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42 Kreuzmann (ed.) Preservation of built environment and its impact on community development in Gilgit-Baltistan

# 42 Berlin Geographical Papers



## Preservation of built environment and its impact on community development in Gilgit-Baltistan



edited by  
Hermann Kreuzmann

Centre for Development Studies (ZELF)  
Institute of Geographical Sciences  
Freie Universität Berlin

2013

**Editor of Berlin Geographical Papers**

**Prof. Dr. Hermann Kreutzmann**

**Contact**

Centre for Development Studies (ZELF)

Institute of Geographical Sciences

Freie Universität Berlin

Malteserstr. 74-100

D-12249 Berlin

[h.kreutzmann@fu-berlin.de](mailto:h.kreutzmann@fu-berlin.de)

Tel: +49 - 30 - 838 70223

Fax: +49 - 30 - 838 70757

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**Editor of Berlin Geographical Papers**

**Prof. Dr. Hermann Kreutzmann**

**Contact**

Centre for Development Studies (ZELF)

Institute of Geographical Sciences

Freie Universität Berlin

Malteserstr. 74-100

D-12249 Berlin

[h.kreutzmann@fu-berlin.de](mailto:h.kreutzmann@fu-berlin.de)

Tel: +49 - 30 - 838 70223

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**Vol. 42**

**Preservation of built environment and its impact  
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## Foreword

The Aga Khan Trust for Culture has been active in Northern Pakistan for well over two decades. During this period, its Historic Cities Programme has been a leading force in the conservation, rehabilitation and re-use of a number of important historic and cultural sites that are emblematic of the region's rich and often turbulent past. The impact that these efforts are having on the local socio-economic environment is well described in this report by Hermann Kreutzmann and Jolyon Leslie, each of whom carried out a mission to the area in 2009. Since then, a number of important developments have started to affect the region. One such development is the new provincial status that the former Northern Areas of Pakistan were given. It is expected that the new Province of Gilgit-Baltistan will have more decision-making powers for matters that directly affect the local economy. Another development has been the sudden and protracted blockage of the Karakoram Highway, following a major landslide in January 2010 at Atabad. This blockage has since dramatically reduced the flow of traffic between China and Pakistan. Lastly, there is the issue of security, which has become problematic following a number of high profile attacks against locals and foreigners. Although some of these developments have led to temporary set-backs, there is a general-held belief that the future prospects for the region look good and that trade and commerce, as well as tourism, will bounce back as more crossing points into Gilgit-Baltistan will open. New roads into the region are not only expected to be constructed from within Pakistan, but are also expected to come in from Afghanistan and nearby Tajikistan. Rather than being perceived as threats to the cultural identity of the region, AKTC sees such development - if properly guided - as an important tool for the preservation of the region's unique cultural heritage.

Jurjen van der Tas

Deputy-Director Historic Cities Programme  
Aga Khan Trust for Culture





## Preface and acknowledgements

The study presented here is the outcome of a mission on behalf of the Aga Khan Cultural Services Pakistan to Gilgit-Baltistan in September 2009. The linkages between cultural preservation and the restoration of historical monuments and their impact on regional economies, skill development and tourism were to be analysed by two independent researchers. The holistic approach of all kinds of activities under the umbrella of the Aga Khan Development Network (AKDN) needs to be kept in mind when evaluating the effects of a combination of development measures.

Therefore our gratitude goes to all supporters during the fact-finding mission. AKCSP Pakistan provided us with excellent logistical support and organised the itinerary in a way that during the short span of time well-prepared experts provided the necessary data and information on the spot. Foremost our thanks go to Salman Beg and to Safiullah Beg whose expertise and company in the field proved most valuable. In Altit our queries were answered by a variety of experts including Richard Hughes, Shukrullah Beg and members of WSE. Focus group discussions with members of TMS including Ghulam Murtaza, Dispenser Mumtaz and Mukhi Vilayat Ali proved very valuable. During our visit of Ganesh we had a focus group discussion with members of Ganesh Kalan Heritage and Welfare Society including Sadiq Ali and Nazir Hussain. In Khaplu and Shigar our mission was enriched by meeting Sher Ghazi, Mubashir und Bushra, who organised and prepared our visit of the palace and adjacent buildings followed by a gathering with Khaplu TMS including President Haji M. Iqbal and Joint Secretary Ghulam Hussain (both members of NALA) and Deputy General Secretary M. Raza Bughti. Site visits of impressive rehabilitation projects in the muhalla of Hunduli and Banpi provided valuable insights as well as the inspection of the conserved Khanqa Nurbakhshe Mualla and Astana Syed Mir Muhammad. An evening meeting with members of Shigar TMS was organised by its president Wazir Fida Ali who had prepared the subsequent visit of Abruzzi school project and site of new central mosque in Shigar and accompanied us during the focus group discussion with Shigar TMS. The brief stop at BEDAR premises in Skardu concluded the field visit. After collecting data and evidence it is not surprising at all that to date AKCSP Pakistan has received a dozen UNESCO awards since 2002 for its excellent performance in preserving built heritage.

In addition AKRSP Pakistan was of great help and we received valuable support from Izhar Ali Hunzai, Abdul Malik and Ghulam Amin Beg who shared their vast knowledge of community development in Gilgit-Baltistan with us. From the private tourism sector Naunehal Shah and Amjad Ayub provided much appreciated background information.

Berlin, October 2013

Hermann Kreutzmann

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<sup>1</sup> All figures © Hermann Kreutzmann, except Fig. 13 (provided by AKCSP)

## Acronyms

AKCSP	Aga Khan Cultural Services Pakistan
AKDN	Aga Khan Development Network
AKRSP	Aga Khan Rural Support Programme
BCF	Baltistan Culture Foundation
BCDF	Baltistan Cultural Development Foundation
BEDAR	Baltistan Enterprise Development and Arts Revival project
HACF	Hunza Arts and Cultural Forum
HEC	Hunza Environmental Committee
KADO	Karakoram Area Development Project
KHDP	Karakoram Handicraft Project
KKH	Karakoram Highway
LSO	Local Support Organization
MIAD	Multi-Input Area Development
NWFP	North-West Frontier Province
PRs	Pakistan Rupees
TM&DS	Town Management and Development Society
TMS	Town Management Society
WSE	Women Social Enterprise



# Preservation of Gilgit-Baltistan's cultural heritage as a key to development

## *Impact and long-term sustainability of the physical rehabilitation and socio-economic development in and around five key cultural heritage sites located in Pakistan's Gilgit-Baltistan region*

Hermann Kreutzmann

### I Introduction

Along the 500-km-long course of the mighty Karakoram Range the main ridge is interrupted only by two deeply incised river gorges, the Hunza in the west and the Shyok in the east. Both valleys are part of a network of tectonic fault lines that resulted from Tertiary geological uplift and were modified and polished by the Quaternary glaciation of Inner Asia.<sup>2</sup> During the last 10,000 years the two major inner-mountain tributaries of the Indus river system have drained melt waters, suspended matter and sediment load in great quantities out of the Karakoram landscape towards down-country Pakistan. The present landscape is the result of geological activities that formed a unique environment in which aridity and verticality prevail. The climatic conditions structure the harsh environment of the canyon-like gorges from desert in the valley bottoms to Artemisia steppe and green pastures culminating in the nival zone of eternal ice cover. Meagre precipitation in the valley bottoms of less than 200 mm per annum is superseded by ten times higher water quantities in the snow cover on the ridges.<sup>3</sup> The Karakoram peaks represent real "water towers of humankind" on Earth with the most extensive glaciation outside the polar regions and with water stored as a commodity that significantly continues to appreciate in value.<sup>4</sup> The contrast of aridity and humidity, of desert conditions and glaciation, offers a highly differentiated spatial landscape in which verticality contributes the third dimension of altitudinal variegation to longitude and latitude.

The Karakoram gorges represent some of the steepest slopes on earth. The Altit settlement, for example, survives on a flat river terrace and outwash fans that are part of the slope profile ranging from an altitude of 2,100 m at the bank of the Hunza River to 7,390 m at Ultar Peak. The average inclination of the slope is approximately sixty percent and provides the settlement space for a structured village and its lands. The

---

<sup>2</sup> Cf. Searle 1991, 2006.

<sup>3</sup> Cf. Hewitt 1989, 2006.

<sup>4</sup> Cf. Kreutzmann 2000, 2006a.

slope profile contains the settlement in all its components. The traditional compact and fortified built-environment forms the nucleus (*khan*) augmented by its surrounding filial settlements (*giram*) with seasonal shelters and huts (*guti*) in the higher elevated pastures (*ter*). The permanent settlement is embedded in the village lands that are structured in arable parcels (*harkish*), fruit orchards (*basikish*) and irrigated meadows (*toq*). Above the village lands (*ichit*) that are distinguishably marked by the highest irrigation channel, the seasonal pastures and the areas for the collection of herbs, fuel and timber commence.<sup>5</sup> The major survival arteries are the water channels that link the melt waters from the glaciated zone with the irrigation network of the village. In terms of purity, verticality governs the appreciation and perception of the environment. The river gorge is considered as the habitat of adders and less esteemed than the high-lying pastures and glaciers under the reign of fairies (*pari*), where ibex (*Capra ibex*), Marco Polo sheep (*Ovis ammon*) and blue sheep (*Pseudois nayaur*) are to be found. In many ways the environment and its perception used to be highly structured with precise attributions of land use and property to each parcel of land, with unrecorded water rights that were known to everybody, and with spiritual estimations that identified individual access and user rights. It is this canon of order and belonging that has been amended and transformed by demographic, historical and political developments.

While changes to the local physical, socio-economic and cultural environment had in the past generally come gradually or in bursts that were followed by periods of relative calm during which changes could be absorbed, the opening of the Karakoram Highway to the public in the 1970s has exposed the area to a process of continuous transformation. This has dramatically altered the area's social fabric and has endangered its built environment. Whilst recognising the need to keep up with global developments, the Aga Khan Trust for Culture has over the past two decades made efforts to restore some of the most remarkable landmarks within the built environment in five settlements that were in danger of disappearing altogether. By doing so, it has emphasised not just the physical rehabilitation, but also the maintenance of social, cultural and economic traditions in order to ensure that rehabilitation efforts would last. This report looks at the experiences in the settlements of Karimabad, Altit, Ganesh, Shigar and Khaplu.

## 1 Livelihoods

The traditional economy of the Karakoram oases has been dominated by combined mountain agriculture structured through a strong link between irrigated crop cultiva-

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<sup>5</sup> Cf. Kreutzmann 1994, 2000, 2006b; Kreutzmann, Schmidt & Benz 2008.

tion and animal husbandry. Natural pastures provide ample fodder for the summer season, whereas the irrigated oases have to cover the rest of the year's needs with crop residues, alfalfa and tree leaves. This backbone of each and every household is modified in Baltistan and Hunza by single-cropping and/or double-cropping growth patterns for wheat, barley, maize, millets and buckwheat. For the vast majority of households combined mountain agriculture has ceased to be the dominant contributor to their incomes. Nevertheless, rare cases of fallow or abandoned land parcels are to be found. The vast majority of households use their however meagre agricultural resources for cultivation of grain or cash crops such as vegetables, fruit and potatoes. The crops introduced in the second half of the 20<sup>th</sup> century - maize and potatoes - are consuming higher amounts of water and fertilizer than the "traditional" grain crops cultivated for centuries.<sup>6</sup> Animal husbandry contributes to a lesser degree to household incomes in the study settlements of Altit, Ganesh, Karimabad, Shigar and Khaplu.<sup>7</sup> But again, no settlement would give up its inherited resources and pasture lands. Combined mountain agriculture provides security, even when in most cases only three to six months of food provisions can be generated from this source.

Contrary to conventional wisdom, most mountain communities have never been self-sufficient based on their agrarian adaptive strategies for cultivation of bread crops and harnessing milk products and meat from their animal flocks. Additional sources of income were necessary for survival. In this respect the strategically advantageous location of Baltistan and Hunza at crossroads linking Central and South Asia needs some consideration. All five settlements have location assets in common. As mentioned above, the mountain oases of the Karakoram are important stage posts in the traditional communication network in the Indus, Hunza and Shyok river valleys with long-distance connections towards Srinagar, Kashgar and Yarkand, the Hindukush, Pamirs and Ladakh.<sup>8</sup> Thus, it is not surprising that all communities have been involved in providing voluntary and/or involuntary services for political strongmen and hereditary rulers, for trade caravans and entrepreneurs as guides, porters, carriers and fodder vendors. Smuggling, kidnapping and hijacking of trade caravans are well-known episodes in a local folklore that emphasizes the additional source of income generated from activities that involved sale of neighbours, robbery and murder. With the advent of colonial rule towards the end of the 19<sup>th</sup> century these activities completely ceased. Other sources of income had to be explored including wage labour, army service and subsidies. In addition, mineral wealth in the form of precious and semi-precious stones found its way to interested circles. Other services such as military and government

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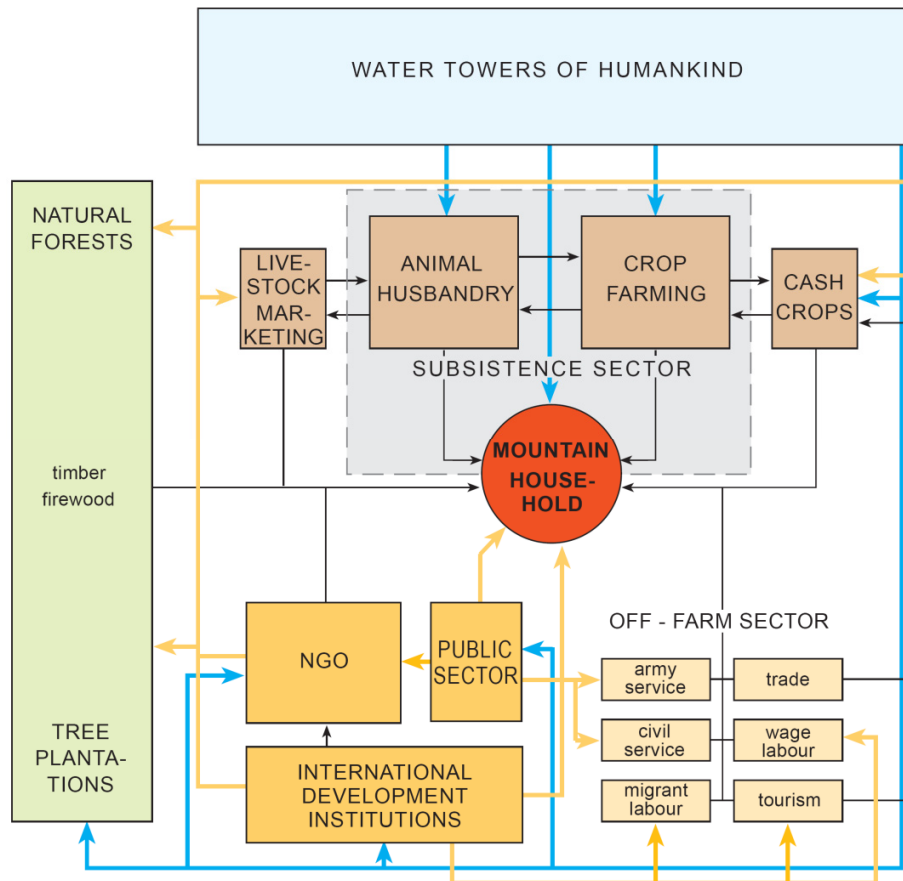
<sup>6</sup> Cf. Kreutzmann 2000.

<sup>7</sup> Cf. Ehlers & Kreutzmann 2000.

<sup>8</sup> Cf. Kreutzmann 1998, 2004a.



employment have been appreciated as a reliable source of pensionable income augmenting the ubiquitous nutritional deficit from domestic sources (Fig. 1). Over time the set of available income sources has changed, but the pattern of combining sources has prevailed to date.

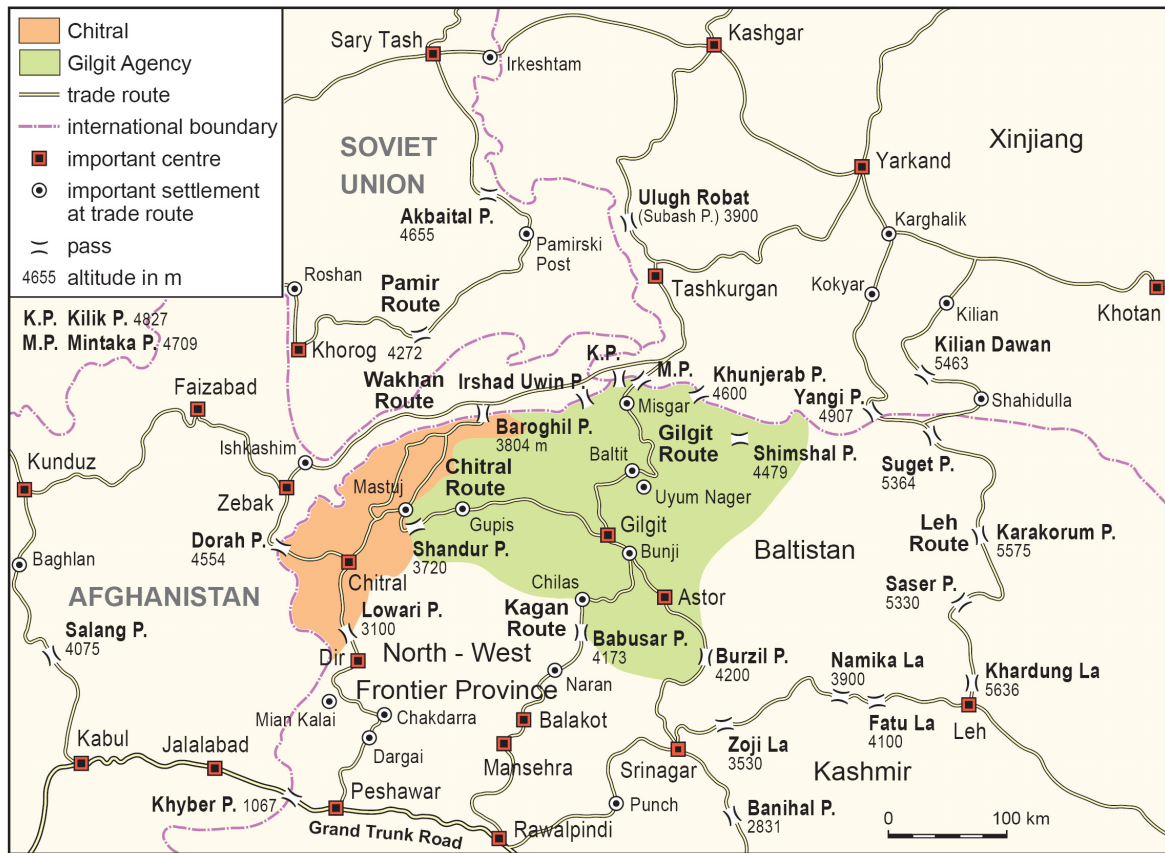


**Fig. 1: Interrelationship and structure of household income sources in Karakoram settlements**

## 2 Communication and infrastructure

The times of trade caravans, raids and colonial interference are bygone episodes. The provision of load-carriers and pack animals as well as fodder used to be a regular source of income along the trans-montane trade routes (Fig. 2) between Chitral, Hunza, Baltistan, Kashmir and Ladakh in pre-motor transport times en route to the Silk Road oases of Turkestan. Since then everything has significantly changed in the mode of transportation.

## Important trade routes between Central Asia and British India in 1935



Source: revised from H. Kreutzmann 1991 : 720

**Fig. 2: Important trade routes between Central Asia and British India in 1935**

In the twentieth century motorized transport became the appropriate technology and revolutionized communication. The advent of motor vehicles and the construction of roads in the mountain belt began in a singular mode and required a different planning background than railways. Roads for small four-wheel vehicles were laid out following traditional mule-tracks which needed some extensions or amendments and had to be adapted and supported by strong cantilever and suspension bridges. Some regions were connected to motor traffic already during colonial times. These enterprises are the adventurous ones such as the Citroen expedition of 1931 aiming to cross the Karakoram - devoid of any roads at that time - on its route from Beirut to Shanghai. Prior to that, the first motor-car had been brought to Chitral in pieces and re-assembled to ply the main valley on specially constructed roads for the local ruler. Direct access to Chitral by crossing the Lowari pass (3100m) was only possible after 1947. It took another five years for regular traffic to commence after the road between Dir and Chitral had been widened. Two years later the first motor vehicle made its journey

into Gilgit, connecting down-country supply stations with the Karakoram.<sup>9</sup> Before 1935 the Gilgit Agency was supplied with goods via Burzil pass (4200m) from Srinagar. After the lease of Gilgit to British India the Babusar route was expanded and improved by military engineers and contractors for the summer caravans. Both routes were closed in winter due to heavy snowfall. The first link for "modern" traffic of Northern Pakistan with down-country Pakistan was established from the railhead in Havelian (NWFP) via the Kaghan Valley in 1949.

The selected route followed a colonial mule track that had been established for the support of the British administration and the garrisons in the Gilgit Agency. It took until after independence for the first jeep to reach Gilgit - a cul-de-sac of its own - before the track was extended towards Hunza in 1957. The jeepable road across Babusar Pass (4,173 m) remained open for three months in summer only, and during the rest of the year air links transported valuable supplies at high cost. Air traffic between the Punjab and Gilgit was introduced as early as 1927.

After the inception of Pakistan's first Village Aid Five-Year Plan in 1956 development efforts based on public funds reached the mountains and were made available in the Gilgit Agency. A participatory approach facilitated the construction of suspension bridges to span the Hunza river near Danyor and the Gilgit river at Sher Qila. Villagers provided three-quarters of the cost, all the unskilled labour, and cut all the wood for bridge construction from communal forests.<sup>10</sup> At this early stage of development the Central Government covered "75 per cent of all non-recurring expenditure and 50 per cent of recurring expenditure"<sup>11</sup> trying a holistic approach by introducing new wheat varieties, new ploughs, different fruit varieties, improved livestock (pedigree bulls, merino rams etc.), silkworm production, and new weaving looms for local tweeds. Out of the annual Village Aid Programme's budget of Rs 300,000 (app. US \$ 65,000 at that time) two thirds were spent on transport alone. Lack of accessibility involved high costs for the allocation of goods from the lowlands at the places of need in the mountains. Consequently the remaining budget for development projects was substantially reduced. Not surprisingly the transport charges for one *maund* (1 *maund* equals 37.32 kg) of goods from Rawalpindi to Gilgit amounted to a multiple of its value.

In order to reduce transportation costs of basic goods an Indus Valley Road from Swat was proposed, and in 1959 construction began. As a result of the Pak-China Border Treaty of 1963 bilateral, cooperative efforts led to what has been termed the Pak-

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<sup>9</sup> Cf. Kreuzmann 2006a.

<sup>10</sup> Clark 1960: 21.

<sup>11</sup> Clark 1960: 22.

China Friendship or Karakoram Highway (KKH). By 1975 the KKH was accessible to trucks, and since 1978 regular traffic has plied between Rawalpindi and Gilgit.

In addition to trans-montane exchange of goods the KKH (Fig. 3) brings subsidized food grains from down-country Pakistan into the region. It is the lifeline for the ever-growing food needs of Northern Pakistan. Cereals, fresh meat (imported as live animals for slaughter in the bazaars) and cooking oil account for more than three quarters of all imports from the lowlands. The per capita dependence on supplies through this artery is highest for the Gilgit District and significantly lower in Chitral and Baltistan.<sup>12</sup> Chitral was seasonally cut off from external supplies until the tunnel under the Lowari Pass was recently completed. Baltistan has been linked to the Karakoram Highway through an asphalted road which now enables year-long traffic communication and a rapid change of market prices for basic commodities. The Baltistan road did not exist as such in previous times when Baltistan was oriented towards Srinagar. In 1963 a first road link to Gilgit was established across the Deosai Plateau, two years later via the Indus valley. The road was extended and asphalted in the mid-1980s. In addition to its ubiquitous military importance, huge quantities of food are brought into the region to supply army personnel, tourists, and growing numbers of local farming and trading households.

The improved infrastructure has enhanced communication and led to a tourism development which began in earnest only after the completion of the Karakoram Highway. New income opportunities and integrated rural development are connected with these assets in physical infrastructure. Development projects, federally-funded packages and subsidies are the framework that provides the context for the boost in regional development, in tourism industry and cultural heritage preservation. While the first-generation Karakoram Highway is presently being replaced by a sophisticated alignment and higher quality of road<sup>13</sup>, the prospects of enhanced exchange relations need to be awaited as they are dependent on a number of factors including domestic and international affairs. The devastating rainfalls of July-August 2010 causing subsequent floods destroyed a number of efforts that had been implemented in rebuilding the Karakoram Highway. At the present stage the communication between Pakistan and China is hampered as the more than 20km-long Atabad Lake buried a significant stretch of the KKH that can only be passed on boats. Presently efforts are underway to bypass the somewhat lowered Atabad Lake stretching from Atabad to Gulmit-Gharben. The bypass will consist of a number of tunnels that are under construction. The re-opening of the road is scheduled for 2015.

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<sup>12</sup> Cf. Kreuzmann 2004a.

<sup>13</sup> Kreuzmann 2010a, b.



Source: own design, topography based on CAK map Northern Pakistan and International World Map

© Hermann Kreutzmann 2009

**Fig. 3: Karakoram Highway as the major link between down-country Pakistan, Gilgit-Baltistan, and China**

Infrastructure improvement and out-migration have strengthened the incorporation of remote Karakoram oases into mainstream Pakistan economy with international links across the mountain passes into China. New sources of income are tapped in the framework of the Indus Valley Road, the Karakoram Highway and Skardu Road. With the advent of modern road communication the observation of Robert Chambers that development and research are taking place along roads has materialized.<sup>14</sup>

The boost of governmental and non-governmental activities in form of infrastructure development, marketing support, introduction of new crops, trades and skills, social organization and female empowerment has created a microcosm of its own that provides direct and indirect employment and has significantly helped to stabilize and diversify sources of income generation. Nowadays external support and remittances by migrants substantially contribute to the local economies in the Karakoram oases. Consequently, if a holistic understanding of local economies is to be attempted we need to take into account the interrelationships and connectedness of individual Karakoram households with an amended and diversified set of income sources. The attribution of single packages and rehabilitation programmes needs to be interpreted in such an encompassing approach.

### **3 Challenges for human settlements in the Karakoram landscape**

Prior to AKCSP's activities in Gilgit-Baltistan a steady decay and collapse of cultural heritage in the appearance of public and private built-environments could be observed. The timely interventions during nearly two decades in the five locations concerned had an immense impact on tangible and intangible spheres. The perception modes of cultural heritage and physical rehabilitation, the idea of deriving economic and social benefits from preservation programmes, the educational impact of monument conservation and training in traditional skills for present and future generations as well as the contribution to a cultural landscape embedded in a challenging natural environment set the agenda for a holistic approach. Measuring the impact and sustainability of physical rehabilitation and socio-economic development packages poses a multi-dimensional challenge if the benefit for local communities is to be evaluated. The attribution of effects based on single measures remains blurred and opaque in an environment where numerous development activities executed by the Aga Khan Development Network and other governmental or non-governmental agencies and institutions are implemented.<sup>15</sup> Nevertheless, in this report the attribution strongly linked to

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<sup>14</sup> Chambers 1983, p. 13.

<sup>15</sup> Cf. Godwin 2009; Arif Hasan 2009; Khan 2009; Kreutzmann et al. 2009; Wood, Malik & Sa-gheer 2006.

AKCSP’s activities in Gilgit-Baltistan will be highlighted. A five-pillar model (Table 1) is applied in which cultural, economic, environmental, educational and social dimensions are identified and investigated.

For structural purposes three aspects are highlighted in the following: tourism impact on local economies, improved living conditions in compact settlements, and ownership through local institutions. All three aspects are linked to the fields of AKCSP’s intervention and experience gathered, and they need to be linked to physical rehabilitation, institution-building and socio-economic benefits. In evaluating the importance, extent and justification of selected interventions in conservation, rehabilitation and institution-building the village environment in which they take place is the reference. This context provides the essential insight regarding the analysis of experiences and prospects for sustainability from which lessons may be learnt for future projects.

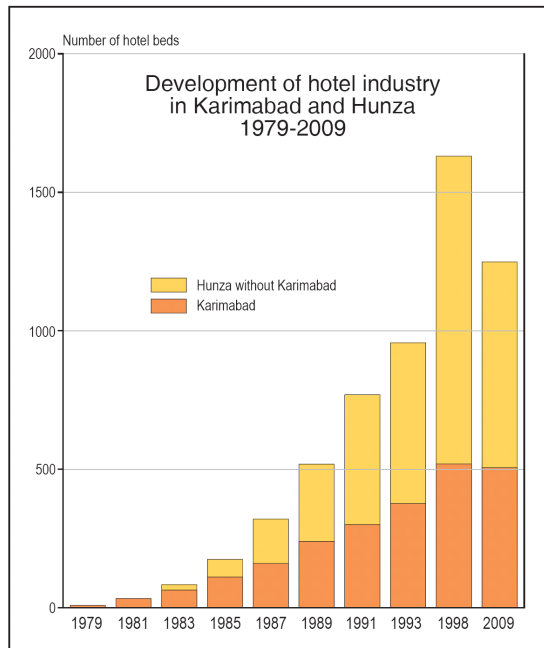
**Table 1: Framework for benefit analysis**

Physical rehabilitation of local cultural heritage for the benefit of local communities				
Cultural assets	Economic assets	Educational assets	Environmental assets	Social assets
<ul style="list-style-type: none"> <li>• Preservation of local skills</li> <li>• Persistence of cultural traits</li> <li>• Strengthening of cultural landscapes</li> <li>• Revitalization of cultural practices</li> </ul>	<ul style="list-style-type: none"> <li>• Income-generation</li> <li>• Value-added skill provision</li> <li>• Tourism growth and local participation and share in it</li> <li>• Enterprise development</li> </ul>	<ul style="list-style-type: none"> <li>• Skill development</li> <li>• Professional training and provision of services</li> <li>• Quality improvement</li> <li>• New employment opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigation of degradation</li> <li>• Risk avoidance</li> <li>• Creation of healthy environment</li> <li>• Nature protection in tune with cultural landscape preservation</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in decision-making</li> <li>• Representation and impact on local level</li> <li>• Local ownership and governance</li> <li>• Sustainable institution-building</li> </ul>

Source: own compilation

## II Raising the standards of living of the population living in and around the monuments

### 1 Tourism impact on local economies

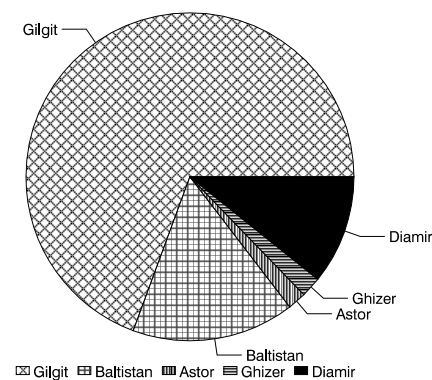


Survey by Didar Ali, Ghulam Rasool, Rizwan Ali and H. Kreutzmann

investments were high; loans taken bound the fate of households and sometimes even clans and had to be repaid over longer periods. For a growing group of residents direct and indirect benefits from tourism became a valuable although risky source of local income. It is only during the last decade that saturation has set in and the growth of hotel industry has ceased and even reversed its trend. The reasons and prospects will be discussed in greater detail below. Karimabad has developed into the centre of tourism activities, while Altit and Ganesh participate indirectly. In recent years Gojal and especially Sost have become prominent destinations as the customs and border post forces visitors to stay for immigration formalities.

In a first step the relationship between tourism and economic benefits from monument conservation needs to be addressed. Tourism as a new source of income became relevant in the Hunza Valley after 1979 when the Karakoram Highway was opened for international travellers from Thakot up to Altit. In 1982, the accessible zone was extended further to Pasu, and in 1986 for the first time international tourists were allowed to cross Khunjerab Pass into China. During these periods Hunza experienced pioneering and steady investments in tourism facilities such as hotels (Fig. 4), restaurants, souvenir shops and services. Expectations and

#### Accommodation facilities in Gilgit-Baltistan 2008



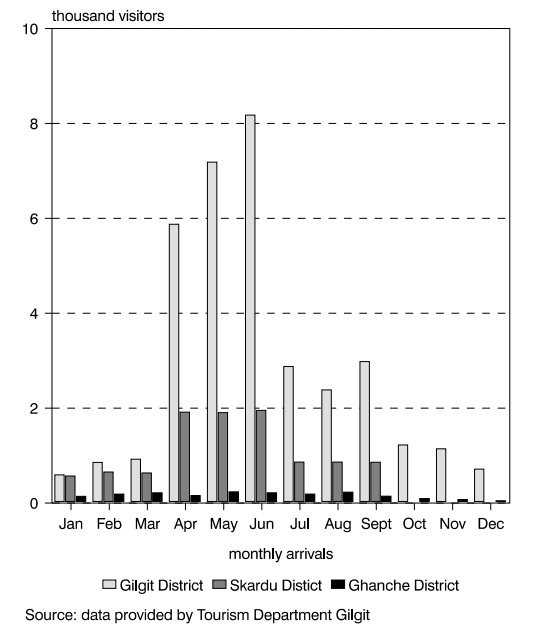
Note: The total accommodation facilities sum up to 2437 rooms in 141 hotels

Source: data provided by Tourism Department Gilgit



In Baltistan tourism in its broader sense is strongly linked with mountaineering expeditions that have visited the high peaks in steady numbers since the 1950s and have been accommodated in remote camp sites rather than in village hotels. Cultural and trekking tourism coincides here with the improvement of road access and correlates somehow with tourism development in the Hunza Valley, but with limited scope and size in Baltistan (Fig. 5). In the early stages tourism was seen mainly as an activity directed towards facilitating greater inflow of international visitors who were considered to be better spenders. Only in recent years has the share of domestic tourists grown and become a significant part of the earnings from tourism-related services.

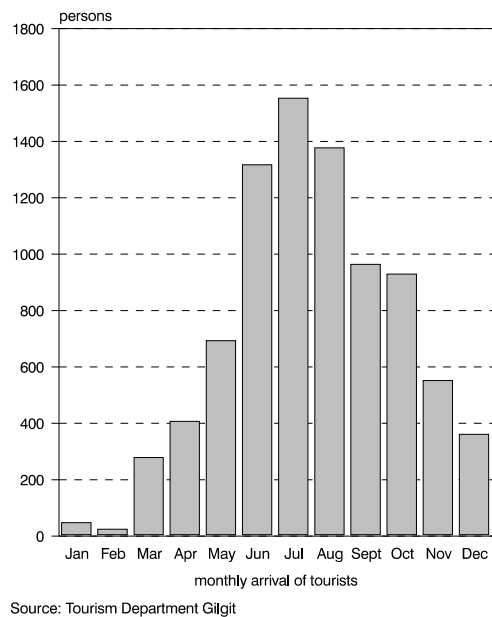
The share of Gilgit and Hunza dominates the whole industry as is reflected in the recent data about domestic tourism in Gilgit-Baltistan (Fig. 6). It is obvious that seasonal preferences are different between international and domestic tourism. Not only is the quantity of tourism more substantial in Gilgit District, but also the standard and management of bookings excel there. Occupancy rates are higher in Gilgit and Hunza, whereas other districts such as Baltistan and Diamir offer some hotel facilities, but with limited success even on the domestic front.



During the short span of tourism development the main attractions continue to be Hunza and Baltistan, the first because of mountain beauty and its fairy-tale reputation, the latter mainly because of its natural assets. International tourism is highly channelled and seasonal in the Karakoram mountains (Fig. 7). Except for the apricot blossom season in spring that attracts mainly Japanese tourists, the peak demand is limited to summer tour-

cent data about domestic tourism in Gilgit-Baltistan (Fig. 6). It is obvious that seasonal preferences are different between international and domestic tourism. Not only is the quantity of tourism more substantial in Gilgit District, but also the standard and management of bookings excel there. Occupancy rates are higher in Gilgit and Hunza, whereas other districts such as Baltistan and Diamir offer some hotel facilities, but with limited success even on the domestic front.

Foreign tourist inflow in Northern Areas 2008



ism with nearly no winter tourism at all. Consequently, the major income is generated during the peak season of agricultural activities. Households need to respond to these demands that sometimes leave the major workload to the women while men are engaged in tourism-related activities. In Baltistan the male workforce could be absent for prolonged stretches of time when mountaineering and trekking expeditions demand porters and guides, between 20 and more than 1000 service-providers being required per party.<sup>16</sup> The majority of the better-paid jobs are taken by residents from Hunza who benefit from their longer established experience and quality of services provided. Nevertheless, tourism has proved to be a vulnerable enterprise. In the shrinking market especially after 9/11 and in the environment of unstable political conditions in Pakistan and neighbouring countries, competition among service providers has grown. In the beginning tourism was a success story in itself. As is known from other destinations the pioneering phase of substantial gains is succeeded by a period of stabilization and sometimes stagnation. In the context of Northern Pakistan we are faced with an international tourism market which at present is at its ebb and where domestic tourism might fill the gap in the future. The vagaries and uncertainties of tourism enterprises need to be kept in mind when assessing the interrelationship between monument preservation and its effect on tourism proceeds.

## **2 Tourism-related economic benefits from monument conservation**

For the five settlements under scrutiny tourism's impact on local economies is quite diverse, and various experiences were made in different time frames. While Karimabad has remained the centre of tourism activities from the onset, Altit and Ganesh are localities in the immediate vicinity with quite different experiences. Shigar Fort has set a landmark in a previously rather neglected tourism environment in which Shigar was by-passed by caravans of porters on their way to Concordia, from where K2 and other major peaks can be accessed. Khaplu Palace conservation started much later, and here the potential needs to be elaborated on. The impact of tourism will be assessed in space and time in the context of each individual settlement.

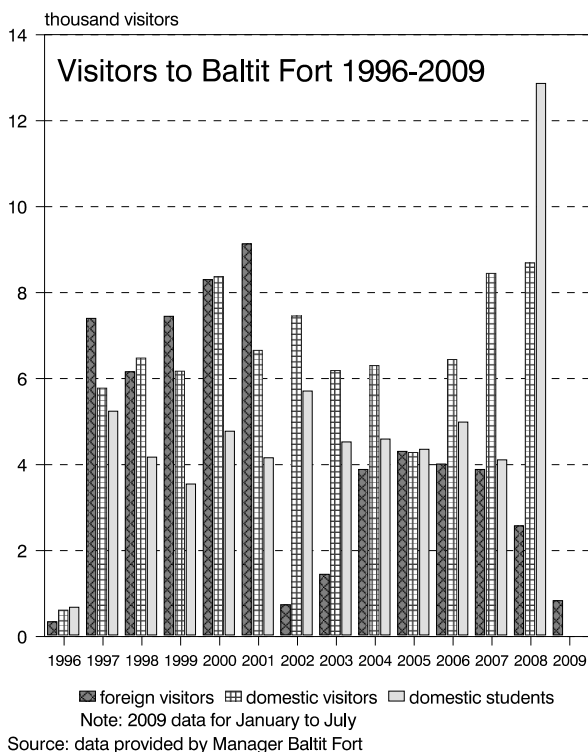
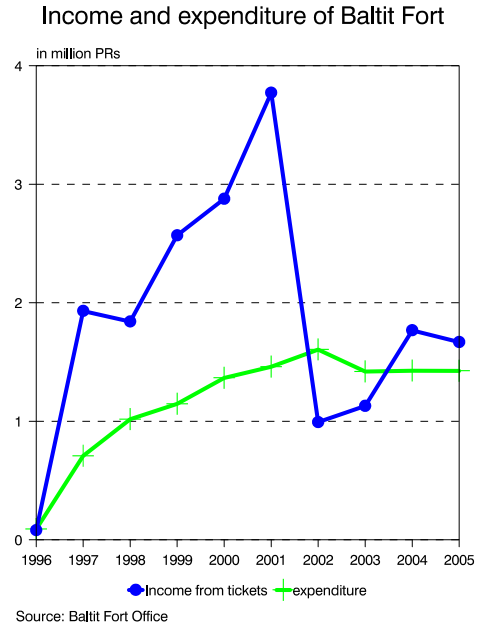
### **2.1 Karimabad**

Karimabad is a pioneering settlement that adjusted to tourism needs and has substantially utilized the "Hunza myth" as an attraction to foreign and domestic visitors. Prior to AKCSP's activities devoted to conservation of Baltit Fort and the rehabilitation of adjacent settlements, Karimabad's reputation was fading. Baltit Fort in its increased

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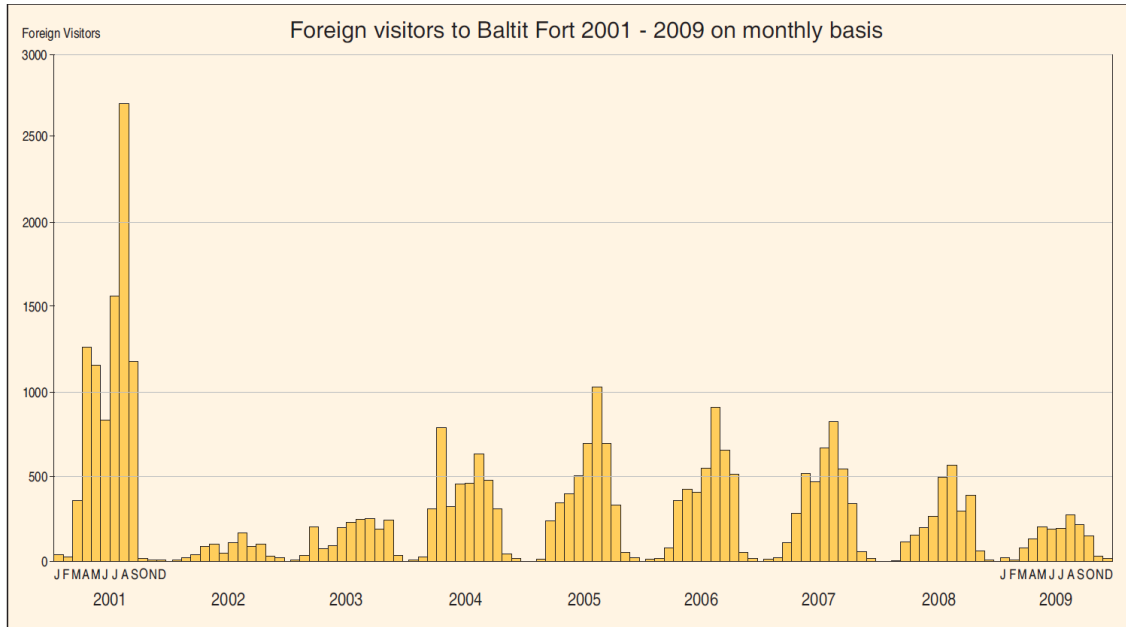
<sup>16</sup> Cf. the work of Butz (1995, 2006) and MacDonald (1988, 1996) who researched portering and its effects on local communities in Hunza and Baltistan.

state of decay posed a poor attraction to visitors, especially when compared with other monuments in the Tibetan Himalaya. With the inauguration of Baltit Fort in 1996 a new phase of tourism started in the Hunza Valley that profited from better marketing and higher international attention. In addition a landmark such as Baltit Fort (Fig. 8) offered a museum and library-cum-archive that became a compulsory stop for international and domestic visitors and for growing numbers of students for whom not many educational attractions are available in Gilgit-Baltistan as yet. The first quinquennial period was a major success story with growth trends (cf. Fig. 8) that helped to generate substantial funds to contribute to the upkeep of Baltit Fort. The idea of linking monument conservation with tourism seemed to succeed.



This phase came to an immediate stop due to the events directly and indirectly connected with 9/11. The shock inflicted higher losses on Pakistan's tourism than on any other comparable destination in China, India and Nepal. Baltit Fort as a museum enterprise suffered as well, and expenditure levels surpassed the income generated mainly from entry tickets and souvenir sales for two years after 9/11 (Fig. 9). The income from dinners in Baltit Fort was significant for some years, but was halted due to manifold reasons regarding preservation and security. Despite all obstacles, a recovery on a lower gross level was realized until 2007 (Fig. 10). In the aftermath international tourism has experienced another downfall while domestic tourism thrives.

For the assessment of benefits we should keep in mind that the future might be sought in Chinese and domestic tourism.<sup>17</sup>



## 2.2 Effects in the tourism hub of Gilgit-Baltistan

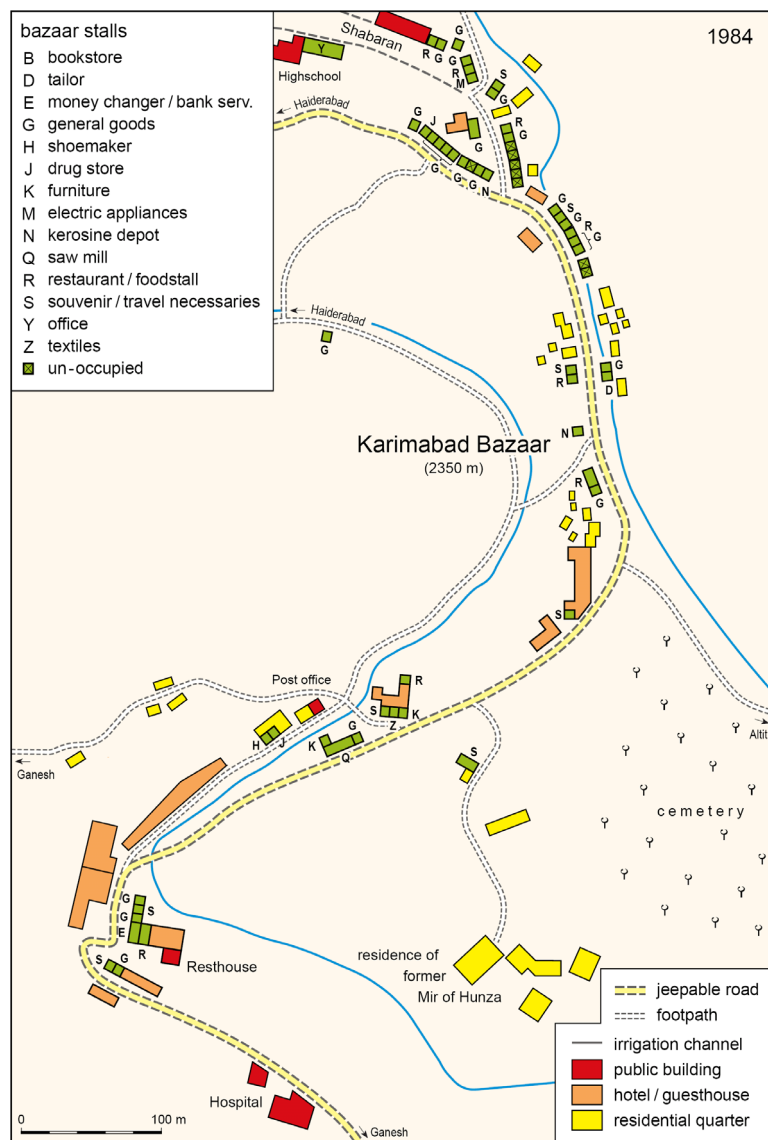
The case of Karimabad shows that tourism and monument preservation can be driving forces for raising local living standards. Income-generating correlates with the number of visitors, which may potentially grow with the monument preservation programme. The list of effects is substantial:

- **Production and marketing of handicrafts:** While in the early phases of tourism few local antiques, handicrafts from other areas and some sub-standard souvenirs were offered to visitors, the scene has changed completely. The growing demand was responded to by entrepreneurs who opened shops in Karimabad bazaar and by quality improvement through efforts by Karakoram Development Organisation (KA-DO) which mobilized several thousand households in Hunza and Nager to participate in the production and marketing of quality products within Gilgit-Baltistan

<sup>17</sup> The appalling state of tourism in 2009 might be related to the prevalent Swat and Xinjiang crises and also to the present rebuilding of the Karakoram Highway that makes travel difficult and less attractive. In 2010 the affairs worsened after the heavy rainfalls and floods in July-August, in 2012 the Chilas incident with a number of casualties and in 2013 the Nanga Parbat killings of mountaineers contributed to a further decline of tourism.

and beyond.<sup>18</sup> While the production is mainly a domestic affair spread across the villages in the Hunza Valley, Karimabad Bazaar (Fig. 11) has developed into a marketing centre. In addition to handicrafts other tourism-related goods are offered here and provide jobs for vendors and entrepreneurs. The majority of shopkeepers are not necessarily from Karimabad itself, the attraction of the bazaar is such that numerous outside businessmen are to be found here (Fig. 12). Whereas Karimabad is a tourism-oriented bazaar Aliabad has gained the function of providing goods and services for daily and episodic needs.

- Provision of guiding and transportation services: Baltit Fort in itself generated some jobs which contribute to the occupational structure of Karimabad. In addition opportunities are there for self-appointed and employed tourism guides who specialize in the cultural assets of Karimabad and surrounding villages. The attraction of Karimabad Conservation Area has enhanced the time spent by visitors. As accessibility creates a challenge for some, transport facilitation by four-wheel drive vehicles provides some additional income to operators.
- Provision of hotel and restaurant services: Ac-



<sup>18</sup> Cf. for a detailed discussion of KADO's contribution and embeddedness in local social structures Amin Beg and Khwaja Khan (2006).

commodation availability in Karimabad and Hunza grew at a steady pace until the beginning of the 21<sup>st</sup> century. With the decline of tourism in the aftermath of 9/11 certain entrepreneurs went bankrupt, had to sell their property in order to meet loan requirements, or changed its use from hotels and restaurants to offices and hostels. The market responded to shrinkage and risk with abandonment and termination of business activities (cf. Fig. 4). When times improve the demand could easily be met and flexible response will be due. Presently about 500 hotel beds are available in Karimabad with app. 750 hotel beds in addition in other villages of Hunza.<sup>19</sup> Restaurant facilities are often connected with hotels, but sometimes independent specialized eating places such as cafes and restaurants have found a market niche.

- Revitalizing the appreciation of local dishes and traditional cuisine: One by-product of conservation and awareness creation is the re-incorporation of traditional dishes of Hunza cuisine into local menus in restaurants. The effects are manifold: tourists are offered dishes which they can connect with their perception of Hunza, local people can purchase palatable and favoured local dishes in the market for the first time, and the ingredients of this cuisine are mainly of local origin and are purchased from private households.
- Selling, processing and marketing of agricultural goods: The tourism market creates a demand for quite a variety of local products. Fresh vegetables, potatoes, and buckwheat flour are cultivated on the meagre crop farming-parcels that can be converted into highly productive kitchen gardens (*shanie khutkus*); orchards contribute seasonal fresh fruit (apricots, cherries, mulberries, peaches, pears, plums and apples). Some of these found their segment in the dried fruit bazaar in addition to apricot oil and honey. The occasional *qurut* and ghee (*maltash*) from animal husbandry and milk processing find their share in local recipes.

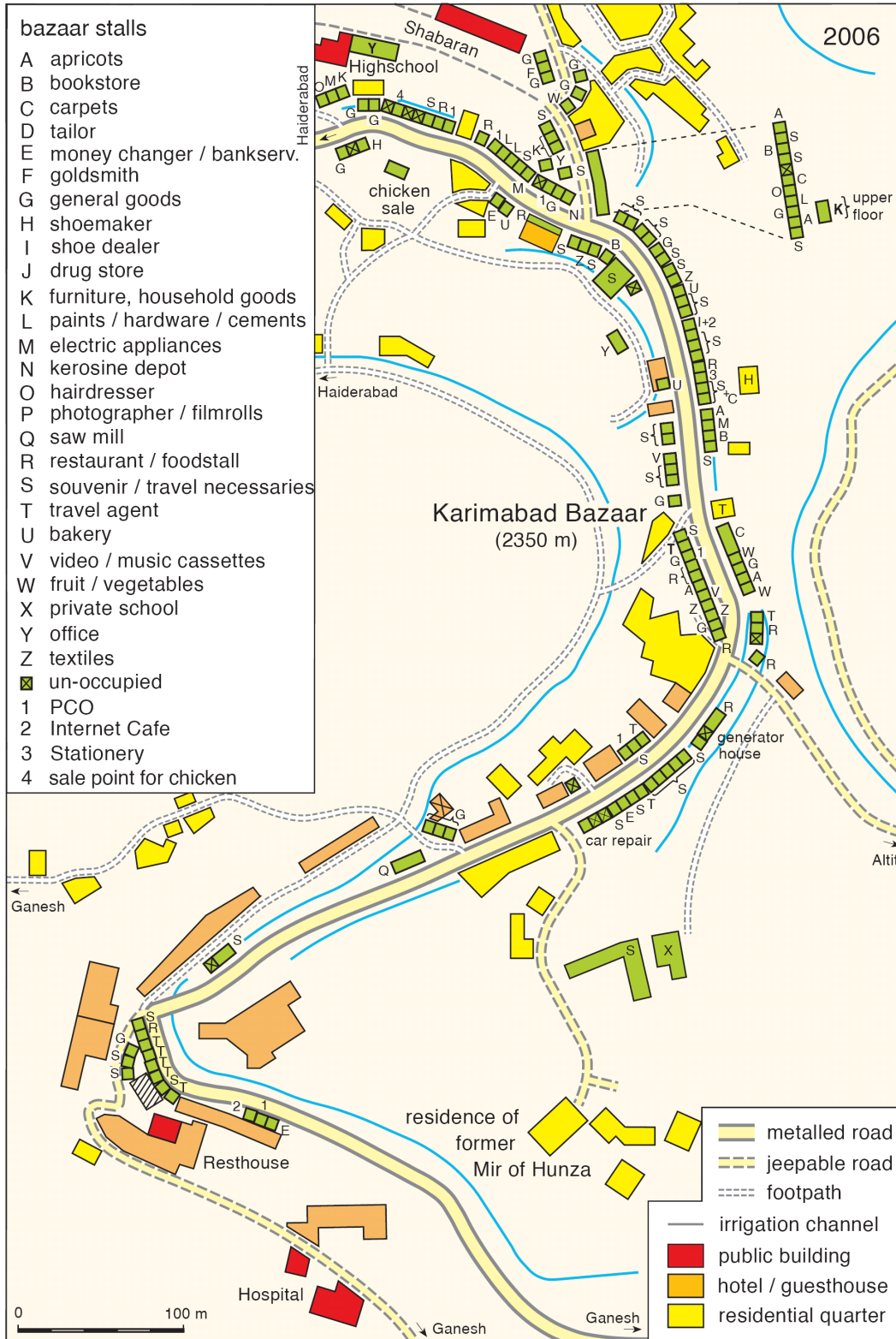
Although the attribution question needs to be addressed here as well, it is evident that the Karimabad conservation project stabilized the attraction and thus contributed to the major sources of income from tourism. In mid- and long-term perspectives it provided an attractive and purposeful monument with a rehabilitated surrounding settlement space that creates the economic sphere. At the same time the present inadequate institutionalization of professional services such as land use planning, construction regulations, sanitation, waste management and water supply has contributed to a loss of attraction owing to mushrooming construction.<sup>20</sup> The delicate equilibrium be-

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<sup>19</sup> The data are based on a survey by Rizwan Ali conducted for this report in July 2009.

<sup>20</sup> This aspect will be addressed in greater detail below.

tween preserving a cultural landscape attractive to visitors and its destruction by service-providers who seek their immediate advantage is at stake.



Survey: H. Kreutzmann, April 2006; based on KPSS map

### 2.3 Altit

The second case in point is of a different quality. Altit is the neighbouring village of Karimabad and significantly participates in Central Hunza's tourism activities. Altit entrepreneurs operate hotels, restaurants, shops and transport businesses in Karimabad and to a lesser degree in Altit. Nevertheless, the concentration of tourism-related activities in Altit village itself is much less than in the centre. This constellation diminishes Altit's attraction and would pose a threat for the future if unplanned constructions and unstructured investments in tourism infrastructure were to thrive in a similar manner as in Karimabad. The charm of Altit at present is its remoteness from the tourism centre of gravity which at the same time has made Altit an interesting place after the completion of conservation works in Altit Fort. Direct proceeds from entrance fees to Altit Fort ranged between 48,000 Rs to 84,000 Rs during the last three years. This amount just covers the cost of a guide and the rent of a shop that presently serves the purpose of office and store. The limited scope of tourism-related activities in Altit *khan* can be estimated: out of 18 shops two are devoted to the needs of tourists, while two additional shops provide some items of tourism demand. For coming years expectations are much higher although the geopolitical environment is eyed with caution by the villagers who have limited trust in future improvements.

### 2.4 Ganesh

Ganesh is strategically located in the remarkable inverted S-shaped bends of the Karakoram Highway before it changes its course from the right to the left bank of the Hunza River. The new road bisected the village lands and the polo ground (*shabaran*). No other village was affected and encircled in such a manner. During the rural upturn in the aftermath of the construction of the KKH, Aliabad and Karimabad took the lead in economic development and market orientation. Ganesh has rather reluctantly participated in the commercialization of a bazaar economy and in tourism. With the conservation programme in Ganesh Kalan (1997-2001) concluded, an entrance fee was levied from visitors. Since 2005 when 84,000 Rs were generated the amount has been declining to only 22,000 Rs in 2008 and a meagre 5,000 Rs during the first half of 2009. In combination with proceeds from occasional film-shooting and regular dues from sewerage fees this income has contributed to an endowment fund and provides spending power for mutually agreed village projects. Tourism proceeds are one of the few sources of this kind.



## 2.5 Shigar

During the last decade AKCSP's activities have significantly changed Shigar and its residents' perceptions of tourism. With the conservation of Shigar Fort and its conversion into a high-class hotel under the management of Serena Hotels a new source of income has emerged. Out of 27 positions 25 jobs are presently filled in the hotel by Shigri people who received professional training; in addition, income from transportation<sup>21</sup> and sales of souvenirs such as serpentine stone remains in the village. The Shigar Fort Residence has managed to purchase nearly two thirds of all regularly required goods from Shigar bazaar.<sup>22</sup> These spin-off effects from high-class tourism are highly appreciated as a relatively new source of local employment with long-term prospects and community benefits. In addition to the Shigar Fort Residence new entrepreneurs have started to attract tourists for a longer stay in Shigar, a camping-ground arrangement, food and beverages services, souvenir provision, suggestions for short walks and treks etc. are meant to convince those visitors to spend more time in Shigar who previously only passed through the village en route to Askole.<sup>23</sup>

## 2.6 Khaplu

The latest project is on track to adopt the convincing experiences from Shigar Fort. Khaplu Palace offers a unique example of Balti architecture as a link between the Pamirian and Hindukush-Karakoram building traditions and the Tibetan influence from the Northeast. Khaplu itself is rich in cultural heritage, which will be the backbone of tourism development. Local entrepreneurs and political representatives support the project and expect triggering of tourism not only from employment opportunities for 25-plus local persons and income from transporters, goods and service providers from Khaplu bazaar, but at the same time a substantial growth is expected that will increase the numbers and stay of domestic and international visitors. Proposals to revitalize traditional entertainment in music performances and handicraft production are in tune with plans to expand the activity portfolio for visitors to include camping, trout-fishing, trekking and mountaineering in the vicinity of Khaplu.

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<sup>21</sup> Ten percent of all transportation charges are handed over to the Shigar TM&DS which amounted to 104,850 PRs in the first two years of operation (2007-2008).

<sup>22</sup> Local purchases for Shigar Fort Residence amounted to 3.5 million PRs in the first two years, i.e. a share of 61.2% of the total goods purchased (data calculated on the basis of charts provided by Sher Ghazi). The remainder was predominantly bought in Gilgit-Baltistan.

<sup>23</sup> Cf. AKTC 2005; Kreutzmann, Schmidt & Benz 2008 for a comprehensive study and base-line survey of Shigar's potential. Shigar Fort in itself has become an attraction for a variety of visitors ranging from local politicians and dignitaries to domestic and international tourists.

Tourism will continue to be a strong link between preservation of cultural heritage and generating additional non-agrarian income locally. The attraction of generating income during short seasons is modified by the uncertainty of its materialization due to external events. The option of tourism as a contributing factor to household incomes will remain a valuable additional resource. Utilizing monuments - or rather what was left of them - and outhouses for tourism enterprises have convinced villagers of the value of a purpose-led strategy to combine economic well-being with conservation. A side-effect - which might prove to be of even greater importance - is the contribution to improving daily living conditions in the traditional villages.

### 3 Improving living conditions in compact settlements

Preservation of a cultural landscape goes beyond the conservation of exemplary monuments. The observation that historical settlements have lost their vitality and fallen into disrepair correlates with certain states of poverty and communal incapability.<sup>24</sup> The structural set-up of fortified villages in Hunza and in Baltistan fell into disarray in two phases. First, after the colonial conquest at the end of the 19<sup>th</sup> century the fortified settlements<sup>25</sup> (*khan*) were partly given up as the external threat had ceased or at least diminished. Watchtowers (*shikaari*) fell into disrepair. Already at this time historical records show that people left the *khan* for manifold reasons: demographic pressure, poor hygienic conditions, great distance to water supply, congestion of houses with no space for expansion, lack of orchards and shade from trees, dangerous access paths, great distance to agricultural fields and pastures.<sup>26</sup> The reasons are easily understood; the price which was paid when Hunza had less than one fifth of its present resident population was high. The optimized utilization of space was given up: So far, settlements had occupied wasteland and land that was difficult to irrigate; now the new settlements occupied space from valuable orchards (*basikish*), at that time the only land category generating some surplus income.

The first exodus was directed towards shifting the settlement closer to the agricultural fields (*harkish*), removing the animals from the *khan* into the new filial hamlets called *giram*. Now the majority of residents lives outside the *khan*. Basically similar structures prevailed in the *giram* with the major difference that the hamlets had more space, shade from the orchards and less congestion. Nevertheless, the water supply

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<sup>24</sup> Cf. AKTC 2007: 15.

<sup>25</sup> Burushaski: *khan*; Pashto: *qila*, Urdu: *kot*. The first outmigration from the *khan* had begun in the early 19<sup>th</sup> century when the so-called "new settlements" (*thuants khanants*) were founded, such as Aliabad, Dorkhan, Haiderabad, Hassanabad and Murtazabad. In this early phase the same building techniques were applied to construct a fortified village (cf. Kreutzmann 2006b).

<sup>26</sup> Kreutzmann 1989: 54.

from pits (*gulk*), sewerage and sanitary conditions (bur. *chuqang*, balti: *chaqsa*) were not necessarily of a higher standard.

**Table 2: Demographic development in Central Hunza and Shigar 1931 to 1998**

Village	Households 1931	Inhabitants 1931	Households 1998	Inhabitants 1998
Altit	178	879	364	2769
Ganesh	217	1161	355	2568
Karimabad	380	2208	671	5168
Shigar		5401 (1911)		9563

Source: Government of Pakistan 1998; Kreutzmann, Schmidt & Benz 2008: 148; Pal 1934

The second change in settlement patterns took place in the aftermath of the Karakoram Highway. Improved accessibility, the introduction of link roads and motorized transport, and the growing numbers of motor vehicles significantly changed local mobility patterns, the estimation of space and the burden of load-carrying. During this phase access roads to fields, water pipes etc. enabled people to build their houses anywhere on the village lands. The sprawl of new buildings commenced a quarter of a century ago and has gained pace since. During the second phase even more valuable land was occupied by house constructions. The available cropland (*harkish*) was affected as well as orchards (*basikish*), none of which produced a surplus any more. Only scanty statistical information is given about the scope of settlement growth and demographic pressure (Table 2). Over the span of just two generations the settlement size more than doubled when we compare 1931 with the last official population census.

Both amendments of traditional settlement patterns have created the unsatisfactory perception that common rules, identity features and settlement structure have been lost and that arbitrariness and lack of consideration prevail. This process of abandoning valuable settlement space and leaving it in a dilapidated state has been retarded after more than a century thanks to AKCSP's activities in rescuing valuable community assets and reinventing the former space of security and seat of defence as an acceptable and agreeable built-environment. Intervention in the former centres of community power should be regarded as a highly important, necessary and timely step to stop the loss of valuable land in an environment where property prices are extremely high. The

rehabilitation programmes in Karimabad, Altit, Ganesh, Shigar and Khaplu have created awareness of a forgotten resource of local heritage.

Compact settlements are one answer to the challenges of demographic pressure and urbanization as they have been felt and observed in Central Hunza for quite some time. Traditional examples of compactness are the former fortified villages (*khan*) in the core of the settlements. Diramishal Khan and Qhurukuts Khan in Karimabad resemble the early examples of clan (*rom*) settlements and give a glimpse of what could be achieved by rehabilitating more of the nuclear settlements in Central Hunza.

Ganesh Kalan is a prime example of rehabilitation, improvement of hygiene, electricity and water supply, and (re-)creation of public spaces (*jataq*) for community activities. Surrounded by neighbourhood mosques belonging to individual lineages (*guti*) and possessing its own water storage tank (*phari*), the village fabric creates a space of identity, providing shade and space for leisure that have made a traditional settlement a more attractive place than the random housing sites scattered across the village lands. The identity of clans (*rom*) and lineages (*guti*) is here localized and spatially anchored. Thus rehabilitation contributes to identity creation and strengthening of community bonds.

Altit Khan is a case in point that outmigration can be slowed down by providing a healthy environment. The problems of night-soil pits (*chuqang*) and failing water supply were the major driving forces for people to leave the khan. People left behind in the fortified village were regarded as the poor layers of society with a higher share of female-headed households than were found outside. The rehabilitation activities have converted a residual poverty-driven settlement into an attractive place of residence, the centre of village activities, communal affairs and mutual support as it was in previous times when princely states provided the political framework. To date the inverse estimation and appreciation of living in the centre has not led to a process of re-immigration. Given the extraordinarily high property prices in Gilgit-Baltistan and especially in Central Hunza the future might offer such an option. Then re-immigration would be a prime indicator for the success of the rehabilitation programme.

The importance of village rehabilitation programmes including the hamlets of Banpi and Hunduli in Khaplu (Fig. 13) cannot be overestimated. During the project implementation phase Hunduli (2003) consisted of 88 households with 673 persons, while in Banpi 65 households and 485 persons significantly benefited from the rehabilitation project (2004-2005). The scope for intensifying hamlet rehabilitation becomes obvious when Khaplu bala (965 households, 7165 inhabitants) and Khaplu paeen (1086 households, 7823 inhabitants) are taken as reference points for the municipality alone. The

cost of 3 million PRs and 3.5 million PRs respectively is low compared to the significant improvement of hygiene and health. The rehabilitation of water courses, street pavement, improvement of common spaces, historic houses and shops, the provision of latrines, common bath houses and washing spaces and the acceptance of all measures constitute the success of the project.

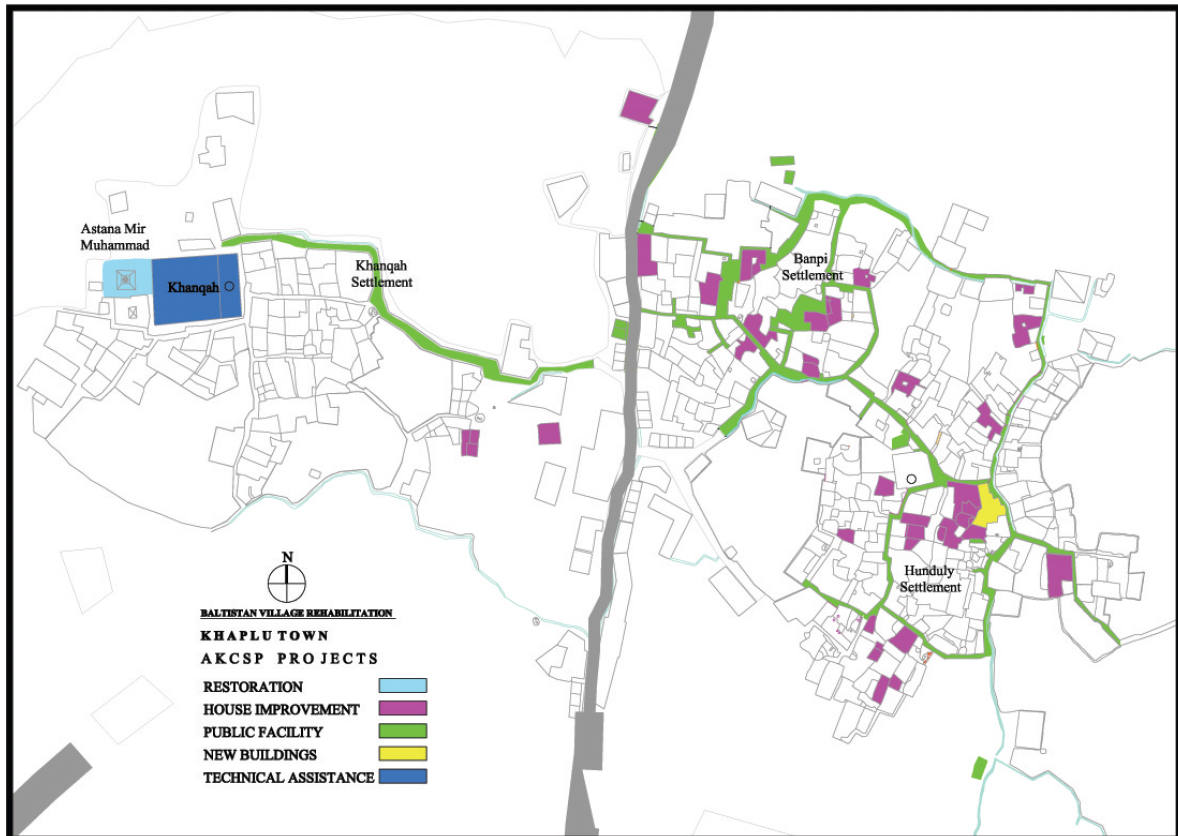


Fig. 13: Rehabilitation projects in Khaplu (AKCSP)

These rehabilitation projects are the most significant contribution to future settlement stabilization that enables local people to improve their living standard and welfare in grown localities. Here compactness based on appropriate and adapted measures to fulfil basic needs and to create well-being among residents is one answer for coping with urbanization and maintaining the built-up village fabric. This strategy of improving living standards seems to be quite cost-efficient compared to a host of other measures including cluster settlement development. The advantage of revitalizing and stabilizing the nuclear settlements is that neighbourhoods remain intact, property is already allocated, and less affluent and vulnerable residents are an integral part of the hamlet and are reached by the measures. The pressure on valuable irrigated cropland (*harkish*) and orchards (*basikish*) can be reduced by re-utilizing land

categories which traditionally have been reserved for house construction, the fortified villages (*khan*) and the subsequently founded hamlets (*giram*) are prime targets for this revitalization on the path to compact settlements that offer more than only basic amenities.

The estimated importance of satisfying basic needs might be highlighted in the constant repetition of the boon to each household of the introduction of improved sewerage and healthy sanitation. The traditional latrines (*chaqsa*, *chuqang*) are mentioned in Baltistan and Hunza as a reference to olden times in comparison with the new symbols of settlement rehabilitation. In Baltistan these are augmented by public bathing and washing spaces that find a mixed response, but have contributed to awareness creation. Taking into account who can afford to own a house in the new cluster settlements such as Daldas (Karimabad) it becomes obvious that these well-designed improved houses are meant to be for more affluent layers of society. Often they are people who earn their wealth outside of their villages of origin. They create neighbourhoods that do not resemble the traditional village set-up. Nevertheless, for a small segment of society these modernized traditional houses built with local materials will be attractive, affordable and appropriate. With land prices ranging around six lakh Rs/kanal and house costs between 15 and 20 lakh Rs, the 30 houses in Daldas might be acceptable for that group of people. For the mainstream residents the consolidation and revitalization of existing hamlets by providing satisfactory amenities in hygiene, electricity and water supply would be of utmost importance.

Rehabilitation projects based on local materials, improved infrastructure assets and walkways, creation of public spaces for community meetings, services and leisure are the significant contribution of AKCSP to raise the standard of living in existing settlements and contribute to the visible recognition of building traditions and inherited settlement patterns, thus making the Karakoram villages a salient cultural asset and learning environment for implementing well-known demands derived from the Millennium Development Goals (MDG) in the fields of environmental protection, safe water supply, adequate sanitation and poverty alleviation. The AKCSP projects described and evaluated here are a visible and viable contribution towards achieving these goals and have proven that modest investments can make a difference for a sizable population.

#### **4 Additional income opportunities**

During the rehabilitation and conservation phases varying numbers of skilled and semi-skilled professionals found employment and/or training in AKCSP's projects. As a spin-off from these activities a sustained demand for carpenters, wood-carvers, masons, electricians, and sewage experts developed locally. In two major community projects

in Shigar - the new Friday mosque and the Abruzzi school building - local materials and techniques as they were demonstrated in AKCSP's conservation and rehabilitation projects have been applied. Proud craftsmen and their customers have adapted lessons learnt from previous projects, convinced fellow community members and initiated the construction of modern landmarks based on locally distinctive and grounded architecture. The same applies for the new extension of Khaplu's Khanqah Nurbakhshia. The latter projects are all under full control and financial management of the local communities. Without creating trust from earlier conservation projects involving religious buildings and sacred sites, as well as convincing the community about the importance of having safe and sophisticated representative buildings, the artisans would face a less stable job market.

A similar quality of services is now provided in Altit by the Women Social Enterprise (WSE) group that offers surveying and craftsmen services in the fields of carpentry, electric appliances and masonry. The women of this remarkable group have found niches such as surveying which initially were applied in the framework of Altit Fort conservation. More recently their expertise was called for from Khorog (Tajikistan) where they worked on the city park project and from Multan where a number of religious buildings were mapped. Especially the niches are augmenting income opportunities and creating local employment. Nevertheless, the craftswomen in traditional and regularly demanded trades are on their way to establishing themselves as a unit of efficient work based on high quality. The employment opportunities for women from vulnerable households are essential for raising living standards and improving local welfare. Such an enterprise is presently only feasible within the framework of AKCSP's activities in Gilgit-Baltistan and could be the nucleus for a sustainable network of skills provision.

Other cultural assets have been promoted by AKCSP such as strengthening the music traditions and performing arts. Initially even workshops for the manufacturing of musical instruments were supported. This initiative has revitalized musical entertainment as an everyday practice and stimulated the forming of music groups - surmounting traditional social stigmas in an emancipatory manner and far remote from practices of exclusion - as income-generating enterprises in tourism and for local festivities. The Silk Route Festivals were initiated by AKCSP: from its origin as an NGO-driven activity it has gone a long way; the Government of Pakistan has institutionalized the festival which nowadays features as a regular event on the festival calendar and is moving to different places in Gilgit-Baltistan.

## **5 Institution-building for community prosperity - ownership through local institutions**

All projects would not have been feasible without a strong participation and ownership of the communities concerned. The interventions are seen as a long-term strategy in improving welfare and living conditions. Especially in conservation projects such as Baltit, Altit and Shigar Forts, Ganesh Kalan village and Khaplu Palace a participatory approach seems to be the only feasible one. Since the abolishment of hereditary rule and the subsequent power vacuum, Gilgit-Baltistan has had a long-standing experience that community-based organizations became leaders and decision-makers in village affairs. Rural communities that rely on irrigation are mutually interdependent societies. This precondition was one of the vital elements for the success of AKRSP and its village organizations' approach for implementing projects. For AKCSP and its conservation and rehabilitation programmes, a similar community-based set-up was required. Town Management Societies (TMS) have proved to be mediators and to be instrumental for implementing conservation projects. Different views, felt needs and strategies need to be debated and communicated. The TMS has been important in implementing and adjusting donor-driven packages to the structure and set-up of the respective settlements. The above-mentioned success of strengthening the local economies in tourism enterprises is significantly linked to their negotiation power. The adaptation of local materials and building techniques such as *cator* and *cribbage* to new mosques and *khanqah* buildings is another strong indicator for the leadership such institutions can take for the preservation of local traditions.

In larger and more urbanized settlements such as Karimabad and the municipality of Khaplu the scope and leverage of Town Management Societies might be limited to specified project activities or certain locations.<sup>27</sup> The challenge for urbanization has to be shared by a number of institutions which basically replace a non-existing or non-fulfilling elected body. Initially supported by AKCSP, in Central Hunza KADO has initiated a municipality task in organising waste disposal through HEC. Nevertheless, in urbanized communities such as Karimabad and Khaplu the challenges for sanitation, water and electricity supply, the preservation of walkways and link roads are communal tasks of substantial size and scope that ask for a holistic management preferably in an efficient municipal corporation. At the same time the question of size needs to be addressed when not only monuments, but cultural landscapes are on the agenda. Different institutions are challenged when settlement rehabilitation and the preservation of the major asset of all villages - the terraced fields and orchards as part of the village lands - need protection. The monuments, the hamlets and the village lands are com-

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<sup>27</sup> Constraints of TMS organizations occur when they are expected to deliver professional services for which office-bearers have not been trained and which are part of other bodies' portfolio. Cf. the case study of Shigar TM & DS by Beg (2007) which explains the scope, potential and limitations of Town Management Societies.



plementary units creating the cultural landscape. Consequently, the recently proposed Multi-Input Area Development (MIAD) approach by the Aga Khan Development Network (AKDN), of which AKCSP is part, is the appropriate scale for seeking solutions to the challenges of the present and future in order to enable the survival of villagers in an environment that combines cultural heritage with modern livelihoods and holistic development.

### **III The status of current practices for the preservation of the local cultural heritage**

#### **1 Skill development**

Training in local building traditions is one of the major achievements of AKCSP's Northern Pakistan activities in human capacity building. Artisans and craftsmen have been trained during the course of the last 17 years of conservation projects and have been the principal actors in revitalizing traditional and locally adapted building techniques. Major local landmarks serve as prime examples for cutting-edge conservation work and thus fulfil multiple purposes: conservation of dilapidated and/or collapsing buildings, contribution to identity creation and stabilization, training of artisans and craftswomen. The effect of this investment in human resources is prominently visible in selected localities and principal buildings.

It would be an unwarranted exaggeration of expectations if the envisaged goal were a complete change of woodworking, carpentry and masonry techniques. Best practices can be illustrated with the conservation projects in which AKCSP took a leading role and controlled the process. Baltit, Altit and Shigar Forts, Khaplu Palace, Amburiq Mosque, Astana of Syed Mir Muhammad, Khaplu Nurbakhshe Khanqah and a number of smaller buildings deserve special mention and recognition. Here experimenting, reinventing, training and modern conservation techniques were successfully applied. In all five locations award-winning or nominated projects were executed. To name just two, Amburiq Mosque in Shigar and the Astana of Syed Mir Mohammad in Khaplu have shown to everyone concerned that conservation is possible with local craftsmen and serves the purpose of the community's felt needs. Skill development and project appreciation have been instrumental for the community's decisions in Shigar and Khaplu to adopt cator and cribbage techniques in line with all local materials for the construction of the new central mosque in Shigar and the extension building of the Khaplu Khanqah. It takes the experience of more than a decade to see these changes materialize and to transfer ownership to local stakeholders.

These prime examples do not disguise the fact that in commercial bazaars of Central Hunza and elsewhere nearly all stalls, shops, restaurants, hotels etc. are built in cement bricks and reinforced concrete. Skill development is a slow process and its adoption is sometimes less visible than the business centres show. In private houses more affluent customers have hired trained craftsmen and are slowly changing their regard for traditional techniques adapted to modern constructions. There is some evidence that local activists are identifying projects for conservation. Without external funding and support most attempts fall short of state-of-the-art implementations.

Skills that have been developed need some longer fostering and quality control. The same applies to encouraging female empowerment in craftswomanship exemplified by the WSE, in which Altit is taking a leading role. These close-knit teams of 60-plus women artisans can become viable units when local demand has grown to such an extent that their professional management and implementation of requested tasks are guaranteed. A remarkable phenomenon at present is a Hunza enterprise: 49 of the 63 women engaged are from Central Hunza and contribute significantly to the available skills. Especially in engineering and architectural services (18), digitizing, design and drafting (8), GIS and communication (6) and instrumentation (4) new niches have been developed in which the teams can excel. In traditional trades such as carpentry (7), masonry (4), electrification (5), plumbing (4) the competition with established male workforces will pose a challenge for better performance. Three quarters of the WSE members are from the Ismaili community, acting as pioneers in the quest for equal opportunities. Here the seeds are planted that may enable them to secure their livelihoods in a sustainable manner. For the time being, continued support through AKCSP as the lead agency and other AKDN institutions seems to be of utmost importance to let the seeds mature.

## **2 Introduction of traditional building techniques into the mainstream of present practice**

Local materials have been adopted and introduced with traditional building techniques in secular buildings. The Abruzzi school is a good case in point to exemplify that skilled craftsmen found employment in a school building of substantial size which is meant to be a symbol of a new era in local educational institutions. Building techniques that were regarded as old-fashioned would have been impossible to negotiate for the implementation of a new internationally funded project some years ago. Semi-dressed stone and woodwork would have been qualified as “*kacha*”, while cement bricks and reinforced concrete buildings would have been categorized as “*pukka*”. The difference between old-fashioned and modern, between makeshift and sophisticated is emphasized in this dualism that is applied in judging quality. The re-interpretation of

*kacha* and *pukka* is a major achievement and forms the basis for changing the future course in building techniques. At present the President of the Shigar TM&DS, Wazir Ali Shah, is the most convincing advocate for adopting these techniques, highlighting the economic, employment-related, thermal and aesthetic advantages. A decade ago such a project would have not been executed in this manner. WSE's showpiece building in Aliabad that was built in honour of His Highness' expected Golden Jubilee visit functions as an exhibition for local admirers to see how private houses could benefit from adopting a host of amendments to prevailing construction practice. Awareness is created through these channels as people make their own cost-benefit analysis. The path to fostering a higher estimation of one's own cultural heritage is longer, but first successful steps have been done.

When emphasizing the adoption of adaptive practices the aspect of scale cannot be neglected. The examples mentioned are cases in point but do not represent any kind of mainstream yet. To support village communities and municipal committees in their endeavour to improve living conditions and to introduce certain restrictions of building liberties, a multi-faceted approach is required. AKCSP can take a leading role based on its experiences with participatory approaches in conservation and rehabilitation, AK Planning and Building Services are needed with their expertise in supporting the planning and implementation process, as well as AKRSP that has gained more experience in organizing whole communities for a common purpose than any other institution in Gilgit-Baltistan. For education and health, the AKDN organizations concerned are needed with their expertise. The Multi-Input Area Development (MIAD) approach seems to be the appropriate strategy to join forces for the challenges of the future in adopting packages that serve scale-relevant measures. The mainstream building practice could be stimulated by such holistic efforts to improve livelihoods and living conditions in mountain locations of Gilgit-Baltistan.

## **2.1 Environment-sensitive building with local materials**

The first step has been achieved to create awareness regarding local building materials. More ubiquitous poplar timber - that is cultivated on terraced fields and in orchards, that is seasoned according to methods studied in China, that can be treated and worked on locally, and thus is affordable - is used for all kinds of house construction. The efforts of AKRSP in the early 1980s to convince farmers to plant poplar trees have significantly contributed to the availability of poplar wood in the market. Even furniture production has been established through BEDAR in Skardu with impressive achievements that have created local demand and employment for a number of craftsmen. The use of local semi-dressed stone is growing, although its adoption in a number of house dwellings, hotels and restaurants, and bazaar shops leaves ample

scope for expansion. Local clay (*dumul*) and other implements have been readily re-adopted after the detrimental effects of dust pollution were reduced. The general usage of local materials will always be a question of economic calculation, value chain interpretation and awareness that greater comfort - especially for appropriate thermal regimes, well-being and hygiene - can be achieved.

## **2.2 Preserving local heritage through crafts and performing arts**

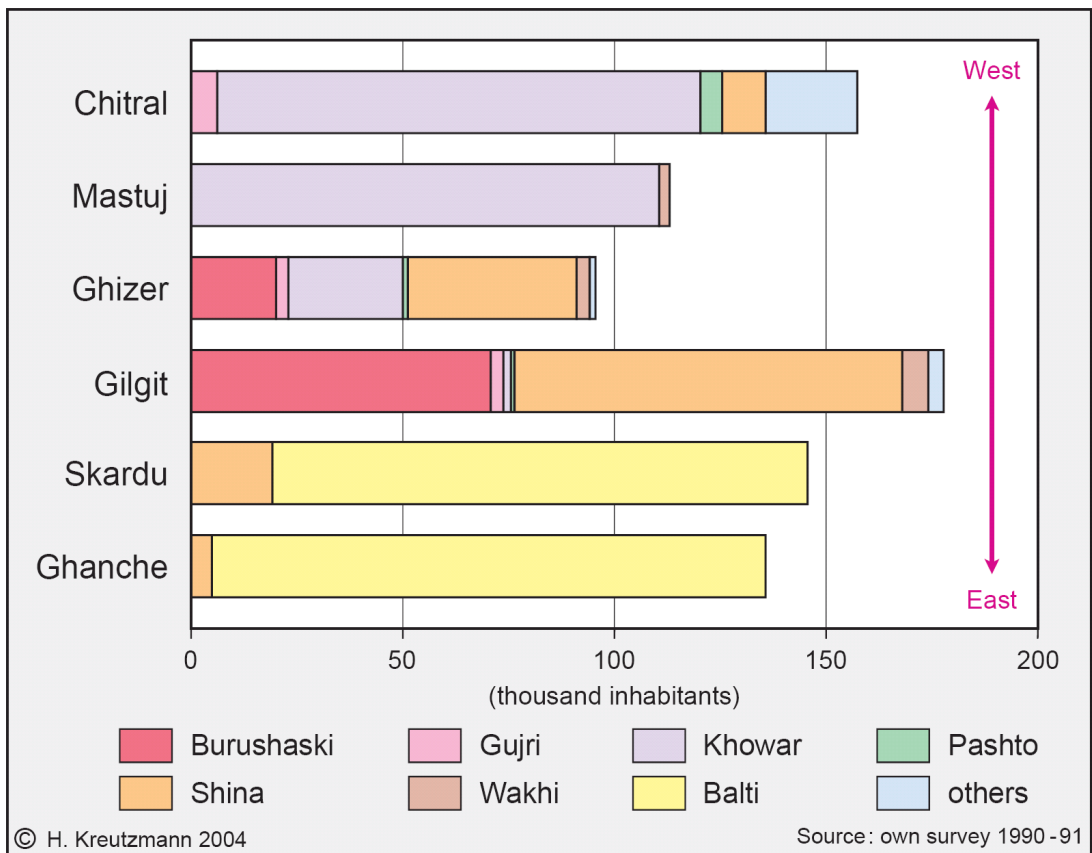
The less tangible results of local heritage preservation are found in a number of local activities that have changed everyday life, ranging from the appreciation of local dishes as culinary specialities to the collection of artefacts without selling them to the immediate customer. Beyond this, social enterprises such as Karakoram Handicraft Development Project (KHDP), Thread Net Hunza, Hunza Arts and Cultural Forum (HACF) have become independent units facing the challenges of economic survival and proved to be resilient. One of the accompanying tasks was the collection and documentation of traditional designs that have been published in the meantime by KADO. In several localities music and dance groups have assembled that perform for domestic and village entertainment during festivals, at special occasions (*salgira*) and weddings. Some have developed so well that additional income can be generated from performing. The sustainability of many cultural groups and Culture Associations - such as Wakhi Tajik Culture Association - is only feasible due to the clearly conducive environment that has been created over time. AKCSP has stimulated the process without controlling it. Consequently, the ownership by the local communities is safeguarded.

## **2.3 Advocating compact settlements in cultural districts**

Progress in revitalizing and rehabilitating former nuclear settlements has just begun. The current status requires further fostering. For the future of settlement development this is a major move towards redefining settlement space and appreciating compact settlements. Ultimately this will lead to better consolidation of the built environment and support the great challenge of providing amenable living conditions in the mountain oases for the vast majority of residents. Its contribution to the preservation of cultural heritage should not be underestimated. Nuclear settlements as expressions of local heritage are the prime examples for the identification of cultural districts. Building techniques and layout of settlements differ in the Tibetan realm of Shigar and Khaplu compared with the Hunza-Nager Valley. Chitral is a prime example of Hindukush house-building traditions as described in a number of publications.<sup>28</sup>

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<sup>28</sup> Cf. Edelberg 1974; Illi 1991; Klimburg 2005; Kreutzmann 2000, 2005a, 2006b; Pott 1965; Yasmin Cheema 2005.



**Fig. 14: District-wise language composition in Gilgit-Baltistan and Chitral**

The identification of cultural districts (Fig. 14) requires the preservation of cultural landscapes that are formed by the dualism of built-environments in settlements and terraced fields and orchards in the village lands. Potential recognition of cultural districts strongly correlates with a holistic preservation and development strategy.

#### IV Conclusions and prospect for the future

Substantial investments have been commissioned for the preservation of landmark buildings and emergency rescue of historic buildings. The achieved results support the view that interventions were timely, appropriate and in tune with community participation. The interrelated rehabilitation programmes were allocated comparatively low funds, but contributed tremendously to the improvement of local welfare. Out of a total AKCSP budget of 17.25 million US \$ between 1991 and 2009 the most significant part was allocated for landmark conservation. In Baltistan and Ghanche just 4.7% went into hamlet rehabilitation, while 88.6% was spent on forts and palaces. The combined efforts were supported by a host of activities documenting and preserving cultural heritage in Gilgit-Baltistan. Baltistan, Ghanche and Hunza-Nager have clearly developed into cultural districts in which AKCSP's work is concentrated. From an economic perspective this is a sensible approach as the bulk of international tourism proceeds are generated here. For the future it might be advisable to follow a twofold strategy:

First, greater emphasis should be directed towards domestic tourism as a more reliable source of income generation than the vulnerable international visitors' sector. Consequently, facilities and tourism-related products and packages need to be designed for a different consumer pattern.

Second, the interlinkage of cultural districts within and beyond Gilgit-Baltistan is a requirement for economic regional cooperation and mutual exchange in High Asia. Chitral has been the complementary and historically related mountain region to Gilgit-Baltistan in Northern Pakistan. For manifold reasons its tourism potential was neglected and did not develop a similar standard in comparison with Gilgit-Baltistan. Seasonal restrictions on physical accessibility and unreliability of transport services have been a major hindrance for tourism development in Chitral. In addition, tourism and other business activities are more closely controlled by the local elite than in Gilgit-Baltistan; they have constrained an environment in which entrepreneurship could successfully thrive. Chitral, Gilgit and Baltistan (Fig. 15) are part of a mountainous region that has many properties in common.<sup>29</sup> The future potential of Chitral is significant in many ways. Chitral is the centre of gravity in the so-called "Chitral Triangle"<sup>30</sup> and the hinge between Afghan and Tajik Badakhshan - the Wakhan Corridor -, the North-West Frontier Province (NWFP) and Gilgit-Baltistan. Realising the importance of Chitral, AKCSP has during the course of 2010 started to explore possibilities to develop its tour-

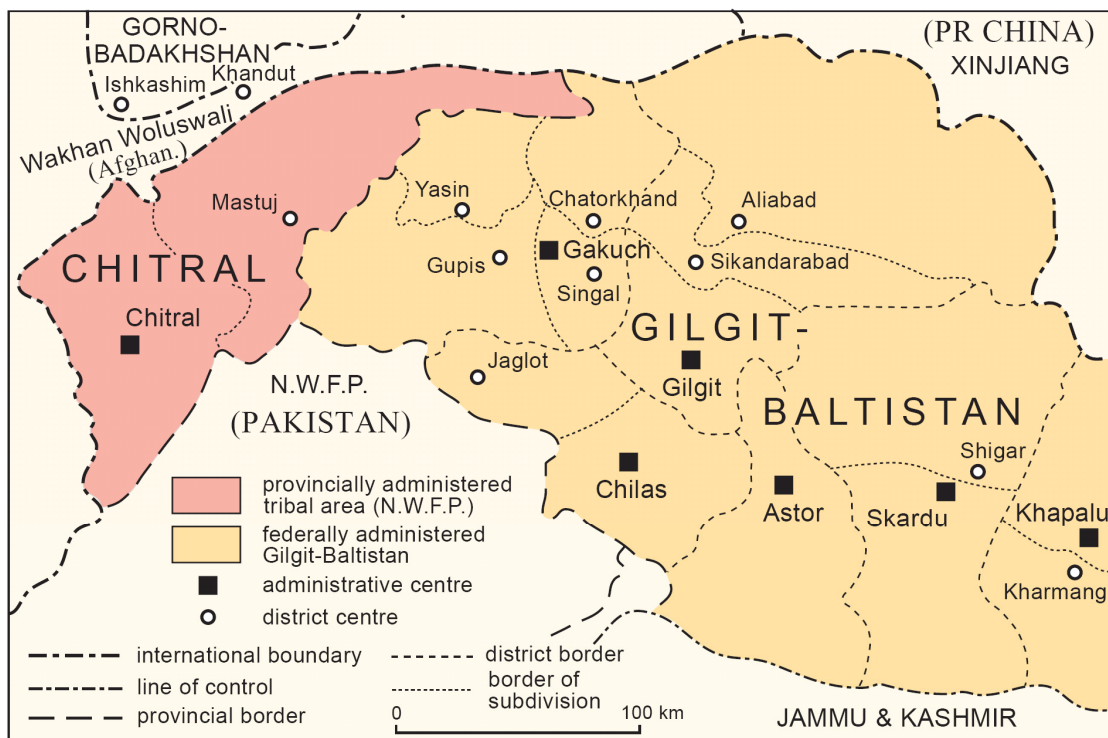
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<sup>29</sup> The World Bank and AKRSP treat it as homogeneous region in which certain development characteristics match; cf. Kreuzmann 2008; World Bank 2002.

<sup>30</sup> Kreuzmann 1998.

ism potential and is expected to become engaged in project activities in the near future.

For future regional tourism and exchange, places such as Mastuj could become an important hub for different routes: (i) through the Yarkhun Valley via Baroghil Pass into Wakhan, (ii) through Laspur valley via Shandur Pass - the venue of the annual polo tournament between Chitral and Gilgit-Baltistan - into Ghizer (Gupis) and towards Hunza-Nager and Baltistan, (iii) down valley to Chitral Town and via Lowari Pass or by Lowari tunnel towards down-country Pakistan. The wider framework of regional tourism development requires connected routes. The suggested route incorporates a number of sites that show landmark and settlement rehabilitation due to AKCSP's efforts. Such a route network would link areas of AKDN activities in Afghanistan, Pakistan and Tajikistan and would create a unique itinerary in the Himalaya, Hindukush, Karakoram, Kun Lun Shan and Pamirs.



Design: H. Kreutzmann

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**Fig. 15: GBC - Gilgit-Baltistan and Chitral**

## V An envisaged circular route for long-term sustainability of mountain tourism in High Asia<sup>31</sup>

The tourist circuit route would have a starting point in Islamabad, from where the mountains can be reached either by plane to Skardu or by road via Astor and across the Deosai Plains to Shigar and Khaplu. After visiting Baltistan and Ghanche the journey to Gilgit and Hunza-Nager is undertaken by road; after staying in Hunza the onward journey on the Karakoram Highway/Pak-China Friendship Highway leads via Khunjerab Pass (4550m) into Tashkurgan County and towards Kashgar, visiting Muztagh Ata-Kongur region en route, departing Xinjiang by crossing Kulma Pass (4363m) into Murghab (former Pamirski Post) in Eastern Pamirs (an alternative and presently feasible route is from Kashgar via Irkeshtam into Sary Tash (Kyrgyzstan) and via Akbaital Pass (4655m) into Murghab); the Pamirs are traversed via the Western Pamirs to Khorog and Ishkashim (Gorno-Badakhshan) or via Kargushi; for crossing the border, the Pjandzh river bridge into Sultan Ishkashim (Afghan Badakhshan) is taken, from where the journey continues through Wakhan to Qala-e Panja and Sarhad-e Wakhan/Baroghil, the Afghan-Pakistan border is traversed at Baroghil Pass (3804m) into Lasht (Upper Yarkhun Valley), continuing the journey on a jeepable road to Mastuj and Chitral Town; after visits to Chitral and the Kalasha valleys, departure via Lowari Top (3100m) or tunnel into down-country Pakistan. Alternatively the Shandur Pass (3700m) route could be taken from Mastuj via Gupis into Gilgit, from where the return journey would be feasible by plane or by road.<sup>32</sup>

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<sup>31</sup> Cf. Fig. 2 and Fig. 3.

<sup>32</sup> The route is partly replicated in the map by Hauser, M. (ed.): *The Pamirs. 1: 500 000: Tourist map of Gorno-Badakhshan with adjacent areas of Afghanistan, China, Kyrgyzstan and Pakistan.* Swiss Agency for Development and Cooperation. Berne, first edition 2004, second edition 2011; cf. Kreuzmann 2004b.



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# Gilgit-Baltistan Evaluation Report

Jolyon Leslie

This report is part of an assessment the impact and long-term sustainability of the physical rehabilitation and socio-economic initiatives implemented by AKCSP over the past 15 years in and around Baltit, Ganesh, Altit and Shigar in Gilgit-Baltistan of Pakistan. Specifically, this section explores the impact of AKCSP's work in effecting and sustaining positive change in the built environment through physical interventions.

## Introduction

The process of heritage conservation and social development by AKCSP began in 1989 with a project for the conservation and re-use of the Baltit fort, before being extended into the adjoining traditional settlement, where support was provided for the improvement of homes and provision of basic infrastructure. A range of work was subsequently undertaken in the settlements of Aliabad, Altit, Ganish, Chumarkan, Gulmit and Nagar, as well as in Shigar and Khaplu, in Baltistan. In order to address the complex set of issues that are raised by this array of interventions - which range from the conservation of individual historic buildings, to the provision of basic infrastructure to settlements, and the formation of institutions to manage both - this assessment deals with the major instruments of change that have been employed over 15 years, namely:

- the **technical** approaches that underpin processes of documentation, conservation, rehabilitation and construction, as well as efforts to ensure that both buildings and infrastructure are effectively maintained after hand-over. Where relevant, the significance of these technical approaches in enabling replication are also be explored.
- the **institutional** approaches adopted to ensure the effective management of conservation sites in the four locations. Drawing on discussions with some of the external partners and current AKCSP staff, the evolution and effectiveness of the various organizational arrangements are explored.

## Background

The physical and social setting in which AKCSP's interventions in Gilgit-Baltistan of Pakistan take place is uniquely challenging. Not only are there significant logistical and supply constraints that need to be addressed if results are to be achieved within defined seasons, but the issue of professional skills has had to be addressed from the start - in fact, the development of a team of dedicated professionals from the region

is a major achievement in itself. In an area with a strong tradition of community structures, but little in the way of formal institutions that would normally oversee the technical aspects of development, the programme has also had to foster the formation of bodies that might sustain the process of development, and for which there was little precedent at the time of the inception of the AKCSP programme in 1980. It is in this context that field staff have had to find a balance between the need to demonstrate results - to donors and communities alike - with support for longer-term processes that are the key to sustainable development, which needs to address the underlying issues of rural poverty and marginalization of some communities.

While the time-line of the various projects undertaken by AKCSP is dealt with in more detail elsewhere in this assessment, it seems important to outline the underlying strategies that have guided the programme, as part of a discussion about the impact of physical interventions on the built environment. Working within an overall goal of safeguarding historic property and patterns of settlement, the key strategies adopted by AKCSP during the course of the past 15 or more years have been:

- to conserve important historic buildings, including key religious structures, forts and palaces (acquired from the families who inherited, but could no longer maintain them), as well as traditional houses within key settlements that retain a degree of integrity in form and fabric.
- to provide basic services for the inhabitants of these settlements, primarily to improve living conditions, but also to ensure that their unique fabric be preserved, to the extent possible.
- to generate revenue from restored buildings - through entry charges for museums, accommodation provided in adaptively re-used guest-houses, restaurants, tea-houses and from other sources - as a means of ensuring the sustainability of these premises, once handed over
- to develop skills and generate employment within communities during the course of projects, so as to contribute to improved livelihoods both during and after the intervention.
- to foster the formation of appropriate local institutions, both to facilitate the process of negotiation and implementation of projects, but also to oversee the subsequent maintenance and management of facilities, from historic public buildings to infrastructure, and (in certain cases), the wider process of physical development.

The evolution of AKCSP's work in the region over time highlights how versatile the programme has been in responding to developments and opportunities that have emerged, and the growing experience of the project team. One example of the approach has evolved lies in the contrast between the Baltit fort, whose conservation was triggered by its fragile state (as borne out in the time taken to undertake a complex series of engineering and conservation works) while subsequent AKCSP projects, such as those in Altit and Khaplu, have been characterised by a more tactical approach towards the process of conservation, while carefully balancing this with upgrading and development activities within the wider settlement. So too, a progressive emphasis on adaptive re-use of historic buildings, where this is feasible, serves to illustrate the evolving strategy within AKCSP's programme.

### **Justification of intervention in the local context**

Developed over time, the strategies above have been developed against a backdrop of rapid physical transformation in the region. Not only is there, as elsewhere in Pakistan, significant population growth in Gilgit-Baltistan, but changing social patterns result in a demand for separate homes for nuclear families. In a context where it was normal for an extended family to occupy a single dwelling only a decade ago, this is resulting in a dramatic sprawl of once-compact villages, whose productive land is in many cases being taken up by new housing, most of which is built using modern materials and non-traditional forms. As a community elder explained at a meeting in Hunza during this assessment, the only way that the traditional pattern of settlement in the area can effectively be safeguarded is 'if we have more land'. While there have been several initiatives, by AKCSP and others, to undertake settlement planning exercises, the continuing sprawl of settlements suggests that these have proved difficult to implement, even where authoritative institutions might exist or have the mandate to do so. Added to this phenomenon is the 'development' pressure relating to the KKH and tourism, which will be dealt with in a separate section of the assessment.

Although a 'cluster housing' initiative in the Karimabad valley, implemented by AKCSP, aimed to explore the option of constructing compact shelter, using traditional materials and with modern levels of servicing, as an alternative to the sprawl taking place around the traditional villages, this seems to have remained at a pilot phase.

While the transformation of traditional patterns of settlement are a critical issue in the region, and have been addressed through most of AKCSP's projects, it was the poor condition of an important historic building that was the starting-point for the programme in 1980, when initial surveys were carried out of the Baltit fort. These surveys revealed an advanced degree of decay that necessitated significant structural in-



tervention, if the complex was to be effectively safeguarded. With virtually no precedent for a conservation project on a unique traditional structure that was in a fragile condition, in a very remote location, the first AKCSP undertaking in the region posed a significant challenge. The details of the technical approach adopted in the conservation of the Baltit fort are dealt with elsewhere (*ref HCP brochure on Hunza and Baltistan*), but they clearly demonstrate how solid foundations were laid at that time for subsequent conservation initiatives by AKCSP in the region.

In terms of the **technical** approach adopted for the conservation of the Baltit fort, one of the critical opportunities that the project offered was for a detailed investigation of the nature of traditional construction, which in the case of most public buildings of this importance, took place in stages over an extended period of time, and often reflected the changing fortunes of the owner. In the case of Baltit, this required a rigorous process of documentation, which has set a standard that has subsequently been maintained across the AKCSP programme in Gilgit-Baltistan. Through the understanding that it provided of the characteristics of a complex building that possibly dates back some 700 years, over which some 70 distinct phases of construction were identified, the surveys enabled the team to develop a set of technical measures that drew on the evident strength of traditional techniques, including the timber cribbage that had ensured the longevity of the fort's walls, while also entailing use of relatively high-technology materials where this was deemed essential. By the same token, the Baltit project provided opportunities to explore how best to find a balance between the preservation of the original form of the building, while introducing new elements such as a suspended floor that enables visitors to inspect archaeological features in the basement of the building, revealed during the course of the early engineering works. This has been further explored in the adaptive re-use of the Shigar fort in Baltistan, although this and other interventions by AKCSP in the region have been careful to strictly adhere to international conservation charters, with which the teams in the field are clearly very familiar.

This technical rigour, with years of documentation and analysis preceding any significant physical intervention, also underpinned the approach used in the **Altit** fort, where work began in 2005. In this case, it was important to determine the form and characteristics of the rock outcrop on which the fort had been built, if effective measures to address the deflection of the structure were to be designed. Through an understanding of such structures developed in Baltit and other projects, the team in Altit were able to determine how best to strengthen the existing rubble stone and adobe block walls and repair the timber cribbage, which serves to strengthen the structure in an earthquake-prone area. These works have been carried out in careful-

ly-planned stages, so as to avoid any risks to the surviving structure. Opportunities for structural improvements have also been exploited, such as the insertion of timber wall-plates under roof beams, where none had originally existed on certain internal walls, or the introduction of stone plates under internal timber posts - both, demonstrating how traditional techniques have been used in preference over more modern interventions, where the latter are not deemed essential.

In terms of materials used, project staff in Altit have been able to draw on a body of experience with stabilized mortars and plasters so as to improve the longevity of structural elements or finishes. As in other AKCSP projects, use extensive use has been made of traditional techniques such as the use of birch-bark to reduce the risk of rot in timber boarding used on earth roofs, or the mixing of apricot juice into the final roof finish, so as to improve water-resistance. Likewise, the careful matching of juniper sections in repairs on the cribbage, along with use of *gasunder* wood for pegs to fix these timbers, illustrate the care that has been taken to ensure an appropriate degree of authenticity in the course of the conservation process. The re-use of materials has also been important, with original adobe blocks being re-incorporated into areas where reconstruction proved necessary in Altit. In the case of Khaplu, the wall construction of a new accommodation wing adjoining the palace is entirely from adobe blocks, used within a system of timber framing in the manner that is widely seen in traditional buildings in the region.

One aspect of AKCSP's evolving technical approach that is amply illustrated by the work in Altit is in an emphasis on training for women from the settlement, 12 of whom have been provided instruction and subsequently employed as carpenters, electricians and masons during the course of the conservation work. Aside from improving the livelihoods of the women trained, the aim is to ensure that skills are available within these communities, either for subsequent conservation work or new-build.

It was in the conservation and adaptive re-use of the historic fort at **Shigar** in Baltistan that an additional technical challenge was faced by the AKCSP team, as they embarked on preparing designs for the incorporation of guest-rooms, with modern services, in part of this sizeable fortified residence of traditional construction. Based on painstaking documentation of the existing structure of the fort, it proved possible to create a variety of guest-rooms and other spaces within the existing fabric of the building, and to route plumbing, waste and electrical networks in the least intrusive manner, without compromising the integrity of the historic structure. In contrast to the transformation that took place in Shigar, a conscious decision was made in the case of the Altit to leave the original structure as a 'shell' for visitors to inspect the rich historic structure and decoration, but with only minimal servicing. Perhaps driven

in part by a changing attitude within the international conservation community, where the imperative of ensuring that interventions are 'reversible' has gained ground in recent years, this approach has been made possible by the fact that facilities for visitors to Altit can be provided in an adjoining summer-house and orchard. Even with this possibility, it remains unclear exactly what function the Altit fort will have once restored - and perhaps draw lessons from the 'museum' approach that was adopted in Baltit, while ensuring that the complex is truly integrated into the life of the community who have been so involved in planning and realizing its conservation.

No such ambiguity affects the ongoing conservation and construction work in **Khaplu**, where some 15 guest rooms are being built away from the historic palace, which will only be partially used for accommodation, so as not to compromise the integrity of the original building. If part of the aim of the use of traditional materials in the extension in Khaplu is to encourage local home-owners to follow this example, there would seem to be a need for outreach to ensure that builders are aware of the implications, in terms of costs, environmental performance etc.

The approach employed in the **conservation of smaller residential and public buildings** has generally been undertaken in the context of the safeguarding and development - and, in certain cases, planning initiatives - of entire **settlements**, and this has always included the provision or upgrading of basic infrastructure. While investments in upgrading within the settlement below Baltit came after work was begun on the fort, in the case of Altit the upgrading of the settlement, which is home to some 1,200 people, was deliberately completed prior to work beginning on the fort itself.

The first such intervention of this sort by AKCSP was in the villages of Diramishal and Khurukshal that lie on the slope beneath the **Baltit** fort, where by 1996 a system of water-borne sanitation and anaerobic treatment was provided for the conservation zone, and subsequently extended in 2003 to serve the wider settlement of Karimabad. It was in order to try to stabilize the settlement and improve living conditions within traditional homes in the area immediately below the Baltit fort (then under conservation) that a pilot project for the repair of some 30 dwellings was initiated, along with support for stone paving of alleys and stairs.

In the case of the village of **Ganish**, a programme of conservation was initiated in 1996, when the inhabitants showed an interest in sanitation work then being carried out in Karimabad, from where the sewage pipes ran through land belonging to residents of Ganish. This helped to bring together two sets of skills and experience within the AKCSP team which had until then worked separately; those involved in conservation (on the Baltit fort) and those who dealt with upgrading and social development in

the villages that make up Karimabad. While the bulk of the 1,800 or so inhabitants of Ganish had access to a source of safe water, there was no corresponding system to deal with the resulting waste water. In addition to the sanitation system, improved stormwater drainage was provided, along with a new piped water network, following a similar technical approach to that adopted earlier for Karimabad. Here, as in Shigar, Nagar and Khaplu, the technical approach to provision of basic services has taken account of the local circumstances, particularly with regard to the future maintenance of schemes by villagers themselves. In all cases, the systems have been designed for a 30-year period of operation, taking into account projected population increase.

In the case of Ganish, some degree of additional economic benefit has accrued to the community, who are able to use the outflow water from the sewage treatment plant for growing vegetables on land reclaimed on the river bank.

The initial focus for AKCSP's conservation work in Ganish village was the central square or *jataq*, around which are grouped 4 historic family mosques which retain fine decorative timber work on the external facades, which were carefully documented prior to conservation work starting. The investment in these public buildings, and on improvements to the *pharee* or cistern that lies in the heart of the village, a degree of trust was built up, which proved invaluable in the subsequent implementation of extensive conservation and upgrading, in which members of the community took an active part. In a way, the collective rehabilitation effort has helped to overcome internal differences that exist within the community in Ganish, although the construction of a large and intrusive concrete mosque on the southern edge of the settlement suggests that the goal of safeguarding the integrity of the village might not in fact be shared by all inhabitants. While no effort has been spared by AKCSP staff to address the complex community relations that seem to prevail in Ganish, the project arguably illustrates the limits of the 'technical' aspects of conservation and upgrading. Having lost agricultural land to floods, most inhabitants of Ganish are unable to move their animals outside of their homes, as was possible for the villagers of Altit. As long as residents of Ganish continue to live in close proximity to their animals, there are limits on what can be realistically achieved in terms of improvements in living conditions, if the dense traditional fabric of the village is to be preserved intact.

No such constraints seem to have faced the settlement development initiatives in Balistan, where the focus has been primarily on Shigar and Khaplu, where major investments have been made in conservation of historic forts. In **Shigar**, there has been a balance from the inception of the programme between conservation of significant public buildings (such as the exquisite 625-year old Amburiq mosque) or improvement of services within traditional settlements, and the conservation/conversion of the histor-

ic fort itself into a guest-house. The fact that small-scale upgrading measures have taken place on some 3,400 households around Shigar points to a significant impact on living conditions in the area. It is perhaps too early to judge whether these investments, or the restoration of the Shigar fort itself, might have an impact on self-built construction in the area. For the time being at least, most homes in the area continue to be built in a traditional manner, with little evidence of the process of transformation that has been so damaging in Hunza and elsewhere in the region,

A significant outcome of programme activities in Shigar lies in the extent to which AKCSP staff are being asked for advice on new construction. One such example lies in the new Jame mosque, which is being built entirely with traditional materials and takes a form that, although large in extent, is sympathetic to its context. Perhaps less successful is the large school that has been built with AKCSP support just outside Shigar and which, although built with traditional materials, is somewhat massive in form.

AKCSP's involvement in settlement development in **Khaplu** is a long-standing one, with the construction of a community centre and pilot conservation of houses in 1998, which took place at the same time as emergency repairs to the Khaplu palace complex. Subsequently, other conservation and upgrading initiatives took place in Astana Mir Ahmad, Khanqa and Banpi. More recently, the construction of a water-filtration unit to serve the Palace guest-house and 30 houses in the area has had a direct impact on the lives of the surrounding community. The primary focus for the time being, however, is the ongoing conservation of the large palace building, where similar techniques to those developed in Baltit, Altit and Shigar are being applied,

While there have been efforts to translate the lessons from the conservation of historic buildings into accessible message for local builders of traditional homes, this never seems to have come together as a coherent element within the AKCSP programme. Very few of those interviewed during the course of the assessment acknowledged having received building advice, either in Hunza or Baltistan. Experience elsewhere in the world suggests that low-key building advice, with appropriate messages about the economic and environmental advantages of certain key techniques, could have a significant impact on rural building practice. The impressive body of experience that exists within the AKCSP team, from the level of craftsmen to professionals, on such techniques, suggests that greater emphasis might be given to this than has been the case to date.

## Institutional issues

Through the various initiatives outlined above, the AKCSP has consistently worked to put in place representative structures to facilitate the planning, implementation and management of individual buildings or facilities such as infrastructure. Building on the experience of the Town Management Society (TMS) that was formed for Karimabad in 1995, a succession of bodies have been established and, where required, continue to receive technical support from AKCSP staff on the ground. While the mandates of these bodies seem to have varied between locations, they seem to have generally played a critical role in ensuring the effective implementation of project activities, especially with regard to dispute-resolution, the mobilization of community labour as a contribution to AKCSP interventions, and in the operation and maintenance of infrastructure. An example of how the formation of such entities has had to adapt to the community dynamic is in Ganish where, because not all of the inhabitants were willing to be involved in a TMS, resulted in the formation of the Ganish Khun Heritage and Welfare Society, with a limited mandate and coverage only in one cluster. In the case of Nagar, the formation of 'construction committees' has proved effective in building trust with communities, particularly with regard to procurement of materials for upgrading works. In Khaplu, a TMS that was established in 2003 reportedly has 75 members, and seems to provide a degree of local ownership on the conservation process, as well as on aspects of settlement planning.

While the continued functioning of infrastructure seems to point to the effectiveness of project-specific entities on technical tasks, it is less easy to evaluate their performance in managing facilities. In the case of the Baltit fort, which is currently managed by the Baltit Heritage Trust, there seems to be scope for a more community-focused use of the complex, which should perhaps be seen more as a school or educational facility than a museum. Without a greater degree of innovation, there is a risk that the Baltit fort remains a symbolic relic of the past, with little real connection to the contemporary life of Karimabad. At the time of visiting it during the assessment, it was eerily empty and there was virtually no information available about the history of the structure or the settlement below, or the process of conservation and upgrading.

As non-governmental bodies, however, there are clearly limits to what project-specific entities such as this can achieve in the context of Gilgit-Baltistan. This is particularly apparent in the realm of settlement planning, in which significant investments were made during the course of the realization of work in Baltit/Karimabad, but which the TMS in this case seems to have failed to implement. While this a complex issue to address in any rural settlement, let alone one in the context of Gilgit-Baltistan, unless some authoritative institution is able to deal with planning issues, the significant gains

that have been made by AKCSP in conservation, provision of services and community development risk being compromised by uncontrolled growth of settlements. Interestingly, members of the community in Hunza stressed the need for more sustained technical support for - and scrutiny of - the TMS. The latter point perhaps derives from repeated assertions that the recovery of operational costs of infrastructure was, in some cases, applied selectively. In the case of Ganish, community elders spoke of the continuing need for technical and managerial support from an 'umbrella' organization such as AKCSP.

### **Summary of conclusions/recommendations**

1. There is a need to effectively address the long-term, inevitable, process of transformation and establish a system of technical advice that not only offers practical building advice to householders (in coordination with BACIP/AKPBS), but also works more closely with the TMS and other bodies to develop cluster plans. Despite the mixed results that emerge from AKCSP's involvement in settlement planning in recent years, there is clearly a felt need on the part of some community elders, who have no-one else to turn to.
2. Given the experience developed by AKCSP staff over 15 years, there would seem to be sufficient material to assemble a set of 'standard operating procedures' to cover aspects of documentation, conservation (including maintenance and visitor management), upgrading and the development of community structures. Such a set of SOPs could both help to synthesize key lessons learned from various projects or processes, and also serve as a training tool for the next generation of young professionals.
3. There is a need for continuity of inputs from AKCSP to both conservation and upgrading projects. Without this, there is a risk of compromising the gains that have been made to date, as buildings or systems are not adequately maintained. Aside from their impressive technical abilities, an important strength of the AKCSP team in Gilgit-Baltistan derives from the fact that they are from the region, and can therefore be very effective advisors, as well as agents of change.
4. Significant achievements have been made by the AKCSP team in developing female skills, both in surveying and documentation, as well as construction skills. This provides an opportunity to develop a longer-term community development programme in Altit that provides support to this group - and possibly others - in improve their livelihoods beyond the completion of AKCSP's conservation work.

## Epilogue

### An inevitable disaster or another paradise lost?

Hermann Kreutzmann

The New Year of 2010 brought with it a catastrophe to the Hunza Valley, in Gilgit-Baltistan. On 4 January, a crack in the slope of the village lands of Atabad, in the Upper Hunza Valley, widened, causing terraces and houses to collapse. A major landslide subsequently caused a wave of dust and gravel, disguising huge solid blocks of rock that had come down which eventually dammed the Hunza River. Since then, that water has been collecting into a massive lake, which by mid-May was perceived as threatening to overflow its banks, inundating dozens of villages.<sup>33</sup>



The crack in the slope was actually discovered more than a decade ago, in the aftermath of the Astor earthquake of 1998. At that time, humanitarian organisations such as Focus, an AKDN-funded NGO, advised nearby villagers to begin moving their homes, warning that the area was highly unstable. Government authorities refrained from designing a proper resettlement scheme. Understandably, however, the villagers hesitated in doing so, as a result of which 20 people lost their lives, nearly 50 houses were completely destroyed, and about 1500 people have been displaced. Nearly two kilometres of the Karakoram Highway, Chinese-engineered work on which was taking place, was damaged and left covered by debris; other roads and bridges

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<sup>33</sup> The photograph was taken on August 26, 2013; © Hermann Kreutzmann



have been submerged in the Gojal area of Upper Hunza, including Gulmit, the administrative *tehsil* headquarters of Gojal. The lake level continued to rise.

Mitigating the disaster fell to the National Disaster Management Authority (NDMA), which was confronted with constructing a spill-over channel to lower the lake surface. This is meant to stop the water level from rising, and could eventually allow for a controlled drainage. When the landslide occurred, the Hunza River was releasing only two percent of its summer melt waters; in the beginning of summer the run-off rate increased day by day, while politicians, activists and engineers debated how to proceed. At that time some suggested utilising the lake water for power generation or tourism purposes, others discussed the stability of the dam, though often without sound geological and geo-morphological evidence. Another faction wanted to destabilise the dam by bombing it, to get rid of the potential problem once and for all.

Inevitably, culprits were sought and easily found on the side of the administration and concerned authorities, demonstrations were staged against bureaucrats and politicians, mainly accusing them of inaction. Initially, the supply of basic foodstuffs and the transport of ailing people were enabled by army helicopters. As the crisis grew, a ferry service allowing the transportation of people and goods was implemented. On both sides of the lake, trucks ready to transport goods to and from the Sost Dry Port, the hub for China-Pakistan trade across the Kunjerab Pass, were stuck. International trade along the only functional corridor between Central and South Asia was halted for some time. After introducing the ferry surface trade and goods exchange were resumed at least from spring to autumn. Winter condition with freezing of the lake surface has remained a grave obstacle for any kind of communication.

### **Culture of adaption and reaction**

As a highly vulnerable high-mountain valley system, Hunza is characterised by the most extensive glaciation outside the polar regions, as well as some of the steepest slopes on Earth. Natural and manmade disasters are not unknown in the Karakoram, and survival under these harsh conditions has brought fame to the local Hunzukuts, contributing to their reputation as capable and hardy mountain folk. Even so, the elders in Hunza termed the January landslide the most significant natural disaster their area had experienced to date.

From 1830 to the 1990s, a total of 124 damaging events, as recorded from a range of sources, occurred in the Hunza Valley. The single greatest destructive force has been the movement of glaciers, accounting for almost half of all recorded disasters. In addition to the slow destruction that glaciers can cause to cultivated lands, irrigation sys-

tems and roads, glacial surges can be triggered by landslides. More seriously, advancing glaciers often lead to the formation of lakes and natural dams, posing the potential for dangerous glacial dams burst and the sudden massive release of temporary reservoirs. The second most destructive natural disasters are avalanches, followed by weather-related action from wind and thunderstorms.

To a significant extent, the cultural landscape of the Hunza Valley is the result of coping with these disasters. Within the period of recorded observation, there have only been four events leading to the complete abandonment of settlements in the Hunza Valley. A mudflow in 1830 and various glacier advances in the Chupursan Valley have been the most dramatic of events, as a consequence of which the whole tributary valley of the Hunza River had to be given up for habitation for decades. It was only within the last century that systematic resettlement resumed, with more than 330 households living there today.<sup>34</sup>

Less than two decades later, in 1858, a severe rockfall at Sarat, and the subsequent damming of the Hunza River, caused the flooding of all villages from Sarat to Pasu.<sup>35</sup> Incidentally the site is located within two kilometres of the present dam; the exact number of victims could not be established at that time. Before their destruction, both of these areas had been newly habituated by settlers from central Hunza and by migrants and refugees from Wakhan. After the rockfall, the young village of Sarat was abandoned and only resettled after 1931.

In general, through all of these years, direct earthquake-triggered mass movements have not been registered, although 42 earthquakes occurred in the Hindukush-Karakoram region between 1876 and 1911.<sup>36</sup> Out of 102 earthquakes with epicentres in northern Pakistan between 1912 and 1971, no direct destruction of habitations is recorded for the Hunza Valley. The January 2010 disaster is thus a significant addition to this data: an earthquake contributed to the destabilisation of the slope, the slope collapsed years later, causing the blockage of the Hunza Valley and the formation of the Atabad Lake.

### **A lake of substantial size to remain for ever?**

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<sup>34</sup> See a table with all events recorded from archival and oral sources in Hermann Kreutzmann (1994; 2006, pp. 253-255).

<sup>35</sup> For the case of Pasu see Hermann Kreutzmann 2012.

<sup>36</sup> See table in Hermann Kreutzmann (2006, pp. 257-258).

Just two kilometres from Atabad, Sarat is an important historical reminder of the immense potential for destruction that exists in the former today. In 1858, a lake similar to today's in Atabad was formed in Sarat. After reaching a length of more than 20 km, the dam collapsed and the lake released a flood that followed the course of the Hunza River into the Gilgit and the Indus.

At that time, the waters entering the Indus flowed with such force that the river levels rose alarmingly around Attock, where the Indus leave the mountainous terrain to enter its floodplain. A contemporary commentator, Frederic Drew, wrote in his book: "The next flood of which we have a record is ... the one that in the year 1858 did so much damage at Naushahra. My information about this is derived chiefly from the above-quoted letter of Major Beeher, from a Memorandum by Captain Henderson which precedes it, and from papers by Captain Montgomerie and Mr. Obbard. The following is the description of it. At 5 A.M. on the 10th August, 1858, the Indus at Atak (Attock) was very low; at 7 A.M. it had risen 10 feet; by half an hour after noon it had risen 50 feet, and it continued to rise until it stood ninety feet higher than in the morning. The fall was very slow; during the 12th August it returned very much to the position it occupied before the flood came. Captain Henderson speaks of the water as 'welling up quietly but very rapidly', and says that four hours after the rise began, and three and a half hours before the maximum, he crossed the river in a boat."<sup>37</sup>

The destruction caused in the lowlands alarmed the colonial authorities to look into the flood regime more thoroughly. Frederic Drew and others<sup>38</sup> wrote reports and tried to record events that sometimes destroyed valuable infrastructure and village lands down stream as well as inferring loss of lives.

What is likely to happen today, a century and a half later? If the Atabad dam would collapse and the Gojal lake would subsequently empty rapidly, the damage would be far more dramatic than it was in 1858. During the 20th century, the Karakoram Highway has changed the infrastructure and livelihoods of both the Indus and Hunza valleys, leading to an expansion of follow-up construction of link roads, extension of village lands and settlements closer to the riverbanks. Today, every tributary river is connected to the larger water bodies by a jeepable suspension bridge or concrete viaduct. Development agencies, the Public Works Department - in Pakistan sometimes labelled as 'public's worst department' - and international donors have contributed to bridge construction and road building. The Tarbela Dam on the Indus claims to be the

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<sup>37</sup> Frederic Drew (1875, p. 419). See as well the geomorphological investigations by Karl-Heinz Paffen, Wolfgang Pillewizer and Hans-Jochen Schneider (1956, p. 14); Kenneth Hewitt (2010).

<sup>38</sup> E.g. Kenneth Mason 1929:

world's largest earth-filled dam, is the major regulator for Punjab province's irrigation, and houses the country's prime hydro-electric power-generation station. Above Tarbela, the Basha Dam is currently under construction, deemed a feasible plan despite high probabilities of earthquakes and flood releases. Considering the scope of the settlement, flooding resulting from the Atabad landslide would be a disaster of massive proportions.

Subsequent to the event progress was very slow and affected people were gravely disappointed over inaction. In the meantime the picture has changed. About 457 households (chula) in Gojal have received compensation from a relief package between 6 and 8 lakh Rs each. To the households who lost family members 20 lakh Rs were paid. International agencies - World Food Programme, Pakistan relief, Focus Humanitarian Assistance Pakistan, China Aid - provided food aid. Especially the role of the Chinese neighbours was lauded as a new actor in the relief cooperation. Between 2010 and 2013 about 8,400 tons of food aid reached Gojal via Khunjerab Pass from Xinjiang Province.

The lake level was significantly reduced so that certain lands and stretches of the Karakoram Highway have reappeared. Others like the village of Ainabad (Goshben) seem to be lost forever. Chinese Roadbuilders and engineers who have rehabilitated the Karakoram Highway in recent years are active in drilling tunnels above the lake, shuttling equipment for blasting and construction between the ports of Atabad, Gulmit and Shishket. Optimistic guesses suggest that overland traffic might be resumed by the year 2015; the speed of action seems to support this thesis. The lake will probably remain and has significantly changed not only the infrastructure; every walk of life has to adjust to the changed environmental and logistic conditions.

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