The Aga Khan Historic Cities Programme

STRATEGIES FOR URBAN REGENERATION

PRESTEL

GILGIT-BALTISTAN

PAKISTAN

1 Baltit Fort 2 Altit Fort 3 Shigar Fort 4 Khaplu Palace 5 Hunza Villages Rehabilitation Intervention areas N 50 km

FEATURED CASE STUDIES

BALTIT FORT

ALTIT FORT

SHIGAR FORT

KHAPLU PALACE

HUNZA VILLAGES REHABILITATION

Programme Scope / Objectives

The goal of the programme is sustainable development through culture and strategic investments. These are social, economic and institutional processes that aim to protect, manage and promote cultural heritage as an integral part of sustainable development. The hope is to enable effective and participatory community stewardship of heritage and environmental resources, and to create income and enterprise opportunities for communities based on proactive cultural heritage management. This has entailed the restoration of monuments and the improvement of living conditions through housing, sanitation, local capacity building, revival of arts and crafts, and the creation of new employment and income opportunities.

Preceding pages:
A view through a pair of carved wooden windows in Khaplu Palace to the valley and the Karakoram Mountains beyond.

Gilgit-Baltistan Area Programme

Gilgit-Baltistan, spread over 69,930 square kilometres, brings together a land of majestic mountain ranges and deep gorges with raging rivers and a heterogeneous population of a million whose origins are lost in the myths of antiquity. Defining the region are the Karakoram Mountains and the Indus River with its several tributaries, with the Himalayas extending in the south and the Hindu Kush range in the east while the Pamirs cordon the north.

It is home to the high mountain valleys of Hunza and Baltistan, located in the upper catchment area of the Indus River and deep within the Karakoram, where nature with its peaks, glaciers, rivers and streams is omnipresent. Terraced fields draw water from a great distance through extremely well-engineered irrigation channels, attesting to efforts to make the best use of nature under harsh living conditions.

The location of the region is sensitive and strategic because of its boundaries with Afghanistan (Wakhan territory), with China and with Indian-held Kashmir. The construction of the Karakoram Highway (KKH), connecting Islamabad with Kashgar over the Khunjerab Pass (over 4700 metres), added to its importance, while the construction of further roads connecting Skardu with the KKH has given this region even more significance. The hydroelectric power potential of the Indus river system in Gilgit-Baltistan is another reason for the region's significance.

The area may be perceived as impenetrable, but it has historically provided conduits for trade between Central Asia and South Asia, with some of the strands of the Silk Road passing through it. This vast mountainous region is populated by heterogeneous communities and tribes of fairly distinct ethnic and linguistic groups, deriving their origin from Aryan, Scythian, Mongolian, Tibetan, Turanian and Caucasian stock.

The earliest forms of religion reaching this region seem to be Hinduism, in time supplanted by Buddhism, before the spread of Islam between the ninth and the fourteenth centuries. The languages spoken in the region are Shina around Gilgit, and Balti, a form of Tibetan in Baltistan. People of Hunza and Nagar speak Buruskaski. Other languages or dialects spoken in Gilgit-Baltistan are Wakhi, Khowar, Turki, Kashmiri and Gujri. Urdu is understood and spoken in almost all areas, while English is gaining ground, particularly with the young.

Altit Fort is typical of building construction in the Gilgit-Baltistan area, with reinforcing cribbage structures at the corners and horizontal cators stabilizing the walls.

Opposite page:
Baltit Fort in 1996, after restoration, looks out over the Hunza Valley.

Over time these peoples developed life styles that meshed fully with local environmental conditions. Frugality, self-dependence, optimal use of resources, and community endeavour emerged as their bedrock. The mountainous terrain is such that barely 1.5 per cent of the land is available for habitation. Water, though running in mighty rivers, was too far down to be readily harnessed. Streams were tapped and brought to parcels of land such as alluvial fans for seasonal crops through ingenious water channels. Only 'useful' trees were planted and looked after, with the apricot being a favourite, while quick-growing poplar was preferred for use in construction. The insufficiency of precipitation and the consequent lack of natural forests, particularly in Hunza, coupled with the burden of creating stone from huge rocks and the scarcity of available land resulted in the construction of multi-purpose single-room dwellings. These, typically, have a storeroom attached, and are made of mud and stone with no chimney or window, only a square hole in the centre of the roof over a fireplace where the cooking was done. Walls are tied in at various levels by wooden beams. A typical Hunza house presents a unique architectural design combining space, security and comfort, with a second storey for summer use. These houses clustered together to form settlements built on barren land that was of no use for the cultivation of crops. Their small size helped conserve energy required for heating as well as other resources. The cluster was also intended to provide security, as protective walls and watchtowers witness.

The first habitations in Hunza are reported to be those of Ganish, Altit and Baltit (since 1960 Karimabad), where *khuns* (fortified settlements) were formed, and water from the Ultar was taken to irrigate land. Over time watchtowers were added and the forts at Altit and Baltit took their present form. Skilled artisans from Baltistan reportedly carried out the work.

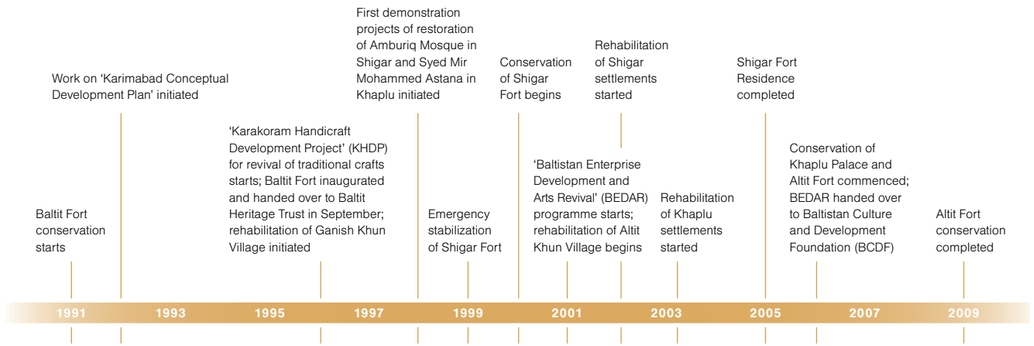
With easier access to and from Kashmir and having historical links with Tibet, Baltistan developed at a faster pace than Hunza. It generally also has bigger open spaces compared to Hunza, and has better resources in terms of land, or tree cover. Of the five valleys of Baltistan, Shigar is perhaps the most attractive. The valley is fertile with abundant water. Situated at an elevation of over 2440 metres, Shigar and the Shigar River drains the waters of the glaciers, feeding into the Indus. The Baltoro glacier, one of the largest in the Karakoram, begins at the north-west end of the valley. This is the main route for mountaineers headed to K2 and the Gasherbrums.

The other important valley in the area is Khaplu, which has borders with Ladakh (Indian-held territory). The average elevation of this valley is 2740 metres. Mountaineers on their way to the Masherbrums and the Saltoro range have to pass through Khaplu. Traditional housing here shows a great range in the use of timber, and has larger spaces as well as two-storey structures that use innovative wooden pillars. The palaces and forts are better developed and places of religion also testify to the rich architectural heritage that is regionally standard. A number of these forts or palaces, though relocated to lower sites during the Dogra regime, offered opportunities for restoration and adaptive reuse.

Our inventory of important cultural buildings in Gilgit-Baltistan includes eight major forts and palaces and nearly twenty minor ones; forty-five *khanqahs* (Sufi retreats), 150 mosques, over fifty archaeological sites, thirty important tombs and fifty traditional polo grounds. Gilgit-Baltistan contains a very rich and pluralistic heritage – representative of Muslim cultures, but also of Buddhist and Hindu influences.

As mentioned, strands of the Silk Road passed through the Hunza and Indus valleys. Commerce, art, skills, ideas, religious faiths, languages and technology passed between East and West through these mountains. The cross-fertilization that occurred facilitated

Phasing 1991 → ongoing



an unprecedented exchange of ideas and the development of a unique culture, which deserves to be preserved and shared.

The cultural enclaves of central Hunza, Shigar and Khaplu were focused upon for Area Development, as these offered a sufficient level of heritage that could collectively permit a discernible improvement in the quality of life. Landmark monuments provided the centrality while the traditional settlements and the heritage and traditions surrounding these forts or palaces allowed for community-based conservation and rehabilitation efforts. The fact that these cultural enclaves were rapidly being transformed from a rural to an urban setting underscored the need to ensure that cultural heritage and values informed the inevitable transition to modernity.

Conservation work started with the most identifiable landmark buildings, such as the Baltit and Altit forts in central Hunza, and Shigar Fort and Khaplu Palace in Baltistan. These forts or palaces, through their gifting by the *mirs* and rajas, transformed private hereditary assets into public resources that benefit local communities.

The experience of conservation of Baltit Fort, and rehabilitation of the traditional settlement just below it, indicated that meaningful restoration work needs to be associated with rehabilitation of traditional settlements as well as promotion of building techniques that can thus have an area development effect.

Conservation of the Fort/Palace and the improvement of living conditions in the adjoining settlements was started simultaneously in Shigar and Khaplu, while in Altit, community-based built-environment upgrading and rehabilitation – a process for conserving historic villages and settlements by providing basic sanitation, water supply, electrification and street paving – was undertaken. Community spaces were restored prior to the conservation of the Fort itself. Economic empowerment of the community involving the revival of skills, particularly those of masons and carpenters, and the creation of modern skills, such as engaging young men and women in documentation functions, were part of the process.

It became clear that a broad range of activities was needed to complement these efforts, including the revival of arts and crafts through an enterprise process. Meaningful

cultural development necessitating the involvement of local partner organizations, such as the Town Management Societies, the Karakoram Area Development Organization and the Baltit Heritage Trust, proved essential to building ownership and sustainability in the future for these projects.

Between 1992 and the present, not only have the three forts of Baltit, Altit and Shigar been conserved and put to use for the benefit of the communities, but work on Khaplu Palace is continuing, with completion expected in 2012. Sixteen historic settlements have been rehabilitated, a number of monuments and houses have been stabilized, and seven public buildings built, demonstrating traditional construction techniques and the use of local building materials. Two major enterprises were established: one in Hunza for embroidery and rugs, and one in Baltistan for apricot kernel oil and production of wood products (carving, construction and furniture). These efforts were backed up with the establishment of a number of new institutions.

The revival of traditional crafts, such as weaving and embroidery, has been an important part of the socio-economic programmes. Trades such as carpentry have been fostered, and the handing down of household traditions has been encouraged.

Background

BRIEF HISTORY OF PROGRAMME AREA

Hunza, nestling in the shadows of the Karakorams, first gained notoriety and fame from its location, the possession of which was coveted by the two expanding rival empires during the 19th century in Asia: Russia under the czar in Central Turkistan advancing towards the Indian borders, and the British Indian empire expanding to the north. In 1842 Sikhs who held Kashmir as part of their domain entered Gilgit, opening the way for the Dogra rulers to get a foothold in the region. The latter had acquired Kashmir after the British had broken the Sikhs' power in the Punjab and the treaty of Amritsar was signed, in accordance with which Kashmir (which included the territories of Baltistan and Astore) was transferred in 1846 to Maharaja Gulab Singh, the Dogra chief from Jammu. Realizing its strategic importance, in 1876 this area was taken away from the maharaja under a treaty by the British. The region was directly administered by the British, while Baltistan continued to be administered by Kashmir State as part of Ladakh, which was conquered by Sikh and Dogra troops before 1842. In December 1891 a successful campaign was conducted against Hunza/Nagar. The main battle was fought at a place called Nilt in Nagir. In 1935 the Government of India arranged with the maharaja of Jammu and Kashmir a lease for 60 years whereby all the territory except Baltistan and Astore areas would be administered by the British Raj. In 1947 (independence of India and Pakistan) the whole area was returned under the control of the maharaja of Jammu and Kashmir who appointed a Governor in Gilgit with military garrisons in Gilgit and Baltistan. On 31 October 1947 the control of the Jammu and Kashmir administration was wrested from the maharaja's representative in Gilgit and his troops were routed by a successful 'War of Liberation' in favour of Pakistan. On the request and invitation from the people of Gilgit-Baltistan, the Government of Pakistan took over the administration in mid November 1947, which in 1948 was extended to Baltistan following its liberation.

Challenges

DEMOGRAPHICS

In 1974 the overall population for Gilgit-Baltistan was estimated to be half a million, now estimated to be one million. The rate of population growth is estimated to be 2.5%. Gilgit and Skardu are the main towns with populations estimated at a 100,000 each.

ENVIRONMENTAL CONCERNS

The construction of the Karkoram Highway (KKH) which connected Islamabad to Kashgar, and the construction of other roads linking all the major towns with Gilgit, also opened the area up to outside influences. The ease of having construction materials at hand, such as cement and corrugated iron sheets, had a major negative impact, as, rather than relying on local materials such as stone, poplar wood and mud bricks that were suitable for the extreme climatic conditions, these so-called modern constructions started to encroach into the area. Arresting this trend and steering design and construction to respect local materials and traditional construction techniques is an area of focus for AKTC work in Hunza and Baltistan.

Significant Issues and Impact

MASTER PLANNING PROCESS

In Hunza, the process was based on participatory inputs. Meetings and detailed follow-ups by experts with the community and with government planning departments were held and options explored, resulting, in the case of Karimabad, in the 'Karimabad Conceptual Development Plan'. In Shigar, with the community and government representatives on board and in collaboration with other agencies such as World Conservation Union (IUCN), land-use plans were generated.

BASELINE STANDARDS

These relied on 'Aga Khan Rural Support Programme' (AKRSP) surveys in most cases for data on the socio-economic conditions. For physical surveys, teams were trained locally and employed. Some of these teams, especially women-based ones, were further supported and have since 2005 been carrying out excellent survey work.

SOCIO-ECONOMIC INITIATIVES

The first initiative was the Swiss-funded 'Karakoram Handicraft Development Programme' (KHDP), with a focus on reviving the traditional art of embroidery work, which has since been subsumed by the Karakoram Area Development Organization (KADO) in Hunza. KHDP was initiated in 1996 as an action-research programme, when the community in Hunza, the Swiss Development Cooperation Agency (SDC) and AKCS-P decided to revive crafts and promote enterprise and economic development with a special focus on women. The success of the action-research phase in 1996 and the formation of a regional body – KADO as a local institutional body representing Hunza Valley – offered AKCS-P the opportunity to transfer the operational responsibility for KHDP to KADO in a staggered manner. Capacity building for KADO during the early phase of the project, especially in administrative and financial skills, facilitated this handover. KHDP allowed 3000 women, working out of their homes, to enhance their incomes through production of embroidery work – a craft which Hunza women had prided themselves on for over generations but which was dying out. In Baltistan, a similar organization, the 'Baltistan Enterprise Development and Art Revival' (BEDAR) was set up by the Baltistan Culture Foundation (BCF) and AKCS-P with funding from the SDC. BEDAR is the Urdu word for "awakening" and was chosen for its symbolic connotations with regard to the resurrection of traditional values. Initiated in July 2003, BEDAR selected a number of product lines. Of these, woodwork has achieved the best results, while responding to a local and regional demand using the comparative advantage strategy to effect. In woodworks, woodcarving and production of *jalis* (perforated screens) – a traditional skill that was recently on the verge of extinction – have been revived by apprenticing young trainees with *ustads* (masters) and the products are being sold in the markets. The small workshop was expanded and now furniture and construction carpentry are the main products. This allows for substitution of imported goods, since furniture items were trucked in all the way from Islamabad, a road journey of two days. Producing local poplar-wood furniture of a reasonable standard in Baltistan helps the local economy. The large numbers of poplars planted with the help of AKRSP are becoming an economic resource, and plenty of wood-related employment opportunities are emerging.

QUALITY OF LIFE

In order to meet the ever increasing needs for proper sanitation systems, an initial project was conceived and launched in Karimabad to cater for the needs of people living in the historic settlements. Based on positive results, these efforts were extended and through a community-led initiative the historic villages of Karimabad, Ganish and Altit now have these facilities. In Baltistan, the Shigar community preferred to use traditional community toilets; these have been improved through better design and better locations. In Altit, Shigar and Khaplu clean drinking-water projects were launched that provide water for the restored landmark monument while also supplying water to the adjoining settlements.

Partners

COMMUNITY PARTNERS

Karimabad Town Management Society, Altit Town Management Society, Ganish Khun Heritage and Social Welfare Society, Shigar Town Management and Development Society, Khaplu Town Management and Development Society, Karakoram Area Development Organization, Baltistan Culture and Development Foundation.

Authoritative Framework

Frameworks – known as 'Terms of Partnership' (TOP) – were negotiated for each of the project interventions with the beneficiary community. These TOPs laid down the roles with AKCS-P invariably having technical responsibility while the community would be responsible for the social aspects and for subsequent use of the project.

Opposite page:
The carved wood balcony of Khaplu Fort,
which is being transformed into a guest house,
is undergoing restoration.

Baltit Fort

GILGIT-BALTISTAN, PAKISTAN

Baltit Fort not only towers over Karimabad, but is also the sentinel of the Hunza Valley. Under the protective presence of the Fort, the houses of the traditional settlements of the old Baltit (now Karimabad) Village are gathered along the slopes beneath it. The Fort forms the backdrop and the focus to these settlements. Restoration and reuse of the 700-year-old Baltit Fort as a cultural and historical museum, and the conservation of its context, the historic settlement of Karimabad, are best seen within the perspective of changes that started in the second half of the twentieth century with the independence of Pakistan and accelerated from the 1970s onwards.

Many of the traditional social conventions that held the community together in the past had been weakened first with the abolishment of the mir in 1974 and then when Hunza, which had remained largely insulated from external forces, was opened up in 1979 with the construction of the Karakoram Highway (KKH) that links Islamabad to Kashgar.

It was recognized that, if not managed properly, forces of change resulting from development could spoil the impressive natural setting and the cultural heritage that was Karimabad's major resource. Preservation of the outstanding physical and environmental qualities was deemed essential to the well-being of central Hunza. The peaks of the Ultar, Rakaposhi and others, the terraced fields, the irrigation channels, the clustered settlements, the wealth of historic buildings and the rich cultural heritage needed to be protected and made to act as drivers for development.

The rapid change from a secluded rural area into a semi-urban one, with the attendant issues of infrastructure, traffic, commercial activities, tourism and new construction modes, all affected the physical environment and charm of Karimabad. These facts needed to be taken into account as part of the programme that had started with the restoration of Baltit Fort.

Baltit Fort had been abandoned in the early 1950s and a new palace constructed where the mir had moved with his family. In the 1980s the Fort was fragile and if it had been permitted to collapse Hunza would clearly have lost its major landmark and an important part of its cultural identity. However, before conservation work could be started, it needed to be transferred from private to

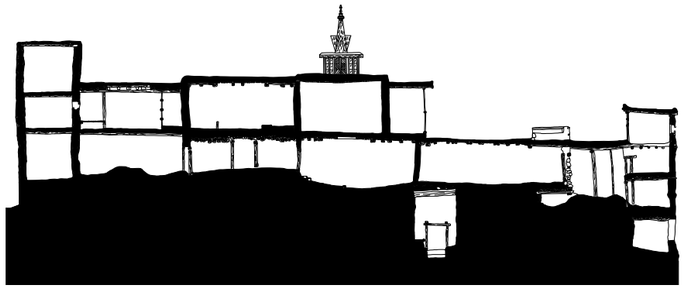
The restored Baltit Fort seen from the south-west.

Opposite page:
A view of Baltit Fort's southern facade from below highlights its early 20th-century wooden additions.

1 Baltit Fort 2 Karimabad 3 Visitor Parking

Project Scope / Objectives

The physical conservation of Baltit Fort was conceived to meet several interrelated objectives. The first of these was to restore and reuse the Fort as a museum and cultural centre and to protect and manage the built environment of Karimabad. A second objective was to train local people in conservation and related disciplines, establishing a pool of professionals capable of undertaking future restoration projects. Third, the project is meant to serve as a demonstration of excellence in conservation and to stimulate awareness and understanding of the significance of restoration and reuse of similar monuments.



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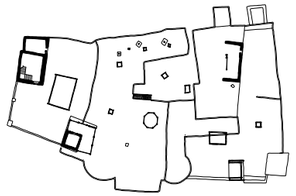
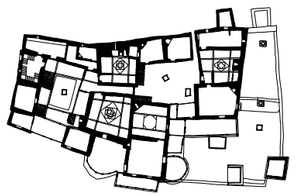
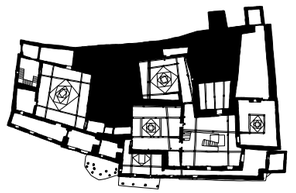
Right, a latitudinal section of Baltit Fort and, below, floor plans of the roof (top), the upper level and the bottom level.







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Opposite page:
Pathways lead up to the entry of Baltit Fort after restoration. The village of Karimabad appears at the base of the structure.

public ownership. The mir on behalf of his family graciously decided to gift the Fort and the land surrounding it to the newly formed Baltit Heritage Trust (BHT) enabling a physical programme of works to be initiated.

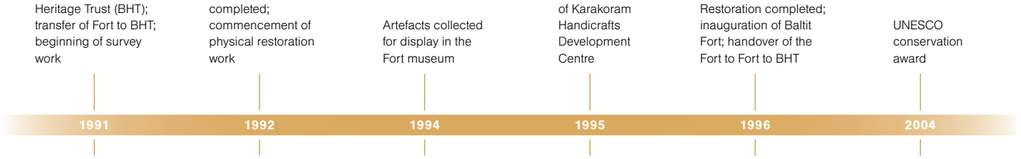
From the beginning it was intended that the conservation should retain the historic character and appearance of the Fort. The restoration of missing features would be based on sound archaeological evidence. It was also realized that if the restored Fort were to enhance and promote cultural values of a living culture it needed to contribute to economic opportunities for the residents and to generate sufficient income to sustain operation and maintenance costs. Accordingly, the main uses selected for the restored Fort were those of a museum and active cultural centre.

While work started on Baltit Fort, a strategic framework for the orderly physical growth and development of Karimabad, and for the maintenance of its environmental and cultural assets, home to a population of around 5000, was developed, resulting from the analysis of its situation in 1992, and leading to the development of the 'Karimabad Conceptual Development Plan' (KCDP).

Although the plan for Karimabad, as conceived in the KCDP, is still not enforceable by law, it increased the awareness of the community about the issues at stake, leading to a participatory development process and the need for a community-based institution. In order to anchor this process in the local community, the Karimabad Town Management Society (KTMS), a democratically elected body, was formed and registered under the Social Welfare Societies' Law. The KTMS promotes community involvement in planning efforts in Karimabad and also exercises influence on development projects that advance the KCDP land use, infrastructure and road planning components. The KTMS has also attracted donor funding for a sanitation project that has enabled full coverage to Karimabad and the lower village of Ganish. This was in line with the earlier pilot project of rehabilitation and sanitation project for a portion of Khurukshal Village that had succeeded in bringing people back to old settlements that were being abandoned.

With increased interest from the community and awareness about the need to plan for development and channel change, Karimabad is in far better shape now than it would have been without the KTMS. There is a new attitude towards the local environment that helps to preserve the farming terraces and encourages the introduction of improved standards of health and hygiene, while reviving sound traditional construction techniques.

Phasing 1991 → 1996



Left, a carpet-weaver works under the auspices of the 'Karakoram Handicraft Development Project'.

Right, the *mir*'s bedroom on the second floor, seen after restoration, is part of the visitor tour.

The 'Karakoram Handicraft Development Project', which was set up to complement the Baltit Fort project, and since 1999 managed by the Karakoram Area Development Organization (KADO), produces small embroidered gift items, *sharma* (local woollen rugs) and hand-knotted carpets, allowing for increased incomes for thousands of women. KADO also operates a solid-waste disposal programme in central Hunza.

By mobilizing community resources, providing incentives, and demonstrating evidence of short and long-term benefits, the restored Baltit Fort has transformed Karimabad into a focus of interest in northern Pakistan, while giving local culture a renewed legitimacy in the face of powerful factors of recent change. The project has helped to renew the residents' pride in their heritage. The restoration of Baltit Fort within its setting of the historic village of Karimabad demonstrates the ability to integrate conservation issues in the larger context of community and regional development.

Background

BRIEF HISTORY OF PROJECT SITE
Baltit Village is one of the three oldest known settlements in Hunza, the others being Ganish and Altit. Under the protective presence of the Fort, the houses of the traditional settlements of old Baltit (now Karimabad) Village are gathered up the slopes beneath it. Baltit Fort is dramatically located at the top of a natural amphitheatre formed by terraced slopes, and the site was carefully chosen to control the irrigation channels that emanate out of Ultar. It is a remarkably complex building resulting from more than 700 years of 'organic growth', starting possibly from a watchtower and an adjoining building. Traditional stories mention that it was never captured by outside powers until the advent of the British in 1991 after having defeated the joint Hunza-Nagir forces at Nilt, when Baltit Fort was opened up and the British took control.

Challenges

PROJECT RISKS
This was the first major project of its kind ever in Gilgit-Baltistan, where restoration expertise and skills were not available. Consequently, international expertise was called in for the conservation.

DEMOGRAPHICS
The historic settlements immediately below the Fort were being abandoned as households realized that rather than living in cramped and unsanitary conditions it was preferable to move to lands available in the orchards and terraces, where new housing could be constructed to meet needs of the increasing family size.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES
Traditionally the sources of water are the irrigation channels that tap the Ultar. The water in these channels was very carefully monitored to ensure judicious distribution, particularly during early spring when new crops were in need. Also it was ensured that these channels would not be polluted and no direct washing of clothes, bathing or throwing of rubbish would occur, as well as runoffs from fields into these channels. However, with changes leading to the establishment of the first piped water lines and the abolishment of the Mirdom, this restraint disappeared, resulting in the water channels no longer being clean. Also the traditional system of sanitation was being abandoned for modern systems by setting up crude cesspits.

ENVIRONMENTAL CONCERNS
A road was planned to go through the historic settlement that would have affected most of the households and would certainly have led to the total abandonment of the settlement.

BUILDING CONDITIONS
Baltit Fort was in a state of advanced decay, with the roof resembling a patchwork of holes. Rainwater was able to flow freely into all parts of the building and even down into the lowest storeys. Most of the timberwork had rotted, while renders were reduced to piles of soil collected on the floors. Many walls were tilting and others had settled because they did not have foundations or sat on the loose morraine soil.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
A number of surveys were completed for the 'Karimabad Conceptual Development Plan' in the mid 1990s, in the physical and housing realms, as well as building typologies, demographics and economic conditions. For sanitation needs, surveys to determine routes and meet future needs were carried out. After restoration and its opening, Baltit Fort attracted large numbers of visitors (around 20,000), which, though, have declined sharply after "9.11" (11.09.2001). However, even in 2009 around 3500 foreign visitors and 8000 domestic visitors paid for access to Baltit Fort.

MASTER PLANNING PROCESS
The 'Karimabad Conceptual Development Plan' was commissioned in 1992, when it was realized that the traditional settlements were being abandoned, with the consequent implication of building new houses in the terraced land, resulting in the charm of the bowl of Karimabad being dotted with unappealing new constructions in concrete and at the cost of the farming terraces and orchards. New haphazard road constructions were being planned that would destroy old settlements and also lay Karimabad open to all sorts of commercial exploitation, taking away its charm and balance. The multi-faceted planning process had a number of objectives, including establishment of a representative local institutional body – the Karimabad Town Management Society – allowing for conservation of both the traditional settlements and the scenic environment and establishing an adequate road and service infrastructure to provide for appropriate land-use patterns while responding to a growth in population and changing economic trends.

PLANNING ISSUES
Abolition of Hunza State in 1974 led to an institutional vacuum, as no proper authority took over the responsibilities of the Mirdom that had existed since then. Further, the anomalous status of Gilgit-Baltistan within Pakistan has not allowed for a system of governance that responds to local needs. This was all compounded by the fact that Karimabad was not treated as a town or municipality, further affecting planning for its development. Thus, patchwork development projects implemented through annual development plans have been the norm. It is only in late 2009 that a deputy commissioner has been placed in Karimabad, and a more formal planning process is expected to start.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
In addition to Baltit Fort, five historic houses in its vicinity, two mosques – including the Hanging Mosque on the pathway to the Fort – and the historic watermill that used to be the ground storey of the watchtower, as well as another watchtower, have been restored. For the Fort, remedies were found by putting a temporary protective cover on the roof, while structural problems of the foundations and load-bearing walls were tackled first, allowing for conservation of the architectural fabric and finishes later. Timber elements were procured and inserted at the identified critical intervention points, while modern interventions were also inserted for extra structural strengthening, such as synthetic polyurethane reinforcement meshes and polymer anchor cables. Additional importance was given to preserving the timber lacing and cribbage work, as a means of demonstrating the value of this unique engineering and construction system in resisting earthquakes and of reviving traditional local skills and crafts.

CONTRACTING METHODS
The Aga Khan Planning and Building Services (AKP&BS), then known as the Aga Khan Housing Board, was contracted to carry out work on Baltit Fort under the supervision of AKTC. Work on Baltit Fort and the rehabilitation of the historic settlements around it engaged over 200 unskilled persons.

QUALITY OF LIFE
With support from the community a modern sanitation system has been laid to cater for all the residents of Karimabad as well as Ganish, covering 1000 households. Piped water schemes have also been implemented, while the local community is encouraged to move animals to their fields.

LESSONS LEARNED
This being the first conservation and rehabilitation project brought a wealth of learning to other projects that were taken up subsequently. One major development was the bringing together of the conservation and rehabilitation processes so that planning and implementation were further improved.

Partners

PUBLIC PARTNERS
Government of Pakistan represented on the Baltit Heritage Trust.

COMMUNITY PARTNERS
The community of Karimabad.

Donors

PUBLIC PARTNERS
Government of Norway, Aga Khan Foundation, European Union, Getty Foundation, Sumitomo Foundation, Silver Jubilee.

Authoritative Framework

Agreement signed in 1991 with the Baltit Heritage Trust for the restoration of the Fort and its return to the Baltic Heritage Trust for its future safekeeping and use.

Altit Fort

GILGIT-BALTISTAN, PAKISTAN

Altit Fort is another of the great landmark monuments of Gilgit-Baltistan. Indeed, the *shikari* (watchtower) is some three hundred years older than the first phase of Baltit Fort, making it the oldest surviving standing structure in the western Himalayas. Arguably, it is also the most spectacularly sited fort, built on the very edge of the main Hunza gorge. It sits above 200-metre-high sheer cliffs and precipitous slopes that cascade down towards the river. Its importance stems from the control it exercised on the upstream communication routes.

The conservation strategy for Altit Fort was to preserve it in its 'found', state. Most conservation works therefore related to mending structural defects, stabilizing existing walls, reattaching render to the wall substrate, replacing some roofs, treating wood decay and providing a nominal amount of lighting. However, for the walls that were too unstable, the infill was removed to allow them to be jacked back to more vertical positions and the stone and/or adobe soil blocks replaced in their original positions – making use of detailed survey drawings and photographs. This rather purist concept, an exciting objective in its own right, is significantly different from solutions applied to Baltit Fort, Ganish Village and Shigar Fort.

The conservation strategy for Altit Fort also extended to the associated historic garden, to the north of the Fort. Today, the garden is being kept as it is. When one enters the garden it is like stepping back in time.

But before starting conservation of Altit Fort, it was decided to first rehabilitate Altit settlement, in order to allow for heritage-related values to take root more firmly, while reducing negative commercial pressures. The formation of the Altit Town Management Society (TMS), with a general body including forty per cent of women members and long deliberations about the impact of development, led to a clearer realization by the Altit community of the need to be proactive and involved in the cultural development process. As a result, the interventions in the environmental context, that is, in relation to the historic settlement, the ancient Fort and the built-up or agricultural land, took place under a citizen-managed land-use programme, prior to the monument conservation project.

Built on rocky, unproductive terrain, the settlement reflects traditional values of land use and conservation in a region scarce in agricultural land. Its historic

Altit Fort is located among the snow-capped mountains of Central Hunza .

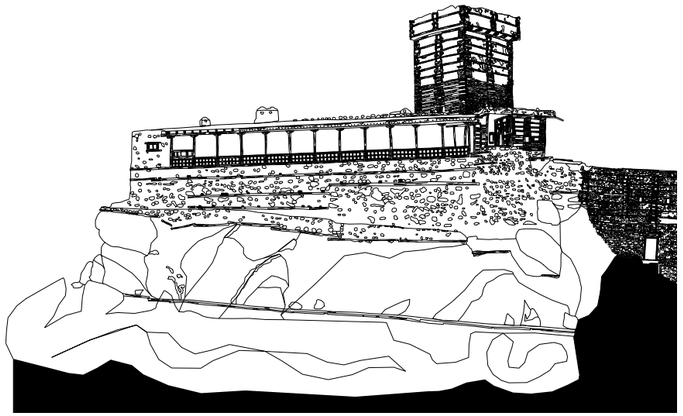
Opposite page:
A view of the valley and Altit Village with the Fort in the background.

1 Altit Fort 2 Altit Village 3 Water Tank 4 Garden

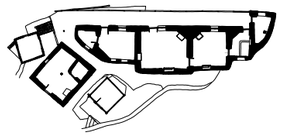
N 50 m

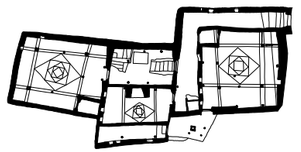
Project Scope / Objectives

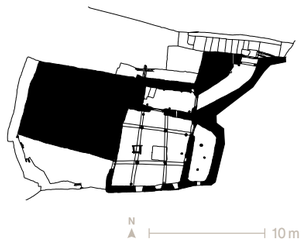
The scope of activities in the case of Altit Fort included documentation of the highest standards and development of a conservation plan that followed a strategy aimed at pursuing a 'purist' approach. Another goal was to fully tie the surrounding Altit Village to the Fort through social and economic bonds.



Right, a drawing of the north facade of Altit Fort, which is built on the very edge of the main Hunza gorge.







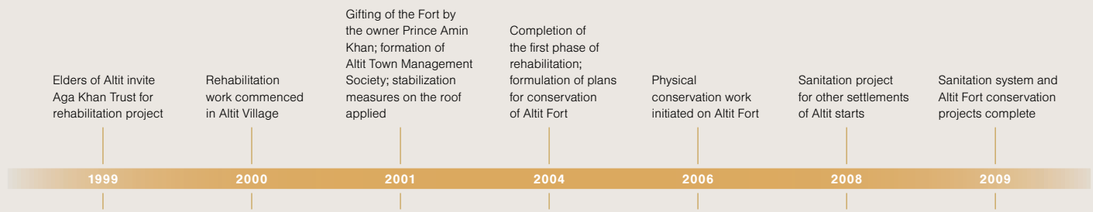
Above, the Fort has three main levels: from the top, floor plans of level 1, level 2 and level 2B.

dwellings exemplify indigenous architectural forms, building techniques and materials well adapted to an environment whose hazards include earthquakes and bitterly cold winters. In addition, the historic settlement, with its compact design and common spaces, supports a culture of cooperation, respect and mutual interdependence that is one of Hunza's most unique and valuable assets.

By the late 1990s, the core settlement of Altit was being abandoned by its residents, largely because of unsanitary living conditions and the inadequacy of houses to support modern life. A consequence of this process was the building of new houses in the surrounding farmland, where families with the financial means could create dwellings with modern facilities and greater living space. The newer houses, with their cement-block construction and rudimentary sanitation systems, contributed to an increase in pollution and a decrease in social cohesion. Moreover, the new construction came at the detriment of the verdant farming terraces and centuries-old fruit orchards that cover the surrounding hillsides. The physical condition of the *khun* became increasingly dilapidated and its common spaces and historic houses were neglected.

Keeping in view the historic, cultural and architectural value of the village, an intervention was conceived that would enhance the value of the old settlement and demonstrate that people can sustain life at contemporary standards in harmony with the traditional built environment. The rehabilitation process included the piping of clean drinking water into each dwelling, the introduction of a modern sanitation system in difficult mountain terrain and the underground electrification of the settlement. In addition, the project undertook the revitalization of common public spaces, improvements to the exterior of the historic houses and the paving of lanes and cul-de-sacs with stone. The project was accomplished with a high level of community participation, and succeeded in changing the attitudes of the people towards the settlement, bringing many families back into their historic residences. It also created a new attitude towards the natural environment, and has thereby nearly stopped the demolition of historic buildings and the random construction of new houses in the scenic farming terraces. In addition to establishing new standards of health and hygiene, it has revived traditional crafts and building techniques developed over centuries.

Phasing 1999 → 2009



Background

BRIEF HISTORY OF PROJECT SITE
Located in close proximity to the historic areas of Ganish and Karimabad, Altit is said to be one the earliest settlements of this region: most scholars agree that it was established in the 15th century AD. Altit's historic value lies in its having been the first capital of the ruling *mirs* of Hunza. The elders remember that the village once had a fortification and eleven *shikaris* (watchtowers), presently buried under the rubble of memory. The original fortified settlement (*khun*) of Altit is located at the base of the Fort, protecting its approaches.

Challenges

SITE CONDITIONS
The site of the Fort, with one side overhanging the cliff, limited the number of people who could be employed gainfully at any one time. Also, access to the east wall was not possible without putting up scaffolding. The installation of scaffolding on the cliff side was technically extremely challenging.

ENVIRONMENTAL CONCERNS
At the start of the project the dilapidated condition of the houses, their small size and the unsanitary atmosphere (due to a lack of modern facilities and to the practice of keeping livestock inside the house) had prompted many settlement residents to relocate outside the settlement. This, in turn, led to further neglect of the physical structures. Since the completion of the project, however, structural improvements to the exterior of many houses, together with the provision of piped drinking water, safer underground electrification and proper sewage facilities, have led many families to move back into their ancestral homes.

BUILDING CONDITIONS
The Fort was in an advanced state of decay. On the western side, it overlooked Altit Village. The danger of wall collapse onto the village was a real possibility, averted through emergency measures of tying and buffering the bulging walls of the Fort.

Significant Issues and Impact

PLANNING ISSUES
At the urging of AKCS-P, residents have relocated their animals to pens outside the settlement, making the houses more spacious and more sanitary. AKCS-P has also provided technical support to families wishing to renovate the insides of their homes using traditional materials and often incorporating elements of traditional craftwork.

COMMUNITY INVOLVEMENT/PROGRAMME
In the process of rehabilitating and upgrading the settlement, local traditions of community participation and collective labour were drawn upon, reinforcing the community's awareness of and pride in its heritage and the potential for self-sustainability. Skilled craftsmen from the community were recruited to train the volunteer unskilled labour in traditional crafts and techniques. Traditional social and political practices have been strengthened as former settlement residents have moved back into their ancestral homes, bringing the settlement back to the critical mass required for healthy sociability and democratic decision making. The Altit Town Management Society (TMS) draws on culturally sanctioned values and modes of collective discussion and decision making in its activities, creating continuity with the political traditions of the area. The Altit TMS also oversees the collection of revenue from the project beneficiaries – the settlement residents – for the maintenance of improvements and services. The revenue is collected monthly, generating a total of PKR 17,000 per month from 150 households. The maintenance has proved entirely financially self-sustaining, even generating revenue for future improvements. Monthly expenditures for maintenance come to PKR 6000, providing PKR 11,000 in monthly savings. In addition, the Altit TMS is already charging visitor entry fees to the rehabilitated Altit Village, thus generating additional funds.

VOCATIONAL TRAINING/CAPACITY BUILDING
The settlement and improvements are the common property of the resident community. For the physical upkeep of the structures and services, the Altit TMS is able to draw on the expertise of those villagers who were given training during the course of the project.

QUALITY OF LIFE
Provision of clean drinking water using the technical expertise of the 'Water and Sanitation Extension Programme' (WASEP) for all the residents of Altit Village, besides providing water to the educational institutions, has created a clean and hygienic village, where it is reported that sickness and disease have reduced considerably. All settlement homes now include a separate washroom.

LESSONS LEARNED
Providing tangible benefits to the local communities prior to carrying out work on a landmark project is most helpful in allaying their concerns and also reducing commercial tendencies.

Partners

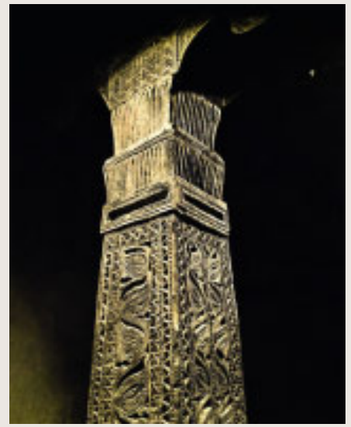
COMMUNITY PARTNERS
The community of Altit.

Donors

Government of Norway, Government of Japan.

Authoritative Framework

In 2001 the owner Prince Amin Khan graciously gifted Altit Fort to AKDN while a sizeable portion of the orchard garden was purchased. The Tourism Promotion Services is to manage the Khabasi Café opened up in the summer house, while the Women Social Enterprise in collaboration with Altit TMS and with AKCS-P oversight are responsible for Altit Fort itself and the garden.



A detail of a column in a communal kitchen in Altit Village displays exquisite carving.

Shigar Fort

GILGIT-BALTISTAN, PAKISTAN

The four-hundred-year-old Shigar Fort was selected for adaptive reuse and restoration as a major strategic investment that would re-establish community identity and confidence by conserving and putting into use one of the major heritage assets of Baltistan, in the rugged high desert mountains of the Karakoram in northern Pakistan. The current function of the Fort/Palace complex as a heritage guest house and museum is having ripple effects in terms of economic benefits for the community, generating employment and training, both in artisanal skills and in tourism. The project provides an income stream for future maintenance of the Fort and to sustain local institutions. The value of cultural heritage has become evident in the region. Community-based planning and rehabilitation of the three traditional settlements of Khlingrong, Chinpa and Halapa surrounding Shigar Fort accompanied the restoration, with three additional villages – Giangpa, Chamaqpa and Agaipa – benefiting from similar rehabilitation efforts subsequently. The upgrading of the Shigar public bazaar and the construction of a community school building using traditional techniques and local materials at Sainkhore were also undertaken.

Built on a massive boulder, Shigar Fort is locally known as Fong Khar – literally the Fort on the Rock. Located on the right bank of a mountain stream, slightly elevated above the nearest hamlets of Shigar, it is at the foot of a steep rock formation, a hundred or so metres high, on top of which lie ruins of the original fort.

Raja Hassan Khan, the twentieth ruler of the Amacha dynasty, ascended the throne in 1634, but lost his kingdom to invaders. He managed to regain his throne with the help of forces of the Mughal emperor Shah Jahan. The raja brought various artisans including shawl weavers, carpenters, goldsmiths and stone carvers from Kashmir to Shigar and proceeded to build the Fort/Palace. Fong Khar was gradually abandoned in the 1950s in favour of more recent annexes, built in its immediate vicinity.

Shigar Fort in its 'received' state was an abandoned and neglected building that had undergone many changes. But it was also a wonderfully preserved statement of history. The idea of promoting a new type of environmentally conscious cultural tourism was decisive for the reuse design of Shigar Fort, both in

The reconstructed outer wall of the reception hall of the Shigar Fort/Palace complex is at terrace level.

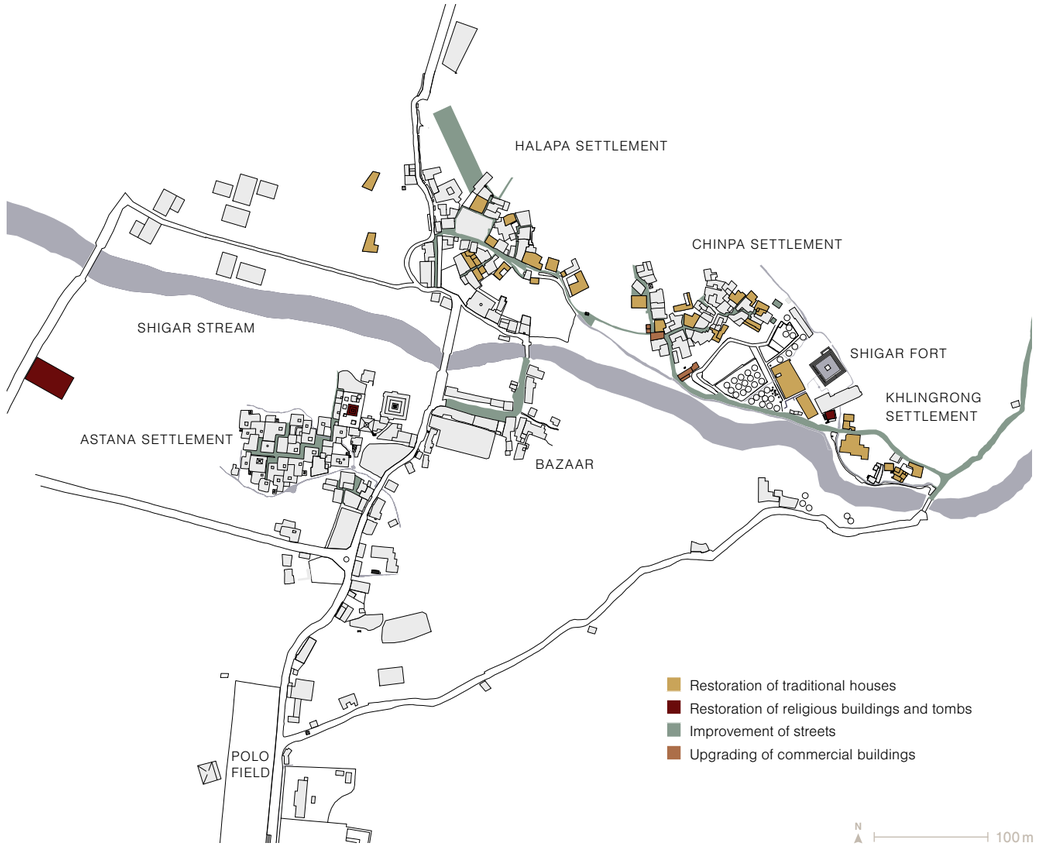
Opposite Page:
A view of the Old House and Raja Mosque.

1 Shigar Fort
2 Old House
3 Baradar
4 Garden House
5 Vegetable Garden
6 Cherry Garden
7 Burpi Tzar
8 Raja Mosque
9 Raja House
10 Khlingrong Mosque
11 Water Filtration Plant

N
50 m

Project Scope / Objectives

The objectives for the Shigar Fort project were the restoration and reuse of the most outstanding landmark monument in Shigar, leading to a revival of pride, identity and skills for the community. Also at stake was heightening the awareness of the importance and relevance of cultural and architectural heritage in the present; the initiation of conditions for socially responsible tourism and economic development of the area; and finally, the creation of revenues for the maintenance of the Fort, as well as for the community.



Settlement plan for the area around the Shigar Fort/Palace complex.

terms of providing new opportunities to residents and of ensuring financial self-sustainability for the restored building.

The adaptive reuse plan for the Fort was predicated on transforming it into an exclusive thirteen-room guest house with the grand audience hall and anterooms serving as a museum of Balti woodcarving and local living traditions. The guestrooms – some rather small, others having a comfortable suite character – retain the authentic character of the Fort/Palace as much as possible. Modern furniture and equipment in the rooms is minimal. Many guestrooms feature original or restored woodwork complemented by traditional craft objects and artefacts from the region. Accommodation is geared to an international clientele of connoisseurs, who look for a special experience.

The “Old House”, located at the entry of the compound, has been redesigned and converted to cater for all service functions, including a reception area and museum ticketing. Inside, the building accommodates a kitchen and ground-floor restaurant with outdoor sitting space and an upper-floor lounge with balcony overlooking the stream, a meeting room and administration facilities. The Garden House, with no historic features,

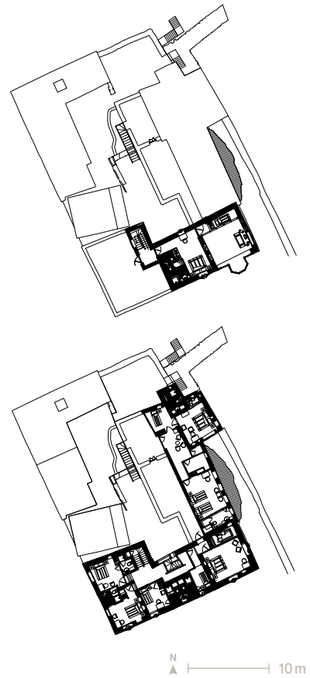
Left, views of the Old House and Fort; right, individual guest rooms in Shigar Fort Residence.

was refurbished and extended to offer seven additional guestrooms that are more ‘conventional’ and modern in character, that is, larger and more practical than the average guestroom in the Fort. However, most of the rooms overlook the garden and therefore have a charm of their own. Offering two alternate accommodations enables the complex to cater for different tastes and types of clients.

Beyond its architectural and environmental merits, this project is the first attempt to achieve a wider cultural development initiative in Gilgit-Baltistan based on the promotion of a new type of culturally and ecologically sensitive tourism. The location of Shigar on the access route towards some of the highest mountains in the world and the metalled road between Skardu and Shigar facilitates marketing of the guest-house complex. Guests have the opportunity to engage in short treks in the vicinity, or to indulge in trout fishing. They can climb Shigar rock, visit the hot springs at Chutron (two hours from Shigar), visit monuments in Shigar and Skardu, or take day-tours to Khaplu, Kiris and Kharmang, or Deosai.

The development of local institutional capabilities has been vigorously pursued by the Aga Khan Cultural Services-Pakistan (AKCS-P), resulting in the formation of the Shigar Town Management and Development Society (TMDS), an active partner for all projects and activities in Shigar. The TMDS as an institution that consolidates and brings together the thinking of the Shigar community on matters related to culture and tourism has been an essential mechanism, acting as a bridge and allowing for the articulation and discussion of views, while also allowing for information and news to reach the community in a considered and comprehensive manner.

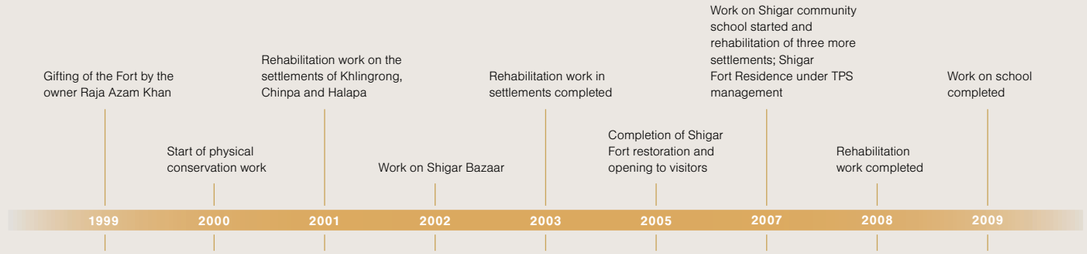
The project provided an opportunity to act as a catalyst for a comprehensive improvement of the local economy, generating direct and indirect employment opportunities. Situated in the immediate proximity of a poor and unskilled village population, it was thought the Shigar Fort Residence project could raise the quality of life in the villages surrounding it, and boost economic enterprises in the bazaar area. This process was accompanied by a proactive village upgrading and rehabilitation programme that has reached almost twenty-five per cent of the households of Shigar’s two union councils.



First- and second-floor plans after conversion into Shigar Fort Residence.

The restored Khilingrong Mosque stands near the Shigar Fort/Palace complex.

Phasing 1999 → 2009



Background

BRIEF HISTORY OF PROJECT SITE

Fong Khar is the last remaining structure associated with the ruling Amacha family, which claims to have ruled Shigar for 32 generations. Sources describe the Amachas as having their origins in the "Hamacha" tribe of Ganish, Hunza. The present raja, Mohammad Ali Shah Saba, believes that the Amacha originally belonged to China. Buddhist ruins in the vicinity of Shigar Fort testify to the lengthy human occupation of the site.

Challenges

PROJECT RISKS

Since this was the first major project of its type in Baltistan, in order to create credibility and trust with the local community and demonstrate the procedures and benefits of culturally relevant rehabilitation, the restoration of Amburiq Mosque in Shigar, selected in consultation with the community, was carried out in 1998. The result of this conservation impressed the community significantly, paving the way for the restoration of Shigar Fort.

DEMOGRAPHICS

The two union councils of the town of Shigar, Marapi and Murkunja, collectively make up a total population size of around 10,000 and 1240 households spread over 21 villages. Rehabilitation projects have had a direct impact on almost 400 households with a population of around 3300 in eight villages.

HOUSEHOLD ECONOMY

In general household economy depends on agriculture, with some seasonal tourism-related activities when locals provide portering services. Shigar Fort Residence employs 25 local staff out of a total of 28.

STATUS OF HEALTH AND EDUCATION

Education has been recognized by the Shigar community as the most important element for improving their lives. After a visit to Hunza by the Shigar TMDS, the top priority it identified was education.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES

Like other valleys, provision of clean drinking water remains a major area of concern. Although there are a number of piped water systems, these carry untreated water.

BUILDING CONDITIONS

During the past two to three centuries Shigar Fort had already undergone many transformations and adaptions. As found in 1998, it was in a partially ruined condition, with some of the former rooms serving as cowsheds and a new ramp access leading directly into the former reception room.

Significant Issues and Impact

PLANNING ISSUES

A combined museum/guest-house option was selected for Shigar Palace that allowed AKCS-P to develop a different restoration philosophy, complementing the approach applied to Baltit Fort. The reuse aims helped to carry out a more proactive policy of consolidation, restitution and reconstruction based on the evidence uncovered during the consolidation process. All efforts have been made to preserve the patina of older elements, and newer elements and finishes have been executed to be in sympathy with this age value.

HISTORIC BUILDINGS/MONUMENTS CONSERVED

The positive impact of the conservation of Shigar Fort translated into practical action by the Shigar community. In one case the shrine of one of the saints in Shigar was restored by the community itself, winning a UNESCO award of merit. The larger community has started work on a Jamia Masjid using traditional design, materials and construction techniques.

NEW BUILDING FACILITIES

The Abruzzi Higher Secondary School Building has been built, designed to be compatible with local conditions and optimizing local materials. The most important aspect is that this is designed to be a school for both boys and girls, quite a transformation for a society considered conservative.

COMMUNITY INVOLVEMENT/PROGRAMME

The Shigar TMDS is the main forum for the community, which is spread over 20 villages/settlements and has a population of around 12,000 people in 1500 households. The establishment of the Shigar TMDS, with both a community development and planning function, brought the village upgrading operations into a far stronger relationship with the monument conservation project. It was from the villages of Khlingrong, Chinpa and Halapa, where village upgrading had first occurred, that most of the workers in the Fort project were drawn and continue to be drawn as the working staff of Shigar Fort Residence. Furthermore, in 2009 PKR 3 million ($40,000) worth of purchases was made locally of groceries, fruit and vegetables, meat and poultry, thus helping to provide an economic boost to the local economy. Transport needs for Residence guests was met locally, with a sum of PKR 560,000 going to local transporters. 10% of this revenue was provided to Shigar TMDS.

VOCATIONAL TRAINING/CAPACITY BUILDING

Ten carpenters were trained in the art of carving and *jali* (perforated screen) work, besides reviving the skills of cribbage construction. Also five young women were trained in the field of documentation, including survey work.

LESSONS LEARNED

In order for local community institutions to have sustainability, the recourse to viable restoration and reuse projects, such as Shigar Fort Residence, are critical. Also utilizing the strengths of AKDN agencies provides synergies. The role of Tourist Promotion Services (TPS) in managing the Residence exceedingly well is a case in point.

Partners

COMMUNITY PARTNERS

The community of Shigar.

Donors

Government of Norway, Aga Khan Foundation, International Union for Conservation of Nature, Governments of Germany, Japan, Greece, Spain and Pakistan, American Express.

Authoritative Framework

Raja Azam Khan and his father Raja Mohammad Ali Shah Saba gifted the main Fort building and the land it sits on to AKDN in 1999, while the Old House and lands around it were purchased. The Garden House was taken on a six-year lease with access to the Amacha garden in exchange for building a house built for the Raja. The Tourism Promotion Services has been managing Shigar Fort Residence as a guest house since 2008.

Khaplu Palace

GILGIT-BALTISTAN, PAKISTAN

Khaplu is the easternmost part of Baltistan, with the Shyok River, a tributary of the Indus River dividing the valley. The steeply sloped valley has less land available than other valleys in Baltistan. However, in terms of architectural heritage and cultural expression it arguably has more treasures than Shigar, possibly as a result of its proximity to both Leh in Ladakh and Srinagar in Kashmir.

In Baltistan, a region rich in cultural heritage, Khaplu Palace is the finest surviving royal residence. Built by the Yabgo Raja Daulat Ali Khan in 1840, it replaced an earlier fort constructed 600 metres above the present location, of which little now remains. As a former seat of royal government, the Palace is exemplary in terms of its building typology and aesthetic and structural qualities.

Following the inauguration of the restored Baltit Fort in 1996, His Highness the Aga Khan visited Baltistan where he emphasized the role of culture in development and environmental management in an address to a large gathering, This led to an invitation to the Aga Khan Cultural Services-Pakistan (AKCS-P) to extend its activities to Baltistan. An exploratory expert mission was sent to Baltistan in 1997 to visit over eighty sites. This was followed up by systematic inventories in 1998 and following years establishing that the cultural heritage of Baltistan was worthy of international recognition.

Among the pilot projects that were implemented by AKCS-P in Baltistan, in Khaplu the upgrading of a typical traditional house, the construction of a community building and the restoration of the *astana* (or tomb and shrine of a venerated saint) of Syed Mir Mohammed were initiated in 1998. The surveys had established Khaplu Palace and Shigar Fort as the two landmark buildings with outstanding historic and architectural merit. While work following a successful dialogue with the raja of Shigar and the community was started on Shigar Fort, in the case of Khaplu the understanding for its restoration was reached when the benefits of restoration and reuse of Shigar Fort became visible in 2005.

Rehabilitation of the historic settlements of Hunduli and Banpi was initiated in 2002, using simple, low-cost interventions such as improved composting, the creation of community latrines and of places for washing clothes, as well as bathrooms for men and women. Piped water delivery was improved and stone paving of the pathways and streets was put in place. Meanwhile the establishment

The north facade of Khaplu Palace features projections in wood.

Opposite page:
The interior of the projecting room on the upper floor.

1 Palace
2 Darbar House
3 Chaman House
4 Wankoo
5 Stables
6 Ra Tzar House
7 Ra Tzar Garden
8 Chaoni Tzar Garden

Project Scope / Objectives

The Palace complex is being conserved or developed as part of a reuse project that will turn the property into an up-scale hotel – a 21-bed residential retreat. The aim of the project is to develop a tourism circuit based on cultural heritage and to generate economic and employment opportunities for locals.

Left, carpentry workshops prepared workers for erecting house frames.

Right, a stone floor is being laid in one of the complex's buildings.

of the Khaplu Town Management and Development Society (TMDS) as the local community institution, along the same lines as the TMS bodies nurtured in Hunza, allowed for local ownership of the development.

In 2005 Khaplu Palace itself was gifted by the rajas Zakria Ali Khan and Nasir Ali Khan to the Aga Khan Development Network (AKDN) and its agencies, the Aga Khan Foundation (AKF) and AKCS-P, to facilitate the conservation of Khaplu Palace as a heritage site. In addition to direct benefit through a share in the profits (30%), the local economy also benefits through employment, purchase of local goods wherever possible and the stimulation of tourism services in the town. As was the case in Shigar, increased visitor numbers resulted from this work.

The reuse plan drawn up for Khaplu Palace has at its core the intent to operate the site as a guest house and restaurant similar in nature to Shigar Fort. The use of the complex for a number of complimentary purposes is central to the reuse plan and future financial sustainability of Khaplu Palace and Residence (KPR).

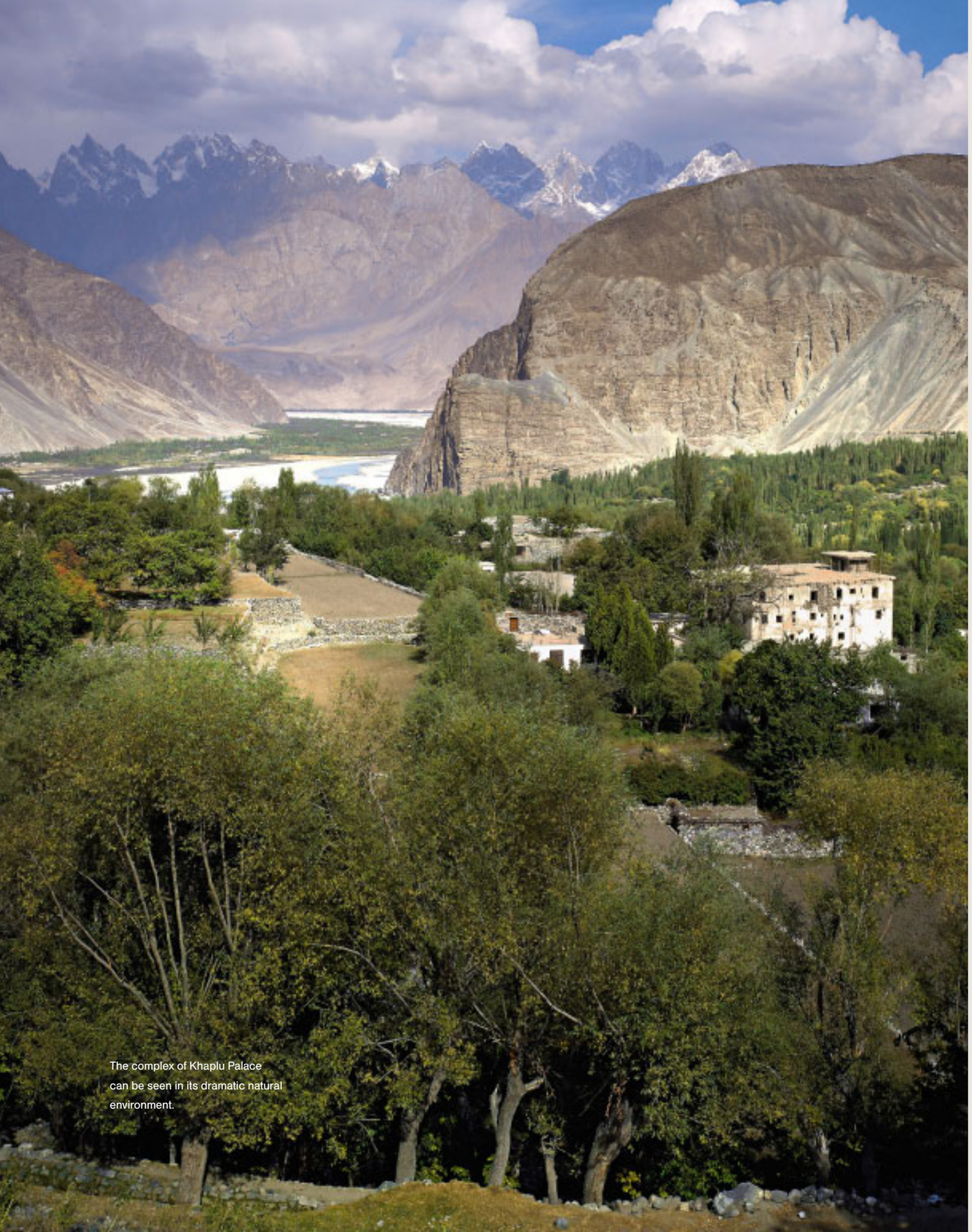
Khaplu Palace complex can be grouped into four main areas. The Palace (Yabgo Khar) is four storeys high including the basement, and has been used as a seat of governance, grain store and royal residence. From the outside, the building appears to be one structural unit but detailed examination of the internal structure suggests that it was built during a number of different construction phases. Its form and internal organization are strongly influenced by the Kashmiri manor-house typology, with rooms arranged in a rectangular grid around a central courtyard.

Given its significance, the Palace is being treated as a Grade 1 listed building. Six rooms at the rear of the first and second floors are being adapted with minimum compromise of conservation standards, to provide guest suites with modern comforts. The more historically significant rooms at the front of the building that were used by the raja as living and reception spaces are being incorporated into an interpretative museum open to the public.

There are also ceremonial gardens (Chaoni Tzar, Ra Tzar) – two formally organized garden spaces adjacent to the Palace – and historic landscape. The Chaoni Tzar, which forms a key part of the ceremonial entrance sequence, was (according to an account by the raja) formerly laid out as a *chahar-bagh* Persian garden, with geometrical areas separated by watercourses. In more recent times it was used as a ceremonial gathering space beneath the Palace where the raja could preside over celebrations and hold court.

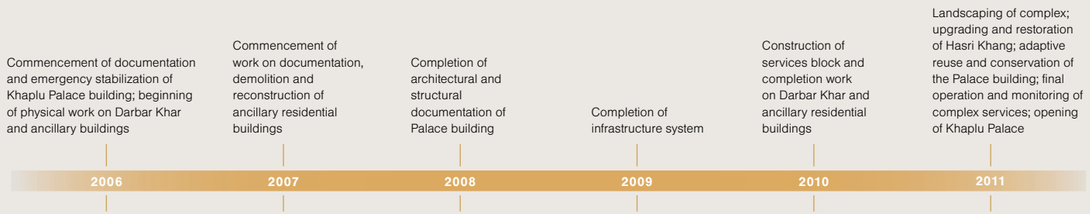
Top, distinctive features of Khaplu Palace are the rooms projecting out from the north facade (left) and the wooden balconies on the south facade (right).

Left and above, an extended elevation of the complex and a north elevation of Khaplu Palace.



The complex of Khaplu Palace can be seen in its dramatic natural environment.

Phasing 2006 → 2011



Background

BRIEF HISTORY OF PROJECT SITE

Until the creation of Pakistan in 1947, the territory of Baltistan was under the suzerainty of the Dogra maharaja of Kashmir. Khaplu was ruled by the Yabgo family of local rajas for a thousand years or more. Khaplu Palace was the family's residence as well as its seat of power and was built in the first half of the 19th century when the region had just fallen under the control of the Dogra rulers of Kashmir. In 1840, when the Dogras annexed the territory under Zorawar Singh, all the rajas in the Baltistan region were ordered to dismantle their ancient fortresses, many of which were located on strategic defensive heights. As a consequence, new palaces came to rise lower down in the valleys, including the one at Khaplu. Abandoned by the family in the late 1970s, the building had been decaying for several years.

LANDSCAPE

The town of Khaplu is in reality a group of rural settlements scattered about on an ancient alluvial fan along the course of the Shyok River some 90 kilometres upstream from its confluence with the Indus River. Watered by the Ghanche stream, this natural terrain has been turned over the centuries into an oasis of fertile terraced fields and apricot orchards.

Challenges

SITE CONDITIONS

The site is a series of agricultural terraces that long pre-date the construction of the Palace and its satellite buildings. The historicity of these terraces was a value that had to be protected and enhanced through appropriate treatment of the vegetation contained by them.

HOUSEHOLD ECONOMY

In general household economy depends on agriculture, with some seasonal tourism-related activities when locals provide portering services.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES

The downstream village of Doksa will be provided with clean drinking water and it is expected, as demonstrated in Shigar, that water-borne and gastrointestinal diseases will be reduced to statistical insignificance in this village.

INFRASTRUCTURE

Infrastructure services have aimed at providing clean drinking water from the filtration unit established for the project to the Doksa community down the slope. Infrastructure development has raised issues of conflict, related also to future employment opportunities, which were resolved by realignment, relocation of certain services, and changing their specifications.

BUILDING CONDITIONS

Most buildings that tend to the 'monument' status are built in stone or mud-block infill in a framework of heavy timber cribbage and seismic ties. Structurally the main Palace building posed serious challenges in being founded on cultural fill with the bearing strata in full access of a basement space. Decay of timber elements and rainwater and irrigation water ingress had resulted in serious decay of the building fabric and its timber elements. More modest buildings are built generally in massed rubble masonry or mud-block construction reinforced with horizontal timber ties and vertical poplar *ka'as* (columns embedded in masonry) or *khewphang* (vertical columns traversing more than one floor). Internally walls are provided with a thick plaster render of mud and straw which provides buildings with adequate insulation during the bitter winter months. Typically these techniques are not used any longer at the popular level, having been replaced by concrete blocks, reinforced concrete and corrugated sheet steel – all without any insulation – leading to numerous health and social issues.

Significant Issues and Impact

PLANNING ISSUES

As elsewhere, a voluntary civil society organization, the Khaplu Town Management and Development Society (TMDS), was helped into existence. Community-related issues, including land-use control, are partially regulated with the help of the Khaplu TMDS. However, since Khaplu is the headquarters of the Ghanche District, the Town Committee mandated by the Local Government Act also exists, and works in the same deficient manner as many such institutions in the public sector do. The Khaplu TMDS acts as a civil society balancing institution making up for many such deficiencies.

HISTORIC BUILDINGS/MONUMENTS CONSERVED

Among the main accomplishments is the conservation and recycling for reuse of the main Palace building, Yabgo Khar; the Darbar Khar, a building added on one of the terraces in 1929; and Hjta Khang, the old stables. Reconstruction of Chamanstar Khang, one of the older ancillary buildings, and demolition of the latest residential outhouse from about the 1960s and their replacement by a new designed structure, Ra'astar Khang, providing the majority of guestrooms. The Palace itself is being treated with great respect for its authenticity and its original fabric, composed as it is with source material from two or three older buildings. The reuse of the building has been kept as much as possible similar to its original residential use. Mechanical services are being installed with sensitive consideration for the building form and built fabric. Of the 21 guestrooms being created, only six are located in the Palace building, the remaining being housed in the ancillary blocks.

NEW BUILDING FACILITIES

The new buildings on the complex comprise Ra'astar Khang and the services blocks. Ra'astar Khang will offer nine of the 15 guestrooms outside Yabgo Khar, and has been designed as a new functional building but in the traditional material of natural stone and earthen mortars, laced with timbers for seismic stability. The two service blocks are located on land well removed from the main complex, and comprise the laundry building, which also includes a small cafeteria for staff, and the standby power building, which will house the standby generators, the transformer substation as well as living accommodation for six staff.

COMMUNITY INVOLVEMENT/PROGRAMME

Through the Khaplu TMDS, the community is benefitting from employment of labour at the construction site of the project. The Tourist Promotion Services has already started the process of selecting a cadre of employees who will work as trained hotel staff in the complete project.

VOCATIONAL TRAINING/CAPACITY BUILDING

About 30 staff drawn from the community is being trained in the hospitality trade as cooks, waiters, housekeeping staff, watch and ward staff, in mechanical equipment operation and maintenance, and other miscellaneous roles. During construction, hundreds from the local community have been employed as skilled and unskilled workers, many being trained as masons, carpenters, plumbers and electricians.

Partners

COMMUNITY PARTNERS

The community of Khaplu.

Donors

Government of Norway, Government of Japan.

Authoritative Framework

The main Palace building and the Darbar was bequeathed to AKDN. The ancillary buildings and the open land area were purchased by AKDN. One of the contiguous terraces has been leased for 25 years to retain control over further development. Additional land was purchased in the vicinity to establish service facilities. The property will be managed and operated as a residence guest house by the Tourist Promotion Services.

Hunza Villages Rehabilitation

GILGIT-BALTISTAN, PAKISTAN

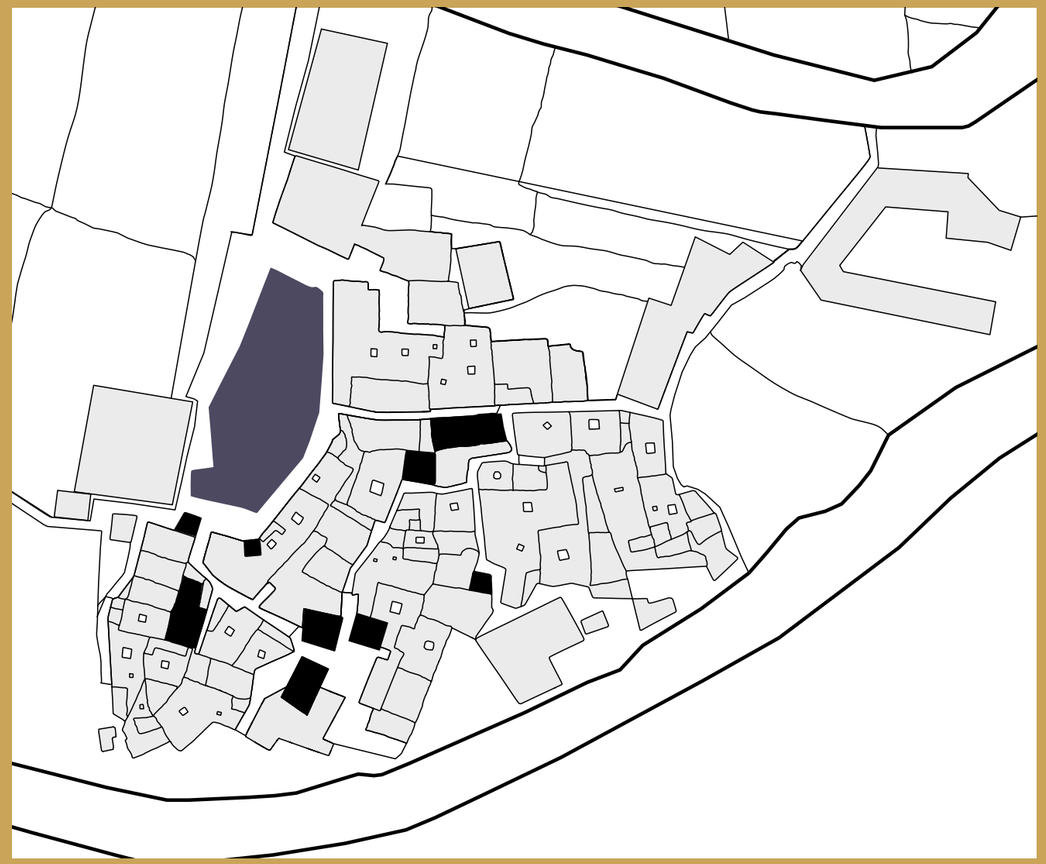
While conservation of Baltit Fort, the first project of the Aga Khan Trust for Culture (AKTC) in the area, was undertaken it was determined that in order for the socio-economic benefits to be fully realized, thus allowing for community ownership of the process, the living conditions and overall welfare of the inhabitants of Karimabad would also have to be improved. Thus the Karimabad project undertaken as of 1992 was the first AKTC initiative using multiple inputs for community-based rehabilitation, village planning and area development.

Subsequent to the loss of the traditional institutional structures in 1974, with the abolishment of the Mirdom and the opening up of the KKH road that linked Pakistan with China in 1979, the physical environment in Hunza experienced a negative phase. Traditional wisdom called for the use of scarce land for agriculture, fruit growing and cash crops while 'dead' land was employed for housing, but these lessons were cast aside. This negative development had started to affect Karimabad as the traditional settlements in the neighbourhood of the Fort were being abandoned, mostly because of prevailing unsanitary living conditions and the inadequacy of the houses to support the desired standard of modern life.

New housing built on the open farm terraces with only rudimentary sanitary waste disposal was not only marring the physical scenic beauty but also reducing productive farm land. To steer this development away from these negative aspects, following discussions with the inhabitants of Karimabad, a framework for physical growth and for the maintenance of its environmental and cultural assets was formulated. This called for: the establishment of a representative local institutional base, the Karimabad Town Management Society (TMS), which could resolve upcoming social and community issues; the rehabilitation of the traditional settlements and their architectural heritage; a more balanced land-use development catering for future growth either by enlarging the existing settlements or by developing new sites suitable from an environmental and cultural sensibility; and the planning and setting up of service infrastructure to support the proposed land use.

An aerial view of a settlement in the Hunza Valley.

Opposite page:
Elders dancing in the rehabilitated *jataq*, or community space, in Altit Village.



1 Ali Gohar House
2 Tower
3 Kuyukutz Mosque
4 Rupikutz Mosque
5 Mamurukutz Mosque
6 Yarikutz Mosque
7 Kuyukutz Mosque
8 Shalkutz Mosque
9 Tower
10 Tower
11 Water System Improvements

N
10 m

Project Scope Objectives

The aims of this project include improving living conditions in central Hunza, while protecting and retaining the natural and physical setting that is the attraction of the area. The conservation of its architecturaland cultural heritage is a clear goal, together with the rehabilitation of its traditional settlements through insertion of modern services (such as sanitation, water supply, paved pathways). These actions demonstrate the applicability of traditional housing, fostering responsible community-based institutions, and reviving traditional skills in crafts, while developing capacities in non-traditional areas for women.

Left, the restored *jataq*, or community space, in Altit.

Right, the traditional, flat-roofed houses adjacent to the Fort on which one can see plates of apricots drying in the sun.

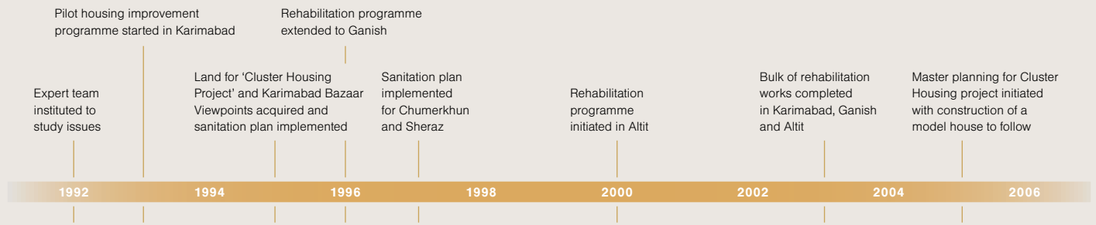
The rehabilitation programme was extended to the historic village of Ganish initially and then spread to the villages of Chumerkhun, Sheraz and Altit. To sustain improvement in the quality of life brought about by these projects, Town Management Societies (TMS) were instituted following the Karimabad model in Ganish and Altit, with the charge of taking full responsibility for the rehabilitation projects in the settlements. In addition to the restoration and rehabilitation efforts, focus on reviving traditional skills, generating new employment opportunities through revival of arts and crafts, and training in non-traditional skills for women was also implemented.

Revival of the marketing of traditional crafts, such as weaving, embroidery and rug making, was also made possible through partnering with local organizations, such as the Karakoram Area Development Organization (KADO). Other KADO activities include the Hunza Environmental Committee which looks after the collection and disposal of waste in central Hunza. Another initiative is the Hunza Arts and Culture Forum, established to revive and promote music through apprenticeship of young students with masters in the old traditions, and production of indigenous musical instruments.

At the request of the Ganish community, the rehabilitation programme was extended to Ganish, one of the oldest villages in Hunza, an example of a traditional fortified settlement. Initiatives started with the conservation of an architectural ensemble of the four family mosques of Yarikutz, Rupikutz, Kuyukutz and Mamurukutz, organized around a historic open community space, the *jataq* – formerly the site of ritual and ceremonial activities. The programme was then extended to cover the whole historic village with its three other mosques, two *shikaris* (watchtowers), the historic village water reservoir and a number of historic houses. Sanitation and water supply schemes were also instituted. A concealed electric supply system was installed and the village lanes were stone-paved to complete the environmental upgrading.

Residential development outside the historic areas has allowed for the revival of sound building techniques based on tradition, drawing upon the experiences and research into appropriate forms of traditional cluster housing. This helps to provide a viable social setting, where inter-generational interaction is possible and encouraged, and where security of the individual and the family is ensured.

Phasing 1992 → ongoing



Background

BRIEF HISTORY OF PROJECT SITE
The historic settlements of Ganish, Altit and Baltit are in central Hunza. A strand of the old Silk Route runs through Ganish where within walking distance are found the Sacred Rocks at Haldeikish, testimony to the many cultures, traders and travellers that traversed this route. The human effort to carve out a living in this incredibly beautiful yet harsh terrain, in harmony with the natural environment, led to the development of a mountain culture among the Hunzokutz which is visible in the many forts and fortified villages, the terraced farming lands, the irrigation channels that were constructed, the intricate water supply system that was implemented, the traditions and festivals that were adopted, the folklore and the language – Burushaski – the diet, dance and music, and the arts and crafts. The combination of the cultural heritage and the physical environment provide an enclave that is worthy of recognition as a world heritage site.

Challenges

DEMOGRAPHICS
The three villages of Karimabad, Ganish and Altit with their many settlements have a population of 11,000 with 1400 households.

ENVIRONMENTAL CONCERNS
The centuries-old harmony of human habitation and natural environment is being eroded by the construction of scattered housing in the productive terraced farmlands. A large number of these new houses use concrete blocks and large glass windows, alien to the traditional wisdom of using local materials, such as stone, poplar wood, mud adobe bricks and small-sized living spaces, and of being south facing, as well as importantly being built on so-called dead land that could not be made productive.

ACCESS TO OPEN SPACE
The Karimabad bowl-shaped land configuration enables wonderful scenic vistas. These vistas, because of commercial pressures on the scarce land, have been blocked as multi-storey buildings have come up in the main Karimabad Bazaar. The buildings on the lower side obscure these views. In an effort to provide visual corridors and prevent the feeling of traversing any other bazaar in Pakistan, a number of 'viewpoint' areas were acquired that have been retained to provide openings for people to absorb and get a wide-open feeling.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
Surveys and data collection were centred on Karimabad. As the programme spread, village surveys and topographic surveys have also been done, through locally trained women and men.

MASTER PLANNING PROCESS
The 'Karimabad Conceptual Development Plan' was formulated through a very interactive process with the community, village organizations and government departments. Expertise and research work was also done through field work carried out by the Aga Khan Program for Islamic Architecture, where students from MIT and Harvard participated in the early 1990s.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
The major forts of Baltit and Altit have been conserved. The fortified settlement of Ganish Khun has been fully rehabilitated, including recently the Ali Gohar House; so too the historic settlements of Karimabad and Altit. The various conservation and rehabilitation projects have so far won four UNESCO Asia-Pacific Awards for Cultural Heritage in central Hunza.

NEW BUILDING FACILITIES
In an attempt to demonstrate the modern usage of traditional construction techniques and materials, a number of new buildings have been constructed. These are the Amin Khan House, the Altit TMS building, the Altit gallery building, the Darbar in Aliabad, the office building in Karimabad, which houses the Karimabad TMS, and the model house in the 'Cluster Housing Project'. The latter and some other buildings that have used traditional building materials and construction techniques, relying on local materials thus also supporting the local economy, have been much appreciated by the communities. Already one sees greater use of locally available poplar wood, thus cutting down on deforestation, as well as use of local building materials in some of the new housing and buildings now being constructed.

VOCATIONAL TRAINING/CAPACITY BUILDING
The decision to restore the historic Baltit Fort as a museum and cultural centre in the early 1990s was the first major step that triggered the process of revival of traditional construction style and skills. The few master masons and carpenters then available were recruited, together with young apprentices under the supervision of international consultants and professional staff. This strategy of developing technical and skilled capacities in conservation and rehabilitation has been followed since the beginning of the Baltit Fort restoration with 14 master carpenters and 23 master masons now practicing, some with 15 years of experience in conservation and rehabilitation. The Women Social Enterprise (WSE) has enabled 12 young women with school education, previously trained in technical documentation of heritage assets, now to work with master carpenters, masons, electricians and plumbers. These young women trainees are receiving both on-the-job practical training from master artisans as well as basic theoretical understanding from professional staff, such as engineers, architects and consultants.

QUALITY OF LIFE
Health indicators are much improved with the provision of proper modern sanitation systems through the coverage of the 1400 households of Karimabad, Ganish and Altit. Interestingly the treated effluents are being used for growing crops in the areas of the Hunza River bank with excellent harvests reported.

Partners

COMMUNITY PARTNERS
Karakoram Area Development Organization, Karimabad Town Management Society, Ganish Khun Heritage and Social Welfare Society, Altit Town Management Society.

Donors

Governments of Norway, Japan and Spain, Swiss Agency for Development Cooperation, Aga Khan Foundation, European Union.

Authoritative Framework

The underlying agreement for all community-based rehabilitation and enterprise projects is that communities would drive the project implementation, while AKCS-P would provide technical assistance and financial oversight. On completion the communities would take responsibility for the management of the concerned individual projects.

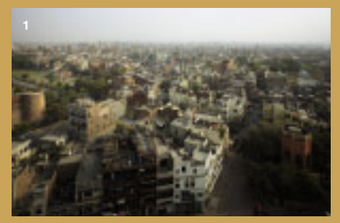
LAHORE

PAKISTAN

1 Shahi Guzargah 2 Wazir Khan Mosque Intervention area

N 500 m

FEATURED CASE STUDIES



SHAHI GUZARGAH

WAZIR KHAN MOSQUE

Lahore Area Programme

Programme Scope / Objectives

The Lahore Walled City project focused on the rehabilitation of the historic urban fabric and included the conservation of architectural heritage. Landmark monuments as well as public and private buildings were concerned, as was the improvement of infrastructure services in neighbourhoods and the living conditions of the residents. It also aimed at rehabilitating public (open) spaces within and around the area.

Preceding pages:
A view of Kotwali Bazaar looks west along the north facade of Wazir Khan Mosque.

This once fortified city is located in the north-west area of metropolitan Lahore, the capital of the province of the Punjab, and measures about 2.5 square kilometres. This historic core of Lahore has a concentration of monuments and buildings that reflect cultural diversity in architecture. Despite a dynamic and tumultuous past spanning several centuries, this area has retained much of its historic urban form.

The Walled City of Lahore project was initiated in 2006 by the Government of the Punjab and the World Bank. The following year the Aga Khan Trust for Culture (AKTC) entered a 'Public-Private Partnership Agreement' (PPP) with the provincial government to provide technical and financial assistance for the project and to undertake to build capacities in urban heritage conservation. In early 2008 AKTC signed a 'Memorandum of Association' with the World Bank. The Historic Cities Programme (HCP) has provided strategic planning services for the entire historic city while extending professional assistance for a pilot urban rehabilitation project that is integrated in a city-wide strategic framework for conservation and redevelopment.

The World Heritage Site of Lahore Fort (the Shahi Qila) and other equally spectacular monuments from the Mughal period, such as Badshahi Mosque (1683), Wazir Khan Mosque (1634) and the Wazir Khan Hammam, lend their splendour to the city. Additionally, several structures from the Sikh period and British colonial sites add to the city's charm, highlighting the importance the city held for a sequence of empires that ruled over South Asia. At present, the city possesses nearly two thousand buildings of significant architectural merit. Despite the lack of appropriate regulatory mechanisms pertaining to building demolition and construction, the Walled City is physically distinct, marked off from the surrounding colonial period city by the Circular Garden and the Circular Road.

In 1959 an excavation at Lahore Fort revealed the city's pre-Muslim occupation, dating back almost 1500 years. In the early eleventh century AD, Lahore became the seat of Sufi learning under Ali ibn Usman Hajweri, known as Data Ganj Bakhsh by his devotees. Lahore was subsequently conquered by the Ghaznavids under Sultan Mahmud in 1026, commencing the Muslim phase of its political history. Under the Mughal dynasty (1526–1789), Lahore flourished as an important provincial city periodically substituting for the Mughal capitals at Agra and Delhi. From 1789 onwards, Lahore was ruled by the Sikhs until the

Phasing 2007 → 2010

2008	2009	2010
'Memorandum of Understanding' signed with the World Bank; several types of surveys begin, including assembly of a base map, building inventory, environmental quality assessment	Neighbourhood demonstration project through pilot home improvements initiated; GIS database assembly	Wazir Khan Mosque project preparation study; neighbourhood demonstration infrastructure project commences; Shahi Guzargah project implementation continues

Sutar Mandi Chowk.

Opposite page:
The west facade of Naunihal Singh Haveli.

British annexation of the Punjab in 1849. In 1947 a substantial part of the Old City was destroyed as a result of communal strife and arson associated with the Partition of the South Asian subcontinent. This area is now home to intense commercial pressures resulting in the piecemeal demolition of the historic residential fabric.

The 'Strategic Plan' developed by HCP for the Walled City aims to redefine the city's role as a heritage site within Metropolitan Lahore. Promoting heritage-sensitive urban design, infrastructure improvement and residential land use, the Area Development framework integrates both landmark monuments and historic neighbourhoods. The framework provides for increasing residents' capacities to engage in the revitalization of the city and for generating opportunities for income. These broad priorities are being pursued at three levels.

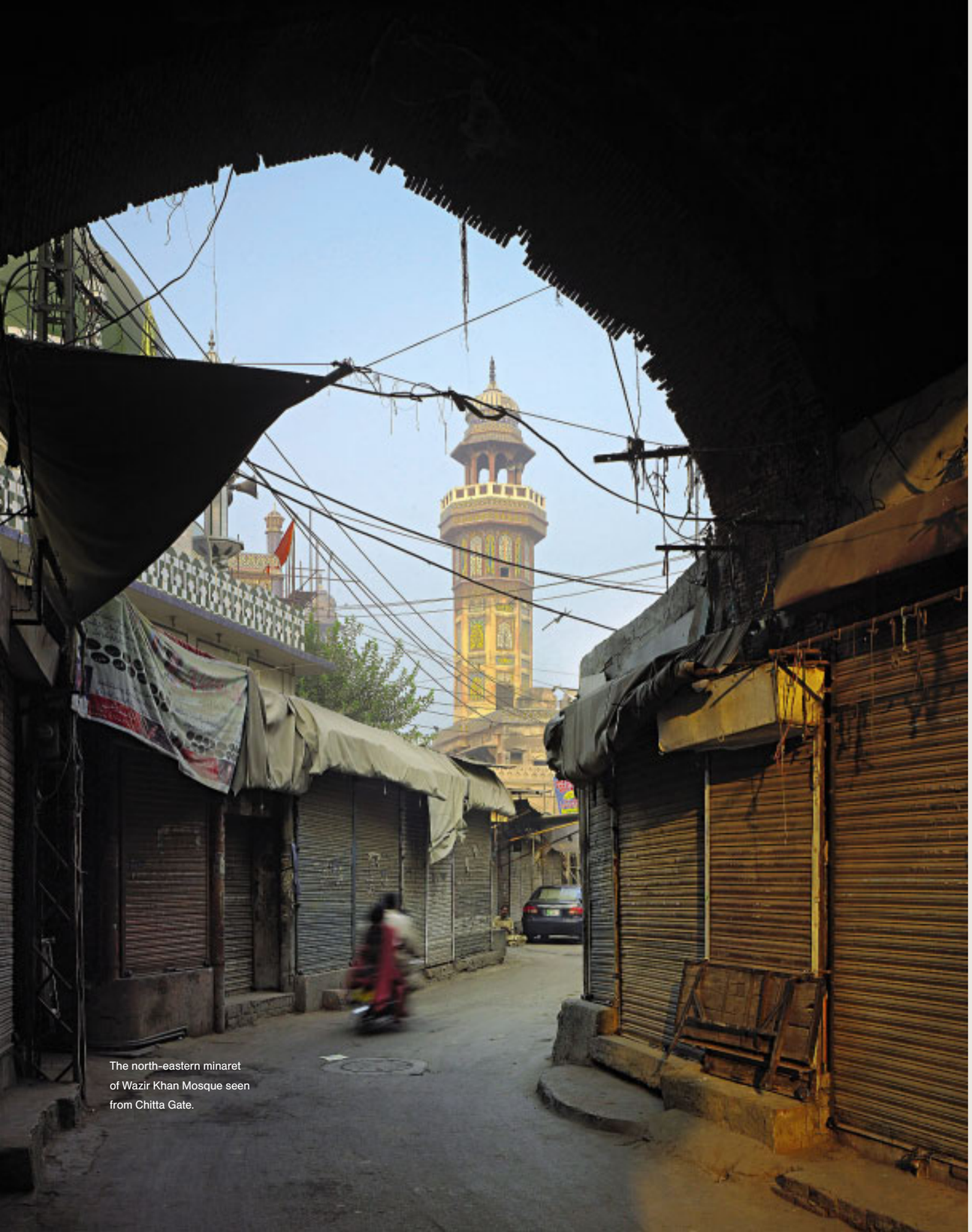
The Walled City is surrounded by regional transportation functions that support local commercial markets. The 'Strategic Plan' proposes the gradual relocation of such metropolitan functions to more suitable sites elsewhere in Lahore in conjunction with associated land use such as wholesale and warehousing. This is being considered by the Punjab Government.

The Plan promotes the re-establishment of residential and other functions compatible with the city's historic character and makes provisions for reclaiming green areas in and around the Walled City. Special attention is being given to the restoration of the monumental complexes (and open spaces associated with them) and other architectural heritage as well as upgrading and expanding public utilities in neighbourhoods.

A legislative initiative is now underway to develop new planning and regulative processes. The framework also outlines building regulations in order to check the uncontrolled demolitions of historic building stock and their conversion into commercial entities.

The Plan outlines strategies for consolidating residential use and rehabilitating building stock. The overriding focus of attention concentrates on revalorizing *mohallas* in their historic and topographic context. Pilot initiatives integrate facade improvement, infrastructure upgrading and (historic) home improvement. Community-driven initiatives are also encouraged through training of local youth in spatial mapping and building trade skills as well as incentives for home improvement to owners through technical support.

Accompanying these efforts routine advice has been given to the Government of the Punjab on planning, legislative and administrative issues. Baseline surveys comprise a topographical map at the scale of the Walled City, an inventory of all 22,800 properties and a socio-economic survey of 1757 households across the city. An operational Geographic Information System (GIS) is in place.



The north-eastern minaret of Wazir Khan Mosque seen from Chitta Gate.

Background

BRIEF HISTORY OF PROGRAMME AREA
Lahore Walled City is the historic core of Lahore and began on the banks of the River Ravi at least 1500 years ago. In the early 11th century AD, Lahore became a seat of Muslim Sufi learning under Ali b. Usman Hajweri. Not soon after, in 1026, Lahore was conquered by the Ghaznavids under Sultan Mahmud. The centuries under the Delhi Sultanates (1187–1526) were turbulent, and physical evidence of the city's eminence from this period is scarce. Under the Mughals (1526–1789), Lahore was an important provincial city and several important monuments were built, including the World Heritage Site of Lahore Fort, the Mosque of Wazir Khan (1634) and the Badshahi Mosque (1683). From 1789 Lahore was under the control of the Sikhs until the British annexation of the Punjab in 1849. The colonial period saw the destruction of the city's fortifications and its gates, and the establishment of important institutions and the architecture associated with them outside the historic core. In 1947 significant areas of the Walled City were destroyed by arson and looting, leaving an indelible mark in the form of commercial developments that replaced what was lost. The new markets continue to expand agressively at the cost of the historic fabric. However, some 2000 non-monumental buildings of architectural merit still survive.

Challenges

PROGRAMME RISKS
The project seeks to address many existing conditions – physical, socio-economic, cultural and administrative. The single most imporant challenge it faces is the continued lack of an enabling administrative and governance apparatus, being mitigated by certain legislative and administrative steps being taken by the Government of the Punjab. Other challenges are related to this, such as the unimpeded demolition of the historic building stock and its replacement by commercial structures.

SITE CONDITIONS
The historic city is an artificial mound, 2.6 km^2 in area, with a rise of some 15 metres. The city is densely packed with nearly 23,000 parcels of land, and gross residential density is in the range of 550 persons per hectare. The city is surrounded by major inter-regional rail and road transporation functions in a symbiotic relationship with the regional markets inside the historic precincts.

DEMOGRAPHICS
According to the last census conducted in 1998, the Walled City's population stood at 160,000. However, a declining trend is in place due to increasing commercialization and loss of the residential fabric. In spite of this, the Walled City remains one of the most densely populated localities in the metropolis.

HOUSEHOLD ECONOMY
The Walled City is home to some of the poorest people in metropolitan Lahore and the lack of suitable job opportunities is a major concern amongst households – especially those who continue to educate their children. Common sources of income include employment as salesmen, vendors, daily wage earners and/or owners of small shops.

STATUS OF HEALTH AND EDUCATION
Common illnesses comprise diabetes and blood pressure, asthma, hepatitis B and typhoid. AKCS-P has introduced monthly health awareness sessions to address frequent concerns among women. Most public-sector schools are overcrowded, and lack playing areas and adequate sanitation facilities.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES
Drinking water is of poor quality with high traces of faecal contamination. Lack of appropriate measures to treat the water supply at source further exacerbates the problem. During the summer, significant parts of the Walled City suffer from water scarcity.

ENVIRONMENTAL CONCERNS
Prevailing environmental conditions negatively impact the quality of life of residents. Improvement in the services infrastructure and the enforcement of land-use controls are expected to improve the currently unacceptable health and environmental conditions.

INFRASTRUCTURE
The 150-year-old reservoir built at the city's highest point and some of the water mains of the old water supply network are still relied upon, and are part of a pressurised grid augmented by some 16 tube wells, dotted around the city. Failure of pressure in the system results in contamination and insufficient supply, leading to consumers installing small centrifugal pumps on the supply lines. The drainage system is mainly covered-over open drains, many large open drains on one or both sides of the main thoroughfares, and main sewers in some bazaars. It is a mixed sewage and storm-water system. The electrical and the telecommunication distribution systems need much reorganization and updating to acceptable standards. A city-wide programme of infrastructure development and guidelines for implementation have been prepared. These aim to improve the water supply system, introduce a new drainage system separating storm water from sewage, and rationalize the electrical and telecommunication distribution system, all at standards well above the prevailing ones.

ACCESS TO OPEN SPACE
The Circular Garden, established in 1912, has been heavily overrun by public and private sector unauthorized buildings, and by strip-commerce along Circular Road. Urban squares have also been overrun by unauthorized commerce.

BUILDING CONDITIONS
Most buildings are founded on cultural debris and structural failure is endemic. To stem this, it is proposed to provide a new drainage system that stops the percolation of water into the foundation-bearing soil.

OPEN SPACES
The Circular Garden along the Walled City serves as the main open space. However, it has been subjected to routine encroachments by commercial enterprises as well as public institutions.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
Topographical surveys using EDM/CAD technology could only be carried out at night, owing to traffic conditions. Inventory of 22,800 individual buildings, recording some 172 attributes, is now part of a GIS database.

MASTER PLANNING PROCESS
Strategic Plan completed in February 2008, now due for a review and update.

PLANNING ISSUES
Ownership titles for properties are non-existent owing to land subdivision not having been recorded during colonial times; absence of land-use regulation; collapse of municipal governance; no clear demarcation of the municipal limits of the historic area; metropolitan and regional planning inadequacies negatively impact on Lahore Walled City.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
AKTC and AKCS-P are carrying out the conservation of Wazir Khan Mosque. A home in one of the lanes of the Old City has been conserved as a demonstration project.

NEW BUILDING FACILITIES
A new urban infill building has been designed and site access is being negotiated.

COMMUNITY INVOLVEMENT/PROGRAMME
Community-based organizations have been formed based on discreet components of the urban morphology. One of the communities is currently directly involved in the conservation and upgrading of its neighbourhood.

VOCATIONAL TRAINING/CAPACITY BUILDING
Skills enhancement training programmes related to building trades and spatial documentation have been initiated in the project area. The programme provides on-the-job training for local youth – both male and female.

CONTRACTING METHODS
For large projects, national competitive bidding procedure; material and labour contracts for intermediate and small projects; labour only contracts with material purchased by AKTC; employed labour and hired unskilled labour with material purchased by AKTC.

NEW TECHNOLOGIES INTRODUCED
GIS; EDM/CAD real-time surveying and documenting techniques, with photo-orthorectifying software; SSPS analysis.

RELEVANT CODES/STANDARDS ADOPTED
International codes being recommended by consultants engaged by AKTC. Recommendations and guidelines prepared by AKTC being introduced.

LESSONS LEARNED
This is the first HCP project based on a 'Public-Private Partnership' framework approach. While the Government of the Punjab facilitates many aspects of the project that would otherwise be extremely difficult, the project has been characterized by changing levels of mutual understanding of its nature, purpose and philosophy, owing mainly to varying political and administration personalities that AKTC has had to work with.

Partners

PUBLIC PARTNERS
Government of the Punjab.

COMMUNITY PARTNERS
Several community-based organizations at the scale of micro neighbourhoods.

Authoritative Framework

'Public-Private Partnership Framework Agreement' was signed between AKTC and the Government of the Punjab on 2 July 2007. 'Memorandum of Understanding' between the World Bank and AKTC was signed on 6 March 2008.

Shahi Guzargah

LAHORE, PAKISTAN

The 'Pilot Urban Rehabilitation and Infrastructure Improvement Project' is being jointly implemented with the Government of the Punjab in one section of the Walled City of Lahore and constitutes eleven per cent of the Old City's footprint. The project, as initially conceived by the World Bank and the Punjab Government, aimed to rehabilitate a historic thoroughfare (starting at the Delhi Gate – one of the city's thirteen entrances and leading up to the Royal Fort) by putting services underground. Presently, this route comprises some of the major commercial centres serving the metropolis and the region. With the collaboration of the Historic Cities Programme (HCP), the project now has a broader set of goals. It comprises comprehensive regeneration of the area as heritage urbanism with special emphasis on the conservation of the historic residential areas associated with the bazaars, and includes the conservation of the main monuments and urban open spaces associated with them. This entails urban design, infrastructure upgrading, monument conservation and historic urban fabric rehabilitation with participation by the communities that constitute the residential areas.

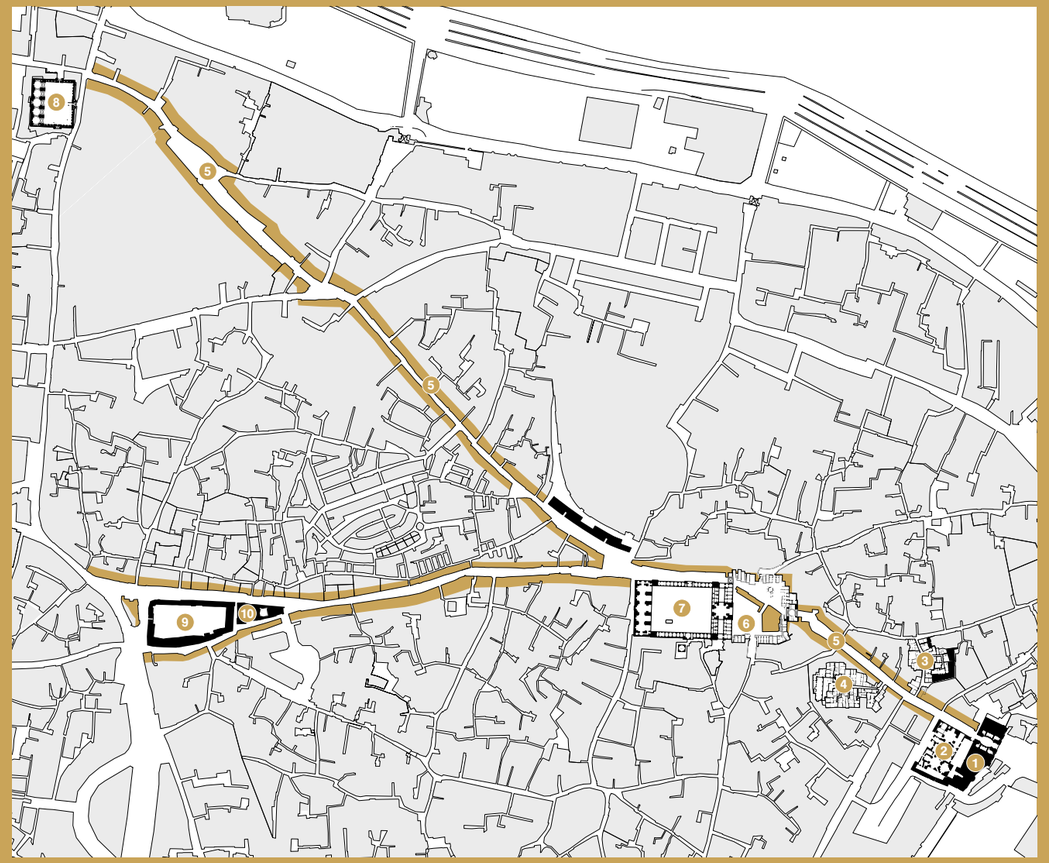
Part of the site also represents a significant expansion of the area of the fortified city brought about by the addition of a new wall in the sixteenth century by the Mughal emperor Akbar (1542–1605). The site of Wazir Khan Mosque (see p. 160) used to be outside the old walls, and when the Mosque was constructed in 1634 it was one of the first to be inside Emperor Akbar's new walls. The urban open spaces associated with this monument are to be rehabilitated as part of the project.

The urban design aspect focuses on improving the visual and sensory features of the urban environment in conjunction with the rationalization and improvement of the visible elements of services infrastructure. The Aga Khan Trust for Culture (AKTC) is facilitating the improvement of bazaar facades (1.5 kilo-metres in length) and street surface improvement, the design and development of open spaces that have been heavily encroached upon by commercial entities, the provision of civic amenities and tourist facilities, urban landscaping, street furniture and related facilities including signage.

Regarding services infrastructure, AKTC has prepared an integrated infrastructure conceptual design for the Walled City as a whole. This conceptual design provides guidelines and parameters for the detailed design of infrastructure and

Infrastructural problems plague Sutar Mandi Chowk.

Opposite page:
Delhi Gate, one of the thirteen entrances to the Walled City.

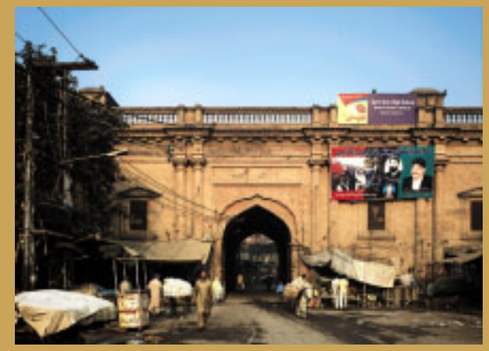


1 Delhi Gate
2 Wazir Khan Hammam
3 Neighbourhood Rehabilitation Programme
4 Muhammadi Mohallah
5 Shahi Guzargah
6 Wazir Khan Chowk
7 Wazir Khan Mosque
8 Begum Shahi Mosque
9 Baoli Bagh
10 Sonehri Mosque
Intervention corridors

N 100 m

Project Scope / Objectives

This project aims to rehabilitate the main bazaar thoroughfares as well as residential urban fabric in an integrated manner. This entails urban design work, infrastructure upgrading and historic building stock rehabilitation. Urban open spaces are to be rehabilitated and key landmark monuments located in the main thoroughfares are also to be restored as individual projects. The neighbourhood demonstration project involves testing of proposed designs on which basis the larger pilot project will be implemented.

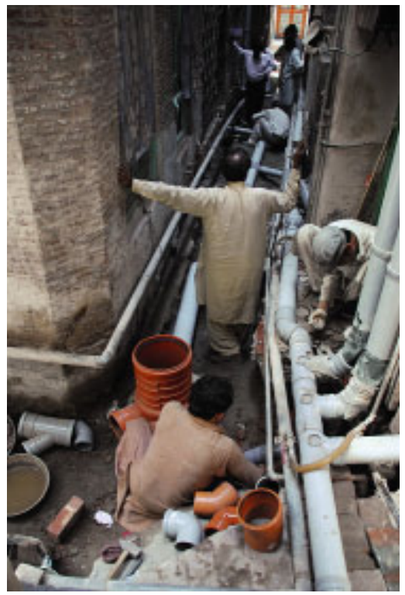


A courtyard detail of an old *haveli* in a state of decay.

allows for a higher degree of design and implementation control at the level of the project area. Upgrading and improvement of infrastructure for water supply, sewage disposal, storm-water disposal, electricity, telecommunications and natural gas in the pilot project pose a different range of problems at various levels of delivery. Standards and details of the infrastructure include carefully thought out solutions responding to the myriad problems posed by the special physical and geographical context of the Walled City.

The 'Neighbourhood Rehabilitation Programme' constitutes a key component of the 'Pilot Urban Rehabilitation and Infrastructure Improvement Project'. It proposes a holistic approach to urban rehabilitation with sustainable yet quality standards for the services infrastructure, and the structural consolidation and revalorization of the historic building stock. A strategy sensitive to the historic urban fabric has been developed and is being implemented in a residential lane off Delhi Gate Bazaar – Gali Surjan Singh and its cul-de-sac offshoot, Koocha Charakh Garan. Together, these two streets comprise twenty-five residential buildings housing approximately 150 people. The locality was chosen primarily because it represents the average conditions of infrastructure, building obsolescence, and the admixture of historic and contemporary houses among the historic neighbourhoods in the area.

The survey and documentation done by the Aga Khan Cultural Services-Pakistan (AKCS-P) in the project area revealed that, by and large, homeowners are willing to undertake home repair and maintenance works in small interventions in accordance with their income levels. However, the lack of adequate technical knowledge and necessary skills poses serious limitations on the scope of the work. A home restoration project carried out in 2008 demonstrated the full range of problems associated with building decay and mobilized the street community to take part in the project.

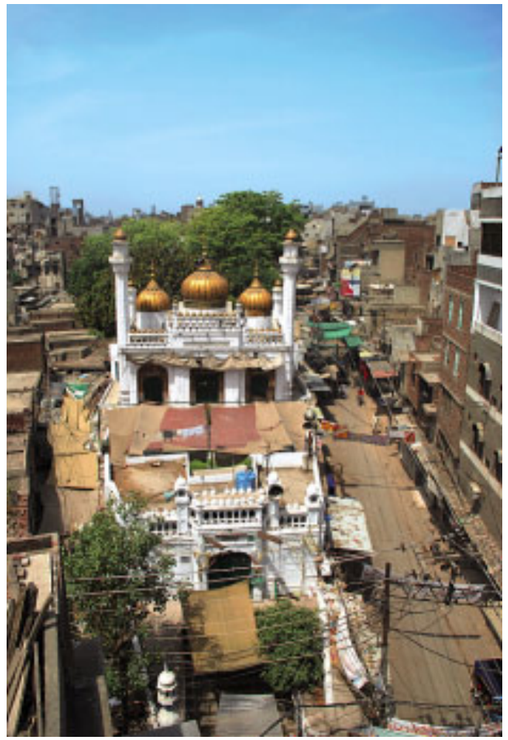


Left, drainage upgrading is being undertaken in Shahi Guzargah.

Right, restoration work is being done on original brickwork.

The rehabilitation strategy involves intensive social and technical extension work, and aims at setting a precedence for urban environmental rehabilitation. It addresses the socio-economic dynamics of the context with on-the-job training in various traditional building trade skills targeting local youth in the project area, who work alongside master craftsmen in masonry, carpentry, plumbing and electrical works.

The programme has three well-defined but interlinked components. First, facade improvement: since infrastructure elements such as electricity and telecom lines can only be attached to rehabilitated facades that can effectively bear the stresses of physical support, facade rehabilitation is considered an investment in the public realm. Intervening in house facades entails a modicum of structural consolidation and necessarily means engaging with the inner workings of a house too. A close relationship is thus developed between the owner-occupant of a house and the implementing agency, in this case AKCS-P, one that also encourages homeowners to make their own investments in undertaking home repairs. Second, infrastructure upgrading: this provides for improved waste and storm-water disposal where possible, systems for improved solid waste disposal, subsurface layout of gas pipes and new (re)organized electrical, telephone and television cable distribution networks. It is expected that better drainage facilities will reduce the extent of leakage or seepage into the bearing strata of the soil, therefore complementing efforts at structural consolidation of the surrounding buildings. Third, home improvement: this component addresses building problems in the internal spaces of a house and includes, to varying degrees, structural repairs and consolidation, replacement of dilapidated and/or dysfunctional installations, non-structural architectural intervention and finishes.



Above, a bird's-eye view of Sunehri Masjid (Golden Mosque), Rang Mahal, in the Walled City (left) and a detail of a ruined facade in Chehal Bibiyan Mohalla (right).

Below, elevations of Guzargah neighbourhood rehabilitation projects, before and after intervention.

10 m

Background

BRIEF HISTORY OF PROJECT SITE
The project site comprises those neighbourhoods of the historic city through which the route taken by Mughal royalty, from the entrance to the city to the gates of the royal palace, passes. This route now consists of some of the major commercial centres of the metropolis.

Challenges

SITE CONDITIONS
Neglect and inadequacy of the existing services infrastructure and the task of transforming it to meet acceptable standards is one of the biggest challenges of the project, particularly when seen in relation to the complex morphology of the Walled City. The state of the historic building stock is another key challenge, as a vast majority of the buildings reflect structural failure, traceable to foundation failure and bad plumbing which results in water seepage into the building fabric.

DEMOGRAPHICS
Approximately 8000 people live in the Shahi Guzargah project area. The neighbourhood demonstration project serves close to 150 people residing in the residential lanes, Gali Surjan Singh and Koocha Charakh Garan. The majority of residents are homeowners.

HOUSEHOLD ECONOMY
Lahore Walled City is home to some of the poorest people in metropolitan Lahore and a lack of job opportunities is a major concern. Common sources of income include employment as salesmen, vendors, daily wage earners, piece-rate workers (especially in the case of women), and/or small shops owned by residents. Socio-economic profiles of residents in Gali Surjan Singh and Koocha Charakh Garan are not much different from the rest of the Walled City.

STATUS OF HEALTH AND EDUCATION
Common illnesses comprise diabetes and blood pressure, asthma, hepatitis B and typhoid. In collaboration with the Aga Khan Health Service, AKCS-P has introduced monthly health awareness sessions and medical camps for residents in the project area and surrounding localities. Most public-sector schools are overcrowded, and lack playing areas and adequate sanitation facilities.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES
Drinking water is of poor quality with high traces of faecal contamination. Lack of appropriate measures to treat the water supply at source further exacerbates the problem. During the summer, significant parts of the Walled City suffer from water scarcity.

ENVIRONMENTAL CONCERNS
Improvement in the services infrastructure and the enforcement of land-use controls are expected to improve the currently unacceptable living conditions.

ACCESS TO OPEN SPACE
No open spaces suitable for women and children exist in the immediate vicinity of the Shahi Guzargah project area or the neighbourhood project site.

BUILDING CONDITIONS
Most buildings are founded on cultural debris and structural failure is endemic. A majority of the buildings are taken over by commercial enterprises resulting in significant deterioration. Homeowners continue to alter houses according to their needs but changes are generally inappropriate in the light of the age and condition of the buildings.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
A full inventory of buildings has been completed and made a part of the GIS system. A topographical map of the area has been completed. Buildings displaying architectural merit are in the process of being documented. A 12% sample of households has been surveyed for establishing income and poverty levels and prevailing quality of life conditions. For the purposes of the demonstration project, detailed home documentation for all the houses in the two streets has been carried out along with the survey of existing services infrastructure. Baseline data pertaining to the socio-economic profile of all the households in the two streets have been compiled.

MASTER PLANNING PROCESS
The demonstration project is one of several 'Local Development Frameworks' that have been planned for the Walled City. It represents the full range of policies and interventions envisaged at this scale in the 'Strategic Plan' prepared by HCP.

PLANNING ISSUES
Governance, land use and zoning control are lacking. Necessary legislative frameworks to regulate building constuction are not in place. Traffic reorganization is in need of planning. Heritage conservation, urban design and rehabilitation of neighbourhoods and open spaces require an integrated approach.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
A number of monuments are part of the project area. Monuments being targeted for conservation include Wazir Khan Mosque, the Sonehri (Golden) Mosque and the Maryam Zamani (Begum Shahi) Mosque. A single historic house (just over 100 years old) in Koocha Charakh Garan – the neighbourhood demonstration project area – was conserved in 2008. Rehabilitation of five additional historic houses are underway in the same locality.

NEW BUILDING FACILITIES
An 'urban infill' building has been designed and is part of the project. This will give back the scale and physical volume of a missing portion of the streetscape; create opportunities for appropriate level of commerce of a type aimed at visitors; and house certain infrastructure elements such as transformers and one tube well. Other new buildings are planned to manage the urban space outside the city's perimeters.

COMMUNITY INVOLVEMENT/PROGRAMME
Community-based organizations (CBOs) have been created in small units related to the topo-morphological characteristics of the neighbourhoods. These help in resolving local issues of conflict, in speaking to individual stakeholders, and in propagating the desirable values in development participation.

VOCATIONAL TRAINING/CAPACITY BUILDING
Youth residing in the project area are participating in the 'Skills Enhancement Programme' pertaining to building trades and spatial documentation. The programme provides on-the-job training to both males and females.

CONTRACTING METHODS
National competitive bidding under the guidelines of the World Bank. In the case of the neighbourhood demonstration project, material purchased and labour hired directly by AKTC; supervised by AKTC staff.

NEW TECHNOLOGIES INTRODUCED
EDM/CAD real-time surveying and documenting techniques, with photo-orthorectifying software; data analysis with GIS and SPSS. New standards for the infrastructure distribution networks have been introduced.

RELEVANT CODES/STANDARDS ADOPTED
Recommendations and guidelines prepared by AKTC being introduced.

QUALITY OF LIFE
In collaboration with the Aga Khan Health Service, AKCS-P has introduced monthly health awareness sessions and medical camps for residents in the project area and surrounding localities.

Partners

PUBLIC PARTNERS
Government of the Punjab.

Donors

The World Bank, German Foreign Ministry.

Authoritative Framework

'Public-Private Partnership Framework Agreement' was signed between AKTC and the Government of the Punjab on 2 July 2007.

Wazir Khan Mosque

LAHORE, PAKISTAN

Wazir Khan Mosque is the centrepiece of a historic urban ensemble in the Walled City of Lahore. The Mosque was built in 1634 by Hakim Alimuddin who was granted the title of Wazir Khan on Shah Jahan's accession to the Mughal throne in 1628. It is founded on the site of an old Sufi convent – associated with the saint Syed Ishaq Gazruni (d. AD 1284/AH 786) – between the limits of the Old City and the new city walls built a century earlier by Shah Jahan's grandfather, Emperor Akbar. In this still developing space, the Mosque complex was an ambitious and unprecedented piece of urban design. The grave of Syed Ishaq Gazruni was included in the fabric of the Mosque. At the time of its construction it was considered the largest mosque within the fortifications of Lahore and superseded the Begum Shahi Mosque (constructed by Emperor Jahangir in 1614) as the congregational mosque of the city.

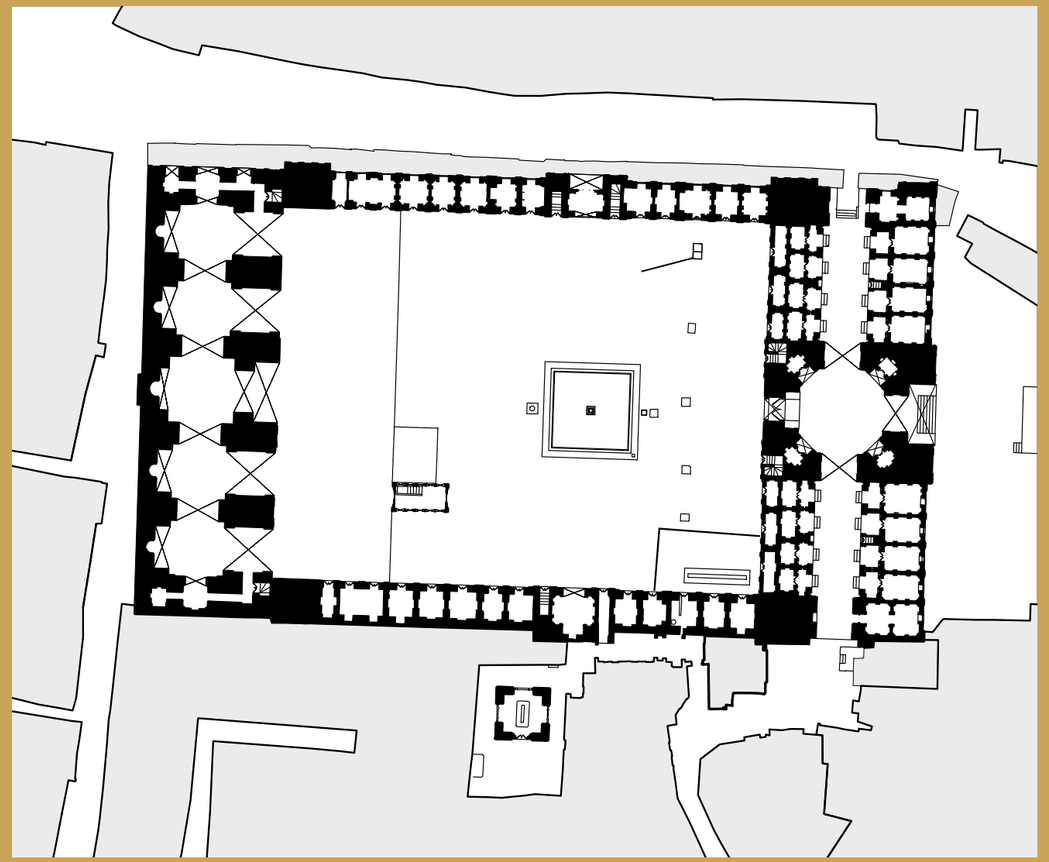
Wazir Khan Mosque is located at a distance of about 260 metres from the Delhi Gate on the route to Lahore Fort and is surrounded by the thick urban fabric of the Walled City. The physical context comprises the Chowk (a square urban open space), Chitta Gate and the buildings fronting the square and the bazaar. The houses on the south side define the southern limits of the Mosque and street defines the border between the Mosque and the urban fabric on the west side. On the northern side the bazaar opens up at a fork to form the Kotwali Chowk, which was the space in front of the Mughal-period city police station, the *kotwali*, no longer existing. Historically, as part of the thoroughfare connecting Delhi Gate and Lahore Fort, Wazir Khan Mosque, together with its square, formed a singularly important element punctuating the urban fabric of the Walled City.

Of the fourteenth-century Sufi establishment nothing but three grave sites remain. Of these the grave of Syed Ishaq Gazruni was made part of the fabric of the Mosque, and is accessed by a staircase in the main courtyard, marked by an elaborate pavilion. The original level of his grave is about 2.5 metres below the level of the Mosque's courtyard.

The Mosque's layout comprises a large quadrangular plan, with the heavily built prayer chamber housing five in-line domed cells located at the *qibla* end of the courtyard. The main building of the Mosque and its inner courtyard is supplemented by a bazaar with two rows of shops – intended for calligraphers and

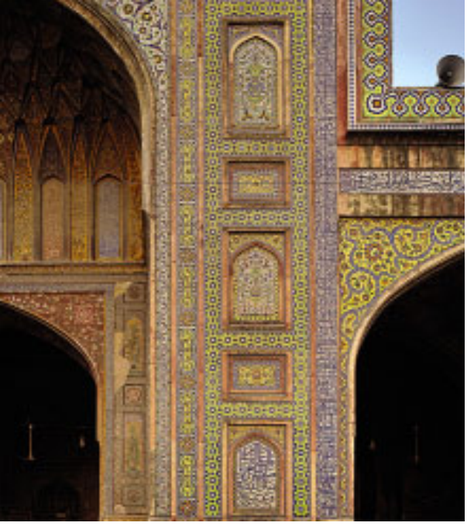
The eastern facade of the main prayer chamber of Wazir Khan Mosque, seen from the courtyard.

Opposite page:
Scaffolding has been erected to enable a thorough documentation of the building.



Project Scope/Objectives

AKTC is working on the conservation of Wazir Khan Mosque and providing planning assistance towards the reorganization of the space in front of the Mosque with the objective of improving the quality of the urban environment. Goals are the relocation of infrastructure underground and the return of the Mosque to its original urban setting.



Above right, the eastern facade of the main prayer chamber of Wazir Khan Mosque while a detail, on the left, shows the intricate tile-work on the same facade.

book binders – at right angles to the axial direction upon entering the courtyard. The Chowk, a square open forecourt outside the Mosque, was part of a conscious attempt at formal urban design and an immediate precursor to other great urban compositions of Shah Jahan's time.

The chief architectural and artistic characteristic of the Mosque resides in its profuse surface decoration both on the exterior and in the interior. On the exterior, the decoration comprises a combination of fine exposed brickwork and a framework of plaster render with a thin layer of *faux* brickwork. This forms the overriding frame for dramatically coloured glazed-tile mosaics in floral and arboreal motifs as well as depicting calligraphic quotations from the Qur'an, the Hadith and other verses. Interior surfaces, entirely covered by fresco-work, have been touched up or painted over down the centuries by successive attempts at 'restoration', so much so that no original work appears to exist any longer. Of the delicate Mughal surface ornaments and decorative techniques, the most vividly displayed are the glazed-tile mural decoration and calligraphy which, despite its chromatic exuberance, recalls Safavid monuments in Isfahan (Iran), built only a few years before, and earlier Timurid architectural antecedents.

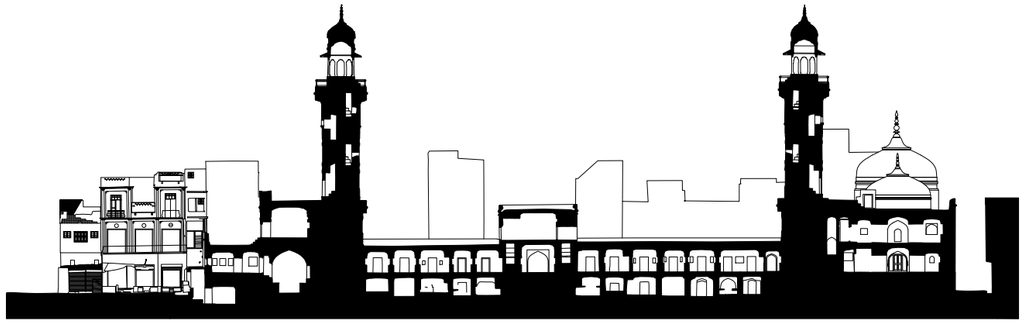
The Mosque has undergone serious damage. Heavy ingress of rain and waste water has damaged the floor of the rooms and the courtyard. Inappropriate commercial activity in the shops on the main facade poses a hazard to the building's fabric.

The four minarets, thirty-six metres in height from the street, have leaned out to varying but not alarming degrees. The movement of the two minarets adjacent to the main prayer chamber has caused cracks in the arches and roof structure of the end bays. Structural investigations suggest successive earthquakes as the cause of this behaviour. That the cracks existed prior to 1971 is confirmed from the record of repair work begun at that time.

Since March 2009 major architectural and damage documentation of the Mosque complex has been under way. Detailed electronic documentation of the building provides the basis for examining the nature and extent of damage and for assessing the extent of conservation measures. Geotechnical investigations have been completed and measures to carry out structural consolidation of the monument are being designed. Assessment of the building and the condition of its foundations indicate that major structural cracks are not related to ongoing structural behaviour. A programme for the conservation of the Mosque, to be implemented in several stages, is being developed.

Above, Wazir Khan Mosque is located in a heavily built-up environment.

Below, the east-west section of the Mosque.



Background

BRIEF HISTORY OF PROJECT SITE
Wazir Khan Mosque was built in 1634 by Hakim Alimuddin Ansari, the famous governor of the region under Emperor Shah Jahan. When still Prince Khurram, Shah Jahan had employed Hakim Alimuddin as his court physician. Upon ascending the throne, Shah Jahan appointed him governor of Lahore with the title Wazir Khan. A 14th-century Sufi convent associated with Syed Ishaq Gazruni existed on the site of the Mosque. The monument is noteworthy for its rich glazed-tile decorations.

Challenges

PROJECT RISKS
The minarets of the Mosque have leaned outwards. The base of the two western minarets, attached to the main prayer chamber, have induced structural cracks in the chamber. Structural investigations suggest that in all likelihood the cracks developed as a result of successive earthquakes. The conservation and restoration of the surface decorations in the Mosque, including its tile revetments, are costly and time-intensive operations and will require sustainable development of the appropriate skills. Pilot projects for key decorative crafts are proposed to be initiated. These are fresco murals, ceramic tiles and lime plasters. For post-conservation monitoring and maintenance, appropriate capacity in the maintenance agency is proposed to be developed.

SITE CONDITIONS
The diagonal connection from Chitta Gate to the gate leading out of the square on the north-eastern corner of the Mosque has now been transformed into a bazaar as a result of encroaching shops. A detailed survey has revealed that most of the shops, fronting the square on its eastern and northern sides, have encroached into the square. Some fragments of the original 17th-century shops on the perimeter of the square are nested deep within the new structures. The historical openness of the square has been seriously sacrificed to low-value structures. Increasing presence of commercial activities during the last four decades has resulted in ill-maintained shops and structures that have ultimately distorted the form of the open space and the monument.

INFRASTRUCTURE
The project aims to improve the existing infrastructure in the Mosque complex. Water supply, rain and waste water disposal, gas supply and electrification have all created serious problems since their introduction during past restoration efforts. An example of the negative impact is the settlement in the courtyard floor in various locations due to the heavy ingress of water resulting from inadequate drainage.

BUILDING CONDITIONS
As the street level has risen over the centuries most of the original shops on the northern side, rented out to an assortment of businesses, have lost accessibility from the steet and currently exist as storage space for shops built onto the face of the Mosque and encroach into the street space. Commercial activity, such as steel fabrication in the shops (on the main facade on the eastern side), is a huge threat to the structure of the Mosque. The Mosque has undergone serious damage due to inadequate maintenance and care.

Opposite page:
The interior of the main prayer chamber, looking north, and, on the left, a detail of a courtyard facade.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
Since March 2009 major architectural and damage documentation of the Mosque complex is underway. Geotechnical investigations have been completed and measures to carry out structural consolidation of the monument are being designed.

MASTER PLANNING PROCESS
At the end of the documentation and analysis stage a master conservation plan is being prepared.

PLANNING ISSUES
The problems of building control and the regulation of the urban fabric, widespread in the Walled City, are equally applicable to the Wazir Khan Mosque complex. Equally important is how the present capacities for the protection and administration of the architectural heritage and levels of conservation skills presently available can be made more effective and sustainable.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
A conservation programme for the Mosque is being developed and will be implemented over several stages. In the first stage structural and architectural investigations have been carried out.

COMMUNITY INVOLVEMENT/PROGRAMME
An initiative to involve the local community in the process of documentation and enhancing building skills has already been started and will be extended during the restoration of the Mosque.

CONTRACTING METHODS
The work will be carried out by employing skilled and unskilled workers, and the project management will be carried out by AKTC staff. Building contractors in the field of conservation do not exist in Pakistan.

NEW TECHNOLOGIES INTRODUCED
Real-time EDM/CAD documentation and photo-rectification software has been used for the first time in a protected monument in Pakistan.

RELEVANT CODES/STANDARDS ADOPTED
The 'International Charter for the Conservation and Restoration of Monuments and Sites' (the Venice Charter), 1964, is the principal document for the documentation and restoration of the monumental complex.

LESSONS LEARNED
The conservation of Wazir Khan Mosque and the rehabilitation of its Chowk are part of a larger Area Development Project in the Walled City of Lahore. It is part of a local development framework comprising the rehabilitation of the surrounding urban fabric and open space. The thrust of the project is aimed at urban regeneration and the economic uplift of the residential communities living in the neighbourhood of the project and offers lessons in conservation planning and methodology and capacity building.

Partners

PUBLIC PARTNERS
Government of the Punjab, Planning and Development Department, Sustainable Development of the Walled City of Lahore Project, Awqaf Department.

Donors

Kaplan Foundation Fund.

Authoritative Framework

'Public-Private Partnership Framework Agreement' was signed between AKTC and the Government of the Punjab in 2007. In 2009 formal permission to proceed was obtained from the Awqaf Department – the custodian of the property.