Strategies for Urban Regeneration

THE AGA KHAN HISTORIC CITIES PROGRAMME

Edited by Philip Jodidio
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Protecting the Past, 
Inspiring the Future

HIS HIGHNESS THE AGA KHAN

More than fifty years ago, when I became the Imam of the Ismaili Muslim community, I discovered that ignorance or indifference about other cultures, the drive to standardize cultures through imposed external models, or sometimes open aggression, together with the desire to ‘modernize’ the built environment, had resulted in the irreparable loss of important cultural characteristics in developing countries, particularly those in the Muslim world. The highly distinctive cultural features of those societies and countries were being eroded and new environments created which were dysfunctional. The situation required a broad-based response that would find support amongst the communities and nations concerned. Culture, far from being a luxury, needed to be recognized as an essential factor for any society to prosper.

With so many social and economic needs still unmet around the world, why is culture so important? Conventional thinking suggests that there is a sequence that must be followed in every instance – first addressing humanitarian and social needs, then economic challenges and finally, perhaps, culture. We have found, however, that the equation is not so simple. Culture itself can be the catalyst for social and economic development.

The notion of cultural heritage as an asset rather than a drain on resources remains a new one in many parts of the world. The sad result is that many important buildings and monuments – the physical patrimony of mankind – have already succumbed or are in a precarious state. This is especially true in the Muslim world. A third of the world’s heritage sites are in the Muslim world, and many of them are suffering from serious decay. Budgets for maintenance and repair of cultural heritage have declined or have been cut drastically. Traditional settlements have been abandoned in favour of modern construction, bringing its own economic and social problems.

Improving the Quality of Life

When I created the Aga Khan Award for Architecture, I discovered that the cultural dimension of the Islamic world was an extraordinarily powerful trampoline for development. It became apparent that by developing patrimonial sites one could improve the quality of life of the people who live in and near them. The populations of these historic areas are often the poorest in the countries concerned. Here, by acting in the realm of culture, it was actually possible to improve the quality of life for the poorest of the poor. By giving its true value back to culture, new forms of productivity, a new form of socio-economic development, come into being.
My effort to defend the value of culture, through the Aga Khan Development Network, and specifically through its dedicated agency, the Aga Khan Trust for Culture, focuses its activities in four main areas: the Aga Khan Historic Cities Programme; the Aga Khan Award for Architecture; the Aga Khan Music Initiative; and Museum Projects. These activities, which are themselves subdivided into a number of subsidiary programmes in many countries, obey four key principles. Firstly, they seek to increase the beneficiaries’ independence, to involve local communities, and to secure the support of public and private partners. Secondly, they are carried out in poor environments where there are considerable centrifugal, sometimes even conflicting, forces at play. Thirdly, they are designed to have maximum beneficial impact on the economies of the populations involved and their quality of life in the broadest sense of the term. Finally, they are planned in the long term, over a period of up to twenty-five years, enabling them to become self-sufficient both financially as well as in terms of human resources.

The residents of historic cities and districts know a great deal about their own cultures, but in many ways these remain at the periphery of general knowledge elsewhere. Through initiatives such as the Aga Khan Award for Architecture and the Historic Cities Programme, we have also sought to disseminate the knowledge that these cultures had developed their own traditions of architecture and that these were worthy of continuity. The fact that we have been able to rebuild pride in these cultures, which are not only cultures of the past, but of today and tomorrow as well, brings a totally different psychological attitude to the processes of change.

Developing Resources for Sustainability

One way that revitalized historic areas can become economically self-sustained is, of course, through the development of tourism. In places like Cairo, Aleppo and Lahore, tourists spend days viewing cultural monuments. Many such tourists would be attracted by the combination of a well-maintained cultural heritage and a natural environment that astounds even the most jaded traveller. These visitors are the kind most favoured by tourism development organizations around the world – engaged travellers who want to experience culture first hand rather than be aloof from it. They do not need a single world-famous monument like the Pyramids to attract them; they are equally delighted by the existence of a vibrant local culture. What is important is a density of well-maintained landmark buildings and the infrastructure to accommodate and transport visitors. In an era of mass tourism, these visitors are not searching for the package tour, but for a unique and authentic cultural experience. We must plan carefully for the reuse of restored or conserved buildings. A well-executed conservation plan transcends mere physical restoration to address long-term productive reuse and sustainability. We must get this equation right at the start.

A clear emphasis has been placed by our planners on sustainability. It has always been clear that a strong financial base must be created in order to maintain the accomplishments of today. A project must be compatible with the long-term welfare of its neighbourhood and community. For any important work of restoration to survive and to
thrive into the longer range future, it must contribute to the well-being of those who live in its presence — so that they in turn will have reason to safeguard its enduring viability. For this reason, the Historic Cities Programme is not only concerned with saving buildings or historic districts for future generations. It seems to go beyond restoration and to create mechanisms that contribute to real, measurable improvement in the quality of life in rural and urban areas, also enabling their inhabitants thereby to look after their cultural assets. This is the goal of the multi-programme capacity-building strategies which the Aga Khan Development Network deploys to help the residents of historic cities or areas, whether this be the Silk Road, or Kabul and Herat in Afghanistan, Aleppo in Syria, Mopti in Mali, or Zanzibar, or Cairo, the city that my forefathers, the Fatimid Imam-Caliphs of Egypt, founded more than a thousand years ago. In all such places, rehabilitation of cultural heritage is supported by the work of the Aga Khan Development Network agencies specializing in micro-finance, health, education, water and sanitation, and promotion of economic enterprise.

Our experience in situations as diverse as remote parts of northern Pakistan, to Delhi, Zanzibar and Central Cairo, is that the restoration of historic communities and important cultural assets provides a catalyst for economic development. The restoration activity is a source of direct employment for workers and skilled craftsmen, many of whom live in adjacent neighbourhoods. The refurbished facilities themselves often become an attraction for tourists as well as fulfilling their role as community centres, generating more opportunity. And as the residents of surrounding areas find themselves with new sources of income, they spend some of it improving their own homes and neighbourhoods. These are the pragmatic reasons for revitalizing a nation’s cultural assets. But equally, and perhaps more importantly, these activities restore and preserve the historic identity of Muslim societies, whose rich pluralist heritage has suffered extraordinary stresses in recent decades. It is also a heritage for the world to cherish.

The underpinning objective is to replace the risk of economic and social collapse with a new capacity, built on informed consent and knowledge capable of sustaining and guiding the transition from poverty to an improved quality of life based on choice and opportunity. Another important step in this process is to promote awareness and understanding of appropriate technologies and solutions. The Muslim world is multicultural, diverse in geography, terrain and climate and it exhibits extremes of wealth and poverty. This diversity requires us to be sensitive not only to local needs, but to local capacity and resources available to meet those needs.

The Heritage of Respect

Contrary to the image sometimes given in the press, the Qur’anic ideal is one of a vibrant humanity, rich in pluralism, and yet constituting a single human community. This heritage of respect for differences attaches value to diversity, pluralism and positive and productive relationships between different segments of society. The Holy Qur’an teaches us that mankind holds Allah’s creation of the world in trust, with the duty to leave the physical environment better than they found it.

In Islam, the Holy Qur’an offers explicit direction to share resources beyond one’s requirements, and to care for the poor and those in need. The injunction to service is the ethical underpinning of the work of the Aga Khan Development Network, it drives its efforts to build the intellectual capital and institutions needed to address the problems of our world today. Indeed, the Qur’an, the Hadith, the sayings of Hazrat Ali, and many scholarly sources also make references to the forms and purposes of philanthropy. Human dignity — restoring it, and sustaining it — is a central theme. Enabling individuals to recover and maintain their dignity as befitting their status as Allah’s greatest creation is one of the main reasons for charitable action. There is dignity in the individual’s ability to manage his or her destiny. That being the case, the best of charity, in Islamic terms, can go beyond material support alone. It can take the form of human or professional support, such as the provision of education for those otherwise unable to obtain it, or the sharing of knowledge to help marginalized individuals build different and better futures for themselves. Thus conceived, charity is not limited to a one-time material gift, but can be seen as a continuum of support in a time-frame that can extend to years. This means that multi-year support for institutions that enable individuals to achieve dignity by becoming self-sustainable holds a special place amongst the many forms of charity in the eyes of Islam.

A Vision of a Pluralistic Society

In the troubled times in which we live, it is important to remember, and honour, a vision of a pluralistic society. Tolerance, openness and understanding towards other peoples’ cultures, social structures, values and beliefs are now essential to the very survival of an interdependent world. Pluralism is no longer simply an asset or a prerequisite for progress and development, it is vital to our existence. Never perhaps more so than at the present time must we renew with vigour our creative engagement in revitalizing shared heritage through collaborative ventures.
The Future of Historic Cities

Luis Monreal

Most historic cities in the Muslim world are witness to the ravages of human misery. They are often the first stop for transient populations making the leap from rural habitats to urban life. They have a rich cultural heritage but house communities that live in poverty.

What can be done to reverse such situations without making historic cities into museums, or subjecting them to a gentrification process that leads to the replacement of existing populations and activities? What new strategies can be applied to ensure a future for historic cities? What new methodologies, means and resources are required?

This is what this book is about. It intends to provide answers to some of these questions – answers based on the experience gained by the Historic Cities Programme (HCP) of the Aga Khan Trust for Culture (AKTC) during the past ten years.

The first premise for the survival of historic cities as we know them today is to give their inhabitants a real chance to improve their living standards and to break free from the constraints of poverty. The gradual development of a middle class, able to play a role in the collective effort to maintain a city’s assets, its domestic and monumental architecture, infrastructure and public services, is key to this strategy. Traditional approaches to the conservation of a city’s cultural heritage that do not address the social and economic dimensions of the problem are insufficient to ensure the survival of historic settlements that are irreplaceable witnesses to the development of human civilization.

At present, 242 cities are registered on the UNESCO World Heritage List. These historic cities naturally evolved over time according to specific geographic and socio-economic conditions. As the Getty Conservation Institute has made clear: “There is little question that exponential growth and uncontrolled changes put the integrity and authenticity of historic cities and urban settlements, and the values that are embedded in them, at risk. At a time of rapid urbanization and globalization, the conservation of historic cities is an urgent and difficult challenge.” According to the Getty Conservation Institute, the task at hand extends beyond the conservation of architecture and the landscape. It requires the careful management of change through the adaptation of historic buildings and urban fabric to new forms of living, the creation of income and training opportunities, and real consideration for the intangible heritage that contributes to the city’s cultural significance.

Urban planning, as such, existed in the distant past in the Indus Valley, China and the Roman Empire, but such concepts of order gave way to organic growth in medieval Europe, for instance. It was not until the eighteenth century and the thought espoused by Denis Diderot’s Encyclopédie (1751–72) that urban planning in a modern sense emerged. A more rational order could be imposed by demolishing large swathes of the cities that had evolved by accretion over the centuries, or so it was thought. The most stunning example of this approach is George-Eugène Haussmann’s modernization of Paris, which began in 1852. Many of the narrow medieval streets of Paris were swept away in favour of large boulevards for reasons of hygiene, traffic flow and, perhaps above all, security. A corollary of the broad ‘modernization’ of cities such as Paris was that districts unaffected by these major public works programmes were more obviously the subject of conservation efforts. The idea that the historic city could and should coexist with the modernity imposed by urban planning came to the fore, at least where some old structures were left standing.

Colonial Rule and the Stamp of Authority

The use of urban planning to impose authority is, in fact, an essential element in the development of numerous cities under colonial rule. Thus, in both India and Morocco, colonial authorities decided to create their own capitals, leaving old cities outside the economic mainstream. Subsequent to the French invasion of Morocco in 1912, for example, General Hubert Lyautey decided to move the country’s capital from Fez to Rabat, because of the rebellious population in Fez and, beginning in 1913, the architect Henri Prost designed Rabat’s new district, the Ville Nouvelle. Although King Mohammed V decided in 1956 to keep the capital in Rabat, strong forces obviously played on these cities as a result of colonial intervention. New Delhi, with its wide boulevards, was the idea of the English occupiers and the work of the talented architect Edwin Lutyens. Designed and built between 1912 and 1931, New Delhi replaced Calcutta as the capital of India. New Delhi was built to the south of the Old City. The point here was to impose British control through the creation of a new city and, above all, through what the architectural historian Henry-Russell Hitchcock has called a resort to a “Roman scale.” The British again intervened in a historic city in Pakistan, where AKTC has ongoing projects. The twenty-hectare Lahore Fort is set in the north-western corner of the Walled City of

New Delhi was the idea of the British, whose intention was to impose imperial control. The Raj path, above, is the ceremonial boulevard in the design undertaken by talented architect Edwin Lutyens.
Lahore. Though it was essentially built during the reign of the Mughal emperor Akbar (1556–1605), the origins of the Fort go back far before the sixteenth century. The English occupied the city in 1846 and turned over the Fort to the local Department of Archaeology in 1927, but not before they had accomplished one symbolic act that speaks volumes about the impact of colonialism on the heritage of historic cities. The occupiers demolished the southern section of the walls, creating a stepped structure that effectively obviated the walled nature of Lahore itself, the fruit of centuries of development and civilization. Those wounds, in an almost literal sense, allowed historic cities to be drained of part of their substance, a scenario that in the worst cases leads to the creation of ghettos of a different sort than those in the new world.

The Historic Cities Programme (HCP)

AKTC, through its Historic Cities Programme, seeks to confront the very real and substantial problems faced by historic cities, in particular in the Muslim world. Although European countries, for example, have also faced these issues in the twentieth century, the process of decolonization and urbanization in the Muslim world has made many problems more acute in the period since World War II. Various multilateral initiatives have been aimed at ameliorating the situation of historic cities, beyond the efforts of individual governments or municipalities, but, until the programmes of AKTC came to their maturity in recent years, few have attempted to deal with the root causes of difficulties. The restoration of monuments, which in itself has proven to be of limited value in terms of sustainability, is but one part of the approach of AKTC. The goal is to create a global approach, which can be used with appropriate variations in many parts of the world.

International Organizations Come to the Fore

Interest in architectural heritage, particularly in historic cities, was not a matter of national concern until the twentieth century. Many European countries took national initiatives to protect their own monuments beginning in the late nineteenth century, and associations with such goals also came forward. In the developing world and former colonial areas, the need to build on national traditions to form a new identity also encouraged drives to preserve and restore historic monuments and districts. A more international approach did not develop until after World War I with the League of Nations and more significantly after World War II with the United Nations and UNESCO. The idea that cultural heritage is not just the property of one nation but of all of humanity emerged. Questions have been raised for some time about the structures and policies developed by UNESCO. The Dutch sociologist Emanuel de Kadt wrote:

“Since 1970 a series of UNESCO-sponsored Intergovernmental Conferences on Cultural Policies has stressed the importance of cultural development as an essential component of the general development of countries. Even so, the cultural and non-material aspects of development are still often neglected by those responsible for making the crucial policy decisions both nationally and internationally. Growth alone may not suffice to overcome poverty within a reasonable time, and the distribution of the material benefits of development among the poorest countries and the poorest population groups within individual countries requires special attention. From arguments about the general effects of different development strategies on distribution of income, attention has come to rest on the staggering number of people, more than 900 million of them, living in absolute poverty. More than ever before, the development community is searching for means that will enable the poor to provide for their basic needs through more productive work, more widely available social services and, increased participation in political decision making. It needs to be considered whether the deliberate and large-scale development of tourism, conceived as a major net earner of foreign exchange, leads to results.”

Coming to the Aid of the Ultra Poor

Having created the Aga Khan Award for Architecture in the late 1970s, His Highness the Aga Khan became increasingly preoccupied by the state of historic cities in the Muslim world, a concern that he expressed publicly in his opening speech at the Ninth Seminar in the series Architectural Transformations in the Islamic World of the Aga Khan Award for Architecture. On 11 November 1984, he stated: “When the World Heritage Convention listed 136 sites as being of major importance to the heritage of mankind, no less than one third were monuments of Islamic culture.” For the Aga Khan, it was clear that this remarkable concentration of cultural history was not receiving the sort of economic, social and academic support it deserved. The historic cities of the Islamic world, and no doubt others, were noted to be a concentration most often of the ultra poor in urban environments and, because of this, there was not only a social problem that had to be addressed, but also these ultra poor, due to their poverty, were further degrading these historic cities. He concluded that it was necessary for the Islamic world to try to harness new resources to protect these historic cities, and to bring relief to the marginalized people living within them at a time when there was no agency that was committed to these goals.
AKTC’s involvement in Egypt began with the Aga Khan’s decision to donate a park to the citizens of Cairo, subsequent to an Aga Khan Award for Architecture international seminar entitled ‘The Expanding Metropolis’ in Cairo in 1984. Soon thereafter a thirty-hectare site on al-Darassa was selected, because of its enormous potential as a ‘lung’ at the very centre of the historic agglomeration. This hilly site is surrounded by the most significant historic districts of Islamic Cairo, all of which are major destinations for visitors to the city. The topography of the site, formed by debris accumulated over centuries, now provides elevated viewpoints dominating the city and offers a spectacular 360° panorama over the townscape of Historic Cairo.

Having begun the project with the clear intention of creating a new park for Cairo (today’s Azhar Park), the Aga Khan and his organizations became increasingly involved in the surrounding district. The work can be said to have developed in a pragmatic way, progressing from the idea of the Park to the discovery of the rather well preserved remains of the Historic Wall of the Old City and going quite naturally from there into the neighbouring district of Darb al-Ahmar. Although it was not originally part of AKTC’s scheme for Azhar Park, it became apparent during the course of the work that an effort was needed to excavate and renovate at least part of the fortified walls would make good sense. A length of approximately 1500 metres from Bab al-Wazir to al-Azhar Street, forming the boundary between Darb al-Ahmar district and the Park, was thus completely unearthed and restored.

A substantial effort has been made to reintegrate monuments as complex as the long-buried Historic Wall into the life of the community. This was done not only by opening connections into the new Azhar Park, but also by renewing housing and monuments that abut the Wall or even sit partially on top of it at one point. And rather than seeking to move residents and local workshops to some distant new location, this project has taken on the training of local craftsmen in the traditional arts of carpentry and stonework that they no longer have. Rather than being considered as a barrier between Darb al-Ahmar and the new Park, the Historic Wall has been reintegrated as a living part of the city, and a true sense of historic continuity has been created between Islamic Cairo’s past and its future.

In this introduction to the book Cairo: Revitalising a Historic Metropolis, published in 2004 on the occasion of the opening of Azhar Park, His Highness the Aga Khan wrote:

“We stand today confronted with starkly different visions of the future of historic cities. At a time when our heritage, the anchor of our identity and source of inspiration, is being threatened with destruction, by war and environmental degradation, by the inexorable demographic and economic pressures of exploding urban growth, or by simple neglect, there can be no doubt that it is time to act. Will we allow the wealth that is the past to be swept away, or will we assume our responsibility to defend what remains of the irreplaceable fabric of history? My answer is clear. One of our most urgent priorities must be to value and protect what is greatest in our common heritage. Breathing new life into the legacy of the past demands a creativity, tolerance, and understanding beyond the ordinary.”

The generous impulse of His Highness the Aga Khan to donate a Park to the city of Cairo, which at the time had very little green space, has led in some unexpected ways to the creation of the model now being employed by HCP to intervene in historic cities. Once the idea of the Park was on the table, the Aga Khan quite naturally asked himself how this new facility could be maintained. It also became apparent that giving a Park located near one of the poorest areas in Cairo would not be enough: something had to be done for the Darb al-Ahmar district. The step into the socio-economic situation of the neighbourhood became evident.

Improving Standards of Living

An ongoing analysis of the situation in Darb al-Ahmar demonstrates the impact of AKTC’s intervention. Declared household incomes doubled between 2003 and 2009. Although high levels of inflation nullified most of the gains that were made, there was still a substantial net increase in income during this period. This was manifested, amongst other elements, in reduced expenditure on food items as a percentage of the household budget. In late 2003 fifty-six per cent of the households surveyed reported spending more than half of their income on food. This five per cent gain was made in spite of the dramatic 2008 price increases of basic food commodities, following the removal of most subsidies. During the same period of 2003 to 2009, home ownership of those interviewed in HCP’s project area increased from four to eleven per cent, while crowding (expressed as the number of people in the household divided by the total number of rooms) was reduced from 2.75 to 1.73.

It should be noted that from the first year of its operation in 2005, the Park generated an operating surplus, which grew to $1.3 million in 2009, and a total of two million visitors in that year.

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Overpopulation, poverty and the physical decay of historic cities remain very much a part of the present in the Muslim world and beyond. Aggravated by urbanization or rampant speculative construction, these remnants of culture and civilization are threatened today as they have never been before. Despite the significant efforts of such organizations as
INTRODUCTION

THE FUTURE OF HISTORIC CITIES

A pragmatic series of decisions taken in part in the context of the development of Ashar Park, AKTC and its Historic Cities Programme have developed a methodology and an expertise that is being put to use in other projects. The work in Cairo clearly underpins the methodology and approach of AKTC in other locations, but each set of circumstances calls for a different approach. The work of the Trust is forward-looking and dwells little on implicit critique of other systems. The methodology developed in the course of AKTC’s projects in Cairo, although somewhat pragmatic in its origin, points the way to a more efficient and sustainable approach to the historic city than any practiced before. Indeed, it is in the unique context of Cairo that HCP first developed the use of a ‘Public-Private Partnership Agreement’ (PPP), as the juridical basis for a complex project involving multiple inputs and parties. The PPP is a useful tool to foster collaboration between stakeholders. It allows the coordination of various competencies and inputs to a project, and helps to structure the post-construction management and operations. In this scenario, the public sector can offer regulatory oversight, administrative support and investment in infrastructure. The private sector can offer project management, coordination of the multiple stakeholders involved and mechanisms to bring in third-party funding through grant-making bodies or loans. In the case of multi-input projects where HCP partners with sister agencies of the Aga Khan Development Network (AKDN), such as the Aga Khan Foundation (AKF) and the Aga Khan Agency for Microfinance (AKAM) in the realm of health, education and poverty alleviation, the PPP is essential for a long-term vision of development. In the case of HCP; the mandate is to create financially self-sustainable projects in the realm of parks that are income-generating endeavours in which surpluses are reinvested in the project. In order to facilitate these enterprises, a legal framework with government partners and donors, such as the World Monuments Fund or the World Bank, are essential for AKTC, which is a non-profit entity.

UNESCO, neither lists of worthy monuments nor a reliance on foreign visitors are sufficient to tackle these problems at the root and to provide a sustainable alternative. Beginning with a pragmatic series of decisions taken in part in the context of the development of Ashar Park, AKTC and its Historic Cities Programme have developed a methodology and an expertise that is being put to use in other projects. The work in Cairo clearly underpins the methodology and approach of AKTC in other locations, but each set of circumstances calls for a different approach. The work of the Trust is forward-looking and dwells little on implicit critique of other systems. The methodology developed in the course of AKTC’s projects in Cairo, although somewhat pragmatic in its origin, points the way to a more efficient and sustainable approach to the historic city than any practiced before. Indeed, the process was launched again, and the lessons learned in Cairo were applied, in cities such as Aleppo, Kabul, Herat, Lahore, Delhi and Stone Town (Zanzibar).

Essential Partnerships

It is in the unique context of Cairo that HCP first developed the use of a ‘Public-Private Partnership Agreement’ (PPP), as the juridical basis for a complex project involving multiple inputs and partners. The PPP is a useful tool to foster collaboration between stakeholders. It allows the coordination of various competencies and inputs to a project, and helps to structure the post-construction management and operations. In this scenario, the public sector can offer regulatory oversight, administrative support and investment in infrastructure. The private sector can offer project management, coordination of the multiple stakeholders involved and mechanisms to bring in third-party funding through grant-making bodies or loans. In the case of multi-input projects where HCP partners with sister agencies of the Aga Khan Development Network (AKDN), such as the Aga Khan Foundation (AKF) and the Aga Khan Agency for Microfinance (AKAM) in the realm of health, education and poverty alleviation, the PPP is essential for a long-term vision of development. In the case of HCP; the mandate is to create financially self-sustainable projects in the realm of parks that are income-generating endeavours in which surpluses are reinvested in the project. In order to facilitate these enterprises, a legal framework with government partners and donors, such as the World Monuments Fund or the World Bank, are essential for AKTC, which is a non-profit entity.

The PPP system, which has emerged from the engagement of HCP in numerous projects, is one aspect of an overall commitment to create confidence in communities, where the often marginalized, poor inhabitants are initially not prepared to believe that something positive can occur in their lives. Their confidence may be won by implementing projects as quickly as possible, and offering some basic infrastructure improvements that will have an immediate positive impact on the daily lives of inhabitants. Some of these actions are the creation of associations of groups of common interest and empowering them; the establishment of vocational training and employment programmes; the development of opportunities for micro-finance to small merchants to spur economic opportunities; and providing technical assistance to populations in the form of housing, water and sanitation programmes.

The idea of the ‘Public-Private Partnership’ agreement is not yet common in the cultural sector; it is often not part of the existing legal framework in many countries, and it remains difficult to involve authorities in a project while still seeking to manage work in an autonomous manner. Where HCP has utilized the PPP model for cultural projects, in places like Egypt, India and Syria, a legal precedent has been set that could open the door for future investment in cultural assets by international organizations. However, it is clear that the public sector alone cannot regulate, legislate, establish norms and provide infrastructure, all of which are necessary for Area Development Projects (ADPs). The Historic Cities Programme has also partnered in a meaningful way with other organizations. Though essential to gaining the critical mass necessary in some instances, such partnerships may give rise to increased difficulties related to shifting political priorities, or complex
The Best Way to Honour the Past Is to Seize the Future

What are the future prospects of HCP’s approach to the rehabilitation, in material and social terms, of historic cities? The current work of the Programme gives some hint of a response. In 2007, AKTC joined the Government of the Punjab and the World Bank in support of a project for the regeneration, renewal and conservation of Lahore’s Walled City. Here, all of the tools developed by HCP are being brought to bear: the involvement of the local populations will be actively involved in the ongoing work for the sake of the improvement of their lives. In Lahore, there is a kind of poetic justice in this initiative, a sign that historic areas associated with the onslaught of a certain vision of modernity are stronger than ever, and not likely to reverse in the foreseeable future. Rather, more modestly, HCP’s interventions seek to demonstrate that urban forces at work in the movement of populations and the almost inexorable degradation of historic areas associated with the onslaught of a certain vision of modernity are stronger than ever, and not likely to reverse in the foreseeable future. Rather, more modestly, HCP’s initiatives seek to offer tools and examples that others can seize on, and to affirm the ongoing value of what has come before, even in a thoroughly modern context. These efforts advance in the spirit instilled in the Programme by His Highness the Aga Khan, “remembering always the Qur’anic commandment that humankind must take responsibility for shaping and reshaping our earthly environment, employing Allah’s gifts of time and talent as good stewards of His Creation.” There is an urgent need to combine a heightened respect for the traditions of the past with an understanding of what exists and what may come. “The best way to honour the past,” states His Highness the Aga Khan, “is to seize the future.”

2. Historically, the city of Lahore was the hub of the Punjab region and the capital of the Moghul Empire. The British, who ruled the city from 1765, was the capital of the British Empire in India, and was a major cultural and economic centre.
7. Data from the ‘2003 Darb al-Ahmar Baseline Survey’ and the ‘2009 Post-Implementation Survey’. Both surveys were carried out by Dr Dina K. Shehayeb, of the Institute of Architecture and Housing of the Housing and Building National Research Centre (HBRC) in Cairo, Egypt.
8. His Highness the Aga Khan, Aga Khan Award for Architecture, Doha, Qatar, 24 November 2010.
9. Ibid.
Urban planning has given rise in the recent past to the concept of urban regeneration as a process of change. It has become clear that there are hidden assets in historic cities. Defining physical action zones in historic cities, determining the needs of historic settlements and sites, and setting the role of municipalities, planners, communities and investors are all keys to the urban and physical rehabilitation choices that are being made today.

Overview

An overview of urban rehabilitation, in the manner in which the Historic Cities Programme (HCP) engages in this broad-based initiative to enhance the inherited urban environment in historic settlements, requires a brief summary of factors that have been influential during the last decades. Urban development worldwide has followed an irregular trajectory that has included disdain for the past in the early twentieth century, coupled with an almost unrestricted faith in industrialization and modernity. Dense cities (particularly districts with organic layouts) were not in favour, and leading planners of the time proposed that urban growth be based on a quasi-suburban model, often based on the model of the garden city. Bipolar decisions grounded on solutions either replicating the known past or sheer novelty in confronting the unknown future have given rise to urban environments that are difficult to read visually and, more critically, difficult to reside in.

Urban planning entered a period characterized by the abandonment or neglect of historic cities and their cores and the development of abstract, often radial central plans, with utopian underpinnings. In the first half of the twentieth century, regional planning enlarged the area of inquiry, bringing with it critical thinking on the topics of scale, hierarchy, access and environmental systems. In the process, fascination with regional scale prepared the ground for new towns that sometimes bypassed existing settlements altogether. The legacies of this movement have been numerous. Planners in the 1950s and 1960s were mesmerized by the new city movement (cities such as Brasilia, Canberra, Islamabad and Chandigarh being prime examples) with frequent reliance on the Corbusian super-block and open squares dominated by the automobile as regulating elements.

In the second half of the twentieth century, in contrast to this brave new world of urban planning, a new awareness of finite resources began to make itself felt. It became apparent that a pattern of expanding environmental abuse and intensive land development or transformation, coupled with the pressure of increasing urban density, had undermined the equilibriums so highly valued in sustainable historic settlements. More recently, while urban expansion in both controlled and uncontrolled form has continued at a rapid pace in many emerging economies, in the industrialized ‘North’ the cumulative inventory of urban fabric and infrastructure have been increasingly seen to
represent a collective asset. Even when under private ownership, such assets have been understood to be extremely valuable, costly to remove and historically redolent with cultural and anthropological meaning. Existing cities have had to ‘make do’ with whole new districts created on their edges while emerging economies plotted new central business districts, typically endowed with mid- and high-rise blocks. In the last quarter of the twentieth century, reassessment of planning practices became common-place. It dawned on many urban planning and design professionals that what they could point to as good practice was modest in comparison to the many problem areas of urban reality that they could neither confidently handle nor readily address. The discourse shifted in the process from urban planning to urban regeneration or redevelopment.6

The simultaneity of urban development and decay, in all its phases across the globe, highlighted starkly by modern communications and travel, has created a confusing situation for urban planners and redevelopment specialists. When facing an urban district or area in decline, what are the appropriate responses and remedial actions? Are there a variety of considered approaches, amongst them: wholesale demolition and reconstruction; abandonment and construction of new centres elsewhere (mono-industrial business centres, suburbs, edge cities, etc); replacement of low-rise with high-rise (higher-value and multi-use buildings); and re-densification, preservation and selective reconstruction within carefully prescribed guidelines. Inaction and combinations of these different strategies are found in practice.

The Historic Cities Programme Approach:
Urban Regeneration and Urban Rehabilitation

What are the benefits of the more patient process of preservation and selective reconstruction, coupled with physical and environmental improvements, adaptive reuse and community development? Unlike certain other past and present approaches, the multi-disciplinary urban regeneration approach does not aim to reward a particular economic group, but tends to generate benefits across the range of stakeholders. Under this approach, externalities are not wished or abstracted away, but are taken into account in a neutral way in major decisions. Relentless expansion is not a choice in historic districts. The remaining options are to reduce density, intensively with new open civic spaces, or to adjust density levels with new cores and buffer zones.

Urban rehabilitation, a variant of urban regeneration, seeks to practice in a mode that is inclined to spare existing buildings and community spaces wherever feasible. In so doing, it represents a summation up of the methodologies that HCP deploys in its initiatives in historic settlements. These activities and methodologies comprise: urban physical rehabilitation; conservation of historic buildings and monuments; community development; parks and environmental action and planning; adaptive reuse of existing building stock; and the development of museums and cultural centres. While this publication provides data on each of the processes employed in the urban rehabilitation of historic districts and cities, it is not the intention of the Programme to imply that any one process can be completely isolated from other valuable tools in the broad agenda of urban regeneration.

In many cases, the net effect of an initiative is boosted by the application of additional tools, in a ‘multiplier effect’. Efforts by partner development agencies, municipalities, NGOs and private investors, when orchestrated within an adopted planning and conservation framework, add to this multiplier effect. It is these change processes and their physical, visual and socio-economic benefits that ultimately validate the planning investment of all concerned agents. HCP thus endorses urban rehabilitation as a proactive approach to realizing improvements in the physical and socio-economic environment of historic cities and settlements. An entity partaking in urban regeneration must assume that change is possible while avoiding the historicist notion of accommodating an evolutionary path of ‘impending change’ or predictive trends. History cannot be predicted but it is possible to make reasoned contributions to a better future. Ultimately, the key resources for urban regeneration are ideas and imagination.

HCP’s projects seek out strong anchor communities that are tied historically to the urban terrain involved. More precisely, these communities are the best guarantee that the proposed redevelopment will remain relevant beyond the initial phase. The districts of Darb al-Ahmar in Cairo, the Old Cities of Kabul and Herat, the Nizamuddin Basti in Delhi and the Walled City of Lahore are examples of such project types.
The Importance of Local Phenomena

While attentive to the global debate on the built environment, HCP's focus is on the local rather than the global aspect inasmuch as material, tangible heritage is local and space-specific, reflecting each site's local genius. Within the Programme physical rehabilitation is based on intensive field research aimed at identifying urban areas that exhibit physical or environmental distress. In addition to the relatively low percentage of urban environments meeting the definition of sustainable physical environments or micro-environments, the problems of improving stressed environments, infrastructural, or general urban building stock are of such dimension that both governmental programmes based on funding from taxes and private entities funded by entrepreneurial investors are easily overstretched.

Historic urban or rural settlements, especially when populated by low-income communities, are typically the last areas to receive funding. Governmental agencies may propose a rehabilitation project, but poor prospects for a future surplus of community funds will often create the risk that useful improvements will be reversed due to lack of maintenance. The private sector often avoids low-income areas, because these are seen as involving a high degree of risk of project non-completion. This situation has often resulted in the demolition of older, dilapidated urban and rural fabric, followed by reconstruction. This has evolved into a perverse system that squeezes out low-income families, depleting heritage in many cases, and offering opportunities for even more unsustainable development to take place.

The preservation movement that emerged in many instances during the twentieth century across much of the developed world was a response to this lack of an empowered base within Historic areas that would be able to champion the value (real or potential) of its own heritage. In more recent decades, this movement has gained further adherents in arguing that buildings of historic value represent captured resources and energy that it would be foolish to discard in the new age of awareness of finite energy and resources. The preservation movement has thus been joined by the environmental movement in certain cases.

Heritage at Paril

The Programme, since its inception, has faced the dilemma of a profound imbalance between the number of historic sites and settlements that are in need of rescue and rehabilitation, and the number of sites and settlements in which it can meaningfully intervene at any one time, due to the required resources. The selection of projects has been further qualified by approaching the physical rehabilitation of historic areas not solely as a concern for ‘matter’ but also for the community that resides within or around historic sites. Physical rehabilitation in HCP’s mode often involves a combined strategy of physical rehabilitation of heritage sites and areas, and preservation-based community redevelopment. Improvements to the physical state of heritage sites and areas are linked to improvements in the quality of life of the community. The potential for success implies that both the historic area and its associated community must be carefully defined, both spatially and demographically.

The Organic Development of Historic Settlements and Newer Patterns of Growth

Historic cities – unlike the vast metropolises of the automobile age, which often veer between collage and chaos – have tended to develop organically, sometimes as formal nodes and often as smaller micro-settlements with a nucleus of supportive public and community activities. While these smaller units have frequently fused into larger settlements or districts, it is often possible to identify the earlier constituents, which are sub-districts, and find these still functioning as small communities with a wide array of economic functions located within a compact, densely populated area. Community development initiatives tap into the energies of proximity, involvement within a community, trust, and incentive to engage in special programmes even when no private gain is involved. The organic integrity of such settlements is not guaranteed, but often requires repair or reconstruction in harmony with the overall pattern in order to endure. HCP often encounters cases where this reality has been ignored to the detriment of the original fabric.

An Integrated Approach

In responding to the physical rehabilitation needs of historic settlements, the Programme has found it advantageous to employ a wide array of tools, such as surveying, planning, research, conservation, open-space improvements and community-focused support services. This is done in conjunction with its sister agencies, extending micro-credit to coherent historic districts which have monuments or significant material heritage within their boundaries. Projects such as Darb al-Ahmar in Cairo, Ashqan wa Arefan in Old Kabul.
Master plans, conservation plans, development control and strategic plans are different but related tools used to generate a set of guidelines for steady state conservation and managed growth or transformation. Carried out at the level of coherent districts with popular community support, planning tends to be more responsive to needs. This suggests that “micro-planning” is sometimes more relevant than “master planning” within the historic urban domain. In some cases, “piecemeal engineering” with incremental improvement is to be preferred to an ambitious, holistic approach which can be assimilated to “utopian engineering.” Hence, what is “local” is of critical importance. Without change, society would be less prone to value and preserve the past. Without preservation and the rehabilitation of our physical heritage as intermediating and stabilizing processes, change would become intolerably narrow and meaningless.

Today sufficient consensus exists regarding the value of urban rehabilitation, and both the public and private sectors have signed on to urban regeneration in the mode of Area Development Projects. Even in relatively large conurbations, space is limited and the ability to upgrade and realign existing building stock is usually less costly than expanding metropolitan areas and services. This has led to inspiring examples of the revitalization of inner urban environments and open spaces, and the adaptive reuse of buildings and districts with historic value. The lessons of many of the examples cited in this book have theoretical implications in terms of urban planning – but it would be more correct to state that these case studies show the power of pragmatic planning within a well-defined area and with creative attention to an area’s needs and potential.

1 Cities at the time witnessed the increase of slum areas as land prices, transport and laissez-faire policies interacted with the meteoric growth of industrialization and rural to urban migration.
2 Raymond Unwin (1863 – 1940) and Ebenezer Howard (1850 – 1928) are leading examples, the latter in the “city beautiful” movement.
3 Initiated by Patrick Geddes (1854 –1932) and taken up by other professionals.
4 New Delhi, created in the early twentieth century, is seen as a different species of new town or capital as it is a restrained neo-classical composition that reflects the imperial values and self-image of the late Victorian age. Like many of its previous new cities, Delhi has also successfully assimilated this relatively recent urban intervention with its accumulated layers of earlier urban development.
5 Examples being as different as (Brisa) Crystal City (Arlington, Virginia), Diagonal de Mir (Buenos Aires), and La Défense (Paris).
6 The work of sociologists such as Jane Jacobs (1916 – 2006) revealed the faults in much urban planning at the time and redirected attention on the community scale.
7 See Karl Popper, The Poverty of Historicism (Lakatos, 1967), for arguments of each approach.
The wealth of material and tangible heritage, including monuments and their adjacent areas, is taken into account by the methods of the Historic Cities Programme (HCP) and techniques of documentation, collaboration and execution are all part of a well-defined process of conservation.

Many preservation action groups and agencies commenced their activity as a response to the threat of destruction or of damage to a specific monument of local or greater importance. Many of these struggles were successful and vindicated the investments of time, effort and expense required; others were not. The number of endangered monuments, sites and districts has increased with urbanization, with the extension of listings to new categories of landmarks, often accelerated by war or conflict, and with projects that developed without an appropriate vision. Ironically, over time, the work of conservators and preservationists has not diminished but increased. In the case of conserved projects, concern has also led to developments in the management of conservation sites. Specialized agencies and NGOs have arisen to meet these challenges. Within the Aga Khan Development Network (AKDN), the Aga Khan Trust for Culture’s Historic Cities Programme has placed monument conservation as a high priority within a preservation-based community redevelopment approach to historic settlements.

Unlike other agencies that restrict themselves for internal reasons to the site of a specific monument, the Aga Khan Trust for Culture (AKTC) intervenes not only on a monument and its site but also with its associated community or district whenever possible. This is done purposefully on the assumption that monuments without inhabitants adjacent to them are in reality barren archaeological sites. This holistic approach to conservation is based on the principles of ‘Living Heritage’. Preservation of tangible heritage thus goes hand-in-hand with community development. While archaeological sites have featured in a number of AKTC’s projects (the Syrian citadels, as an example), more often than not these sites are found in historic settlements (for example, Aleppo, Masyaf). At the same time, while carrying out Area Development Projects (ADPs) around key monuments, HCP has been keen to avoid the creation of districts that are actually outdoor museums, where activities are orchestrated for the visiting public but which, by the same token, lose their own intrinsic local rationale. Apart from World Heritage Sites, a maximum effort is made to develop a conservation strategy and approach that puts emphasis on a number of well-studied points, outlined below.

Research, Surveys and Planning
Architectural documentation is essential to HCP’s efforts. This is the process of data collection and critical interpretation of information dealing with sources such as archives,
In many countries, conservation activities still involve only the restoration and replication of the given historical fabric using traditional building crafts. But an increasing number of problems affecting historic buildings requires the introduction of new reinforcement techniques, calling for meticulous damage assessment and planning. From Afghanistan to Mali, the Programme has introduced a methodological approach to conservation, involving multidisciplinary strategy and inputs.

Pilot Projects

The value of experimentation in the field via pilot projects to test remedial solutions on a small scale, and to subject them to accelerated weathering process, in order to better develop suitable conservation techniques has been successfully verified in various countries. Associated with preliminary studies and damage assessment, the implementation of small-scale prototypes has proven critical in defining adequate solutions.

Coordination with Local and International Agencies

A majority of historic cities in which the Programme is active (Cairo, Damascus, Aleppo, the Stone Town of Zanzibar) are on the UNESCO World Heritage List, as are HCP projects involving single monuments (from Humayun’s Tomb in Delhi, to the Timbuktu Mosque in Mali). Local government stakeholders usually have prime jurisdiction over the historic monuments. HCP provides technical support to the authorities dealing with monument preservation and establishes references for quality of work to be replicated elsewhere. Critical to post-construction management and maintenance is ensuring the use of vacated buildings by establishing adaptive reuse plans and empowering local citizens’ committees to maintain their asset. Institutional partnerships related to monument conservation also include privately funded organizations, such as the World Monuments Fund, or the American Research Center in Egypt, that have collaborated with AKTC on multi-year projects.

Project documentation is instrumental in developing damage assessments and a conservation programme of work. Throughout the entire duration of a conservation project, surveys and documentation material are collected to form a source of valuable information on the building condition before work starts, the nature and areas of conservation interventions to be implemented and, finally, a set of documents describing the building in its restored status. Such technical information is provided to local archives in soft and hard formats and is being made available on a central web-accessible data bank.

Conservation Strategy

In many countries, conservation activities still involve only the restoration and replication of the given historical fabric using traditional building crafts. But an increasing number of problems affecting historic buildings requires the introduction of new reinforcement techniques, calling for meticulous damage assessment and planning. From Afghanistan to Mali, the Programme has introduced a methodological approach to conservation, involving multidisciplinary strategy and inputs.
The tall Ayyubid bridge, still serving as the only official entrance to the citadel of Aleppo in Syria, leads to the fortified entrance complex, certainly one of the most spectacular examples of Islamic military architecture.

Local Professionals and International Specialists

Building the capacity of technical staff in the field is a key factor in achieving quality work and ensuring sustainability. In many countries, the field of conservation is new and local professionals need exposure to international specialists to develop their own practice. When starting a new initiative, AKTC ensures that a transfer of knowledge can ensue between international specialists and local professionals.

Site Supervision

In most locations, contractors have no qualifications or previous experience in conservation. In such cases, AKTC creates its own local team, ensures training with international experts, and builds internal services associating implementation specialists, management, and back-office support, in the aim to guarantee close quality control.

Post-Conservation Maintenance

Assistance to local government agencies or community leaders includes post-conservation plans. This comprises the creation of technical maintenance guidelines manuals, training of local maintenance teams and the formation of governing bodies for cultural heritage; and it also involves the preparation of financial projections to assist in identifying solutions for sustainability.

Final Project Documentation

AKTC’s mandate of preserving and promoting the local cultural expression in its material heritage finds one of its best applications in the role played by monuments to boost cultural tourism and local development. Developing visitor circuits linking restored monuments to the most important areas of interest of a historic city has a dual impact. They not only bring visibility and accessibility to neglected parts of a city but also boost the community’s economy and opportunities. Permitting adaptive reuse and visitation of monuments makes education and interpretation of cultural heritage possible for a wide range of students, from school pupils to university graduates.

Due to their geographic spread, HCP’s conservation projects now span numerous types of buildings and technologies, including earthen architecture; coral limestone block; heavy medieval masonry with vaults and domes; brick vaulted and domed structures adorned with decorative glazed ceramic tiles; low-rise stone rubble construction with timber cribbage, and so on. No single agency can master all the requisite technologies and sub-techniques involved in the conservation of such buildings and AKTC has solicited external specialist consultants and other partner agencies in many of these projects.
Physical rehabilitation is a key, but certainly not solitary, feature of the approach used by the Historic Cities Programme (HCP) in its sites of interest. The sustainability of such interventions has been understood to depend on community involvement and development, targeted to permit financially viable solutions and the ongoing preservation and adaptive reuse of historic areas.

Once conceptualized, Area Development Projects (ADPs) attain their form through a process of multidisciplinary planning and a process of organic development during the initial phase of implementation. Analysis of qualitative and quantitative data enables HCP to make choices with regard to the depth and reach of proposed core socio-economic development activities. In generic terms, this means that activities aimed at improving the quality of life of residents focus on fulfillment of basic needs, provision of the means for social welfare and on creating a secure social and physical environment. Thematically these activities nearly always include better housing conditions, higher levels of employment, stimulation of income-generating activities, better education and better health (see the table below). Once activities have been defined and targets have been set, they are implemented in phases – starting with a first or pilot phase of limited extent (geographically, as well as in terms of time and the number of beneficiaries involved). Organic growth that is permitted in the early stages of the project is recognition of the fact that the process of delivery is part of the process and that this carries as much importance as the final product.

<table>
<thead>
<tr>
<th>Development activities by theme</th>
<th>Cairo</th>
<th>Kabul</th>
<th>Mopti</th>
<th>Aleppo</th>
<th>Lahore</th>
<th>Delhi</th>
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</thead>
<tbody>
<tr>
<td>Housing improvement</td>
<td>x</td>
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<td>Open space development and public buildings</td>
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<tr>
<td>Infrastructural improvement</td>
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<td>Education programme (including TVEI)</td>
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<td>Health programme</td>
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<td>Micro-credit programme</td>
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HCP’s socio-economic development activities in seven different Area Development Projects (ADPs).

The instruments for appreciating improvements in the quality of life, such as those that have been tested within the network of Aga Khan agencies between 2005 and 2010, can partially help to answer the question how relevant achievements are in view of overall improvements.

Achievements are measured in qualitative as well as in quantitative terms. The overall outcome is reviewed in relation to domains of asset creation that the Aga Khan Development

Outside the walls of the Great Mosque of Djenné, Mali, workers construct a pit for the preparation of banco – a manually mixed construction material made of clay soil, sand and various straw and organic additives – on the construction site.

Opposite page: In the urban village of Nizamuddin Basti in Delhi a vibrant community is centred around the dargah of the 14th-century Sufi saint, Hazrat Nizamuddin Auliya.
instance, are notoriously difficult to measure and therefore need to be approached from various angles in order to arrive at acceptable estimates. Neighbourhood walks with knowledgeable individuals, focus group meetings, interviews with key informants and other sources of information, such as rejected loan applications for micro-credit, provide important additional information. By applying such methods in Cairo and Aleppo, it was possible to arrive at estimates of average household income and expenditure of the population that seemed plausible. In contrast, this was not possible in Zanzibar, in spite of persistent efforts. Zanzibari income levels appear to be substantially lower than household expenditure. Very telling for all household budgets is the percentage of income spent on food. Without exception, it was found that the urban poor that live on an income of less than $1 per day (the UN definition of poor) tend to spend more than fifty per cent of their income on food. Zanzibar did not appear any different in that respect.

Although HCP collects a great deal of data (a typical baseline survey may produce 500 or more variables), the information sought still reflects a bias for the sectors of intervention that are close to HCP’s mission. The development proposal for the revitalization of an urban area that eventually emerges, therefore, nearly always includes one or two major focal points of historical value that are the subject of physical rehabilitation. When used as a strategic ‘entering wedge’ into the community, such interventions effectively replace better-known strategies used by other agencies, such as productive investments, productive improved infrastructure, lending through micro-credit initiatives or arranging participatory social mapping exercises.

Analysis and Prioritization of Core Development Sectors

Once objectives are set and a strategy is in place, and all necessary background information and data concerning the project area have been collected and analysed, project activities for the major intervention sectors are planned. Although such activities may differ substantially from one ADP to the next, the seven domains of development by which their successes and failures are measured are nearly always represented.

Network (AKDN) has defined. These are Economy, Health, Education, Social Life, Built and Natural Environments, Voice and Influence, and Local Perceptions of the overall Quality of Life. In order to fully appreciate qualitative improvements from an HGP perspective, improvements in the physical environment (housing, open space, solid waste collection), restoration or instilment of dignity (skills development and employment) and personal recognition (as happens through adult education and improved health) are taken into account.

Holistic Planning and Identification of Needs

When planning socio-economic interventions, available information concerning the size of the project area, its population and basic socio-economic data are collected and analysed. Key players are identified at both governmental and private level (including local Civil Society Organizations) and local leaders are contacted. Once an assessment is made of the desirable location for an ADP, suitable boundaries of the area are decided. These can be formal administrative boundaries (used in Cairo and Aleppo), informal boundaries recognized at local levels, such as mohallas or neighbourhoods in Lahore and in Kabul, watersheds (Mopti, Lahore and Kabul), mountain crests and rivers (northern Pakistan), as well as man-made boundaries such as major thoroughfares and perimeter walls (the Nizamuddin Basti).

Methods for Gathering Information

Project formulation in terms of the selection of development sectors, description of activities and budgeting is preceded by the execution of baseline surveys: a process of extensive fact-finding and orientation during which qualitative and quantitative information from within the targeted area is collected. These baseline surveys include variables that are generally difficult to assess in a straightforward manner, but that are nevertheless of great importance in the urban context. Household income and household expenditure, for example, are notoriously difficult to measure and therefore need to be approached from various angles in order to arrive at acceptable estimates. Neighbourhood walks with knowledgeable individuals, focus group meetings, interviews with key informants and other sources of information, such as rejected loan applications for micro-credit, provide important additional information. By applying such methods in Cairo and Aleppo, it was possible to arrive at estimates of average household income and expenditure of the population that seemed plausible. In contrast, this was not possible in Zanzibar, in spite of persistent efforts. Zanzibari income levels appear to be substantially lower than household expenditure. Very telling for all household budgets is the percentage of income spent on food. Without exception, it was found that the urban poor that live on an income of less than $1 per day (the UN definition of poor) tend to spend more than fifty per cent of their income on food. Zanzibar did not appear any different in that respect.

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Squares, streets and even alleys can be put to multiple uses. In Cairo’s Darb al-Ahmar quarter, a small but centrally located square, which is dominated by the thirteenth-century Aslam Mosque, was identified as a key public space and as a result was developed with multiple uses in mind. Furthermore, HCP was also involved in the development of a master plan for the reuse of public space in the entire district. Of equal importance is the creation of public space around recently rehabilitated buildings. Not only does this contribute to better visibility and access to the building, but it also helps to prevent encroachment and damage, ensuring longer lasting benefits to the public.

3. Education and vocational training

Levels of education in most, if not all, of HCP’s intervention areas are generally low to very low at the start of launching development activities. Literacy levels, in particular for women, reach only seventy per cent in Cairo and in Aleppo, but are as low as twenty-five per cent in Kabul and only around thirty per cent in Mali and Zanzibar. Many children do not complete primary school, as parents often do not see the need for further education in the absence of career prospects.

In a number of cases HCP has started literacy classes for adults, either directly or in collaboration with experienced local NGOs. In addition to this, attempts are being made to increase the level of involvement of parents in the education of their children. The libraries for children and adults that were set up in Cairo have become a focal point for interaction with parents and children, as have after-school activities that are aimed at stimulating creativity and emphasizing the need for continued education. A similar library will now also be set up in Aleppo.

HCP is not involved in secondary and higher education for local communities, but instead focuses on vocational and administrative training. The assumption is that the vast majority of people in the poor areas where HCP intervenes would be best served with knowledge of a particular skill or trade that could be marketable, thus adding to the family income.
6. Employment and vocational training
HCP’s involvement in employment is mainly a consequence of its engagement in vocational and administrative training, as well as its involvement in stimulating the development of income-generating activities. The basic principle is that HCP, or any of its local development agencies, is not a job provider, nor an agent that acts as a broker between employees and employers. It does promote vocational training.

Technical, Vocational and Educational Training (TVET) is the one education component that can be found in almost all HCP’s interventions. The reason for this is that physical rehabilitation of monuments requires able craftsmen from start to finish. More often than not, however, such able craftsmen are not locally available and need to be trained on the job. As a result, nearly all intervention programmes include crafts training –
originally foreseen in the 1973 Master Plan. The recreation of Qazi Bagh, a four-hectare green open space in the heart of Old Kabul, is another example of a reversal of potentially harmful urban development (in this case it was the absence of any planning that had caused complete encroachment of green open space).

Sustaining Development Initiatives after Project Completion

Continuation of HCP-initiated socio-economic development activities beyond the lifetime of its projects depends on the character of the intervention, the implementing capacity of local counterparts and availability of funding. Integrated development projects, which contain a multitude of thematic elements, are generally split into several manageable components before being handed over, while some parts are considered to have been completed. Continuation of the vocational training packages beyond the project’s lifetime is secured through a number of arrangements with private and governmental training institutes, whereby HCP aims at preserving the curriculum that was prepared and the quality of the training that was provided.

Physical rehabilitation usually comes to an end when the project is completed. The newly created built environment, however, requires continuous upkeep. In order to ensure that buildings and public works are properly maintained by the local entities that carry on after HCP has left, income-generating activities have been devised whereby funding comes from the public paying entry fees (for example to the Baltit Trust which manages Baltit Fort in Hunza, northern Pakistan), rent (by leasing restored public buildings to other organizations, for example the Old Dispensary in Zanzibar) or by organizing events. The Komoguel Project in Mopti is an exception, whereby physical rehabilitation of water and sanitation during the course of a number of phases will be handed over to a local counterpart that will continue similar interventions in Mopti and elsewhere.

Monitoring, Research and Evaluation

In the monitoring, research and evaluation of its projects, HCP follows the same hierarchical sequence it applies when designing projects, but it addresses these in reverse order. Project descriptions of the ‘what’ (goals and objectives), ‘how’ (strategy) and ‘which’ (activities) are monitored and evaluated by looking first at the results (which reflect the direct outcome of activities), then at the effectiveness (which measures the strategy) and finally at the impact (defined as lasting and durable change). There are compelling arguments for maintaining this hierarchical order in project design and in project monitoring and evaluation. Not only does it provide insight at which level outputs are directly attributable to inputs, but it can also help to trace and rank the less tangible, often indirect outputs. Development of important cross-cutting themes for HCP, such as environment, gender, and organizational and institutional development of Civil Society Organizations, are also evaluated in terms of their impact.

7. Urban planning

Nearly all cities where HCP is engaged in urban revitalization have master plans for urban development. Many of these plans, however, have not been adjusted to the realities on the ground and have therefore lost their relevance. In order to deal with the realities on the ground, HCP has in a number of cases taken on some planning tasks that are generally associated with governmental, municipal or district units. Meticulous plot-by-plot investigative work carried out over a number of years in all of the historic cities concerned has yielded a wealth of information. Based on this, changes can now be proposed that will have a significant impact, not just in terms of retaining physical assets within the built environment, but equally in social and cultural terms. In Cairo it led to a decision in 2006 not to demolish a core part of Darb al-Ahmar as was in particular construction-related crafts such as masonry, carpentry and fine woodwork, plumbing and electrical engineering. Training in administration has proven particularly attractive to women who seek to improve their skills and move up in the labour market. Local crafts development through training in quality improvement is another element that is part of the TVET approach.
Green and open space in historic settlements is too rare. When it does exist, it can provide areas for recreation and relaxation in dense communities. The documentation and understanding of local flora and fauna, and ecologically sound approaches to land use and natural site protection are other benefits of projects centred on such spaces.

The Project Portfolio

A major environmental rehabilitation project in the heart of Old Cairo, the site of the present Azhar Park, was a major impetus to the further engagement of the Aga Khan Trust for Culture (AKTC) in demonstrating the vital role of public open spaces in the rehabilitation and enhancement of historic districts. The size and diversity of AKTC’s parks portfolio by the end of 2011 is, in large part, a reflection of the results of this project typology, first in Cairo and then in other locations illustrated in this publication, evidencing the positive change processes these environmental projects can and have set in motion. It is useful to briefly summarize the contents of this portfolio prior to explaining the rationale behind a family of unique yet related projects.

At present, the park projects portfolio includes three gardens that are located within heritage sites: Humayun’s Tomb and Garden in Delhi; Forodhani Park in the Stone Town, Zanzibar; and Babur’s Garden in Kabul. The first two are within World Heritage Sites, while the latter has an application underway for such designation. Three park projects (Azhar Park, Cairo; the National Park of Mali, Bamako; and Khorog City Park, Tajikistan) are in central city sites that have cultural significance. Two more such park projects are underway: Sunder Nursery in Delhi and Bab Qansu Park in Aleppo. The Historic Cities Programme (HCP) has recently begun work on two further park spaces within largely natural settings covering even more expansive areas of land: Nairobi City Park in Kenya and Phase II of the National Park of Mali.

Urban Regeneration and Community Development

A number of factors unite these projects despite their diverse locations, while other elements differentiate them. The point here is not to dissect each project from a topological and morphological perspective. In a broader context, HCP is interested in questions such as what role do parks such as these play in urban regeneration and community redevelopment? Do park projects such as these transcend environmental rehabilitation in the sense of a restricted physical undertaking? What impact can such parks have on urban planning and design as a practice? How does a municipality ensure that a large park facility remains maintained and sustainable in the long run? In the course of conceptualizing, implementing and then operating these diverse projects, HCP has acquired...
encouraging feedback from these very ‘real world’ prototype situations that affirm the vital importance of such initiatives, not only in general urban environments but even more so in historic urban settings. It is beneficial to consider briefly the origin of many of the formal parks and gardens showcased in this publication.

The Role of Patrons in the Historic Development of Parks

The role of royal patrons in the creation of historically important pleasure gardens in many parts of the world is well documented. In the Islamic world, this involvement may have reached its apex in the series of gardens created by the Mughals, started by Babur and extended by Humayun and his descendents. Historians have engaged and are described in the Case Studies (pp. 174). Gardens occasionally provided inner solace and inspired poetry. Parks and gardens have historically embodied the formal parks and gardens showcased in this publication.

Gardens in Historic Islamic Settlements

Parks and gardens in many of the regions where AKTC has been active are intact and coherent sets of landscape design. They usually stem from the vision of a patron or landowner and were developed through the use of skilled local artisans employing ‘hardscape’ and ‘softscape’ materials. Careful research and surveying provides fuller understanding not only of the final expression of the composition but also, over time, of the incremental development of large works. Environmental design was an active field practiced in all of the areas concerned. Programme work has witnessed that these interventions included hillside retention systems and terracing, and the development of elaborate water conduits, as well as large man-made lakes. Environmental design, as seen in historic cases, has occasionally been concerned with astronomical observations and assemblies were laid out with precise measurement techniques, often involving the carefully calculated control of slopes for water flow. Well-known layouts in historic gardens, such as the chahar-bagh, demonstrate a facility for combining aesthetic and practical design aspects in a balanced mode.

Historic Areas and Their Environmental Context

Environmental design can be seen as playing an influential role in the contexts of historic districts and monuments in the Islamic world. Monuments are often found in the midst of open space and these spaces sometimes have afforded critical buffer zones between historic fabric and the expansive urban area beyond.

The Islamic garden performs many functions. Whether under customary private ownership or for occasional public use, it is enclosed and protected, and affords privacy. Throughout most of the Islamic world, it offers relief from the stress of intense heat, while its beauty enhances the quality of living. Terraces, canals and tanks meet the demands of horticulture and irrigation, while the water also serves a desire for display and sound. Fruit trees shade planting on the ground, while flowers provide fragrance and colour. The Islamic garden serves as a larger manifestation of the courtyard, a domestic analogy. As described by Jonas Lehrman:

"The Islamic garden performs many functions. Whether under customary private ownership or for occasional public use, it is enclosed and protected, and affords privacy. Throughout most of the Islamic world, it offers relief from the stress of intense heat, while its beauty enhances the quality of living. Terraces, canals and tanks meet the demands of horticulture and irrigation, while the water also serves a desire for display and sound. Fruit trees shade planting on the ground, while flowers provide fragrance and colour."
While not formally categorized as 'landscape', the many instances of ancient walls surrounding historic old cities, such as Cairo, Herat and Lahore, represent massive acts of environmental design, enclosing whole cities or districts, creating walled compounds within a larger walled territory. AKTC’s projects in such areas have concerned archaeological investigation, conservation and the development of circuits for public visits. The largest of these projects, the Historic Wall of Old Cairo in the vicinity of Azhar Park, exceeds one kilometre in length and includes a major promenade and landscaped hillocks. Azhar Park, thirty hectares in surface area, became the focal point not only of a major environmental rehabilitation in Old Cairo, but also the precursor to an Area Development Project (ADP). Thus, environmental design and urban rehabilitation of historic districts in AKTC’s portfolio are very much intertwined.

In the case of waterside settlements and retreats, such as the Stone Town of Zanzibar and Khorog City, the cities’ water edge has critical importance from the viewpoint of aesthetics as well as an early role in riverine or marine defence systems. In Zanzibar, AKTC conserved and restored sections of the historic seawall along Forodhani Park fronting the sea over an eighteen-month period. This 400-metre stretch of seawall became an important sub-project of the overall rehabilitation effort for this major urban park site, which itself is part of the Stone Town’s World Heritage Site area. In this case, environmental rehabilitation and garden conservation became linked objectives. In the case of Khorog, the City Park shares a major perimeter edge with the fast-running Gunt River. The river wall became the focus of a large masonry retaining wall engineering system combined with protected footpaths for promenades.

Large urban spaces often served historically as gathering places associated with architectural complexes or shrines. Some of their rich variations can be seen through HCP projects in the cases of Guzargah, Herat and the Nizamuddin Basti. Examples of urban courtyard spaces are well illustrated in the historic belts in Damascus, while three-dimensional examples can be found in the inner courts of remote mountain sites, such as Baltit Fort in northern Pakistan. HCP projects in the cases of Guzargah, Herat and the Nizamuddin Basti. Examples of architectural complexes or shrines within Asheqan wa Arefan; Herat’s Guzargah complex; and Delhi’s Nizamuddin shrine complex; caravanserais and polo grounds (in Kashmir, northern Pakistan, and Faisalabad, northern Afghanistan).

The concept of public goods or ‘social commons’ has lately received increasing attention in publications on subjects ranging from history and political-economy to ethics, and the environment, although this analysis dates in part back to the early twentieth century. The notion of the oceans or the atmosphere as being common goods or part of the commonwealth of mankind is often evoked in such works. A central concept is that “non-rival” and “non-excludable” services are public goods and are critical in the avoidance of the predicament of “private affluence, public squalor”. The term is often discussed with reference to examples from the Western world with the implication that cases in other regions are scarce or non-existent. It is hoped that HCP projects will provide evidence, to the contrary, of a range of common goods created for wide social benefit in the regions concerned. The question is not so much about the existence of historic precedents but, rather, why such rich examples are being ignored in the further development of the urban environment in these areas.

Urban Landscape: Recovering Marginalized Tracts of Land

With the increase in urban population pressures and land speculation, land, even in marginal city areas, has become commoditized, resulting in remaining open space and parkland being encroached on or redeveloped. The lack of well-formulated planning instruments in some areas has led to insufficient land-use control, with open space suffering as a result. While land-use controls for private use usually do not lack support, the protection of key public open spaces is often left to well-intending but poorly funded civil society groups. The introduction of new infrastructure, particularly transportation systems,
important contributions but ones that will need replication and continuous investment by municipal authorities in the coming years if environmental degradation is to be reversed in the longer term.

AKTC’s park projects typically include the development of detailed operational plans for the maintenance of the rehabilitated or new park spaces once projects are completed. The park maintenance teams often benefit from personnel trained during the plantation phase of project implementation. Turning the management and operation of restored park and open spaces into a subject worthy of planning, organizational development and proper budgeting has been a major step forward to safeguarding these local environments for the benefit of their users.

Completed parks are carefully monitored across a number of factors including park visitation levels, local jobs created, linkages to the surrounding neighbourhoods through circuits and signage, quality of maintenance, and financial performance. In the case of surplus operational funds, these are reinvested, in accordance with the relevant project agreement, in the further enhancement of the districts surrounding the park space and their communities. In 2010, five of AKTC’s park projects were under operation in metropolitan centres serving a combined population of twenty-five million people, from Cairo to Khorog City. Visitation of these parks crossed the three million mark that same year, a figure equivalent to twelve per cent of the total population figure for the cities involved, proof of a firm continuing demand for public parks thus far in the twenty-first century.


2 Ibid., p. 225.


Adaptive Reuse

FRANCESCO SARAVO AND
JOLYON LESLIE

The restoration of historic sites and monuments and their adaptation for community and cultural uses can be seen as a keystone to the successful urban rehabilitation of historic settlements. Steps in this process are the definition of stakeholder needs, the interface between conservation and sustainable community reuse, and the training requisite to carry out the programmes. Perspectives on these issues, written by members of the Historic Cities Programme (HCP) team, are presented here.

BRINGING TANGIBLE HERITAGE BACK TO LIFE

Operating as a sub-domain or area of engagement, adaptive reuse projects within the Historic Cities Programme (HCP) are consequential acts following decisions to undertake an Area Development Project (ADP). Adaptive reuse of historic sites or buildings can be categorized according to their status as monuments or listed buildings or simply sites representative of a past era. In accordance with existing preservation law, statutes, or conventions, national or international, acceptable uses of monuments and listed buildings are restrictive in nature and meant to safeguard rare examples of heritage or fragile sites. Period architecture and districts require protection to ensure their survival as identifiable, coherent and authentic examples of the past but otherwise can often permit new uses, public or private, and, indeed, often such new uses are the principle means of safeguarding these elements of the urban fabric by allowing for self-sustainable forms of occupancy and maintenance.

Monuments and Listed Buildings

HCP is accustomed to working closely with international agencies and national authorities in the determination of the proper levels of access and usage of monuments by the public.

While monuments until recently have long been considered restrictive in terms of their use following preservation, these restrictions are increasingly being worn down by changing public awareness of the advantages of unique settings for leisure, residential, community functions or tourism. At the minimum, increased public visitation to preserved monuments along carefully selected routes can both protect the monument while lifting the revenue streams so critical for proper maintenance. The often surprising benefit of the attention devoted to given monuments or buildings is the vastly increased level of interest on the part of the local and regional community in what was previously an overlooked relic. This reaction is in fact critical to building an important base of civil society support and appetite for further projects of this nature.
APPROACH AND METHODOLOGY: ADAPTIVE REUSE

A number of hotels have been developed or are planned through the adaptive reuse of existing buildings. Clockwise from top left: a telecommunications building in Zanzibar; existing buildings. clockwise from top left: a telecommunications building in Zanzibar; an old palace in Damascus; and a fort in Shigar, northern Pakistan.

Several of the ADPs that the Programme has been associated with are in a number of World Heritage Sites which have called for special treatment: Humayun’s Tomb complex in Delhi, Babur’s Garden in Kabul, the Stone Town in Zanzibar, Darb al-Ahmar in Historic Cairo, and the Walled City in Lahore.

Non-Listed Sites and Buildings

In many of the Programme’s ADPs, the overwhelming percentage of building stock, protected by statute or not, is non-listed and therefore affords more forms of adaptive reuse. Reuse at its minimal level can involve the insertion of modern services in housing and other buildings to support current activities and improve the quality of life. While maintaining the authenticity of the original design or features, the site or building value is enhanced by making it reusable as a part of private or community life. Much of the building stock in Darb al-Ahmar (Cairo), Nizamuddin Basti (Delhi), Lahore Walled City, Old Kabul and Herat, and the Stone Town (Zanzibar) falls into this category. As a group of (mostly) uniform and coherent building morphology, once rehabilitated and brought up to date in terms of building services and their associated public spaces, this stock can be reused if vacant and its usage extended if occupied with much improved standards of living.

ADPs with important adaptive reuse components create a call on funds that are typically not available in the community. In many of the ADPs of the Aga Khan Trust for Culture (AKTC), the per capita household income does not exceed $2 per day. These neighbourhoods are all too frequently overlooked by banks, considered ineligible for loans due to low income, uncertain property ownership or tenancy, and lack of collateral. While micro-credit combined with house-owner investments and grants have succeeded at a certain level (Darb al-Ahmar in Cairo is an example), the number of eligible buildings still represents a minority of the cases.

Adaptive reuse occurs when the original building fabric remains intact with only structural repairs or improvements to consolidate the envelope. Too often opposing market forces are at work. A building owner may wish to see his building decay and be demolished so that the site can be sold or redeveloped in an inappropriate way to yield a capital gain. Determining what is appropriate or inappropriate is a labour-intensive process usually requiring public hearings, involvement of civil society groups, and development of building planning and design guidelines. The latter are intended to prevent new developments that represent unacceptable or overly intensive commercial or other uses or introduce building scale or stylistic signatures which are alien to an otherwise harmonious urban environment. Whether highly urban or rural in setting, the same principles and risks are faced by any community that is subjected to change without proper controls and safeguards.

REDEFINING FUNCTION AND SYMBOL

The ‘adaptive reuse’ of buildings, a term coined by architects in recent periods to demonstrate a design choice, in fact describes a process of which there is evidence in the earliest human settlements. Long after the original function or symbolism of a building may be forgotten, the material investment in construction can serve succeeding generations, rather than razing it. In most cases, this process of reuse is born of necessity. In the modern sense of the term, however, ‘adaptive reuse’ describes a conscious choice to retain a building of intrinsic value and to give it a new life, usually through a function that differs from that imagined by its builders.

The Dangers of Construction

While the beauty attributed to certain historic buildings is subjective, and not always a value shared across a society or community, a degree of understanding of collective history is common in most nations. In Afghanistan, as in other conflict-prone countries, the disruption of systems of formal education over decades has meant that many have been denied the opportunity to learn about their own history. One of the most visible manifestations of this situation since 2002 has been the transformation of urban centres, where concrete and glass buildings now surround the surviving historic fabric. The rapid inflow of population and external resources has increased demand for urban property, which has soared in value, prompting speculative building on an unprecedented scale. This construction boom, driven in part by external aid, is arguably causing more extensive damage to both the built heritage and archaeology of Afghanistan than decades of neglect or conflict. This process of transformation is one that many historic cities have witnessed, but the speed with which destruction is being wrought in Afghanistan, particularly at a time of relative peace and prosperity, is disturbing and now poses the single greatest...
challenges to urban conservation initiatives, such as those being implemented by the Historic Cities Programme (HCP) in the cities of Kabul and Herat.

A Demonstrative Approach

Working within communities that may be ambivalent about the intrinsic value of their environment, with officials unwilling to enforce even the most basic form of legal control, it has been vital for the Programme to build confidence in the notion of conservation by showing results. By inviting community leaders to witness at first hand craftsmen at work on mosques and shrines that held special religious or social significance, it has been possible over time to rally residents behind a process from which they benefit directly, in terms of improved public facilities or living conditions. Such initiatives also instil a sense of collective identity and pride. Media attention on the conservation process has also contributed to building public awareness of the value and sheer beauty of what survives, and thereby helped to shift the public debate beyond a stage where the demolition of such buildings or areas might be admissible. As well as creating awareness, this ‘demonstrative’ approach is driven by the need to create a new reality on the ground. The fact that scaffolding is in place and teams of workmen engaged around a historic public building is a useful deterrent against those who might wish to ‘modernize’ it. So, too, investments in upgrading can effectively obstruct ill-conceived intrusions into the historic fabric, such as the widening of streets in Kabul or the demolition of covered passages in Herat.

Framework Agreements

In a context where a historic building may be close to collapse, or pressure is building for its ‘redevelopment’, there may be little time to negotiate the eventual use of a public building in advance with officials who may not be in a position to define the eventual programme. Working within the confines of framework agreements signed with central or local authorities, the initial conservation of public buildings has taken place in parallel with consultations with custodians or community representatives as to the eventual functions of a building. While clearly unorthodox, this ‘exploratory’ approach to the adaptive reuse of historic property has enabled the Programme to maintain momentum, while responding to the fast-changing economic and institutional environment that prevails in Afghanistan. Certain aspects of this approach are outlined in the three examples that follow.

Chahar Suq Cistern

Once the major source of domestic water for inhabitants of the Old City of Herat, the Chahar Suq Cistern became redundant with the introduction of piped water in the 1980s. The Cistern soon began to fill with waste from the surrounding bazaars and, by the time that it was surveyed in 2004, it was clear that what had been an important public facility only twenty years previously had been forgotten. Largely invisible due to encroachments, the central domed space, which measures twenty metres across, seemed at that time to have potential for a range of public functions. Rather than trying to define these in any detail, however, the priority was to stabilize the structure, parts of which were in a precarious state.

As its name implies, the restored Chahar Suq Cistern is in the centre of the Old City of Herat lies at the intersection of four bazaars. It is now used for events such as photography exhibitions and musical performances.

Although a very different type of building, the conservation of Timur Shah’s Mausoleum in Kabul (see p. 86) between 2003 and 2007 provides a further example of this ‘demonstrative’ approach towards reuse. Built in the late eighteenth century within a formal garden originally laid out in Mughal times on the banks of the Kabul River, the massive brick Mausoleum remains one of the largest built landmarks in Kabul. Historic photos indicate that the Mausoleum underwent a series of repairs and ‘improvements’ in the nineteenth and twentieth centuries, before the uppermost of its two domes was damaged during factional fighting in 1993–94. The partial collapse of this brick dome posed an immediate threat to the integrity of the Mausoleum. The priority from the start was to stabilize the structure. Given the religious and historic significance of the building, there was at this early stage no discussion as to possible adaptive reuse. It was not until the closing stages of the conservation work that the main domed space of the Mausoleum, which served at this time as a carpentry workshop, came to be used for occasional lectures for students of architecture. This led to a discussion about formalizing the use of the building and the park (reclaimed after hundreds of informal traders had been relocated) for appropriate cultural events.
WHY ADAPTIVE REUSE IS RELEVANT

HCP’s approach to the reuse of historic buildings has developed as a result of the Programme’s involvement in preservation planning and conservation projects since its inception. There can be no doubt that this is one of the most pressing issues in decaying historic areas throughout the world, and certainly no less so in the context of Islamic cities.

A first question is why adaptive reuse is relevant in the effort to preserve historic areas. It is in this light that HCP’s approach and practice can be best understood, particularly with regard to the choice of a functional programme and its philosophy of intervention, as well as the implementation modalities followed.

Inexorable Decay and Rapid Development

Two opposites – inexorable decay and rapid development – reinforce each other and bring about a vicious cycle that is very hard to break in historic areas. Because the old fabric is so fragile – sometimes on the verge of collapse – urgent intervention appears justified. But when intervening, the only alternatives considered in most cases are radical modernization or total substitution. There are numerous reasons for this.

Global changes caused by rapid urbanization and development have brought about social displacement as well as the loss or transformation of historic places and natural sites around the world. New building models and materials that are associated with progress are used extensively in new and old areas alike, in spite of the fact that they are often expensive and ill-suited to local conditions. The gradual disappearance of traditional builders and artisans, and the emergence of contractors who are often unable to cope with old structures is, of course, another difficulty. They find it easier and more lucrative to demolish and rebuild.

A more deterministic approach towards adaptive reuse was employed in the restoration of the Queen’s Palace in Bagh-e Babur, Kabul (see p. 78). Built in the late nineteenth century as a residence for members of the royal household inside a Mughal garden, the complex was destroyed during factional fighting in the early 1990s. At the design stage, a balance had to be found between respect for the form and surviving details of this important historic monument, and the needs of future users of the Palace. It proved necessary to allay the fears of Afghan officials with limited experience of adaptive reuse, who urged that the building be faithfully restored to its original form and converted into a ‘museum’. In the end, a compromise was reached whereby modern services were introduced to the Palace with the least possible intrusion. Collapsed sections were rebuilt, and the major reception areas restored in a manner that retains the proportions and details of the original, enabling them to serve a variety of functions, including exhibitions, meetings and a cafeteria. It is foreseen that such a range of activities will, in time, generate sufficient revenue to meet the costs of the upkeep of the restored Palace and the garden as a whole.

The crypt, in which the grave of Timur Shah and others lie, remains accessible for visitors who wish to pay their respects, while the main space above has, since 2007, been used for a regular series of public lectures, as well as for occasional seminars and exhibitions. Without a waqf (an elaborate system of endowments) to contribute to the cost of upkeep of the Mausoleum, resources could be raised through the use of its magnificent central space, as well as the newly landscaped park, for appropriate public events. Although this is an unfamiliar concept in the Afghan context, a draft agreement for the complex to be operated as a cultural venue is under discussion with the relevant authorities.

The skills of a sizeable team of Afghan craftsmen in a range of building techniques were developed in this reconstructive and adaptive process.

Queen’s Palace

The Queen’s Palace in Bagh-e Babur in Kabul was looted and burned during inter-factional fighting in 1992 and only the ruined walls were left standing.

Right, now the Palace is fully restored and its courtyard often serves as the venue for musical and theatrical performances.

Inside the Queen’s Palace in Kabul there is an exhibition and performance space.
In the face of this unfortunate state of affairs, the rehabilitation and adaptation of old buildings for new uses can be a powerful means of demonstrating that there is an alternative to radical and destructive change and that old buildings, particularly those that still hold a symbolic significance for the communities concerned, need not be associated with poverty and neglect. Such buildings are, in fact, still capable of playing a useful role in contemporary life. Their reuse can help stimulate the revitalization of traditional crafts and create new employment, and they can offer a strong attraction for residents and visitors alike.

In sum, adapting old buildings to new uses can be a source of pride, as well as economic and social benefits for the surrounding communities. For this reason, the exemplary, demonstrative value of successful rehabilitation and reuse projects can inspire the community and serve as a tangible demonstration that old is far from bad.

Definition of the Functional Programme

In adapting an old building, the first question is what to do with an old structure, often underused and sometimes derelict or abandoned. HCP’s approach has always been to identify a functional programme that will be useful and relevant, self-sustainable, and not disruptive. HCP’s approach has been that of researching and promoting discussion within communities to identify uses that are relevant and that benefit residents. Libraries, health centres, adult education facilities, recreational and children’s day-care places are but a few among the functions that can find a place in structures awaiting rehabilitation, particularly in declining historic areas where services are rare. The more these structures can be made part of the life of a neighbourhood, the more they will be appreciated and cared for, and the more they will serve as a demonstration that old buildings can continue to have a useful purpose.

An Alternative to Radical Destruction and Change

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Income-Generating Components

Once rehabilitated, if buildings are not maintained, within the span of just a few years they will be back where they started. Ensuring financial support for their continued maintenance is thus essential. However socially relevant they may be, such new uses per se cannot guarantee a building’s long-term sustainability. In fact, socially relevant uses may bring in little revenue. A mix of activities is thus essential, some not or less profitable, others definitely to generate revenue. HCP therefore seeks to identify income-generating components for its adaptive reuse schemes, dedicating between one third and one half of the usable space to this purpose. Depending on the specific situations and the results of preliminary market studies, the inclusion of spaces that can be rented out for commercial or office use or as studio accommodation has proven an effective means of ensuring that revenue for the operation of the buildings is available.

A further strategy that has proven effective in ensuring sustainability is adaptive reuse schemes that are not overly specialized. Spaces that are versatile and adaptable over time are more likely to remain occupied. If a given use fails or is no longer profitable, it can be replaced with another. Uses that are not overly specialized are also less likely to disrupt a historic structure.

In Keeping with the Past

The third prerequisite in defining a successful and acceptable functional programme is that a new use must be compatible with the historic character of the building. This is best achieved by avoiding total transformations. The ideal solution is one where the same use and spatial organization can be reinstated. But this is rarely possible. Even reusing an old house for the same purpose requires modifications and upgrading to accommodate changes in family structure, as well as the need to insert modern utilities. No matter how different the proposed new use may be from the original, the new use of the space should be compatible with the nature of the spaces and the architectural character of the old building. Preservation of the structure’s circulation, hierarchy of spaces, decorative features, proportions and scale must inform the brief for its adaptive reuse, and not vice versa. This does not mean that change is excluded, but that it must be compatible in order to allow the building in question to remain true to its essence – both within, so as not to disrupt the interior articulation and significance of spaces, and without, so as not to alter the surrounding context.

Philosophy and Approach

The philosophy of intervention adopted by HCP in its rehabilitation and adaptive reuse initiatives has been to apply internationally agreed conservation criteria and standards, and to identify the best ways in which these can be adapted to the particular conditions of the site in question.

Respecting the existing fabric, including alterations to the building over the course of its evolution, is a major element of the approach. In general, the existing situation is, as much as possible, retained as found, particularly where there is no evidence of the previous
Above, lime plaster to prevent water seepage is being applied to the dome of the Tomb of Iqbal Khan in the gardens of Humayun’s Tomb in Delhi.

Below, workmen at the junction of the roof and wall on the south facade of the great mosque of Mopti, Mali, preparing to position new water spouts.

Implementation and the Role of Training

Experience with local contractors in the contexts where HCP has been operating often reveals that conservation skills and experience are limited and that there is a need to disseminate effective conservation and repair techniques. This makes the development of training and apprenticeship programmes an essential aspect of the implementation of any building works. The complexity of integrating the training component with the building works process, as well as the need to identify and adapt new conservation techniques as the work proceeds, calls for the definition of implementation modalities especially tailored to the requirements and organization of each project.

Flexibility and Control

Often, HCP’s project team retains control over the entire development of the construction work and, in different degrees, takes over the combined responsibilities of supervision, architect and main contractor. Accordingly, the project team is responsible for planning the nature and schedule of works, coordinating labour and procurement of materials, and supervising the implementation of site activities and training, as well as monitoring the quality of the results achieved. Depending on the particular conditions, the work may be split into a series of separate components and implemented as work carried out by the apprentices, during or immediately following training, under the supervision of the trainers and project staff; through direct recruitment of experienced local craftsmen who are selected on the basis of their abilities and past experience; or by subcontracting discrete packages to specialized contractors selected on the basis of their competence and proven track record.

The combination of these different modalities of implementation makes it possible to maintain flexibility and control at all stages, thus enabling the project team to ensure good quality in the work performed, monitor and reduce costs, and facilitate close integration of the training component into the overall building conservation process.
The city of Kabul is thought to have grown around a Buddhist settlement mentioned by Ptolemy in AD 150. The fortified Citadel of Bala Hissar bears witness to its turbulent history, as do the defences along the ridge of the Sher Darwaza Mountain to the south, dating in part to the period of Hindu rule prior to the advent of Islam in AD 871. Kabul seems to have remained little more than a military outpost during the fourteenth and fifteenth centuries, when the cities of Ghazni and Herat witnessed significant prosperity and architectural innovation. It was not until the early sixteenth century, when the founder of the Mughal Empire Babur visited and laid out several gardens in and around the city (including the newly rehabilitated park now known as Bagh-e Babur), that Kabul seems to have grown in importance. While based in India, Babur’s successors continued to show an interest in Kabul, with Shah Jahan’s governor, Ali Marnda Khan, building the covered Char Chatta bazaar in the centre of the commercial quarters in the mid-seventeenth century. By the time that Timur Shah moved his capital from Qandahar to Kabul in the late eighteenth century, Kabul was home to approximately 60,000 people.

Accounts from nineteenth-century travellers to Kabul describe a dense settlement of traditional dwellings, accessed by means of narrow alleyways and divided into distinct quarters, some of which were walled. The only neighbourhoods in which this dense urban fabric has survived are Asheqan wa Arefan, and the bazaars and serais seem to have been the principal landmarks in the city. The Char Chatta bazaar was the target of a punitive raid on Kabul in 1842 by British troops, who returned in 1880 to destroy Bala Hissar Citadel, which until then had been the seat of power.

Shortly after this event, Amir Abdur Rahman Khan laid out a new palace north of the Kabul River, outside the confines of the historic city, whose population had by then risen to about 500,000. Merchant families who had previously lived close to the bazaars in the city centre began at this time to move to more spacious new homes built on market gardens to the north and west. Zaregar Park, now in the centre of modern Kabul, formed part of a walled orchard in which a number of residences and pavilions used by the royal family and members of the court stood. The earliest suburbs of Kabul began to develop after the
Asheqan wa Arefan shows restored external street view within the project cluster in traditional housing stock in the war-affected areas, AKTc is working to preserve important historic homes. Fifteen important historic homes have been rehabilitated in these quarters, where more than forty families were able to return and reconstruct their war-damaged homes, after the area had been cleared of landmines. The reality on the ground, however, remained one that differed little from nineteenth-century accounts, and it was in the traditional fabric of the Old City that much of the inter- factional street fighting took place in 1993–94, which forced the population to flee their homes. It was not until 1995 that families were able to return and reconstruct their war- damaged homes, after the area had been cleared of landmines. It was in order to address the issue of responsibilities for planning and urban manage- ment that an Old City Development Commission was formed in 2004, with a view to ensuring more effective collaboration between concerned institutions. With participation from ministerial and municipal staff, academics, professionals and community represen- tatives, the Commission serves as a clearing house for information and provides a valu- able platform for consultations between professionals and residents on critical development and technical issues. Its efforts to contribute to the process of planning, however, have been less successful, due to both a lack of professional capacity and persistent institutional rivalries. As pressure on urban land and housing mounts, and uncontrolled ‘development’ encroaches on the surviving historic fabric, the future of the Old City requires action at a variety of levels: formulation of effective national policy on urban heritage; promotion of consultative processes of planning; more effective urban management; enhancement of professional and craft skills; technical support for families to repair or upgrade traditional homes; and promotion of economic activity to enable them to afford these. In all of these aspects, it is important to maintain a balance between conservation and development, by basing interventions on a sound understanding of the past, while allowing for new needs and opportunities to emerge, in response to the aspirations and resources of Afghans themselves.

In the context of a process of urban recovery that since 2002 has been largely ad hoc and uncontrolled, AKTC works with Afghan institutions and residents to prepare neighbour- bhood plans to guide reconstruction and development within specific quarters, while ensuring that such initiatives are consistent with wider planning processes for the metropol-itan area of Kabul. An important contribution to the planning process was made through the formulation in 2005 of a joint planning framework for the residential neighbour- bhood of Chindawal, which remains under intense pressure from commercial devel- opment in adjoining areas. Initial mapping of land use, infrastructure and services was followed by a series of intensive participatory planning exercises with municipal staff and representatives from Chindawal, leading to identification of development priorities over a five-year period, along with assignment of institutional responsibilities. It was in order to address the issue of responsibilities for planning and urban manage- ment that an Old City Development Commission was formed in 2004, with a view to ensuring more effective collaboration between concerned institutions. With participation from ministerial and municipal staff, academics, professionals and community represen- tatives, the Commission serves as a clearing house for information and provides a valu- able platform for consultations between professionals and residents on critical development and technical issues. Its efforts to contribute to the process of planning, however, have been less successful, due to both a lack of professional capacity and persistent institutional rivalries. As pressure on urban land and housing mounts, and uncontrolled ‘development’ encroaches on the surviving historic fabric, the future of the Old City requires action at a variety of levels: formulation of effective national policy on urban heritage; promotion of consultative processes of planning; more effective urban management; enhancement of professional and craft skills; technical support for families to repair or upgrade traditional homes; and promotion of economic activity to enable them to afford these. In all of these aspects, it is important to maintain a balance between conservation and development, by basing interventions on a sound understanding of the past, while allowing for new needs and opportunities to emerge, in response to the aspirations and resources of Afghans themselves.
Background

BRIEF HISTORY OF PROGRAMME AREA

Settled since the 14th century AD, Kabul did not develop as a major conurbation until the 16th century. By the late 19th century the city comprised a series of defensive enclaves that were home to some 60,000 people. By the late 19th century the urban population had grown to 500,000 with settlement expanding beyond the historic quarters, to the north of the Kabul River. There was significant development in District 7 during the 1960s, but few investments in infrastructure in District 1, where living conditions deteriorated until 1990, when factional fighting caused widespread damage in both areas. It was not until 1990 that families were able to re-adapt and, since 2001, slum-removal and rebuilding of property has continued, although investment in repair or restoration of infrastructure has been negligible.

Challenges

PROGRAMME RISKS

While significant physical gains have been made in conservation of historic property and upgrading of community infrastructure, and self-built residential (shanty) construction is widespread, the process is largely ad hoc and rarely conforms to the outdated Master Plans that continue to serve as an official reference for urban development.

SITE CONDITIONS

Districts 1 and 7 have some of the highest densities in the city, and access is primarily by means of narrow alleys between single traditional homes or on steep hillside lanes. This poses a challenge for both conservation and upgrading works, as did the clearance of unoccupied orchards that was necessary during the early stages of the programme.

DEMOGRAPHICS

The historic quarters in District 1 have some of the highest recorded residential densities in Kabul, at more than 300 persons per hectare. AKTC baseline surveys indicate a 15% increase in residential population in District 1 between 2003 and 2005, with a slightly smaller increase in District 7 for the same period.

HOUSEHOLD ECONOMY

Housing and household occupancy rate, and with two-thirds of families dependent on a single income (usually derived from casual labour) and often in debt.

STATUS OF HEALTH AND EDUCATION

Within the programme areas there are several major government health facilities to which residents have access if they can afford care and medicines. Recorded school attendance is nearly 80%, although significant numbers of children work in workshops, depots and bars in the commercial area of District 1.

AVAILABILITY OF DRINKING WATER AND PUBLIC SANITATION FACILITIES

The coverage of the piped water network in Districts 1 and 7 is limited, and more than a third of families rely on public sources, where contamination is common. There is no means of sewage, and nine out of ten families rely on basic sanitation facilities.

ENVIRONMENTAL CONCERNS

With extensive war damage and limited access to basic infrastructure and services for those living in informal areas, environmental conditions are generally poor.

INFRASTRUCTURE

A legacy of under-investment in drainage, water supply and electrical networks, coupled with extensive war damage, requires significant investments to achieve even the most basic levels of service coverage for the fast-growing population of Districts 1 and 7.

ACCESS TO OPEN SPACE

Deterioration of and encroachment on key open spaces is widespread. Public parks or open spaces have generally not been effectively maintained, and are often used for parking or the disposal of domestic waste. With many areas of the Old City laid waste as a result of factional fighting, property disputes are common and encroachment on public open spaces is widespread.

BUILDING CONDITIONS

The combination of lack of maintenance and war-related damage means that the bulk of the housing stock, which is largely traditional, is in a poor state of repair. Added to this, high levels of occupancy in subsidized homes in District 1 pose a challenge to efforts to improve living conditions for the occupants.

Significant Issues and Impact

MASTER PLANNING PROCESS

The historic fabric within District 1 is designated for comprehensive ‘redevelopment’ in the various Master Plans drawn up for Kabul since the 1960s, but is now widely acknowledged to merit ‘special heritage zones’ status – even though there is no urban heritage policy in frame like. Along with adjoining areas, a new plan for District 7 has been under formulation since 2005.

PLANNING ISSUES

While several proposals for the rehabilitation of the historic quarters of Kabul have been drawn up since 2003, none has been formally adopted, nor have neighbourhood plans been officially endorsed. Instead, the process of urban planning in Kabul continues to be ad hoc, and precise responsibilities for formulation and implementation remain unclear.

BASELINE STANDARDS

Since 2005, baseline surveys have been conducted in residential areas of Districts 1 and 7, covering more than 30,000 people. In addition to the monitoring of physical transformations in the area, several surveys of informal commercial activity have been undertaken in District 1 since 2004.

SOCIO-ECONOMIC INITIATIVES

In addition to some 200 craftsmen trained through apprenticeships during the course of conservation work in Districts 1 and 7, more than 50 women continue to take part in vocational training aimed at improving household livelihoods in the programme area. The generation of employment through conservation and upgrading activities, as well as development of skills within communities in Districts 1 and 7, continues to be a priority within AKTC’s programme.

CONSERVATION ASPECTS

Significant progress has been made since 2003 in the conservation of a cluster of historic buildings situated between the Timur Shah Mausoleum, on the banks of the Kabul River, and the neighbourhood of Asheqan in District 1, and in the face of the transformation of the traditional fabric and deterioration of often-fragile buildings. Other important monuments were also conserved during the rehabilitation programme in Bagh-e-Bala between 2002 and 2009.

QUALITY OF LIFE

It has been addressed through investments in urban sewing (Asheqan and Arefan, Kuche Kharabat), the reclamation of historic gardens (Bagh-e-Bala, Timur Shah Mausoleum and Bagh-e- Qal), as well as landscaping measures in degraded municipal open spaces such as Zarangan Park. Since 2003, investments in upgrading of infrastructure and support for small-scale housing repairs have benefited some 25,000 people in the programme area. Some investments have been made in improving public water sources and grants for improvements in household sanitation have been made available.

POST-IMPLEMENTATION PLANS

Building on the experience gained in the formation of an independent Trust that now operates the restored Bagh-e-Bala, the establishment of a dedicated Kabul Old City Trust (to succeed the existing Old City Commission), might ensure effective oversight of development in the historic fabric. The Trust might also have a role in coordination of the upkeep of key historic public facilities and facilitation of community-managed maintenance of infrastructure.

Partners

PUBLIC PARTNERS

Kabul Municipality, Ministries of Urban Development, Information and Culture, and Religious Affairs.

PRIVATE PARTNERS

Property owners, businessowners, traders, NGOs.

COMMUNITY PARTNERS

Community representatives.

Authoritative Framework

Vernaculars of Understanding between Kabul Municipality, the Ministry of Information and Culture and AKTN agreed in 2002, relating firstly to urban conservation programme covering the area around Timur Shah Mausoleum and historic neighbourhoods to the south and east and secondly to the reclamation of the historic landscape of Bagh-e-Bala and rehabilitation of surrounding area in District 7.

Opposite page: A conference at work in the Minae Pal Mosque in Bagh-e-Bala, Kabul, which is being restored as a joint training exercise with the Ministry of Information and Culture.
Laid out in the early sixteenth century by the Mughal emperor Babur, the site now known as Bagh-e Babur was rehabilitated between 2002 and 2008. The natural landscape was central to the life of Babur’s court, and he was buried in the garden in around 1540. Among his successors, both Jahangir and Shah Jahan commissioned works on this site, in honour of Babur.

Accounts of nineteenth-century travellers suggest that the garden subsequently fell into disrepair, and its perimeter walls were reportedly damaged in an earthquake in 1842. Repairs were carried out at the turn of the century, during the reign of Amir Abdur Rahman Khan, who constructed a complex for use by his family within the garden. Further transformations took place during the twentieth century, when European-style elements were introduced into the landscape and a swimming pool and greenhouse were built on an upper terrace. By the time fighting broke out in Kabul in 1993–94, the character of Bagh-e Babur was much altered and the site was in a poor state of repair. Situated on the front lines between factions, the garden and surrounding area was laid waste, and it was not until 1995 that the clearance of mines could begin, and residents return to their war-damaged homes.

In 2002 an agreement for the rehabilitation of the eleven-hectare garden was signed between the Aga Khan Development Network (AKDN) and the Transitional Afghan Administration. In parallel with clearance of remaining unexploded ordnance, work began in 2003 on conservation of Babur’s grave enclosure, which had been significantly altered over time. Apart from the carved headstone erected by Jahangir in 1607, few original elements survived and the marble enclosure recorded by nineteenth-century travellers had disappeared. Following archaeological excavations, levels around the grave were lowered and a wall rebuilt around the original grave platform, after removal of a modern concrete structure. Based on marble fragments found in the grave area, it was then possible to erect a replica of the marble enclosure around Babur’s grave, inside the walled area.

The war-damaged marble mosque dedicated by Shah Jahan in 1675 was re-roofed with lime mortar and cracked marble elements were replaced, while the mihrab wall was relaced with marble in 2004. Among other historic buildings subsequently restored were the nineteenth-century Garden Pavilion and...
Along the central axis, water descends through a series of channels, water chutes and ponds, before being filtered and pumped back to the main holding tank at the base of the Garden Pavilion.

Along the central axis, water descends through a series of channels, water chutes and ponds, before being filtered and pumped back to the main holding tank at the base of the Garden Pavilion.

According to the text:

- The Queen's Palace, both now in use for public functions. Excavations in the western end of the garden in 2003 revealed stone foundations of a seventeenth-century gateway, around which was constructed a Caravanserai complex, using traditional forms and techniques, which now houses an interpretation centre and other facilities.

- It is thought that Babur had massive walls built around the perimeter of his entire garden and nearly 1.5 kilometres of traditional compacted earth wall were rebuilt or repaired during 2003–04, generating significant employment among residents of the surrounding neighbourhood.

- Archaeological excavations in 2004–05 revealed sections of a marble-lined water channel and a series of water tanks along the central axis, which provided the basis for the design and reconstruction of a system that again allows water to flow the length of the centre of the garden, as it did in Babur's time.

- The landscaping aims to restore the character of the original garden, through the reintroduction of flowing water and the grading of adjoining terraces that have been replanted as distinct orchards. Stone pathways and stairs have been laid on either side of the central axis, which is flanked by an avenue of plane trees, interspersed with pomegranates, apricots, apples, cherries and peaches. Outside this zone, the terraces have been planted with mulberry, apricot, fig and almond trees, with copses of walnut along the reconstructed perimeter walls.
Bagh-e Babur, where the enhancement on the right, the swimming pool, relocated Pavilion and Shah Jahan mosque, while, Below, a view from the upper terrace of right), is encouraged.

Above, people take advantage of landscape and monuments while ensuring continued access to the public.

In parallel with the garden rehabilitation, support has been provided for improvements in living conditions for the 100,000 residents of the surrounding neighbourhoods, through community-managed upgrading of storm-water drainage, water supplies and access. In 2005, a series of vocational training courses for women and men were initiated, in order to contribute to improving household livelihoods in the district.

Upon completion of the rehabilitation work, the signature in early 2008 of a ‘Memo -to contribute to improving household livelihoods in the district.

Above, a view from the upper terrace of Bagh-e Babur reveals the restored Garden Pavilion and Shah Jahan Mosque, while, on the right, the swimming pool, relocated during the rehabilitation process, is a popular attraction in the warmer months.

Many visitors to Bagh-e Babur remark on how it represents for them a symbol of cultural recovery in Afghanistan: the challenge is to retain the unique character of the landscape and monuments while ensuring continued access to the public.

Background

BRIEF HISTORY OF PROJECT SITE

The garden was laid out in the early 17th century by the founder of the Mughal empire, Babur, who was buried on the site in 1530. His successors continued to enhance and invest in the site which, by the mid 19th century, seemed to have been taken over. Some 50 years later, several new buildings were constructed and, through to the 1940s, parts of the historic landscape were transformed in imitation of European gardens. Already in a poor state of repair, both monu -ments and landscape were badly damaged during fighting in 1993-94. Following minor repairs in the late 1990s, a comprehensive rehabilitation programme was initiated in 2000.

Challenges

SITE CONDITIONS

The presence of unexploded ordnance in Bagh-e Babur and the surrounding area posed an initial challenge, as did encroachments against the perimeter walls of the garden and the need to keep the site open to the public during the course of the rehabilitation work.

DEMOGRAPHICS

Having been largely depopulated, the residential neighbourhoods in the environs of Bagh-e Babur are now home to some 28,000 people. With an urban growth rate in Kabul of 5%, there is growing pressure on land and housing access in the city, with indications that residential densities (recorded in 2007 to be 280 persons/hectare) in District 7 continue to rise.

HOUSEHOLD ECONOMY

More than a third of households rely on wages from daily casual labour for their primary income, and less than a third of households report having a secondary income. Fewer than 5% of families report having any savings.

STATUS OF HEALTH AND EDUCATION

While there are few public health facilities in District 7, access to education is not a major specific challenge, with a number of schools operational. Despite this, only a quarter of children in the District do not attend school. Nearly half of household heads in the settlement around Bagh-e Babur and its environs are literate.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES

Only slightly over half of households have access to a piped water source (often a public standpipe), while others rely on shallow wells, many of which are contaminated. All families rely on traditional pit latrines, with more than a quarter of residents sharing these and washing facilities with others.

ENVIRONMENTAL CONCERNS

Access to water in Kabul, the isolation of groundwater resources remains a concern, and efforts are being made to recycle waste water for irrigation in Bagh-e Babur. In the context of limited collection of domestic waste by the municipality, most of this has been disposed of in the Kabul River.

INFRASTRUCTURE

While residential plots have been made in storm-water drainage on the slopes above Bagh-e Babur, the growth of illegal settlement in this area poses a continuing risk. Repairs have been made to a local water network supplied from wells in the garden, and key sections of drains upgraded, but more investments are required if access to basic infrastructure for residents of over-damaged neighbourhoods in District 7 is to improve significantly.

ACCESS TO OPEN SPACE

The destruction of Bagh-e Babur denied residents of Kabul access to what had been one of the city’s largest public open spaces.

BUILDING CONDITIONS

Families continue to need in the wall-build construction and repair of un-damaged housing, which is largely traditional, but overcrowding is common and living conditions are generally poor.

Significant issues and Impact

DATA COLLECTION/SURVEYS

Baseline surveys have been conducted in District 7 since 2003, while the profiles of visitors to Bagh-e Babur are recorded through regular interviews. Over the past four years, during and since the completion of the rehabilita -tion, the garden has been visited by some 800,000 visitors.

MASTER PLANNING PROCESS

The Kabul Metropolitan Area Plan foresees District 7 remaining a largely residential area, with a light indus -trial zone designated to the south of Bagh-e Babur. Despite the proximity of this and previous Master Plans, however, growth continues in an ad hoc manner and changes in land use remain unchecked.

PLANNING ISSUES

Drawing on the results of physical and social surveys, a number of joint neighbourhood planning examples have been initiated in District 7, involving community representatives and municipal staff.

HISTORIC BUILDINGS/MONUMENTS CONSERVED

Among the monuments conserved during the course of the project are Babur’s grave enclosure; Shah Jahan Mosque; Queen’s Palace; Garden Pavilion and the noon-gun platform; and Burj e Wazir in Guzargah Village. All the major buildings within Bagh-e Babur have been restored or reconstructed, and are in regular use.

NEW BUILDING FACILITIES

New construction includes the Castanelle house (Bagh-e Babur visitor centre and other functions) and a public swimming pool and related facilities situ -ated outside the precinct of the garden.

COMMUNITY INVOLVEMENT/PROGRAMME

Building on experience gained during community- managed upgrading between 2005 and 2010, some small-scale enterprises were established in 2002 with the objective of contributing to household incomes in the neighbourhood.

VOCA TIONAL TRAINING/CAPACITY BUILDING

In order to address the need for on-the-job training experi -ence, the Bagh-e Babur rehabilitation project served as a platform for the development of skills among Afghan craftsmen and professionals. This has been followed since 2007 by community training initiatives in District 7, where carpentry and tailoring workshops have been established with AKTC support. Survey and neighbourhood planning exercises with municipal staff and others have contributed to the development of capacity of counterpart institutions.

CONTRACTING METHODS

With the exception of two subcontract for specific tasks within Bagh-e Babur, all works have been carried out with direct labour recruited (initially from the resident community) and supervised by AKTC professional staff. Upgrading work undertaken by AKTC in District 7 between 2002 and 2006 generated some 450,000 workdays of labour in addition to that generated from the rehabilitation of the garden.

RELEVANT STANDARDS/STANDARDS ADOPTED

All conservation work has been undertaken in accor -dance with the relevant international charters and Afghan domestic law. The formulation of operational procedures drew on documented examples of similar types of site management elsewhere in the region.

EXTERNAL ASSESSMENT

A tender for the possible inclusion of Bagh-e Babur on the World Heritage List is being prepared by UNESCO consultants.

Partners

PUBLIC PARTNERS

Kabul Municipality, Ministry of Information and Culture.

PRIVATE PARTNERS

Property owners, NGOs.

COMMUNITY PARTNERS

Community representatives.

Donors

Federal Republic of Germany, Royal Norwegian Embassy, United States Embassy, Save the Children.

Authoritative Framework

Memorandum of Understanding between Kabul Municipa -lity, the Ministry of Information and Culture and AKON paved the way for the formation of the independent Bagh-e Babur Trust, which now operates the garden. Revenue derived from the growing numbers of visitors to the garden and the hire of restored facilities is used to meet the costs of the operation.
Timur Shah Mausoleum and Park

KABUL, AFGHANISTAN

One of the largest surviving Islamic monuments in central Kabul, the Mausoleum of Timur Shah marks the grave of the son of Ahmad Shah Durani, who effectively united Afghanistan in the late eighteenth century. Born in 1746, Timur Shah served as governor of Herat before facing down a military challenge to the throne from his elder brother, and then moved his capital from Qandahar north-east to Kabul. His son Zaman Shah laid him to rest in 1793 in a garden on the banks of the Kabul River, but it was not until 1817 that the actual construction of the Mausoleum began.

Timur Shah’s Mausoleum comprises an octagonal structure with two intersecting cross-axes organized on six levels. Above a crypt in which the grave stands is a square central space surrounded by an octagonal structure, with four double-height iwan were built on the main elevations. There are sixteen brick-vaulted spaces of varying size on the first floor, encircling the central space, with a flat roof above, surrounding the sixteen-sided drum under the domes. Following the central Asian tradition, the Mausoleum has an outer dome constructed on a high drum above a ribbed inner dome.

Surveys of the structure in 2002 revealed that part of the upper dome had partially collapsed and that rainwater had penetrated parts of the supporting drum. This area was therefore the focus of the initial conservation work, once the damaged roof sheeting and timber structure had been removed. Examination of the upper dome revealed that it had been built in stages, using ‘skins’ of brick masonry laid in relatively weak lime mortar. After the erection of a bamboo platform over the lower dome, and installation of two tension belts around the drum, a reinforced-concrete beam was poured around the inside, anchored into the brickwork with forty-eight stainless-steel anchors. Unstable sections of brickwork in the upper dome were removed, and repairs undertaken to match the original structure, using special bricks laid in lime mortar. The original geometry, comprising six layers of brickwork at the springing, reducing to two at the apex, was reproduced in the repairs.

As the upper roof was not part of the original scheme, a new geometry was devised for its profile, based on a harmonic curve that matched the proportions of the main structure. A total of thirty-two laminated timber rafters, measuring up...
to thirteen metres in length, were produced to support a new ‘shelf’ roof, which now spans the repaired dome. Timber boards were then screwed in a circumferential pattern over these rafters, prior to the fixing of galvanized sheeting.

While work proceeded on the main dome, repairs were carried out on the flat roofs and supporting vaults. Areas of facing brick on the elevations were also repaired, as were the soffits of the main vaults, where there was a high quality of brick masonry. In order to permit the lower sections of masonry and facilitate public access, a seven-metre-wide brick platform was built around the Mausoleum.

During the course of conservation work, negotiations took place for the relocation of the two hundred or more informal traders who had encroached on what had been the garden around the Mausoleum. A range of options was explored aimed at incorporating the traders into a new development on or adjoining the garden of the Mausoleum, but these were not approved by the Municipality, and the traders were removed in 2005. Since then, a perimeter wall has been constructed to protect the site, which has been designated a commercial area, although there are questions as to the future of the pockets of residential properties around the site which could affect its use as a public green space.

The conservation work on the Mausoleum provided opportunities for the development of skills among Afghan craftsmen and professionals. The continuing use of the building for student teaching contributes to developing their awareness of cultural issues.

### Challenges

#### Site Conditions
The limits on access to the Mausoleum posed a significant challenge, as did encroachments around the monument and across the adjoining park area.

#### Demographics
The Mausoleum now stands in one of the busiest commercial areas in central Kabul – a fact that affected the negotiations leading up to the reclamation of the Park that had been encroached upon by informal traders.

#### Environmental Concerns
The reclamation of the Park has contributed to improving the environmental situation in an important commercial neighbourhood. The state of the Kabul River remains a concern.

#### Infrastructure
The poor state of infrastructure in the area around the Mausoleum and Park represented a challenge.

#### Access to Open Space
Encroachment by informal traders on a park (now re-claimed) that had originally surrounded the Mausoleum meant that the public was denied access to an important public green space.

#### Historic Buildings/Monuments Conserved
The conservation of the largest surviving Islamic monument and across the adjoining park area.

#### Vocational Training/Capacity Building
The conservation work on the Mausoleum provided opportunities for the development of skills among Afghan craftsmen and professionals. The continuing use of the building for student teaching contributes to developing their awareness of cultural issues.

### Significant Issues and Impact

#### Data Collection/Surveys
A range of surveys were conducted within the commercial areas that surround the Mausoleum and Park.

#### Master Planning Process
Under the Kabul Master Plan, this area of District 1 has been designated a commercial area, although there are questions as to the future of the pockets of residential property to the west, and the Kabul River to the north.

#### Planning Issues
The reclamation of the Park has restored the design aesthetics of the park area.

#### Vocational Training/Capacity Building
The conservation work on the Mausoleum provided opportunities for the development of skills among Afghan craftsmen and professionals. The continuing use of the building for student teaching contributes to developing their awareness of cultural issues.

### Contracting Methods
Given their special nature, conservation work was undertaken with direct labour, supervised by AKTC professional staff.

#### Relevant Codes/Standards Adopted
All conservation work has been undertaken in accordance with the relevant international charters and Afghan domestic law. The formulation of operational procedures draws on experience gained during the course of establishing the Bagh-e Babur Trust.

#### Partners

- **Public Partners**: Kabul Municipality, Ministry of Information and Culture.
- **Private Partners**: Informal traders, shopkeepers.
- **Community Partners**: Community representatives.

### Authoritative Framework
'Memorandum of Understanding' between Kabul Municipality, the Ministry of Information and Culture and AKDN signed in 2002, covering a range of urban conservation measures in District 1, Kabul.
Asheqan wa Arefan
KABUL, AFGHANISTAN

The neighbourhood of Asheqan wa Arefan takes its name from two historic graves at which Afghans come to worship and pay their respects to this day. As with the conservation of ten other buildings of religious significance in the area, the project was vital in building confidence within the community during the initial stage of the programme of the Aga Khan Trust for Culture (AKTC) in the Old City of Kabul in 2002. Found to be in a poor state of repair, the distinctive colonnaded entrance and passage that leads to the grave of Asheq required extensive structural repairs, while the lower grave of Aref, which retains its traditional wooden enclosure, was re-roofed, as were those of the adjoining summer and winter mosques. The courtyard of the shrine, which provides an important focus for residents in the area and visitors alike, was landscaped and improvements made to the public water supply and ablution facilities located at its perimeter.

The mosque of Sedukan, which in its present form dates from the mid nineteenth century, lies to the north-east and was identified by residents as a priority in 2005. Here, it was necessary to entirely reconstruct flood-damaged sections of the lower brick masonry structure, including the traditional hypocaust that provided underfloor heating to the ground-floor prayer space that is mainly used in winter. This was followed by the restoration of a finely carved wooden colonnade that divides the upper prayer space and the timberwork on the main east elevation. Drawing on the experience gained in Sedukan, a further ten community mosques, along with a large brick-domed madrasa, were restored in the Old City between 2002 and 2010.

Work began in early 2004 on the early twentieth-century house of Muhammad Amin, one of eleven historic homes to have been restored in the area. Still inhabited by the son of its original builder, who was a carpenter, the dwelling is arranged on three levels around a courtyard, whose elevations retain the characteristic vertical-sliding timber shutters. Subsidence under sections of the structural timber-frame of the house was addressed, and then repairs were carried out to load-bearing external brick masonry. Following this, mud-brick infill between the lightweight timber framing – a widely used technique to strengthen structures in this earthquake-prone zone – was repaired on the upper levels. A more complex process of restoration was followed in the Wasay House, which is

The entrance portico to Asheqan wa Arefan Shrine, with its series of decorated plaster niches, was uncovered during the course of repairs and restored.

Opposite page: A view inside the Ulya Madrasa shows the extent of damage to the structure as a result of conflict. Work is proceeding fast on restoring the building, which will be returned to community use.
thought to date from the mid nineteenth century and required stabilization of the entire structure. Historic photographs of the dwelling enabled the project team to ascertain the original decorative scheme, on which basis war-damaged parts of the internal moulded plaster decoration – including a series of recessed niches or chinikhana used for the display of porcelain – and timber screens within the main space on the first floor were restored. Here, as in other conservation projects, the documentation of the building has enabled a better understanding of the diversity of construction and decorative techniques used in the Old City over the past 120 years.

Even with some of its finest historic buildings restored, living conditions for many residents of the Old City remain poor, with widespread overcrowding and limited access to services within homes. The rehabilitation of traditional bathhouses or hammams, many of which were no longer operational, offered a means of improving family health and hygiene. For instance, the war-damaged domed structure of the hammam in the Shuturkhana neighbourhood was entirely rebuilt, and the traditional hypocaust system of heating its semi-subterranean spaces was rehabilitated. Reopened in late 2006 and managed by private operators, the hammam is used by more than 150 residents a day on average, and generates revenue that is used for upgrading public infrastructure in the surrounding area.

As part of efforts to improve living conditions for the residents of the Old City, nearly six kilometres of underground and surface drains have been repaired or rebuilt over the past eight years, while an area of more than 22,000 square metres of pedestrian alleyways and streets have been paved within the historic fabric.

The opportunities provided for residents to develop their skills and to find employment have been as important as the physical outcome of the conservation and rehabilitation work in Asheqan wa Arefan and adjoining residential neighbourhoods in the Old City. To date, nearly 320,000 workdays of skilled and unskilled labour have been generated among communities in the Old City, while more than 150 young men have undertaken apprenticeships as carpenters, masons and plasterers, working alongside highly skilled Afghan craftsmen. As part of an initiative aimed at improving family livelihoods, more than two hundred women from the neighbourhood have attended courses in tailoring, embroidery and kilim-weaving, along with literacy classes.
Challenges

PROJECT RISKS
Growing pressure on city-centre property presents a continuing threat, as does the absence of a coherent framework for urban development for Kabul as a whole.

SITE CONDITIONS
With some of the highest densities in the city, and access primarily by means of narrow alleyways between fragile traditional homes, conservation and upgrading faced significant logistical and technical challenges.

DEMOGRAPHICS
All more than 300 persons per hectare, the historic quarters have some of the highest recorded residential densities in Kabul. Surveys indicate a 15% increase in residential population in District 1 between 2003 and 2005 alone.

HOUSEHOLD ECONOMY
With nearly half of households occupying rented property and two thirds of families dependent on a single income (usually derived from casual labour), the Old City is one of the poorest areas in Kabul.

AVAILABILITY OF DRINKING WATER AND MADIER SANITATION FACILITIES
The piped water network in District 1 suffered extensive war-related damage, and more than a third of families rely on public sources, where contamination is common. There is no mains sewage.

INFRASTRUCTURE
Decades of under-investment in drainage, water supply and electrical networks, coupled with extensive war damage, means that significant investments are required to achieve even the most basic levels of service coverage for a fast-growing population in District 1.

BUILDING CONDITIONS
Lack of maintenance, together with war-related damage, results in the bulk of the traditional housing stock being in a poor state of repair. Added to this, high levels of occupancy in subdivided homes pose a challenge to efforts to improve living conditions.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
Since 2004, regular baseline surveys have been conducted in District 1, covering more than 36,000 people.

MASTER PLANNING PROCESS
The historic fabric within District 1 is designated for comprehensive ‘redevelopment’ in the various Master Plans drawn up for Kabul since the 1960s, but is now widely acknowledged to merit ‘special heritage zone’ status – even though there is no urban heritage policy to frame this.

PLANNING ISSUES
While several proposals for the rehabilitation of the historic quarters of Kabul have been drawn up since 2003, none has been formally adopted, nor have ‘neighbourhood plans’ been officially endorsed.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
Since 2002, more than a dozen public buildings and 15 historic homes have been conserved within a cluster of historic fabric in the Old City.

COMMUNITY INVOLVEMENT/PROGRAMME
All conservation and upgrading activities have been undertaken in close collaboration with community representatives, who have also taken part in managing and securing contributions to certain projects.

VOCA TIONAL TRAINING/CAPACITY BUILDING
More than 100 craftsmen have been trained through apprenticeships during the course of the conservation work, and some 60 women continue to take part in vocational training.

CONTRACTING METHODS
With the exception of minor subcontract for Bagh-e Qazi, all works have been carried out with direct labour recruited (usually from the resident community) and supervised by AKTC professional staff.

QUALITY OF LIFE
The deterioration of open spaces has been addressed through investments in urban squares, the reclamation of historic gardens, and landscaping measures in degraded municipal parks.

Partners

PUBLIC PARTNERS

PRIVATE PARTNERS
Property owners, businessmen, traders.

COMMUNITY PARTNERS
Community representatives.

Donors


Authoritative Framework

‘Memorandum of Understanding’ between Kabul Municipality, the Ministry of Information and Culture and AKDN signed in 2002 for urban conservation programme in District 1.
From its origins as an outpost of the Achaemenid Empire, the repeated strengthening of the Citadel of Qala Ikhtyaruddin, and the setting out of a walled settlement by the Ghaznavids, the city of Herat has had a turbulent history. Situated at the crossroads of regional trade, in the midst of rich irrigated agriculture, the area has been a prize for successive invaders. The city became a centre for Islamic culture and learning during the reign of Timur, whose successors commissioned several monumental buildings, but it then fell into decline under the Mughals. Considered part of Persia during the Safavid era in the eighteenth century, it was not until 1863 that Herat was incorporated into the emerging Afghan state.

The distinctive rectilinear layout of the city of Herat was delineated by massive earth walls that protected the bazaars and residential quarters that lay within. This was the extent of the city until the middle of the twentieth century, when administrative buildings were constructed outside of the walls to the northeast. In time, wealthier families moved away from the densely-inhabited historic fabric into suburbs that spread across what had been gardens to the north. The historic quarters remained home to some 60,000 people by the time that unrest broke out in 1979, resulting in the depopulation of the western quarters, where traditional buildings soon fell into disrepair or collapsed and infrastructure was looted or damaged. It was not until 1992 that clearance of mines and unexploded ordnance began, enabling families to resettle in the war-affected historic quarters and begin the process of rebuilding.

With a rapid increase in the urban population since 2002, pressure on central residential neighbourhoods has intensified, even though the state of infrastructure and the few public facilities result in poor living conditions for most inhabitants. In many cases, returnee families who had become accustomed to modern dwellings while in exile have demolished their traditional homes and, in the absence of building controls, built incongruous concrete structures, dozens of which now rise above the skyline of the Old City. Residential areas that adjoin main roads are rapidly being commercialized, with the construction of multi-storey ‘markets’ which have both an environmental and visual impact on the historic fabric.

In order to address these transformations, the programme of the Aga Khan Trust for Culture (AKTC) in Herat has since 2005 involved processes of documentation, building conservation and upgrading, in parallel with measures to
strenthen the capacity of and coordination between key institutions. Given the pace of change, one of the first priorities was to map the historic fabric and establish systems for monitoring demolitions and new construction. A survey of more than 25,000 residential and commercial properties in the Old City, undertaken in 2005–06, yielded important information on the current urban environment, and this has now been mapped and linked to a database, which has proved to be a useful resource for identifying priorities for intervention and could also be invaluable for physical planning.

The prime focus of AKTC’s conservation work has been on two clusters of historic fabric, extending across the Bar Durrani and Abdullah Mesri quarters, where investments have been made in the conservation of key public buildings – mosques, cisterns and bazaars – as well as historic houses. A system of small-scale grants and building advice was also established, aimed at enabling some fifty owners of traditional homes to undertake basic repairs, which has resulted in improved living conditions while protecting the integrity of the historic fabric. As well as safeguarding historic property, these projects have provided a platform for the training of craftsmen, while demonstrating the potential of conservation and adaptive reuse in a context where there is a growing tendency to demolish historic property and ‘redevelop’.

At the centre of one such cluster lies the domed Chahar Suq Cistern, constructed in 1634, which, along with smaller cisterns, remained the primary source of water for inhabitants of the Old City until the 1970s. The massive structure supports a brick dome that spans nearly twenty metres over a square reservoir which, at the time of initial surveys, was filled with domestic waste. Extensive repairs were carried out on the war-damaged dome and the masonry substructure that had been weakened by encroachments from adjoining shops. An urban square has been created in front of the north entrance, after the relocation of shops that had encroached on this area. Since its conservation, the Chahar Suq Cistern has been in regular use for cultural events, including exhibitions and music recitals.

Of the other cisterns that have been conserved in the Old City, one is being used as an art gallery, another is being converted into a public library, while another serves as a study space for students of a madrasa. Among other initiatives aimed at promoting the adaptive reuse of historic buildings is the Karbasi House, now a school for traditional music and crafts, and the Yu Aw Synagogue that is now used as a kindergarten. Among the thirty other public buildings that have been conserved in the Old City are the historic

ABOVE, the largest restoration project undertaken by AKTC has been the Citadel of Qala Ikhtyaruddin, seen here in section.  

BOTTOM, a view of the Citadel of Qala Ikhtyaruddin shows work being done on a wall under scaffolding, with a tower in the background.
mosques of Hazrat Ali and Khaja Rokhband as well as several shrines, synagogues and a hammam or bathhouse. The largest single project to be undertaken in Herat by AKTC is the conservation of parts of the historic Citadeli of Qala Bityaruddin, where work began in late 2008 and is due for completion at the end of 2010. Together with conservation of historic homes, these initiatives have provided opportunities for training in traditional construction and decorative techniques. Among the most significant of these dwellings is the Attarbashi House, which dates from the early twentieth century and retains distinctive northern and southern ranges of rooms (for use in summer and winter respectively), arranged around a courtyard. Traces of decorated plasterwork and intricate lattice oroshi screens were found in a partially collapsed section of the house, which has been reconstructed, along with a small hammam for use by the family. To the south, in the Abdullah Mesri quarter, a very unusual painted mural was discovered in 2008 in the Ghulam Haider Posteen Doz House. Once the home of a wealthy family, the complex was found to be in a poor state of repair, and conservation work is under way on the structure, following documentation and stabilization of the mural. As much as building conservation, however, the upgrading of infrastructure is critical to the future of the Old City of Herat. In order to contribute to the improvement of living conditions, nearly five kilometres of underground and surface drains have been repaired or rebuilt, and more than 6500 square metres of pedestrian alleys and streets paved to facilitate access through the historic fabric. Together with the building conservation work, this has generated more than 240,000 workdays of skilled and unskilled labour, largely drawn from residents of the Old City, since 2005. These investments have directly benefited at least half of the population of the Old City, prompting community-implemented improvements in some quarters that were not covered under AKTC’s urban conservation programme. Aside from the physical challenges facing the historic fabric and the need for additional investment to render the Old City more habitable, the issue of management of the urban environment is now more critical than ever. Despite assurances that new development will be rigorously controlled, and appropriate plans drawn up to ensure safeguarding of the unique fabric of the Old City, city officials seem unable or unwilling to act to halt demolitions or inappropriate ‘redevelopment’. Given that many such officials lack the professional training or experience to effectively manage urban growth in this sensitive context, AKTC staff provide technical assistance to a Commission for the Safeguarding and Development of the Old City of Herat, comprising representatives from key institutions and professional bodies. While it has made limited progress on the reform of systems of building permits and the monitoring of new construction or demolitions, the Commission
Phaseing 2005 – ongoing

Pilot conservation and upgrading in a Bar Durani quarter property survey of Herat Old City; documentation of Guzargah shrine complex; initiation of conservation on Qala Ikhtyaruddin; Cistern and Guzargah complex; Completion of Chahar Suq.

Upgrading and conservation in Adbul Rehman and the Namakdan quarters in Herat Old City; conservation ofவணாகாக் கோவில்; Shrina, Namakdan Pavilion in Guzargah.

Challenges

PROGRAMME RISKS

While significant progress has been made in conservation of historic property and upgrading of community infrastructure, the lack of coordination with private development continues to affect the integrity of the surviving historic fabric of the Old City.

SITE CONDITIONS

Residential areas in the Old City are densely populated, with homes often overcrowded, and access is primarily by means of narrow alleyways. This poses a challenge during the course of both conservation and upgrading works, as did the presence of unplanned ordnances.

DEMOGRAPHICS

With an average of 285 persons per hectare, the residential quarters in the Old City have some of the highest densities in Herat, and there are indications that this is increasing as the value of property rates, and families are forced to move into overcrowded homes in what remains the most affordable part of the city.

HOUSEHOLD ECONOMY

A significant proportion of residents in the Old City inhabit rental property, and rely on casual labour for their livelihoods.

STATUS OF HEALTH AND EDUCATION

There are very few educational or health facilities within the Old City, and residents have to travel elsewhere to have access to these services.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES

More than a third of families in the Old City do not have access to a supply of safe piped water. While there is a system of underground drains, which has been upgraded in some quarters, most liquid waste flows into the 80 open cesspools that lie within the historic fabric.

ENVIRONMENTAL CONCERNS

Excessive waste damage and limited access to basic infrastructure and services for residents of the Old City, environmental conditions are generally poor.

INFRASTRUCTURE

A legacy of under-investment in drainage, water supply and electrical networks, coupled with extensive waste damage, requires significant investments to achieve even the most basic levels of service coverage for the resident population. Added to this, there are significant technical challenges in laying drains through the dense historic fabric of the Old City.

ACCESS TO OPEN SPACE

Deterioration of and encroachment on open spaces in the Old City is widespread.

BUILDING CONDITIONS

The combination of lack of maintenance and waste-related damage means that the bulk of the traditional housing stock is in a poor state of repair.

Significant Issues and Impact

MASTER PLANNING PROCESS

The historic fabric of the Old City has been ignored in the various Master Plans drawn up for Herat since the 1970s, and although there is widespread support for it to be given some form of ‘typical heritage zone’ status, there is no legal framework in which the right occurs.

PLANNING ISSUES

A range of planning proposals for key clusters within the Old City has been drawn up, but none has been formally endorsed. Instead, development takes place in a largely ad hoc manner.

BASELINE STANDARDS

In 2005–06 a property survey was conducted in the Old City, covering more than 25,000 premises. Subsequent monitoring within the historic fabric has enabled physical transformations that continue to be tracked.

SOCIO-ECONOMIC INITIATIVES

Some 150 craftsmen have been trained through apprenticeships during the course of conservation works in Herat. The generation of employment through AKTC’s conservation and upgrading activities since nearly five years has, therefore, made an important contribution to the urban economy.

CONSERVATION ASPECTS

With many historic buildings in Herat and the environments requiring conservation, efforts have been focused since 2002 on clusters of historic property within the Old City, as well as the shrine complex in Guzargah, which data from the 18th and 19th centuries. All works have been undertaken in partnership with Afghan counterpart staff, in order to ensure that both crafts and professional skills are developed during the course of the works.

QUALITY OF LIFE

Efforts are being made to transform the area around Qala Ikhtyaruddin into a public green space.

POST-IMPLEMENTATION PLANS

An Old City Commission has been established during the course of the conservation programme and is officially mandated to monitor development in the Old City and to oversee future planning initiatives.

Partners

PUBLIC PARTNERS

Herat Municipality, Office of the Governor, Departments of Urban Development, Information and Culture, and Religious Affairs.

PRIVATE PARTNERS

Herat Old City Commission, property owners, businesses, traders, NGOs, National Professional Shura.

COMMUNITY PARTNERS

Community representatives.

Donors

Federal Republic of Germany, United States Embassy, Royal Norwegian Embassy, Prince Claus Fund.

Authoritative Framework

Memorandum of Understanding between the department of Historic Monuments of the Ministry of Information and Culture and AKTC in 2005, covering the urban conservation works in the Old City. Separate agreement covering the conservation work on Qala Ikhtyaruddin agreed with the Ministry of Information and Culture in late 2005.
The shrine complex of Khwaja Abdullah Ansari in Guzargah, north-east of Herat, is both an important example of Timurid architecture and a popular place of pilgrimage. Having spent a life of contemplation and writing in and around the village, Ansari was buried here in 1089. Records suggest that a madrasa was established in Guzargah in the late twelfth century, and this was probably the complex reconstructed by Shah Rukh in 1424 and which now makes up the shrine complex.

The large courtyard of the hazira of Abdullah Ansari, with its arched iwans on the main axes and rows of study rooms between, takes a form that is more commonly associated with a madrasa. Both the main entrance arch and the high iwan that rises above Ansari’s grave retain sections of fine glazed tile epigraphy and areas of geometric decoration. Some of the finest extant Timurid decoration in the region has been documented here as part of the limited intervention of the Aga Khan Trust for Culture (AKTC) in the complex.

Beginning in 2005, repairs were carried out to all roofs of the Shrine, which had been poorly maintained risking damage to the fragile internal plaster decoration in parts of the complex. During the course of this work, evidence emerged of alterations that had been made over time to the eastern iwan, which rises more than eighteen metres above the surrounding village. The removal of concrete that dated from the 1970s permitted a detailed structural analysis, on which basis a series of brick buttresses was constructed on the eastern side. At the same time, three vaulted rooms in the north-east corner of the complex, which were found to be unstable, were re-constructed on the same footprint as the original, using traditional materials. One of these rooms houses an intricately decorated basalt grave known as the Haft Qalam. It is foreseen that these spaces will in time be used to display important objects from the Shrine.

In order to facilitate the visits of pilgrims, original sections of marble paving were relaid at the main entrance. Incongruous aluminium doors were replaced with traditional wood, along with other doors leading on to the courtyard. To establish improved records, the historic gravestones that now fill this courtyard were methodically documented, prior to repairs and consolidation of the most vulnerable graves. Brick paving was also laid in key areas, to enable access and.
Challenges

PROJECT RISKS
The principal risk in conserving the Shrine complex was securing acceptance from the resident community and the many pilgrims who visit the site.

ENVIRONMENTAL CONCERNS
The principal environmental challenge lay in the protection of the historic garden and graveyard, which risked being encroached upon.

BUILDING CONDITIONS
Poor maintenance of the Shrine complex resulted in the various buildings being in a highly vulnerable condition at the start of the works.

Significant Issues and Impact

HISTORIC BUILDINGS/MONUMENTS CONSERVED
All significant historic buildings within the Shrine complex have been conserved, although there remains significant work to be done on the tile and plaster decoration.

COMMUNITY INVOLVEMENT/PROGRAMMES
All conservation work was undertaken in close collaboration with the Mir of Guzargar and other community representatives, who played a critical role in facilitating the works.

VOCATIONAL TRAINING/CAPACITY BUILDING
Dozens of craftsmen were trained during the course of the conservation works.

CONTRACTING METHODS
With the exception of landscaping, all works were carried out with direct labour supervised by AKTC professional staff.

RELEVANT CODES/STANDARDS ADOPTED
All conservation work in Guzargar has been undertaken strictly in accordance with the relevant international charters and Afghan domestic law.

Partners

PUBLIC PARTNERS
Ministry of Information and Culture.

PRIVATE PARTNERS
NGOs.

COMMUNITY PARTNERS
Mir of Guzargar, community elders.

Donors

Federal Republic of Germany.

Authoritative Framework

Memorandum of Understanding between the department of Historic Monuments of the Ministry of Information and Culture and AKTC signed in 2005, covering amongst other things the conservation of the Shrine complex of Abdullah Ansari in Guzargar.
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 Burushaski. Other languages or dialects spoken in Gilgit-Baltistan are Wakh, Khovar, Turk, Kashmiri and Gujar. Urdu is understood and spoken in almost all areas, while English is gaining ground, particularly with the young.

**Gilgit-Baltistan Area Programme**

**Programme Scope/Objectives**

The goal of the programme is sustainable development through cultural 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 instill effective and participatory community stewardship of heritage and environmental resources, and to create income and enterprise opportunities 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, revenue in kind and cash, and the creation of new employment and income opportunities.
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 witnessed.

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. Mountainiers 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
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.

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.
Background

BRIEF HISTORY OF PROGRAMME AREA

Hunza, nesting in the shadow of the Karakorams, first gained notoriety and fame from its location, the preassumptions of which was created by the two expanding rival empires during the 18th century in Asia: Russia under the czar in Central Turkestan advancing towards the Indian borders, and the British Indian empire expanding to the north. In 1842 Sindh 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 Sindhi 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 1856 this area was taken away from the maharaja under a treaty by the British who was 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 January 1997 KHDP was initiated as an action-research programme, when the community in Hunza, the Swiss Development Cooperation Agency (SDC) and AKC-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 1995 and the formation of a regional body – KADO as a local institutional body representing Hunza Valley – has been achieved by apprenticing young trainees with masters and the products of excellence are now on sale in the market.

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 the latter were used on local materials such as stone, poplar wood and brick which were suitable for the extreme climatic conditions, these so-called modern constructions started to encroach into the area. Arranging this trend and steering design and construction to respect local materials and traditional construction techniques is an area of focus for AHTC in Hunza and Baltistan.

Significant Issues and Impact

MASTEr PlANNING PlROCESS

In Hunza, the process was based on participatory inputs. Workshops and detailed follow-ups by experts with the community and with government planning departments were held and options explored, resulting, in the case of KKH, in the Karkoram Highways Development Plan (KHDP). 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’s (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.

Partners

COMMUNITY PARTNERS


Authoritative Framework

Framework – known as “Bats of Partnership” (TOP) – were negotiated for each of the project interventions with the beneficiary community. These TOPs delineated the roles with AKC-P mainly having technical responsibility while the community would be responsible for the social aspects and for subsequent use of the project.
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.
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.
The Kharakory 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, shawls (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**

**PROJECT SITE**

Balti Village is one of the three oldest known settlements in Hunza, the others being Ganish and All. 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, rearing 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 1921 after having defended the joint Hunza-Nagar forces at Naltar, 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 being cramped in unhygienic 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 SANITATION FACILITIES**

Traditionally the sources of water are the irrigation channels that lap the Baltit. 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 that direct washing of clothes, bathing or throwing of rubbish would occur, as well as runoff from fields into these channels. However, with changes leading to the establishment of the first piped water lines and the establishment of the Mirdom, the reh streamed approach, result in the water channels to no longer be cleaning. Also the traditional system of sanitation was being abandoned for modern systems by setting up crude cesspits.

**ENVIRONMENTAL CONCERNS**

A roof was planned to go through the historic settlement that would have affected most of the households and hence community had to live with the total abandonment of the settlement.

**BUILDING CONDITIONS**

Baltit is in a state of advanced decay, with the roof re-seating a patchwork of tiles. Rampan was added to the back of the buildings and even down into the lower stories, most of the brickwork had indeed, while tenders were reduced to plots or small collections on the floor. Many walls were shifting and others had slumped because they did not have foundations or are on the loose morainic soil.

**Building Features**

The Aga Khan Planning and Building Services (AKP&BS) Aga Khan Planning and Building Services (AKP&BS) have been involved in the project since 1992, when it was realized that the traditional settlements were being abandoned, with the consequent implications of building new houses in the terraced land, resulting in the charm of the bowl of Baltit being stymied with unappealing new constructions in concrete and the cost of the farming terraces and orchards. Navigation by asphalt road constructions were being planned that would destroy old settlements and also Karimabad open to all sorts of commercial exploitation, taking away its charm and balance. The multi-layered 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 would have affected most of the households and hence community had to live with the total abandonment of the settlement.

**CONTRACTING METHODS**

The project involved the use of local contractors from 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 in order for all the residents of Karimabad as well as Ganish, covering 1000 households. Pipewater 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 forth 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**


**Authoritative Framework**

Agreement signed in 1991 with the Baltit Heritage Trust for the restoration of the Fort and it return to the Baltit Heritage Trust for its future upkeep 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

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 purist approach of removing structural defects. An additional goal was to fully tie the surrounding Altit Village to the Fort through social and economic bonds.
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 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 vernacular 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 inter-vention 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 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.

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 craftspeople 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 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) was established 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-sustained, even generating revenue for future improvements. Monthly expenditures for maintenance come to PKR 20,000, providing PKR 5,000 in monthly savings. In addition, the TMS is already charging visitor entry fees to the rehabilitated Altit Village, thus generating additional funds.

Providing tangible benefits to the local communities who were given training during the course of the project, 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.
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, Chimpah 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.

Project Scope / Objectives

The objectives for the Shigar Fort project were the reclamation and reuse of this monumental heritage monument in Shigar, leading to a revival of pride, identity and skills in 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.
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 ante-rooms 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, 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.

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

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

PAKISTAN GILGIT-BALTISTAN AREA PROGRAMME

SHIGAR FORT

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

- Restoration of traditional houses
- Restoration of religious buildings and tombs
- Improvement of streets
- Upgrading of commercial buildings
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 “Hunza” tribe of Garh, Hunza. The present raja, Mohammad Ali Shah Bade, believes that the Amacha originally belonged to China. Buddhist ruins in the vicinity of Shigar were thought to have been abandoned after the early 8th century and continued to be drawn as the working staff of Shigar Fort. Fort, testimony to the lengthy human occupation of the site.

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 Amphora Masque in Shigar, selected in consultation with the community, was carried out in 1998. The result of this conservation impressed the community so much that they set the way for the restoration of Shigar Fort.

DEMOCRATICS

The two union councils of the town of Shigar, Marapi and Murkunja, collectively make up a total population of around 12,000 people in 1500 households. 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 local provide catering services. Shigar Fort Residency 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 modifications. As found in 1998, it was in a partially ruined condition, with some of the former rooms serving as cow-stables 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 ARCS-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 conservation 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 evolvement.

HISTORIC BUILDINGS/INMATERIALS 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 to celebrate a return from the shrine of a saint in Shigar.

NEW BUILDING FACILITIES

The Abruzzi Higher Secondary School Building has already undergone many transformations and adaptations. As found in 1998, it was in a partially ruined condition, with some of the former rooms serving as cow-stables and a new ramp access leading directly into the former reception room.

Lessons Learned

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

Partners

COMMUNITY PARTNERS

The community of Shigar.

Donors


Authoritative Framework

Raja Azam Khan and his father Raja Mohammad Ali Shah Bada took over the Fort building and the land it sits on in 1996, while the Old House and lands around it were purchased. The Garden House was taken on a six-year lease with access to the Amach garden in exchange for building a house for the Tea. The Tourism Promotion Services has been managing Shigar Fort Residency 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 Bani as 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.

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 setting. The aim of the project is to develop a tourism circuit based on cultural heritage and to generate economic and employment opportunities for locals.
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).

In 2005 Khaplu Palace itself was gifted by the rajahs 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 whenever 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.
Background

BRIEF HISTORY OF PROJECT SITE

Until the creation of Pakistan in 1947, the territory of Baltistan was under the suzerainty of the Dogra monarchs 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 Dogras of Kashmir (1849), when the Dogras annexed the territory under Zoroaster 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, many 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 kilometers 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.

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 lime. 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 rainswater and irrigation water ingress had resulted in serious decay of the building fabric and its timber elements. More modest buildings are built generally in masoned rubble masonry or mud-block construction reinforced with horizontal timber lye and vertical poplar kegs (columns embedded in masonry), or Awaraghe (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 blocs, reinforced concrete and corrugated steel sheet – all without any insulation – leading to numerous health and social issues.

Significant Issues and Impact

PLANNING ISSUES

As a member of 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, even Khaplu is the headquarters of the Ghizer 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 more similar to its original residential use. Mechanical services are being installed with sensitive consideration for the building form and built fabric. Of the 21 buildings, the oldest ancillary buildings, and demolition of the latest 1960s and their residential outhouse from about the 1960s and their older ancillary buildings, and demolition of the latest

PHYSICAL CONDITIONS

A total of 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


Authoritative Framework

The main Palace building and the Darbar Kharang has been designated as a new functional building, but in the traditional material of natural stone and earthen mortars, lined with terrones for seismic stabil- ity. The two service blocks are located on land well removed from the main complex, and comprise the laundry building, which also includes a small caretakers’ staff, and the standby power building, which will house the standby generators, the transformer sub- station as well as living accommodation for six staff.

COMMUNITY INVOLVEMENT/PROGRAMME

Through the Khaplu TMDS, the community is benefiting from employment opportunities 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 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.

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

Hunza Villages Rehabilitation

Project Scope Objectives
The aims of the 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 architectural and 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 nurturing traditional skills in crafts, while diversifying economies in non-traditional areas for women.
The rehabilitation programme was extended to the historic village of Garnish initially and then spread to the villages of Chumerkhun, Sherez and Altit. To sustain improvement in the quality of life brought about by these projects, Town Management Systems (TMSs) were instituted following the Karimabad model in Garnish 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 Garnish community, the rehabilitation programme was extended to Garnish, 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 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 shrines (watchtowers), the historic village water reservoir and a number of historic houses. Sanitation and water supply schemes were also installed. A converted 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.

The centuries-old harmony of human habitation and natural environment is being asserted 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 beautiful yet harsh terrain, in harmony with the natural environment, led to the development of a mountain culture, among the fluctuates which is visible in the many forts and fortified villages, the terrace farming lands, the irrigation channels that were constructed, the intricate water supply systems, that were implemented, the traditional knowledge that were adopted, the folklore and language – Buriushaski – in arts and music; and the arts and crafts. The combination of the cultural heritage and the physical environment provides an archetype that is worthy of recognition as a world heritage site.

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 Arif Khan House, the Altit TMS building, the Altit gallery of new buildings have been constructed. These are the Amin Khan House, the Altit TMS building, the Altit gallery and 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 community. Already one sees greater use of locally available poplar wood, thus cutting down on deforestation, in traditional building and housing. These villages, because of their many settlements have a population of 11,000 with 1400 households. 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 and financial oversight. On completion the communities would take ownership of all the enterprises established. The Women Social Enterprise (WSE) programme has so far won four UNESCO Asia-Pacific Awards for Cultural Heritage in central Hunza. The pilot housing improvement programme in Garnish and Altit, has enabled 12 young women with school education, previously trained in technical documentation of heritage assets, now to work as 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.

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 fluctuates which is visible in the many forts and fortified villages, the terrace farming lands, the irrigation channels that were constructed, the intricate water supply systems, that were implemented, the traditional knowledge that were adopted, the folklore and language – Buriushaski – in arts and music; and the arts and crafts. The combination of the cultural heritage and the physical environment provides an archetype that is worthy of recognition as a world heritage site.

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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.
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
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 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.
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 17th century AD, Lahore became a seat of Muslim Sufi learning under Abū Līlār Mīrāq. Not soon after, in 1526, Lahore was conquered by the Qaznavids under Sultan Mahmud. The container under the Delhi Sultanate (1187-1206) was turbulent, and physical evidence of the city’s eminence from the period is scarce. Under the Moghuls (1526-1739), 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 (1577). From 1765 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 largely 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 important 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 unregulated demolition of the historic building stock and its replacement by commercial structures.

Site Conditions

The historic city is an artificial mound, 2.6 km² in area, with a radius below 1.5 km. The city is densely populated, with nearly 23,000 parcels of land, and gross residential density is in the range of 550 persons per hectare. 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 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 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 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 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 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 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 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 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 densely packed with nearly 23,000 parcels of land, and gross residential density is in the range of 550 persons per hectare.

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 water carriers, vendors, daily wage earners and/or owners of small shops.

Status of Health and Education

Common health issues in the Walled City include diabetes and blood pressure, asthma, hepatitis B and typhoid. AKTC-P has introduced mobile health awareness sessions to address frequent concerns among women. Most public-sector schools are overcrowded, and lack playing areas and adequate exhibition 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 and ensure faecal microbiological quality is a problem. During the summer, significant parts of the Walled City suffer from water scarcity.

Environmental Concerns

Preserving environmental conditions negatively impact the quality of life of residents. Improvement in the service 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 pressurized grid augmented by some 16 tube wells, called 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 man-thoroughfares, and mean sewers in some bazaars. It is a mixed sewage and storm-water system. The electrical and telecommunications distribution systems need much reorganisation and updating to acceptable standards. A city-wide programme of infrastructure development and guidelines for implementation have been prepared. This is to improve the water supply system, introduce a new drainage system separating storm-water from sewage, and rationalize the electrical and telecommunication distribution systems, all at standards well above the prevailing ones.

Access to Open Space

The Circular Garden, established in 1912, has been heavily owned by public and private sector unauthorised buildings, and by strip-commerce along Circular Road. Urban squares have also been owned by unauthorised commerce.

Building Conditions

Most buildings are founded on cultural debris and have no structural failure evident. To this end, 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 ESRI ArcView technology could only be carried out a night, owing to traffic congestion, traffic volume of 20,000 vehicles/night, recording some 172 cc databases, 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 adjudication 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 Buildings/Facilities

A new urban UHC building has been designed and site access is being negotiated.

Community Involvement/Programme

Community-based organizations have been formed based on sectional claims of the urban morphology. One of the communities is currently directly involved in the conservation and upgrading of the neighbourhood.

Vocational Training/Capacity Building Skills enhancement training programmes related to building trades and real estate documentation have been instilled in the project area. The programme provides on-the-job training for local youth – both male and females.

Contracting Methods

For large projects, national competitive bidding procedures; material and labour contracts for intermediate and small projects; labour contracts with material purchased by AKTC; employed labour and non-qualified labour with material purchased by AKTC.

New Technologies Introduced

GIS, ESRIA/CAD real-time surveying and documenting techniques, with photo-orthocynching software, SSDS analysis.

Relevant Codes/Standards Adopted

Adopted framework 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 administrative 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 minor neighbourhoods.

Authoritative Framework

Public-Private Partnership ‘Framework Agreement’ was signed between AKTC and the Government of the Punjab on 3 July 2007. ‘Memorandum of Understanding’ between the World Bank and AKTC was signed on 8 March 2008.
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

### Project Scope / Objectives

This project aims to rehabilitate the main bazaar thoroughfares as well as essential urban fabric in an integrated manner. This entails urban design work, urban open spaces, expanding and historic building, stock rehabilitation. Urban open spaces are to be rehabilitated and key landmark monuments located in the main thoroughfare are to be realized as individual projects. The ‘Pilot Urban Rehabilitation and Infrastructure Improvement Project’ involves testing of proposed designs on which basis the larger pilot project will be implemented.
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.

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.

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.

A courtyard detail of an old haveli in a state of decay.
Above, a bird's-eye view of Sunehri Masjid (Golden Mosque).

Below, elevations of Guzargah neighbourhood rehabilitation projects, in Chehal Bibiyan mohalla (right).

Before and after intervention.

PAKISTAN LAHORE AREA PROGRAMME SHAH GUZARGAH

**Background**

**Brief History of Project Site**
The project site comprises three 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**
Neglected and inadequate 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 failures, traceable to foundation failures and bad plumbing which results in water seepage into the building fabric.

**Demographics**
Approximately 6000 people live in the Shahi Guzargah project area. The neighbourhood demonstration project serves close to 350 people residing in the residential lanes, Gall Surjan Singh and Koocha Charakh Ganj. 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 salesman, vendors, daily wage earners, piece-rate workers (especially in the case of women), and small shops owned by residents. Socio-economic profile of residents in Gall Surjan Singh and Koocha Charakh Ganj are not much different from the rest of the Walled City.

**Status of Health and Education**
Common illnesses comprise diabetes and blood pressure, asthma, hepatica 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, 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.

**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 located 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 part of the GIS system. A topographical map of the area has been compiled. Buildings displaying architectural merit are in the process of being documented. A 20% sample of households has been surveyed for establishing income and poverty levels and prevailing quality of the 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 in 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 construction are not in place. Traffic reorganization in need of planning, Heritage conservation, urban design and rehabilitation of neighbourhoods and open spaces require an integrated approach.

**Historic Buildings/Monuments Considered**
A number of monuments are part of the project area. Monuments being targeted for conservation include Wazir Khan Mosque, the Shri MK Gokuldevi Mandir and the Shri Pir Islam Mandir. A single historic house (just over 100 years old) in Koocha Charakh Ganj – the historic house – was conserved in 2008. Rehabilitation of the 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 tele-well. Seven 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 valued in the topomorphological 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.
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 singularity 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 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
Above, Wazir Khan Mosque is located in a heavily built-up environment. Below, the east-west section of the Mosque.

book benders – 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 overhanging 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.
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 Shah Jahan renamed Lahore, Wazir Khan appointed him governor of Lahore with the title Wazir Khan. A 14th-century Sufi convent associated with Syed Isahaq Gaurani 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 crack developed as a result of successive earthquakes. The conservation and restoration of the surface decorations in the Mosque, including its tile restorations, 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 within the new structures. The historical openness of the open space and the monument.

Infrastructures

The project aims to improve the existing infrastructure in the Mosque complex. Water supply, rain and waste disposal, gas supply and electricity 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 in all likelihood the crack developed as a result of successive earthquakes. The conservation and restoration of the surface decorations in the Mosque, including its tile restorations, 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.

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 street 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 raw 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.

Significant Issues and Impact

Data Collection/Surveys

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

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

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 neighborhood of the project and offers lessons in conservation planning and methodology and capacity building.

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 neighborhood 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.

Participant City

Lahore

Opposite page: The interior of the main prayer chamber, looking north, and, on the left, a detail of a courtyard facade.
DELHI
INDIA
Located in the heart of New Delhi, in the setting of Humayun’s Tomb World Heritage Site and dotted with over a hundred monuments, the project area may be the densest ensemble of medieval Islamic buildings in India. More importantly, the densely populated Hazrat Nizamuddin Basti is the repository of seven hundred years’ living culture recognized for its pluralistic traditions.

On the occasion of the fiftieth anniversary of India’s independence, as a gift of His Highness the Aga Khan, the Aga Khan Trust for Culture (AKTC) implemented the Humayun’s Tomb Garden restoration. The successfully completed project led to a significant increase in visitor numbers and eventually culminated in a new public-private partnership project for a comprehensive urban renewal initiative in the area. With distinct conservation, socio-economic and environmental development objectives, this project aims to unify the three presently segregated areas of Humayun’s Tomb, Nizamuddin Basti and Sunder Nursery into an urban conservation zone of considerable breadth and cultural significance while improving the quality of life for resident populations.

Heritage Conservation: Humayun’s Tomb Complex
Conservation works aimed at enhancing the historic character and ensuring long-term preservation are now being undertaken on the mausoleum and associated gateways, pavilions and enclosure walls. Similarly, the project through landscaping and conservation, will focus on enhancing the setting of the World Heritage Site and possibly lead to the expansion of the site’s boundaries.

Exhaustive archival research, site surveys, documentation using three-dimensional, state-of-the-art laser scanning technology, condition assessment and structural analysis preceded the preparation of detailed conservation proposals in keeping with established Indian and international conservation standards and guidelines. Conservation works then commenced in April 2008, following discussion and peer review. Significant completed works include the careful removal of over one million kilos of twentieth-century concrete from the roof and repairs to the dome, with its marble cladding repointed and cleaned and gold-plated finial repaired. The original Delhi quartzite paving of the lower plinth has now been restored, requiring the removal of concrete and manually lifting and resetting 12,000 square metres of stone blocks, most weighing over a thousand kilos.
Phasing 1997 → 2012

- Memorandum of Understanding between AKTC and Archaeological Survey of India for project to undertake the Garden restoration
- Aga Khan Award for Architecture ceremony held at Humayun’s Tomb; Prime Minister of India presents further sites for private partnership in the cultural sector
- Completion of socio-economic surveys; conservation proposals, master plan for Sundar Nursery development and project feasibility conference
- Six hectares with significant 16th-century buildings such as Azimganj Serai, Central Public Works Department and Municipal Corporation of Delhi marking the commencement of the Urban Renewal project
- Significant expansion of project activities in historic ‘urban’ sector through awareness of traditional music, architecture, health, childhood development, sanitation and urban improvement components
- Completion of conservation works at Humayun’s Tomb; completion of landscape works at Sundar Nursery
- Conservation and geotechnical assessments.
- Standing at the eastern edge of the Basti, the unique Mughal tomb known as Chaunsath Khamba, together with the tomb enclosure of Mirza Ghalib – South Asia’s most renowned poet – forms the largest open spaces within the Basti. Both enclosures have been landscaped so as to enhance its historic character and restore dignity while creating performance spaces for musical traditions associated with the area for over seven centuries.

**Socio-economic initiatives**

- Aimed at improving the quality of life for the densely populated Hazrat Nizamuddin Basti, the project takes a synergistic, community-centric and collaborative approach to develop and strengthen essential urban services through interventions in core areas of education, health, sanitation and upgrading open spaces.

**Education**

- The existing education infrastructure has already been significantly enhanced and improved. Interventions in key segments of education, such as the training of teachers and support for students, were extended to include a major refurbishment of a municipal primary school building. This was in a dilapidated state and lacked functional toilets or drinking water. Aimed at creating a student-friendly, secure school environment beneficial to the growth and development of pupils, Building as a Learning Aid’ elements were incorporated and provisions made for drinking water, separate toilets for boys and girls, wider staircases and safety features, like additional exits, unbreakable window panes and new electrical systems. The renovated school and education initiatives have resulted in a 150 per cent increase in the enrolment of students in just over a year.

**Health**

- Interventions at the municipal polyclinic have significantly improved the quality of available clinical and preventive health care. A newly established pathology lab is capable of conducting thirty-four types of tests and more than 3500 people have used the facility to carry out over 11,000 tests in just over a year. The initiative has included placing additional doctors for consultations in Gynaecology, ENT and Eye Care.

**Vocational Training**

- In response to community needs, vocational training, career development and employability programmes have been developed and are being implemented. These are aimed at building skills that translate into employment for youth, and livelihood opportunities and financial independence for women.

**Urban improvements**

- A year after socio-economic development programmes commenced in the Basti and interaction with residents had increased, a physical mapping was undertaken in 2009 with the intention to plan sensitive urban improvements including landscaping of open spaces and street improvement; plans for both are now being implemented.

The project has also served as a platform for training programmes for conservation professionals and craftsmen. Over a hundred officers from across India have attended training modules focused on the preparation and use of lime mortar and high-definition survey techniques.

**Sunder Nursery Monuments**

- Located immediately north of Humayun’s Tomb, the twenty-seven-acre Sunder Nursery stands on the historic Grand Trunk Road linking Lahor to Kolkata and hosting significant sixteenth-century monuments that exist there thanks to nearby Hazrat Nizamuddin Auliya’s daragah.
- Conservation works are ongoing on the unique sixteenth-century Sundarwala Mahal and have been completed on the eighteenth-century Mughal-era garden pavilion, which was on the verge of collapse and threatened with demolition for a roadway project. Its conservation required painstaking work by master craftsmen using traditional materials, skills and techniques.
- The densely populated Basti is named after one of India’s most venerated fourteenth-century Sufi saints, Sheikh Nizamuddin Auliya. The conservation and rehabilitation of monuments and civic open spaces aim to restore its intrinsic cultural, historical and spiritual significance and enhance visitor experience for pilgrims and tourists.
- Conservation works in the Basti commenced following the partial collapse, in July 2008, of the fourteenth-century Basti (step-well), considered holy and visited annually by millions of pilgrims. This is the only step-well in Delhi still fed by underground springs, albeit heavily polluted by sewerage and waste. Its collapse in July 2008 endangered the lives of both residents and pilgrims and necessitated urgent remedial measures. Prior to commencing conservation works on the Basti, studies were carried out using state-of-the-art technology including a ground penetrating radar survey, high-definition 3D laser scans, and geotechnical assessments.

In keeping with the requests of the Pirzadas, or keepers of the shrine, the Basti was also de-silted to its original levels and centuries of accumulations were manually removed requiring over 8000 man-days of work. The collapsed portions were rebuilt as per the original construction techniques and the entire wall surface was chiselled to remove a thick layer of epoxy. Prior to conservation works, a dwelling unit over the collapsed portion needed to be dismantled and an alternate residence built for the family.

- Standing at the eastern edge of the Basti, the unique Mughal tomb known as Chaunsath Khamba, together with the tomb enclosure of Mirza Ghalib – South Asia’s most renowned poet – forms the largest open spaces within the Basti. Both enclosures have been landscaped so as to enhance its historic character and restore dignity while creating performance spaces for musical traditions associated with the area for over seven centuries.

**Top, classes are held in new classrooms at the Municipal Corporation of Delhi School**

**Middle, people listen to a young Basti resident trained as a heritage volunteer at Chaunsath Khamba.**

**Bottom, a child is being examined at the Municipal Corporation of Delhi Polyclinic.**
Background

BRIEF HISTORY OF PROGRAMME AREA

The Master Plan for Delhi (MPD) 2000 recognized the 28-hectare Sunder Nursery, which boasts one of the densest ensembles of medieval Islamic buildings in India, as part of the wider Humayun’s Tomb complex. Sunder Nursery has now been designated in the MPD as a District Park. The programme stands in Zone D of the Delhi Master Plan and is declared a ‘Local Area Plan’ for the Nizamuddin Basti area. It is envisaged that the park will be interconnected by nature trails and heritage walks that link not just the three sites but also their history and culture. The resulting landscape will thus offer a unique experience for visitors while enhancing the cultural significance of the greater Nizamuddin area.

Challenges

PROGRAMME RISKS

The programme aims to reconnect the historic area with the city, to provide and experiment with horticultural and cultural revival initiatives, and to conserve important medieval Islamic buildings in the area as part of the broader Humayun’s Tomb complex. The programme faces several challenges, including:

1. **Cultural Revival Initiative**
   - Exceptional by virtue of not just its vintage, the 700-year-old living culture of the historic area is a unique blend of secular and interfaith elements that encompass performing arts, classical music, poetry and traditional crafts in the setting of significant monuments.
   - This intangible heritage through music festivals held at the performance spaces created under the programme will thus offer a unique experience for visitors while enhancing the cultural significance of the greater Nizamuddin area.

2. **Sunder Nursery Developing a City Park**
   - The twenty-seven-hectare Sunder Nursery, established in 1912, is being developed as an urban park with distinct heritage and ecological zones. Works to enhance and showcase its ecological and historical heritage under a multidisciplinary landscape and conservation programme are now ongoing.
   - The landscape master plan includes a micro-habitat zone/arboretum to showcase Delhi’s fast disappearing biodiversity. For instance, in the Humayun’s Tomb area, the arboretum will house three hundred tree species representative of Delhi’s native flora, trees and plants favored by the Mughals and a secure way to enhance a public park. In addition, the park will emphasize its horticultural past with provisions for mist chambers, a tissue culture lab, glass houses, and berths for restrooms, toilets, and feeding places for birds.
   - The park’s main objectives are to reconnect the historic area with the city, to provide and experiment with horticultural and cultural revival initiatives, and to conserve important medieval Islamic buildings in the area as part of the broader Humayun’s Tomb complex.

3. **Cultural Revival Initiative**
   - The programme aims to reconnect the historic area with the city, to provide and experiment with horticultural and cultural revival initiatives, and to conserve important medieval Islamic buildings in the area as part of the broader Humayun’s Tomb complex. The programme faces several challenges, including:

   - **District Planning**
     - A prime objective of the programme is to integrate the three presently segregated zones: Humayun’s Tomb, Humayun’s Tomb and Sunder Nursery. Physical survey of the entire project area and zones adjoining the project have been completed. All the Towns and Nursery will be achieved by forming a single pedestrian entrance zone, emphasizing by an interpretation centre, heritage trails will be fitted on the Basti, following detailed physical mapping and studies, the project will focus on urban improvements. The three project zones of Humayun’s Tomb, Nizamuddin Basti and Sunder Nursery will be interconnected by nature trails and heritage walks that link not just the three sites but also their history and culture. The resulting landscape will thus offer a unique experience for visitors while enhancing the cultural significance of the greater Nizamuddin area.

4. **Sunder Nursery Developing a City Park**
   - The twenty-seven-hectare Sunder Nursery, established in 1912, is being developed as an urban park with distinct heritage and ecological zones. Works to enhance and showcase its ecological and historical heritage under a multidisciplinary landscape and conservation programme are now ongoing.
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   - The park’s main objectives are to reconnect the historic area with the city, to provide and experiment with horticultural and cultural revival initiatives, and to conserve important medieval Islamic buildings in the area as part of the broader Humayun’s Tomb complex.

5. **Cultural Revival Initiative**
   - The programme aims to reconnect the historic area with the city, to provide and experiment with horticultural and cultural revival initiatives, and to conserve important medieval Islamic buildings in the area as part of the broader Humayun’s Tomb complex. The programme faces several challenges, including:

   - **District Planning**
     - A prime objective of the programme is to integrate the three presently segregated zones: Humayun’s Tomb, Humayun’s Tomb and Sunder Nursery. Physical survey of the entire project area and zones adjoining the project have been completed. All the Towns and Nursery will be achieved by forming a single pedestrian entrance zone, emphasizing by an interpretation centre, heritage trails will be fitted on the Basti, following detailed physical mapping and studies, the project will focus on urban improvements. The three project zones of Humayun’s Tomb, Nizamuddin Basti and Sunder Nursery will be interconnected by nature trails and heritage walks that link not just the three sites but also their history and culture. The resulting landscape will thus offer a unique experience for visitors while enhancing the cultural significance of the greater Nizamuddin area.

Significant Issues and Impact

MASTER PLANNING PROCESS

The Master Plan for Delhi (MPD) 2000 recognized the greater Nizamuddin Area (including Humayun’s Tomb and Sunder Nursery) as one of five designated ‘Conservation Areas’ in Delhi. However, the status of the Humayun Nizamuddin Area, which should be that of an ‘Untouched Village,’ as proposed in the MPD 2000, Sunder Nursery has now been designated in the MPD as a District Park. The programme stands in Zone D of the MPD, alongside the British-era constructed area today known as the Connaught Palaces Zone. Preparation of a ‘Local Area Plan’ for the Nizamuddin Basti is now underway.

PLANNING ISSUES

A prime objective of the programme is to integrate the three presently segregated zones: Humayun’s Tomb, Humayun’s Tomb and Sunder Nursery. Physical survey of the entire project area and zones adjoining the project have been completed. All the Towns and Nursery will be achieved by forming a single pedestrian entrance zone, emphasizing by an interpretation centre, heritage trails will be fitted on the Basti, following detailed physical mapping and studies, the project will focus on urban improvements. The three project zones of Humayun’s Tomb, Nizamuddin Basti and Sunder Nursery will be interconnected by nature trails and heritage walks that link not just the three sites but also their history and culture. The resulting landscape will thus offer a unique experience for visitors while enhancing the cultural significance of the greater Nizamuddin area.

BASELINE STANDARDS

A Quality of Life survey, aimed at establishing benchmarks for key interventions in the Humayun Nizamuddin Basti was completed. A baseline for establishing benchmarks for early childhood care and development indicators was also carried out. In addition, monitoring and evaluation systems to track programme benefits and changes due to implementation of interventions have been established. The programme’s objectives are being assessed through the implementation of a ‘Local Area Plan’ for the Nizamuddin Basti area. It is envisaged that the park will be interconnected by nature trails and heritage walks that link not just the three sites but also their history and culture. The resulting landscape will thus offer a unique experience for visitors while enhancing the cultural significance of the greater Nizamuddin area.

Socio-economic Initiatives

Significant efforts in the field of education, health, sanitation, vocational training and urban improvements coupled with cultural revival initiatives are being made to improve the quality of life for local residents and the pilgrimage experience. Major works have now been completed towards upgrading a primary school, establishing a pathology laboratory at the local polyclinic, new community toilets, establishing vocational training programmes aimed at improving employability and setting up community skill labs.

Conservation aspects

Over a hundred listed heritage buildings stand within the project area. In the last decade, many others have been lost as a result of expanding urbanization, vandalism and neglect. Tenures of the remaining buildings are considered of national importance and protected by the Archaeological Survey of India. Other buildings of high historical and architectural significance were preserved for the Municipal Corporation of Delhi as building of local importance, many suffering decades of neglect and inappropriate repairs. Though they provide a poor living environment, several tombs and qiblat rooms as residences. Conservation work on all 40 heritage buildings is being undertaken as part of the ongoing project. Boundaries of the MPD Conservation Area and the World Heritage Site are also to be defined.

Post-implementation plans

Discussions are ongoing to decide what revenue generated at Sunder Nursery is to go back into projects and maintenance of the park through the formation of a trust or ‘Special Purpose Vehicle’ and, furthermore, as support to the education, health and sanitation programmes established under the programme.

Partners

PUBLIC PARTNERS

Antiquarian Survey of India, Ministry of Culture, Government of India, Municipal Corporation of Delhi, Central Public Works Department, Ministry of Urban Development, Delhi Development Authority.

Authoritative Framework


Conservation efforts on Humayun’s Tomb complex involved the work of many skilled craftsmen, including stonemasons.
Humayun’s Tomb Complex

The tomb of the second Mughal emperor, Humayun, one of the twenty-seven UNESCO World Heritage Sites in India, was the first of the monumental mausoleums to be built in the country. The chahar-bagh, or four-part paradise garden, is the earliest existing example of the Mughal garden tomb. The Tomb and Garden are considered one of the precursors of the Taj Mahal.

The restoration of the Garden was the first privately funded restoration of a World Heritage Site in India and was completed in March 2003 through the joint efforts of the Aga Khan Trust for Culture (AKTC) and the Archaeological Survey of India under the aegis of the National Culture Fund. The objective of the project was to revitalize the gardens, pathways, fountains and water channels of the chahar-bagh surrounding Humayun’s Tomb according to the original plans of the builders.

Emperor Humayun was the son of Babur, the founder of the Mughal Empire. His tomb was built over nearly a decade beginning in about 1565, influenced by Persian architecture, the Tomb stands on a 120-square-metre platform and reaches a height of forty-seven metres. Built of rubble masonry, the structure is the earliest example of the use of red sandstone and white marble in such great quantities.
The preparation of conservation proposals. Conservation works commenced in April 2008 and included restoration of the mausoleum, the monumental gateways, pavilions and tomb structures. The project also includes the integrated development of the surrounding open spaces and provision of visitor facilities and an interpretation centre.

The project vision is to link up the Tomb complex with the site where the Nila Gumbad, a seventeenth-century tomb, also restored by ARTC, is located, just outside the eastern enclosure wall, and Sunder Nursery, which the Trust is converting into a park. Together, this ensemble will create a vast area of monuments, green space, facilities and services.

Once completed, the restoration of Humayun’s Tomb complex will return a significant amount of enhanced green space to the city and the surrounding community, with its constituent parts returned to their historically authentic format. The project is expected to increase interest in and visits to the Tomb, the Garden and the associated visitor facilities, which together form a large complex next to a major urban highway in Delhi. It will serve the local residents of Nizamuddin district as a community green area on one level, and the population of Greater Delhi as well as tourists on another level. Humayun’s Tomb and Garden has rekindled interest in the rich history of Mughal rule and presents Delhi’s heritage in a dignified and cohesive setting worthy of this capital city.
Background

BRIEF HISTORY OF PROJECT SITE

Since it is considered auspicious to be buried near a saint’s grave, following the burial of Hazrat Nizamuddin Auliya this area was seven centuries of tomb building. The greatest is Humayun’s Tomb. The complex now includes several other prominent buildings such as Isa Khan’s Tomb, enclosure, Bu Halima’s Tomb, Nila Gumbad and tombs in the Batashewala complex, all dating from the 16th–early 17th century. The Arab Serai, originally part of the complex, today functions as an Industrial Training Institute. The Yamuna River, on the banks of which Humayun’s Tomb was built, shifted westwards in the 19th century leaving the area landlocked. Humayun’s Tomb became a World Heritage Site in 1993.

Challenges

PROJECT RISKS

All conservation works at the World Heritage Site are undertaken as part of an established process that ensures cultural significance is retained and visitor experience is enhanced. Almost a million tourists and school children visit Humayun’s Tomb annually and as such all works are carried out in a manner that causes minimum disturbance to visitors.

SITE CONDITIONS

Because of the large number of visitors, vehicular and machine movement is not possible within the complex. Manual movement of material is the only other option; it often requires a group of 20 craftsmen a whole day to lift a single piece of stone to the roof. On a larger scale, the inappropriate earlier application of concrete removed from the root of Humayun’s Tomb and the earth expected to be removed from the Isa Khan-Bu Halima complex pose significant logistical challenges.

BUILDING CONDITIONS

Most monuments within the complex are in urgent need of conservation works ranging from removal of 20th-century cement and concrete to stitching of cracks and restoring missing plaster, stones and ceramic tiles.

Significant Issues and Impact

DATA COLLECTION/SURVEYS

Conservation works at Humayun’s Tomb commenced following peer review and approval of the ‘Conservation Plan’ in May 2008. The ‘Conservation Plan’ included detailed measured drawings of all structures utilizing high-definition 3D Laser scanning equipment, research of archival photographs, drafting of a state-of-conservation report utilizing high-definition 3D Laser scanning technology, and conservation professionals in the field. Training of ASI officials and conservation works commence on the west pavilion and west gate; conservation works on the dome and lower plinth completed.

Conservation works commence on north-east pavilion; conservation works on the west doors and enclosure wall initiated. A high-definition survey of Humayun’s Tomb using 3D laser scanning technology was carried out through 2011; conservation works initiated in June 2012; enclosure and Bu Halima’s Gateway completed.

VOCA TIONAL TRAINING/CAPACITY BUILDING

The project is being used as a platform to train new conservation professionals and craftsmen. Regular training workshops on the use of lime mortar have been attended by over 150 officers of the Archaeological Survey of India from countrywide locations. To mitigate risks a craftsmen training programme has been included in the programme and monthly reviews of work are held by a panel of experts with annual independent peer reviews.

CONTRACTING METHODS

All conservation works are implemented directly by master craftsmen employed by the project.

NEW TECHNOLOGIES INTRODUCED

Use of 3D high-definition laser scanning technology to document all structures prior to conservation works, and a training workshop to introduce this technology was also held in India.

Public Partners

Archeological Survey of India.

Donors

Sir Dorabji Tata Trust, World Monuments Fund.

Authoritative Framework

Memorandum of Understanding signed on 11 July 2007.

Phasing 1997 – 2012

MEMORANDUM OF UNDERSTANDING:

Between AKTC and Archaeological Survey of India (ASI) signed to undertake the Garden restoration.

Conservation works initiative at Humayun’s Tomb.

 Conservation proposals agreed with ASI and conservation works commence on the Isa Khan’s Tomb enclosure and Bu Halima’s Gateway.

Conservation works commence on the west pavilion and west gate; conservation works on the dome and lower plinth completed.

Memorandum of Understanding’ between AKTC and Archaeological Survey of India (ASI) signed to undertake the Garden restoration.

Conservation works on the west pavilion and west gate; conservation works on the dome and lower plinth completed.

All conservation works on Humayun’s Tomb completed.

Conservation works commence on north-west pavilion; conservation works on the west doors and enclosure wall initiated. A high-definition survey of Humayun’s Tomb using 3D laser scanning technology was carried out through 2011; conservation works initiated in June 2012; enclosure and Bu Halima’s Gateway completed.

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Memorandum of Understanding signed on 11 July 2007.

Memorandum of Understanding signed on 11 July 2007.
Sunder Nursery was established by the British to experiment with the trees proposed to be grown in the new capital in Delhi. It is a large, enclosed nursery on the north side of Humayun’s Tomb, owned and operated by the Central Public Works Department. Located in south central Delhi and spread over twenty-eight hectares, the development of Sunder Nursery into a sustainable park is part of a larger socio-economic development programme that includes the urban regeneration of Nizamuddin Basti and restoration of Humayun’s Tomb complex (a World Heritage Site).

The Sunder Nursery abuts Humayun’s Tomb complex, with which its shares a common entrance zone, and stands on the historic Grand Trunk Road. Within the Nursery stand nine Mughal-period tombs, of which three are protected by the Archaeological Survey of India. The work of the Aga Khan Trust for Culture (AKTC) will aim to enhance nursery functions; create a significant arboretum; restore the monuments; create new attractions; and provide visitor facilities. At the same time, plans are in place to link up the Nursery site with Humayun’s Tomb complex, creating a vast green space, a ‘cultural heritage park’, in the heart of the capital city.

A flat, extensive and underused green space lies in Nizamuddin, a designated heritage zone comprising Lutyen’s Garden City, its extensions and a number of significant heritage areas, such as India Gate, Humayun’s Tomb complex, Lodhi Gardens and the Old Fort. The Nursery is bordered by Humayun’s Tomb to the south, the National Zoological Park to the north, the Shiraz Scouts and Guides Centre to the east and the prominent Delhi Public School to the west. The area’s position between Humayun’s Tomb complex and Nizamuddin Basti provides the opportunity to create a larger Area Development Project connecting Humayun’s Tomb and its outer precinct.

The design of the new Park is organized along a central axial spine around which gardens and landscapes are arranged. From formal garden to informal settings for families to enjoy picnics, the Park will offer a variety of recreational and cultural venues. Water features, ponds and lakes are part of the master plan, which includes nursery beds, a flower showcase, arboretum, rose garden and orchards.

**Project Scope / Objectives**

The conversion of Sunder Nursery into a public park containing visitor facilities and restored Mughal-era monuments is part of a development programme that seeks to create a larger Area Development Project connecting with Humayun’s Tomb and Nizamuddin Basti.
The 18th-century Garden Pavilion was in a ruinous condition and threatened with demolition to make way for a ‘tunnel roads’ project. Today this unique building is being conserved for protection, thanks to the conservation work carried out by master craftsmen. Conservation works are ongoing on the Lakkarwala Tomb complex have been surveyed using ground-penetrating radar, and documented using laser scanning.

As part of the Nursery development project all of the historic structures located in the Nursery will undergo conservation to enhance their significance and restore their architectural integrity. Landscaping the setting of the monuments is an important element of the conservation works and the master plan for the Nursery. Over 140 tree species presently exist at Sunder Nursery, some of which are unique to the Delhi region. It is proposed to add a similar number of species mostly comprising vegetation that has been lost to the Delhi region. A 3.6-hectare nursery has been established along the northern edge of Sunder Nursery; glasshouses, mist chambers, tissue culture labs, and a training centre are also proposed to be built. As part of the project a micro-habitat zone – an arboretum – is being created, simulating a microcosm of Delhi’s landscape, including Khi (Hilly), Khadar (riverine), Bangar (alluvial) and Darab (marshy) zones.

The proposed Interprestation Centre on ecology and heritage in Sunder Nursery will host educational programmes. A newly-constructed amphitheatre will host musical and cultural performances and a café and restaurant will provide refreshments and food for visitors. The buildings will be eco-friendly and sustainable, having minimum impact on the site’s environmental character, and vehicular traffic will be limited to the periphery to allow visitors to enjoy the natural and built heritage of the new Park. Transforming the Nursery into a Park will create employment opportunities for the residents of Nizamuddin Basti. In keeping with AKTC’s wider objectives of improving built environments in largely Muslim communities, it is expected that the surplus income generated from the park can be used to support the Basti’s urban infrastructure, such as the municipal school, polyclinic, community hall and public spaces.

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Located in the heart of New Delhi, adjacent to Humayun’s Tomb complex and Sunder Nursery, Hazrat Nizamuddin Basti is named after the revered saint Hazrat Nizamuddin Auliya, who lived here in the early fourteenth century. A settlement developed at this location during the saint’s lifetime and it has been continuously inhabited.

Following the successful restoration of Humayun’s Tomb Garden in 2004, the urban renewal project commenced with the signature of a public-private partnership ‘Memorandum of Understanding’ on 11 July 2007. The non-profit partnership includes the Archaeological Survey of India, the Central Public Works Department, the Municipal Corporation of Delhi (MCD), the Aga Khan Foundation (AKF) and the Aga Khan Trust for Culture (AKTC).

Hazrat Nizamuddin Basti comprises a resident population of approximately 20,000. A synergistic, community centred and collaborative approach has been adopted to improve the quality of life for residents through a series of multi-input projects that aims to improve the urban environment, conserve monuments, develop public parks, strengthen basic services through interventions in the three core areas of health, education and environmental sanitation and engage community participation through a regular series of cultural activities and performances. In so doing, the project seeks to integrate conservation, socio-economic development and urban and environmental development objectives in consultation with local communities and relevant stakeholders. All programmes commenced following a quality of life assessment study.

In 2009 a physical mapping/survey of the Basti was undertaken to document the area with the intention of planning sensitive urban improvements. The survey has led to the preparation of street improvement plans which will be implemented by the Municipal Corporation of Delhi. Small public parks are being planned along the western edge of the Basti in areas that are deteriorating and are no longer safe and clean. These spaces will be landscaped to fulfill the needs expressed by the resident community. These parks will bring much needed community space and nodes of civic life back to the area and improve pedestrian circulation through the Basti, and there will be parks earmarked for women, children, cricket, community functions and weddings.
A series of initiatives are spurring a cultural revival in the Basti. Here, Chaunsath Khamba (right) is lit up at night during a concert of Qawwali music at the Jashn-e-Khusrau festival.

The conservation of monuments and the rehabilitation of open spaces in the Basti aim to restore their intrinsic cultural, historical and spiritual significance. Using state-of-the-art technology, including ground-penetrating radar survey, high-definition 3D laser scanning and geotechnical assessments, conservation started on the fourteenth-century Baoli (step-well).

At the eastern edge of the Basti stand two important tombs: the Chaunsath Khamba, a Mughal tomb, and the tomb of Mirza Ghalib, South Asia’s most renowned poet. Together, they form one of the largest open spaces in the Basti. Landscape works at both tombs have enhanced the historic character, restored dignity to these monuments and provided much-needed community-gathering spaces in this dense setting.

Social programmes in conjunction with the AKF have focused on education, training, health and the environment. In the first place the major effort towards primary education improvement has included a refurbishment of the MCD primary school, interventions to improve quality of education through professional development of faculty, improved classroom processes/child-centred teaching-learning process, better school management and strengthened school community approaches interface. Secondly, vocational training programmes for young people include a career development centre (NIIT Institute of Technology), the teaching of the English language (British Council) and training of heritage guides to give tours of the Basti and its history, while learning support to students in the age group of fourteen to sixteen years is given in Maths and English (‘English Access Micro-Scholarship Programme’ co-funded by the US Embassy).

In parallel with these procedures health interventions in the Basti include upgrading the MCD Polyclinic to ensure better diagnosis and treatment, reduce referrals and build the capacity of a community health outreach team for preventive health care, as well as the creation of a pathology laboratory. Finally, newly built public toilets – a key intervention for urban renewal in the Basti – have improved access to hygienic sanitation for residents.

As part of the urban renewal project there is a focus on cultural initiatives. A rich cultural vein, particularly in music and poetry, has existed in the Basti for centuries and drives the lifeblood of the community. This is where Amir Khusrau, musician, poet, scholar, Sufi mystic and spiritual disciple of Hazrat Nizamuddin Auliya, started Qawwali music traditions in the thirteenth century. This tradition continues to this day. The ‘living culture’ of the area is a unique and vibrant blend of secular and interfaith elements that encompasses the performing arts, classical music, poetry and traditional crafts. Improvement in the life of the residents must also include initiatives that embrace the creativity and talent nurtured in this environment and that are core to its identity. Steps are being taken to revive and revitalize these components highlighted at festivals, performances, discussions and through recordings.
Background

BRIEF HISTORY OF PROJECT SITE

Ghazis-ul-din Bahauddin, Sultan of Delhi in the 13th century, founded the city of Delhi. The earliest quarter, Hazrat Nizamuddin Basti, lies here and was also buried there, initiating seven centuries of tomb building in the area. During the reign of Delhi Sultan Ghiyas-ud-din Balban, Sultan of Delhi in the 13th century, Nizamuddin Basti was declared a conservation area in the 2021 Master Plan of Delhi.

CHALLENGES

PROJECT RISKS

Low levels of literacy, high number of immigrants, rampant drug usage and peddling have led to high crimes. There is a presence of several NGOs working in Hazrat Nizamuddin Basti, but only 41% participate.

DEMOGRAPHICS

Nearly 35% of the population is aged between 15 to 25 age group are working and only 6% of women or as casual workers. A similar number of men in the 15 to 25 age group are working and only 6% of women hold jobs. During community discussions, life skills, career counselling and vocational training opportunities are identified as key needs.

HOUSEHOLD ECONOMY

Over 50% of families in Hazrat Nizamuddin Basti have a single wage earner – largely employed in petty trades or as casual workers. A similar number of men in the 15 to 25 age group are working and only 6% of women hold jobs. During community discussions, life skills, career counselling and vocational training opportunities are identified as key needs.

STATUS OF HEALTH AND EDUCATION

Lack of access to quality health facilities has resulted in extremely poor health conditions. During baseline research, reported illnesses in the previous two weeks were 54% among females and 29% among males. The project continues to implement interventions to improve health care including both clinic-based and outreach activities, and plans to address health issues of the elderly and the disabled.

AVAILABILITY OF DRINKING WATER

There is inadequate drinking water. The Basti is served by water from public taps, which are in a poor condition. Public toilets are used by 17% of households and 14% share toilets. In addition, the large floating population of pilgrims puts further strain on the system.

ENVIROMENTAL CONCERNS

Poor physical densification and population growth put enormous strain on the infrastructure in Hazrat Nizamuddin Basti, especially in terms of environmental sanitation and waste management. Frequent flooding and blockages in sewage lines are common and provide public health concerns.

INFRASTRUCTURE

Water supply and sewage disposal systems are present but well below required capacity.

ACCESS TO OPEN SPACE

Encroachment and misuse of open spaces and parks are widespread.

BUILDING CONDITIONS

In Hazrat Nizamuddin Basti limited living space per family, poor ventilation from densification, inadequate sewage and water connections compounded by large numbers of pilgrims have increased the dependence on public utilities and building facilities.

DATA COLLECTION/SURVEYS

The project activities commenced following detailed physical mapping of the project area, documentation of the monuments and socio-economic surveys, which needed to be managed sensitively by senior programme staff to explain objectives. The physical surveys in the community were met with repeated resistance from the community. They could only be completed in 2009 after establishing confidence building programming in health, education, sanitation and vocational training.

PLANNING ISSUES

With the removal of open spaces and landscaping of parks coupled with community mobilisation, ownership and their involvement in management of these spaces, it is hoped that children, women and residents in Hazrat Nizamuddin Basti will be able to safely access these spaces. The project has incorporated interventions such as connecting households to sewer lines and there are plans to improve housing stock in need of repairs, especially those surrounding significant monuments and public spaces such as the Baoli and Aligha Rabi’s Tomb.

HISTORIC BUILDINGS/MONUMENTS CONSERVED

Several monuments dating from the 13th-century onwards are located within the Hazrat Nizamuddin Basti. Conservation works to date in the Basti have focused on a 13th-century step-well or baoli that partially collapsed in July 2008 and on the conservation and landscaping of the tomb of the famous poet Mira Ghalib. In 2011, conservation works will continue on the baoli and also extend to the 18th-century structure known as Chaukhamba and Aligha Rabi’s Tomb.

NEW BUILDING FACILITIES

In 2009, an additional five new community toilets have been built and in operation. Work on an additional, much larger toilet block is planned to commence in 2011.

COMMUNITY INVOVLEMENT/PROGRAMME

The project has begun to strengthen civil society, based on consultative planning and implementation, as well as the formation of internal and user groups. Self-help groups have been established and community management of public facilities such as toilets has commenced. The project continues to implement interventions to improve health care, including both clinic-based and outreach activities, and plans to address health issues of the elderly and the disabled.

VOCATIONAL TRAINING/CAPACITY BUILDING

With only 21% of youth having completed secondary education, the vocational training programmes being implemented are designed for improving employability. Formal linkages with tourism arrivel at Humayun’s Tomb are being established for craft and embroidery products by local women. While literacy rates are reasonably high, increasing enrolment and completion rates and the quality of education are a project focus.

CONTRACTING METHODS

All conservation works and renovations are implemented directly by master craftsmen employed by the project.

Partners

PUBLIC PARTNERS

Archaeological Survey of India, Municipal Corporation of Delhi, Delhi Development Authority.

Donors

Ford Foundation, German Embassy, United States Embassy, Canadian International Development Agency.

Authoritative Framework

Memorandum of Understanding signed on 71 July 2007. In 2009 additional ‘Memorandum of Understanding’ was signed with Delhi Development Authority and Delhi Government’s Public Works Department to allow landscaping of parks and nullahs respectively.
The Stone Town of Zanzibar, the historic core of the capital city of the island of Zanzibar, located thirty-eight kilometres off the coast of East Africa, has been a regional cosmopolitan crossroads for centuries, reflected in its unique fusion of Swahili, Islamic, Hindu and European culture arising through trade and travel. Its principal waterfront cornice displays the front line of a dense array of arresting coral stone/lime structures which are both individualistic in character and yet highly integrated into a larger urban morphology of historic importance.

Although certain institutions of the Aga Khan Development Network (AKDN) trace their history in Zanzibar to the turn of the twentieth century, the first involvement of the Aga Khan Trust for Culture (AKTC) in Zanzibar dates to 1988, when the Aga Khan Award for Architecture organized an international seminar on the island. This event raised the Trust's interest in the rehabilitation of the old Stone Town, which led to an agreement of protocol of collaboration in the Stone Town between AKTC and the Government of Zanzibar.

AKTC's sustained involvement in Zanzibar over several years made it possible to develop a coherent, long-range strategy and set of initiatives aimed at the revitalization of the town's historic core, from the definition of general policies to the implementation of specific building projects and area plans.

The old dispensary

The listed Old Dispensary building in the Stone Town was the second major historical building to be restored by the Historic Cities Programme (HCP) after its establishment in October 1992. As such, it provided a model for similar initiatives carried out both in the Stone Town and elsewhere during subsequent years. The design aimed to respect the existing historic fabric, while taking into account the different building phases, thus avoiding arbitrary interventions and unnecessary alterations. Great attention was paid to ensure that all materials used in the works corresponded to or were compatible with the original ones. Any changes deemed necessary for technical reasons were carefully recorded and identified. In terms of new uses, changes were considered for their compatibility and opportunity vis-à-vis the existing fabric. The final adaptive reuse choice was to transform the Old Dispensary into a combined service, retail and cultural centre. These new uses sought to enhance the building's original qualities in the context of a culturally meaningful public function, while at the same time generating the income necessary to ensure the Centre's future maintenance.
The ‘Stone Town Urban Housing Rehabilitation Programme’ included the royal hotel.

Conservation Planning

A number of wider urban planning and conservation efforts complemented the Old Dispensary initiative to guide future development in the historic area of Zanzibar. In particular, following earlier efforts sponsored by UNCHS/Habitat, AKTC-developed, in close cooperation with the Zanzibar Stone Town Conservation and Development Authority (STCDA), the national authority responsible for the historic area, a number of urban surveys, research activities and planning proposals centred on Zanzibar’s historic area.

This area, traditionally known as the Stone Town, measures approximately 125 hectares, including the eighty-seven hectares that constitute the town’s built-up historic core. The Stone Town accounts for only about five per cent of greater Zanzibar’s total urban area. Within its confines, however, are concentrated the vast majority of Zanzibar’s monuments and registered buildings, as well as principal public and commercial facilities.

Staring in 1992, a joint initiative between the STCDA and AKTC led to the preparation of a ‘Conservation Plan’ for the Stone Town. The Plan was formally adopted by the Zanzibar Government in 1994. It includes controls on the use and development of land, measures to protect individual buildings, street elements and open areas. The Plan also contains a set of measures designed to improve infrastructure, parking and circulation in and around the Stone Town. These proposals are complemented by a set of new building regulations, which constitute an integral part of the Plan, as well as proposals to improve and develop the principal public spaces of the Stone Town.

Forodhani Park and the Seafront

Two such public spaces are the Zanzibar Seafront and Forodhani Park which were, and still are, the object of sustained AKTC work. Forodhani Park lies at the heart of the historic seafront district of the Stone Town. Approval to rehabilitate Forodhani Park was given in January 2008 and work on the Park proceeded from February 2008 to January 2009, together with the restoration of the historic seawall adjoining the Park, initiated in late 2008 and completed in May 2009. The Park was reopened in July 2009 and has since turned a fairly derelict public open area into a major and highly successful concourse for Zanzibar, attracting a total population of seventy people. Before rehabilitation it only had two functioning toilets: one for a family of six and one for the remaining sixty-four inhabitants. Now there are six working toilets and there are separate washing facilities. Cooking was done in the corridors or inside the rooms. Now it is done in the central courtyard. More importantly, perhaps, is that the tenants, who did not have any security regarding the length of their stay, now have formal ten-year contracts with the housing authorities. The Urban Village

The lesson which can be drawn from this experience is that sustained commitment and the ability to realize projects that generate local pride and international visibility are powerful catalysts for urban regeneration. Moreover, such projects are capable of raising supplementary support from governments and international institutions in areas that are normally excluded from financing because they are not considered a priority, such as culture and conservation. On the contrary, the Forodhani initiative and its expected follow-up along Zanzibar’s seafront show that reinforcing connections with the city’s past and its cultural traditions, and combining them with the economic regeneration of significant urban areas, can bring business and jobs, as well as increased revenue from tourism. In this respect, the Zanzibar experience can be extended to other cities in the region and provide an alternative model of urban development, one that reinforces the distinct character and authenticity of places over the look-alike, heavy-handed developments that are currently applied in so many city centres internationally.

Housing Rehabilitation

In parallel to the various activities outlined above, a ‘Stone Town Urban Housing Rehabilitation Programme’ was conducted over the period 1998–2004. Co-funded by the Swedish Development Cooperation Agency (SIDA), the urban rehabilitation programme has benefited approximately five hundred of the poorest residents of Stone Town, who lived in publicly owned houses or in houses administered by the government-controlled religious charity board (Wafid), by the time the community-based rehabilitation programme was completed, nine large publicly owned houses had been rehabilitated, serving more than a hundred families.

The Kiponda Caravanserai is one of these. It was home to nineteen households with a total population of seventy people. Before rehabilitation it only had two functioning toilets: one for a family of six and one for the remaining sixty-four inhabitants. Now there are six working toilets and there are separate washing facilities. Cooking was done in the corridors or inside the rooms. Now it is done in the central courtyard. More importantly, perhaps, is that the tenants, who did not have any security regarding the length of their stay, now have formal ten-year contracts with the housing authorities. The Urban Village
Future cooperation initiatives between AKTC and the Government of Zanzibar that build upon this foundation include the creation of a maritime museum through the adaptive reuse of the Orphanage building, an early twentieth-century structure located in close proximity to Forodhani Park. As a contribution to this museum, Zanzibar authorities entrusted the Sultan’s Barge to AKTC for restoration and eventual display. That work has already been completed. Also in this case, the thematic exploration of the maritime traditions of the region can become a major attraction for visitors to the island and an important educational springboard for local residents. Although Zanzibar already has two important museums aimed at local history and the past, a maritime museum focusing on the Indian Ocean would bring an international perspective and context to the island and return to the town the sense of its historical role in the development of the important commercial links that for centuries has united it to the rest of the Indian Ocean and beyond.

Tenants’ Committees that were called into life by this programme have played an important role in community mobilization and empowerment. In concert with the programme, courses in building repair and lime stucco technology were run for tradesmen, their content later being collated and published as practical repair guidelines made available in both English and Swahili.

Although limited to the initial phase of activities carried out by AKTC in the Stone Town, the housing rehabilitation initiative underlines another important aspect of the Zanzibar experience: the importance of housing in the context of urban regeneration projects. There is in fact no doubt, as other AKTC work has shown in places such as Cairo, that the single, most important catalyst for disadvantaged communities is improved housing conditions. If results can be achieved in this sector, even if numerically limited but significant in quality, community support and mobilization for conservation will follow. Rehabilitation of housing remains a central aspect of urban conservation and it is vital for the sustainability of urban regeneration in this and other cities of the Islamic world.

**Indian Ocean Maritime Museum**

Future cooperation initiatives between AKTC and the Government of Zanzibar that build upon this foundation include the creation of a maritime museum through the adaptive reuse of the Orphanage building, an early twentieth-century structure located in close proximity to Forodhani Park. As a contribution to this museum, Zanzibar authorities entrusted the Sultan’s Barge to AKTC for restoration and eventual display. That work has already been completed. Also in this case, the thematic exploration of the maritime traditions of the region can become a major attraction for visitors to the island and an important educational springboard for local residents. Although Zanzibar already has two important museums aimed at local history and the past, a maritime museum focusing on the Indian Ocean would bring an international perspective and context to the island and return to the town the sense of its historical role in the development of the important commercial links that for centuries has united it to the rest of the Indian Ocean and beyond.
the Stone Town spurred growing concern about the
poor condition and adverse developments affecting
architectural and streetscape features.

Traditional structures, including Indian-, Omani- and
stone buildings were built in consistent numbers. Today,
which was only after 1830, however, that Zanzibar’s
East Africa, the town is the result of a complex stratifica-
tion of a conservation plan. The measures contained
in its request for AKTC’s support in the prepar-
ation of the Conservation Plan.

The poor condition and adverse developments affecting
water and sewage disposal systems. The information
was used to determine the capacity and
effectiveness of existing systems and to identify remedial
measures to be put into effect within the framework of
the 'Conservation Plan'.

ACCESS TO OPEN SPACE

The Stone Town has few open public spaces within the
built fabric; however, there are several large open ar-
areas adjacent to the town or near to Creek Road.

Building Conditions

The building condition survey carried out in 1992
found that over 80% of buildings in the Stone Town
were in bad condition. These buildings were generally
damaged, structurally unsound, and often used inappropriately or encroached upon by
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Significant Issues and Impact

MastEr PLAnInG process

The master planning process aimed at developing two
data processing and complementary levels of the
planning process. These provided comprehensive
control over the use and development of land,
and measures to protect individual buildings, streets elements and open areas. It also included a set of
measures designed to improve parking, circulation and
public infrastructure in and around the Stone Town. The second level of proposals aimed at identifying
prioritising areas and developing preliminary planning
proposals for four Axon Areas (the Seafar and Forod-
hani Park; the Port Area; the Central Market; and a
new mixed-use complex in Mombasa). These areas corres-
ded to the major urban areas of the Stone Town, which
were seen to be of a comprehensive and inclusive
approach. Preparation of the Plan was accompa-
ied by public hearings and participation in order
for them to be passed, and for them to be passed,
planning policies for the Stone Town. These included initiatives towards their rehabilitation, such as the case
of Forodhani Park, whose comprehensive upgrading
was completed in 2009 with the financial and technical
support of AKTC.

BASELINE STANDARDS

A complete field survey of the Stone Town was carried
out in 1992. It was completed in public presence,
and its findings provided information about the
potential of historic areas, with special reference to the
Zanzibar Stone Town 'Conservation Plan' was the first
comprehensive town plan for a historic urban area to
be developed by AKTC and formally adopted by the
national authorities. As such, it provided a model for
similar planning initiatives carried out by the organization in the region and elsewhere.

QUALITY OF LIFE

The Stone Town population has significantly
improved with the rehabilitation of Forodhani Park completed in 2009 and the planning
expansion of the open-space improvement programme,
with the creation of a public square prominent along
Majunga Road and the amelioration of smaller gardens and open areas located in the southern portion of
Zanzibar’s seafront.

Partners

PUBLIC PARTNERS

Ministry of Water, Construction, Energy, Land and Envi-
rionment, Stone Town, Stone Town Conservation and
Development Authority.

Authoritative Framework

Exchange of letters and protocols between AKTC, the Ministry of Water, Construction, Energy, Land and Envi-
rionment and the Stone Town Conservation and Devel-
opment Authority (1990–94). Public hearings and regular
reviews were scheduled throughout 1993 and the early
1994; these hearings provided information on household sizes, employment, tenure, occupancy,
and use of transport. Peer reviews and workshops were also
scheduled during the Plan’s development process.

CONSERVATION ASPECTS

The planning approach and policies were consistent
with the relevant international charters for the conser-
vation of historic areas, with special reference to the
UNESCO ‘Recommendation Concerning the Safeg-
ning and Contemplating Role of Historic Areas’ (Nairobi, 1979). The Stone Town ‘Conservation Plan’ also
provided the establishment of a law, legislation
and planning policies for the safeguarding of Zanz-
ibar’s urban heritage. The Zanzibar introduced categories of significant landmarks and monuments (Grade I
and Grade II), Grade structures (1/4 in town) and
for their outstanding architectural, historical and cultural
significance (291 in total), including the identification of individual architectural features to be protected.
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Majunga Road and the amelioration of smaller gardens and open areas located in the southern portion of
Zanzibar’s seafront.

Partners

PUBLIC PARTNERS

Ministry of Water, Construction, Energy, Land and Envi-
rionment, Stone Town, Stone Town Conservation and
Development Authority.

Authoritative Framework

Exchange of letters and protocols between AKTC, the Ministry of Water, Construction, Energy, Land and Envi-
rionment and the Stone Town Conservation and Devel-
opment Authority (1990–94). Public hearings and regular
reviews were scheduled throughout 1993 and the early
1994; these hearings provided information on household sizes, employment, tenure, occupancy,
and use of transport. Peer reviews and workshops were also
scheduled during the Plan’s development process.

CONSERVATION ASPECTS

The planning approach and policies were consistent
with the relevant international charters for the conser-
vation of historic areas, with special reference to the
UNESCO ‘Recommendation Concerning the Safeg-
ning and Contemplating Role of Historic Areas’ (Nairobi, 1979). The Stone Town ‘Conservation Plan’ also
provided the establishment of a law, legislation
and planning policies for the safeguarding of Zanz-
ibar’s urban heritage. The Zanzibar introduced categories of significant landmarks and monuments (Grade I
and Grade II), Grade structures (1/4 in town) and
for their outstanding architectural, historical and cultural
significance (291 in total), including the identification of individual architectural features to be protected.
The Zanzibar Stone Town ‘Conservation Plan’ was the first
comprehensive town plan for a historic urban area
to be developed by AKTC and formally adopted by the
national authorities. As such, it provided a model for
similar planning initiatives carried out by the organization in the region and elsewhere.

QUALITY OF LIFE

The Stone Town population has significantly
improved with the rehabilitation of Forodhani Park completed in 2009 and the planning
expansion of the open-space improvement programme,
with the creation of a public square prominent along
Majunga Road and the amelioration of smaller gardens and open areas located in the southern portion of
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reviews were scheduled throughout 1993 and the early
1994; these hearings provided information on household sizes, employment, tenure, occupancy,
and use of transport. Peer reviews and workshops were also
scheduled during the Plan’s development process.
The Old Dispensary in Zanzibar was the first project of the Aga Khan Trust for Culture (AKTC) in the Stone Town, part of a larger programme of rehabilitation for the historic buildings along the seafront, which also included the restoration of the Old Customs House. The name of the building comes from its former use as a charitable dispensary, built in the nineteenth century by a prominent local businessman, Sir Tharia Thopan. The foundation stone was laid in 1887 to mark the jubilee of Queen Victoria, and Thopan’s intention was for it to be used as a hospital. He died before it was completed and the building was sold off after a family quarrel. Originally, the Old Dispensary housed a dispensary on the ground floor, with a pharmacy and a resident doctor. The two upper floors were subsequently subdivided into apartments. This mixed use of the building continued until the revolution in 1964, when the inhabitants fled the island and the dispensary fell into disuse. As with most other structures in Zanzibar, the Old Dispensary passed into government ownership and control.

Since its inauguration, more than one hundred years ago, the Old Dispensary has been hailed as a symbol of the multicultural architecture of Zanzibar. And in fact it is an astonishing hybrid of styles combining Indian and European influences. The ornately carved wooden balcony and other intricate details are characteristic of Indian buildings, but laid over a highly disciplined European Neoclassical scheme. The building’s design, rich decoration and construction techniques are of exceptional quality. The plan is U-shaped with a three-storey-high courtyard in the centre. The interior is partitioned into a series of rather small, mostly independent rooms arranged along arcades facing the courtyard. The shape of the site was difficult to deal with, yet the architects turned it to advantage and created a stunning interior space characterized by the exaggerated sense of perspective produced by the side walls converging halfway along the length of the court. This is suddenly reversed by one wall breaking forwards to introduce a diverging line, complemented on the other side of the courtyard by the introduction of a one-storey block that narrows the space yet further. “The timber carving is unlike any other in the Stone Town in its sheer abundance and vivacity, and contrasts with the more restrained plaster work. Carved tendrils and stalks twist and curl through gables, flowers erupt from the brackets, and tendrils.”

The Old Dispensary has been adaptively reused as the Stone Town Cultural Centre. A view of the Dispensary before restoration and the removal of modern encroachments. The building was in an extremely dilapidated condition with the main verandas in danger of collapse.

Project Scope / Objectives

The Old Dispensary is hailed as a symbol of multi-culture Zanzibari architecture. The aim of conservation was to respect the historic fabric of the existing building and to try to understand and record the different building phases. With this information in hand, it was possible to make the building habitable, ensuring rental income for its upkeep and maintenance.
pineapples sprout from the ridges. Amidst the carved foliage, bright red, green, and blue panes of glass glitter like jewels. Eight massive columns, each one a single piece of timber forty centimetres square and over five metres long, support the principal beams running perpendicular and parallel to the facade. Inside, two suspended bridges span the courtyard and, together with the horizontal plaster mouldings, define and unify the interior space, articulated at ground, first and second floor levels by the strong piers surmounted by arched openings.

Prior to the AKTC intervention, the building had been badly neglected and hardly maintained for more than thirty years. Rising damp and moisture had taken a heavy toll on the timber and plasterwork. The first stage of the conservation process involved the identification of the original features of the building through patient research and recording. The internal anatomy of the building was systematically examined in order to establish which materials were originally used and the methods and techniques by which they had been applied. Eventually, the restoration aimed at reinstating the building’s original fabric while respecting its different construction phases. All materials used in the restoration corresponded to, or were compatible with, the original ones. At the same time, the building envelope was made weather-tight to avoid the water penetration and leaks that had been the main causes of the building’s deterioration. Where limited changes became necessary to improve the resistance and quality of the structure, these were carefully recorded and identified as newly added elements to distinguish them from the original ones.

Upon its completion in 1997 the restored Old Dispensary was converted into the Stone Town Conservation Centre. The new uses did not alter the historic features of the building, but rather sought to enhance its original qualities and make them accessible to a wider public in the context of a culturally meaningful public function. At the same time, these new uses had to generate the income necessary to ensure the building’s future maintenance. Thus, the adaptive reuse of the structure transformed the Old Dispensary into a combined service, retail and cultural centre. The design took advantage of the special qualities of the ground-floor courtyard to convert it into a public open space.
Phasing 1991 → 1997

AKTC sees possession of the building and carries out emergency stabilization and minor repairs.

Existing condition drawings and condition surveys.

Preparation of historic condition report; design completed.

Preparation of application for permits, completion of tender process and contract awarded.

Construction and conservation work.

Integration of renovated Old Dispensary as the Stone Town Cultural Centre.

Background

BRIEF HISTORY OF PROJECT SITE

The Old Dispensary was built by a prominent local businessman, Sir Thomas Throp. The foundation stone was laid in 1887 to mark the jubilee of Queen Victoria. Sir Thomas Throp intended the building to be a hospital, but died before it was finished. The building was completed in 1884 and purchased by rich Zanzibaris in 1900, who used it as a charitable institution housing a dispensary, a prison and a resident doctor. The two upper floors were subdivided into apartments. This reused use of the building continued until the revolution in 1964, when the dispensary fled and the dispensary fell into disrepair. As most structures in Zanzibar, the Old Dispensary passed into government ownership and control. In October 1987 AKTC leased the Old Dispensary from the government in order to restore it and use it as a cultural centre.

Challenges

PROJECT RISKS

The poor condition of the building and the limited experience in the development of restoration and adaptive reuse projects in Zanzibar posed a risk, which had to be carefully evaluated prior to implementation. Specifically, the restoration and conversion of the building proved to be a seminal experience for the realization of similar projects in the Stone Town.

BUILDING CONDITIONS

A building condition survey was carried out following the decision to restore the structure in 1991. It revealed that water infiltration combined with living damp, lack of maintenance and inappropriate repairs were the main causes of deterioration. Exterior problems included highly eroded plaster exposing the core of the wall, severely fired brick facing, breaking and blocked drains. Inside, most of the windows were broken, with the openings shuttered. In addition, the internal inspections revealed inappropriate interior partitioning and evidence of poor use and vandalism throughout the building. The detailed assessment of exterior and interior building conditions formed the basis for the subsequent formulation and implementation of an appropriate and effective conservation plan.

Significant Issues and Impact

DATA COLLECTION/SURVEYS

More than 500 drawings at various scales were produced to document and record the plan, elevations and details of the building. In addition, a condition survey of all major components of the building fabric was compiled, including an analysis of the original materials and methods of construction. Laboratory samples were obtained and analyses carried out on the materials, as well as historical research in the Zanzibar Government Archives. The latter provided important information about the original design and use of the building. The ensemble of these investigations made it possible to distinguish new from old, and track the stages of interventions and transformations which took place in the building through time.

DESIGN CRITERIA

The design aimed at respecting the existing historic fabric, as well as taking into account the different building phases in order to avoid arbitrary interventions and unnecessary alterations. Great attention was paid to ensure that all materials used in the vents corresponded to the original ones. Any changes which were deemed necessary for technical reasons were carefully recorded and identified. In terms of new uses, changes were considered for their compatibility and opportunity via a visit to the existing fabric. The final adaptive reuse choice was to transform the Old Dispensary into a combined service, retail and cultural centre.

NEW TECHNOLOGIES INTRODUCED

The state-of-the-art restoration of the Old Dispensary included research and adaptation of the original building technologies to ensure effective and long-lasting results. Through a series of trials, a repertory of solutions to most problems was developed. This included appropriate mixes and materials, and ways of joining, covering and finishing were agreed upon.

RELEVANT CODES/STANDARDS ADOPTED

The AKTC project implemented in the Old Dispensary works the approach and methodologies contained in major international charters and recommendations. Peer reviews took place during the course of the project’s implementation, as well as regular meetings with the STCDA and Ministry authorities.

LESSONS LEARNED

The restoration and adaptive reuse of the Old Dispensary was the first building project carried out by AKTC in Zanzibar. As such, it provided a model for similar initiatives carried out both in the Stone Town and in the region during subsequent years.

Partners

PUBLIC PARTNERS


Donors

Ford Foundation, UNESCO.

Authoritative Framework


The restored inner courtyard, its bridge linking the upper floor, seen from the balcony.
The 1994 ‘Conservation Plan’ identified a number of schemes for Zanzibar’s open spaces in order to ensure their protection, upgrading and rehabilitation. In particular, the work carried out by the Aga Khan Trust for Culture (AKTC) targeted three areas: Kelele Square, Forodhani Park and the Mizingani Seafront. Kelele Square was completed in 1997, following the adaptive reuse of the ex-Telecom Building into the Zanzibar Serena Inn, which defines part of the square. The much larger and ambitious rehabilitation of Forodhani Park, the most visible portion of Zanzibar’s seafront, was completed in 2008–09, while the rest of the seafront, along Mizingani Road, is currently being planned and its rehabilitation is scheduled to begin in 2011. Together, these open areas represent almost seventy-five per cent of the public open spaces along Zanzibar’s seafront and are the most visible and frequented public areas in the Stone Town.

Forodhani Park

Forodhani Park and the Mizingani Seafront form a continuous public open space along the Indian Ocean, stretching from the Orphanage House, at the southern end of the seafront, to the port at the opposite end. The area has the highest concentration of monuments and significant historic buildings in the Stone Town.

Prior to its rehabilitation, Forodhani Park was in very poor condition. It had, however, kept its original organization and layout from the time of its creation on the occasion of King George V’s Silver Jubilee in 1935. The design for the rehabilitation of the gardens was aimed at reconciling current uses and needs with the historic significance and traditions of the garden. To that end, its original elements were preserved and restored and some new features added. The aim was to create a contemporary urban space, while enhancing the original features and historic character of the place. Accordingly, the Park’s layout includes new paths lined with benches, linking together the original elements of the garden with a new organization and structures. Today, as in the past, Forodhani Park functions both as an active meeting place and passive promenade. At the same time, it maintains and defines separate areas intended for pedestrian movement, food vending, sports, contemplation and repose. The layout of the Park and proportions...
of lawn, paving and planting were derived from the main cross-axes defined by the fountain, bandstand and pier, all pertaining to the original configuration of the garden. These simple geometries were reinforced by structured plantings of palms and umbrella shade trees. Detailing was designed in a robust but understated manner, with a formal vocabulary and materials typical of the Stone Town. The paving has an exposed coral aggregate finish, a reminder of weathered surfaces found elsewhere in the historic area, while the park lighting is derived from the original cast-iron lamps manufactured in Glasgow. The baraza seating, modelled after traditional examples, accommodates the need for social interaction and provides the opportunity to simply enjoy the gardens in comfort. The remaining ship cannons scattered about the site were carefully restored and repositioned as a six-gun shore battery.

A survey and restoration programme was carried out for the historically significant buildings, such as the Bandstand, the Fountain, the Arch, and one of the kiosks. The other buildings were demolished due to their dangerous structural conditions or as a result of the significant regrading of the site, and subsequently rebuilt in keeping with their original footprint and style. A new pedestrian bridge linking the Park to the Orphanage House was added to the scope of works to replace the original bridge that was structurally unstable.

Horticulture was a very significant aspect of the park design, and Forodhani Park has the good fortune of having maintained several very large original trees. The trees form an almost continuous green canopy across the Park and make a large shaded area in the central zone around the bandstand. When construction began, the old trees were in very poor health due to neglect and mistreatment. One of the first measures was to rescue the historic trees: they were monitored by a horticultural specialist, and actions taken to bring them back to good health. Old compacted soils and accumulated waste were removed from around the trunks and roots and replaced with new soil and nutrients, followed by a programme of irrigation and pruning. All the trees were saved, and a healthy green canopy has now developed. New planting was also used extensively throughout the Park, with over 130 new trees. The new specimens were selected to restore the green structure, colour and ambience of a classic public garden, as well as reflect the botanical character of the island.

In addition to the paths, lawns and trees, some modifications were made to optimize and redefine spaces for contemporary use, such as a secure playground and a multi-purpose park plaza available to food vendors. The southern area of the Park, opposite the Orphanage building, opposite the Orphanage building, serves today as an intensive play area. It has been designed to withstand constant use, with lighting installed to extend its use after dark. The informal food bazaar, which is one of the most popular attractions in the Stone Town, occupies the

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**Phasing 2002 - 2009**

<table>
<thead>
<tr>
<th>Design studies, planning studies and analysis</th>
<th>Concept design, public meetings, approvals, detailed design, construction documents and specifications</th>
<th>Tenders, contract documents</th>
<th>Construction phase; training activities (horticulture, maintenance and management)</th>
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<tbody>
<tr>
<td>2002</td>
<td>2003</td>
<td>2007</td>
<td>2009</td>
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A comparison of the Park before and after intervention.

Opposite page: In the newly rehabilitated Forodhani Park, its original elements, such as the bandstand, the fountain and the pier, have been retained and new paths lined with benches have been added to link these elements together. Baraza seating, following traditional examples, was also installed.
northernmost part of the Park. It has been reaped to withstand heavy pedestrian traffic and properly fit to extend the use of the area into the night, which is the busiest time for vendors. These various improvements are also flexible enough to accommodate additional uses in the future.

The Park infrastructure is entirely new and includes a much needed irrigation system, a new electrical network and new street and park lighting. Storm-water drainage is natural due to the slope of the site, with the water flowing over the paddy directly into the ocean. The seawall is an integral part of the Park: its condition was very poor as a result of erosion, loss of material, subsidence and collapse of the park grounds. Today, it has been extensively restored, as well as rebuilt to stabilize and reinforce the Park’s edge along the sea.

Environ mental Concerns

Environmental concerns for Forodhani Park includes protecting local wildlife, improving the health of the two ecosystems, and increasing the coverage of areas with shade trees. Another important environmental concern in Forodhani Park is erosion from the sea. The existing seawall system is required to protect the city land from the sea and the effects of erosion. The poor condition of the old seawall, due to erosion and vandalism in the masonry, has allowed for erosion to occur widespread along the Mizingani Seafront.

The seawall block supports a protective structure that is in very poor condition. A fifth structure, the bandstand, was in good condition when the project began. Studies were carried out during the early 2000s in order to minimize risks to the Park in light of the planned upgrading and rehabilitation. The main risks were not properly addressing the needs of the public and interfering in ways that were insensitive and incompatible with the historic context. The 1994 ‘Conservation Plan’ formed the basis of the various subsequent design and social studies, and informed the meetings and consultations with local authorities and citizens.

Prior to work commencing, the Park was in very poor condition due to decades of exposure to water and salt. The seawall structure was damaged, allowing water to erode the park creating dangerous areas.

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Much of what we know of Mali's past comes from oral histories passed down from one generation to the next by griots, or bards, whose profession is to memorize and recite events of the past. One of the first travellers to write an eyewitness account of Africa was Ibn Battuta travelling from Morocco to Mali in 1352. Since the late nineteenth century, archaeology provides us with clues of the past; we know that people lived in the region of present-day Mali as far back as a time when the Sahara Desert had abundant rainfall to support a lush forest, grasses and animals – long before it became a desert. In Djenné-Djeno, near present-day Djenné, there have been many archaeological finds despite a considerable amount of looting in the past. These finds indicate that Djenné-Djeno was inhabited as early as the third century BC. Urban life developed as early as the first century BC along the Inland Niger Delta (located between the Bani and Niger rivers in present-day south-western Mali) and for more than 2000 years it has been a crossroads of culture and trade and has seen the rise and fall of great empires.

Trade became an essential element in the rise and fall of the successive great West African empires of Ghana (Wagadu), Mali and Songhay. By about AD 300 camel caravan routes began to be established through West Africa and the Sahara Desert linking West African cities with Europe and the Middle East. Under the most famous of its emperors, Mansa Musa, Mali's influence expanded over the large city-states of Timbuktu, Gao and Djenné, which were all major trading cities along the trade routes, as well as cultural centres for the whole of West Africa. It was in these cities that vast libraries were built and madrasas (Islamic schools) were endowed.

Little remains from the medieval grandeur in Timbuktu or Djenné except their congregational mosques, situated on the sites of earlier mosques, and some of the urban fabric in their cities. Constructed in mud, like the vast majority of Mali's building stock, the mosques of Mopti, Djenné and Timbuktu are among the world's largest and finest examples of earthen architecture and form an essential part of Mali's cultural heritage.

With these important landmarks of Mopti, Djenné and Timbuktu the Aga Khan Trust for Culture (AKTC) commenced the activities of its ‘Earthen Architecture Programme’. The Trust strategy hinges on close cooperation with local institutions and stakeholders, and the direct participation of experienced local masons and artisans. In restoring three major earth monuments, part of Mali's cultural patrimony, AKTC aimed to improve local capacity to manage architectural heritage, and sought to pass on to future people the knowledge of preservation methods and appropriate technologies and materials to future generations.
crafts, the creation of a dyke to prevent annual flooding along the Pagué Danawal Lake and the creation of a community and visitor centre, public toilets and green open space for the public.

The ‘Earthen Architecture Programme’ has reversed the deterioration process and achieved the restoration of three important landmarks in Mopti, Djenné and Timbuktu, providing valuable experience in the technical, organizational and community-related aspects of preserving earth structures in the country. Specifically it has succeeded in firstly identifying best practices of earth building grounded in local traditions and materials, introducing conservation methods and processes. In spite of the apparent vulnerability of earth architecture, the recourse to adequate mixes and organic additives, such as karité butter or baobab fruit powder, greatly improves the performance of traditional mud building. Secondly it has created a database of architectural, archaeological and technical documentation via first-hand knowledge of unique historic sites. Thirdly it has improved the local capacity to manage a precious architectural heritage, training locals in the skills of building with earth and reviving the traditions of handing down knowledge of restoration methods and materials to future generations. Finally it has generated economic benefits in terms of the development of local supplies, employment and tourism.
The Great Mosque of Mopti is an earthen structure built in the traditional Sudanese style between 1936 and 1943 on the site of an earlier mosque dating from 1908, and is commonly called the Mosque of Komoguel. At the time the Mosque was constructed, the Komoguel neighbourhood was in development as a result of the decision by the French settlers to use Mopti as Mali’s central hub for trade along the Niger River.

When it became apparent, after preliminary studies and surveys, that the seventy-year-old Great Mosque of Mopti was in danger of collapsing, the Aga Khan Trust for Culture (AKTC) was asked to assist in its rehabilitation. Like other earthen buildings in Mali, the Great Mosque of Mopti had been maintained by the community with a traditional plaster of mud and rice chaff, but in recent years an incompatible layer of cement had been applied.

The first phase of the work on this important landmark focused on repairing the roof and stabilizing the upper part of the building, which had been damaged by the use of cement in 1978. Because cement adds additional loads to the structure and integrates poorly with the traditional materials, earthen buildings clad with cement often suffer water infiltration and structural damage over time – a process which, in this case, had weakened and seriously compromised the stability of the monument. Fissures in the cement cladding had been infiltrated by water, which had led to structural damage.

Preserving this unique landmark could only be guaranteed by the return to traditional earthen architecture techniques. Works included restoration of earth masonry, carpentry, roofing and technical installations; together with earthen plaster these aimed to re-establish the historical condition.

Starting in 2004, local masons worked to remove the cement layer and replace damaged areas with traditional mortar and bricks, which are made by mixing earth with rice. Roofing timbers and other structural and aesthetic elements made of wood were replaced. Then a fresh application of the traditional earthen plaster returned the building to its historic condition. To ensure that the Mosque remains structurally sound and that it is properly maintained well into the future, training courses were offered in traditional building crafts – skills that risked being forgotten in the region – and contemporary conservation methods.
Background
BRIEF HISTORY OF PROJECT SITE
Mopti is one of Mali’s larger cities, with a population of approximately 100,000. The Great Mosque of Mopti was built between 1936 and 1943 on the site of an earlier mosque dating to 1908. It is an earthen structure with similarities to the Great Mosque of Djenné. Komoguel neighbourhood, with its 10,000 residents, has developed around the Mosque since the beginning of the 20th century. In 2006, following Mopti Mosque’s restoration, the site was included in the National Heritage List.

Challenges
SITE CONDITIONS
Preliminary studies performed in 2004 showed that the Mosque was subject to deterioration mainly due to the inappropriate application of cement plaster.

INFRASTRUCTURE
Mopti has no proper sanitation system and waste waters flow through its narrow streets before reaching the Bani River. Solid waste accumulates on the shores of the Bani River, forming a fill on top of which lives the poorest segment of the population. The district of Komoguel, surrounded by Lake Danawal, likewise lacks all basic infrastructure services, and consequently suffers from related health and environmental hazards. Prior to the project, sewage water flowed down the middle of streets leading to Lake Danawal, which acted as a filtration basin.

BUILDING CONDITIONS
The Mosque’s wall-bearing system was weakened by the application of a cement coat. The roof leaked owing to defective slopes and accumulation of earth fill.

Significant Issues and Impact
DATA COLLECTION/SURVEYS
The AKTC project performed the first architectural surveys of the Mosque in 2004, followed by a topographic survey of its surroundings.

PLANNING ISSUES
It was determined that the Mosque’s preservation could only be guaranteed by a return to traditional earthen architecture techniques.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
Conservation of the historic Mosque was the main objective of the AKTC project in the period 2004–06.

Authoritative Framework
‘Memorandum of Understanding’ signed in 2004 between AKTC and the Ministry of Culture, providing the framework for an Earthen Architecture Programme in Mali.

Partners
PUBLIC PARTNERS
Ministry of Culture, Municipality of Mopti, Republic of Mali.

COMMUNITY PARTNERS
Comité de gestion de Komoguel.

VOCATIONAL TRAINING/CAPACITY BUILDING
A group of 150 community masons and labourers was trained in earthen conservation methods, plumbing, carpentry and street paving.

CONTRACTING METHODS
Due to a lack of qualified contractors for monument conservation in Mali, the work was entirely in-house managed. This also enabled direct quality control, flexibility in the resources and on-the-job training.

The rehabilitation of the Great Mosque of Mopti has in many ways become a model for AKTC’s other interventions in earthen architecture in Mali. Much of the knowledge gained during AKTC’s two years of work in Mopti found its way into the ‘Memorandum of Understanding’ that was drawn up between AKTC and the Mali Ministry of Culture that paved the way for expanded restoration and conservation activity at other sites in the country. The work on the Mosque was conducted in conjunction with the Direction Nationale du Patrimoine du Ministère de la Culture du Mali, regional authorities, the City of Mopti and the Mosque’s Committee. The local authorities also helped with the selection of experienced masons and young apprentices who are being trained on the job. The model was replicated at Djenné and Timbuktu. Training is an important aspect of AKTC’s international work and mission. In 2006, following the Mosque’s restoration, the site was included in the National Heritage List of Mali.
Situated at the junction of the Bani and Niger rivers, the city of Mopti in Central Mali has developed over the past one hundred years from a modest settlement into an important urban and administrative centre that reaches out to both the north and east of the country. In addition to its access to river traffic, the city is also well connected to Mali’s road network. A twelve-kilometre causeway across an area of seasonally flooded agricultural land, which was constructed during the French colonial period, links Mopti with the national road network. More recently an international airport was added, which receives a fair number of foreign tourists whose main destinations are principally the Pays Dogon and the nearby historic city of Djenné.

Mopti’s strategic location at the confluence of two major rivers has also become its major constraint to further development. During the months of November to February, when the waters of the Niger and Bani are at their highest levels, the city becomes a virtual island with only the causeway as its connection to firm ground. Mopti’s population, currently estimated at more than 125,000, is squeezed during this period into an area of not more than 2.5 square kilometres. Not surprisingly, a parallel city has developed over the years at Sévaré, at the other end of the causeway, where there are no restrictions to growth.

As a result of population pressure and overall low levels of development, living conditions in Mopti, particularly in the areas around the harbour and in the adjacent districts of Komoguel and Gangal, have steeply declined over the past decades. Water and sanitation are in a very poor state, a situation that is being aggravated by the absence of a proper system for waste collection and by unpaved streets with open sewers.

The major objective of the intervention of the Historic Cities Programme (HCP) in Komoguel is to improve existing living standards in a limited geographical area of Mopti by focusing on improved health and sanitation conditions. In order to achieve this, a series of limited interventions aimed at improving existing sanitation conditions in an area confined to the immediate surroundings of the Great Mosque of Mopti have been implemented since June 2006.

HCP has based its intervention strategy on close cooperation with the inhabitants of the neighbourhood, local religious authorities and government...
Phasing 2007 – 2010
Start of ‘Water and Sanitation Programme’, Phase 1
Start of embankment for flooding protection
Completion of Water and Sanitation Programme, Phase 1
Opening of Komoguel Park and the Centre for Earthen Architecture
01/01 07/09 21/10

Officials. Following the complete and successful rehabilitation of Mopti’s Great Mosque by HCP in early 2008, substantial goodwill had been created with the local population and with the authorities to justify the launch of a major initiative for the area. The Mosque’s Committee in particular welcomed plans for improvement of the environment in the immediate surroundings of the Great Mosque.

The activities are being carried out in phases. A first phase, which started in mid-2006 and continued until December 2009, focused on physical improvement of a relatively small area around the Great Mosque. In close collaboration with the local Mosque Committee, improvements have been realized to provide protection against periodically rising river water by constructing a flood barrier with 3200 square metres of landfill. In addition to this, several public water points were established to increase access to safe and clean drinking water; an underground sewerage system was established and connected with individual households; a treatment facility for raw sewerage was installed; 4000 square metres of streets were paved with locally manufactured bricks (made from recycled polythene bags and sand); and a system for collecting solid waste was introduced. These improvements made to the built environment during the three and a half years that it took to implement Phase 1 also generated training opportunities for 345 people in construction techniques, plumbing, masonry, brick manufacturing, carpentry and metalwork.

Following the completion of Phase 1, HCP commenced with the construction of public toilets, a community centre and a visitor centre on the landfill. The latter will house a permanent exhibition on earthen architecture and will also serve as a small museum, thereby generating income for the maintenance of the local water and sanitation system.

Based on information collected through an extensive baseline survey carried out during the first phase, a complementary second phase — involving also the Aga Khan Foundation (AKF) and the Aga Khan Agency for Microfinance (AKAM) — will follow, pending the availability of co-funding. The successful completion of the first phase for Komoguel has opened the possibility for further improvement of water and sanitation conditions in the quarter. During a second phase, a much larger area will be targeted for improvement. During Phase 2, two new sewage treatment facilities will be constructed, underground sewage will be put in place for 2000 beneficiaries and 8000 square metres of streets will be paved with bricks. This second phase will include other socio-economic development issues related to public health, education, family income and possibly also open space development. During this phase cross-cutting issues such as gender, environment and the organizational and institutional development of civil society will also be addressed.

Building conditions

Rick Nye, In turn, together with sewer-related damage, has led to the virtual disappearance of traditional housing stock in a state of advanced degradation. Additionally, high occupancy levels in subdivided homes pose a challenge to improving living conditions.

Challenges

Project risks

Water and sanitation development activities could continue through a number of phases to eventually encompass all watersheds in Mopti town, but local capacities to manage the complex of individual watersheds remain limited. With the island town’s growing population and no further space for expansion, there is a risk of increased urban development along the sandy outer edges, outside the established watersheds.

Site conditions

Komoguel has one of the highest recorded residential densities in Mali (over 400 persons per hectare). Conservation and upgrading works have significant logistical and technical challenges due to tight access via the narrow alleys connecting traditional homes.

Infrastructure

The piped water network is insufficient. Unrelied sewage, which currently is allowed to flow into inner Lake Pegal Danawal, poses a major health threat to the population. Acting as a large evaporation basin, the lake is in danger of disappearing altogether under layers of sediment made up of untreated sewage. Decades of under-investment in drainage, water supply and electrical networks, coupled with extensive war damage, mean that significant investments are required to achieve the most basic levels of service coverage for a fast-growing population.

Background

Brief history of project site

The district of Komoguel is located in north-western Mopti and borders the inner Lake Pegal Danawal. The project area encompasses Mopti’s Great Mosque, built in the 1930s and now considered to be a prime example of quality earthen architecture in West Africa. The local built environment is semi-protected, with a limit placed on building height to protect the skyline.

Significant issues and impact

Data collection/surveys

Since a first baseline survey in 2007, regular sample surveys have been conducted in the area and progress has been measured, covering more than 30,000 people. Nearly 45% of the population are 15 years old or less. Average household size is eight to nine people.

Master planning process

A comprehensive master plan for Mopti is not available. There are remedial plans, however, for improving the port and some parts of the built environment.

Planning issues

Mopti’s relative isolation limits its future development. Ideally located for river traffic, it can only be reached by road via a single 11-km-long causeway passing through the floodplains to connect it with Sévaré. All future planning must take accessibility into account, balancing the needs of a relatively large population with a limited geographical space (around 2500 hectares).

Community involvement/programme

All sanitation improvement and construction activities were undertaken by or in close collaboration with community members. Community members are also meeting in managing and securing contributions to certain projects.

Vocational training/capacity building

More than 300 apprentices have been trained through partnerships during the course of the activities. Capacity building at organizational and institutional level includes the local counterpart (CAF/Coged) (Comité d’Assainissement de Komoguel/Comité de Gastron).

Contacting methods

All works were carried out with direct labour recruited locally from the resident community, and supervised by AKTC professional staff. Sub-contractors were used for moving earth (digging and transportation).

New technologies introduced

Production of paving bricks manufactured from recycled plastic bags.

Relevant codes/standards/adopted

All construction and installation work was undertaken in accordance with the relevant international charters and domestic laws.

Partners

Public partners

Ministry of Culture, Municipality of Mopti, Republic of Mali.

Private partners

Chambre des Métiers de Mopti.

Community partners

Association pour l’Assainissement de Komoguel.

Donors

Canadian International Development Agency, United States Department of Agriculture.

Authoritative framework

‘Memorandum of Understanding’ with the Ministry of Culture (2000); various agreements with the Municipality of Mopti town.
Great Mosque of Djenné

Constructed by the community in 1906 on the remains of a pre-existing mosque, the Great Mosque of Djenné is the largest historical mud mosque in the sub-Saharan region and is considered by many to be the greatest achievement of the Sudano-Sahelian architectural style. It is located in the centre of Djenné alongside the marketplace, making it the city’s focal social point. In 1988 the site was included in UNESCO’s World Heritage List, together with the entire Old City.

Djenné is a small town of 13,000 inhabitants, located away from the main streams of development of Mali. The main income sources on which the local community is dependent are limited to the weekly marketplace and foreign tourism. While urban life is divided by neighbourhoods, the local community leaders play a major role in the city’s decisions. The city has no proper sanitation system and waste waters flow in the middle of the tiny streets before reaching the Bani River, causing major environmental hazards. Solid waste is being accumulated on the shores of the river, forming a fill on top of which the poorest segment of the population has settled.

The Mosque has been preserved till now thanks to the yearly community effort of maintenance coordinated by the barey-ton, the local corporation of traditional masons, holding technical capacities in earthen architecture but also considered to have magical powers.

In spite of its yearly maintenance campaigns, the Mosque was in poor condition in terms of structural load-bearing walls and the roof. Based on a full documentation via topographic and architectural surveys, a damage assessment was drafted. The project scope was to guarantee the stability of the building by consolidating the carpentry and wall-bearing system. The Mosque interior was also subject to full conservation including rehabilitation of the Mosque’s interior and exterior surfaces, eviction of the bats, and replacement of the defective sound, ventilation and lighting installations.

Due to a lack of qualified contractors for monument conservation in Djenné, the work was entirely in-house managed. This also enabled direct quality control, flexibility in resource allocation and on-the-job training in conservation methods to more than 120 community masons.

Project Scope / Objectives

This conservation project guaranteed Djenné Mosque’s stability by consolidating carpentry and the wall-bearing system. The Mosque’s interior and exterior surfaces were rehabilitated, and sound, ventilation and lighting systems installed.
Background

Brief History of Project Site
Djenné is a small town with 13,000 inhabitants, remote from the main stream of development in Mali but well-known for the number of its madrasas, where young pupils receive a basic education grounded in Qur’anic reading. The main income sources are limited to the weekly market and foreign tourism. Built by the community in 1906 on the remains of a pre-existing mosque, the Djenné Mosque is the largest historical mud-brick mosque in the sub-Saharan region. Its symmetrical layout and arches reflected European influence. The Mosque has been preserved thanks to the yearly community maintenance effort coordinated by the barey-ton, a local corporation of traditional masons who have technical abilities but are also believed to possess magical powers. In 1988, the site was included in UNESCO’s World Heritage List, together with the entire Old City.

Challenges

Project Risks
Urban life is divided by neighbourhoods, with local community leaders playing a major role in the town’s decisions. Located in the heart of the town, the Mosque is a focal point, making its conservation a highly sensitive issue to Djenné residents.

Infrastructure
Djenné lacks a proper sanitation system. Waste waters flow through its narrow streets before reaching the Bani River.

Building Conditions
The Mosque suffered from the weakened structure of the wall-bearing system; water ingress in the roofing due to defective slopes and accumulation of earth fill; and accumulation of earth plaster on walls, hiding architecture and filling windows and doors.

Significant Issues and Impact

Data Collection/Surveys
The AKTC project performed the first topographic and architectural surveys of the Mosque in 2008. Documentation of the work in progress is compiled on a regular basis and a set of as-built drawings is being prepared.

Historic Buildings/Monuments Conserved
Conservation of the historic Mosque was the main objective of the AKTC project. Its interior area of 1400 m², as well as 800 m² of courtyard spaces, was fully restored.

Community Involvement/Programme
The community and its leaders played an important role in the decision-making process of the conservation through regular information and discussion sessions.

Vocational Training/Capacity Building
Some 120 community masons and labourers were trained in earthen conservation methods. Literacy classes were offered to members of the implementation crew and foremen were trained in basic computer skills.

Contracting Methods
Due to a lack of qualified contractors for monument conservation in Mali, the work was entirely in-house managed. This enabled on-the-job training, direct quality control and flexible use of local resources.

New Technologies Introduced
New sound, electrical and ventilation systems were installed in the Mosque’s interior.

Relevant Codes/Standards Adopted
Although there are currently no building codes applicable to earthen architecture, the project is in line with conservation principles drawn up by ICOMOS and calls on the best practice of earth architecture specialists.

Partners

Public Partners
Ministry of Culture, Republic of Mali.

Community Partners
Comité de gestion de Djenné.

Authoritative Framework
Memorandum of Understanding signed in 2004 between AKTC and the Ministry of Culture, providing the framework for an Earthen Architecture Programme in Mali.
The Djingareyber Mosque is known to have been constructed in 1325 by the Andalusian architect Abou Ishak, at the initiative of King Hadj Moussa, upon his return from pilgrimage to Mecca. Since then the Mosque has experienced a number of modifications, resulting from the organic nature of earthen architecture and its vulnerability to weathering. Archaeological test pits carried out in 2009 in the main prayer hall have shown that at least three successive buildings have occupied the site. The main earthen ornaments on the qibla wall and some pillars may date back to the sixteenth century. In 1988 the site was included in UNESCO’s World Heritage List, together with the city’s other two historic mosques, Sidi Yahya and Sankore.

The Mosque is located at the southern edge of Timbuktu’s historic city, forming the core of modern Timbuktu, the home of 30,000 inhabitants and capital city of Mali’s Northern Province.

Lying at the meeting point between the Niger River Delta and the Sahara Desert, Timbuktu and the Sahelian environment is affected by growing desertification. Trees that used to form raw materials for the Mosque's carpentry are no longer available. Wind erosion and accumulation of sand deposits in the city’s open spaces are also of concern for the integrity of the urban fabric and public open spaces.

Built in mud and tuff stone, Djingareyber Mosque was in poor condition when it was first documented by the Aga Khan Trust for Culture (AKTC) in early 2007: a full topographic and architectural survey, first performed on the Mosque, was the basis for a damage assessment. It revealed that the building was in weak structural condition, particularly the roof and wall-bearing systems, due to water ingress in the roofing. This occurred because of defective slopes and accumulation of earth fill and the mediocre quality of local mud plasters due to the decline of familiarity with traditional crafts.

The project first focused on consolidating the mud masonry and carpentry, making the roofing watertight. Then the project aimed to conserve decorative earthen motifs and plastered surfaces in the interior spaces of the Mosque’s covered prayer hall and replace the defective sound, ventilation and lighting installations.
Background

Brief History of Project Site

Timbuktu, a town with 30,000 inhabitants, is head of the Regional Council for the Northern Provinces of Mali. The population comprises a variety of ethnic groups, with a majority of Songhai, followed by Touaregs, Peuls, Bambaras and small proportions of other ethnic groups. Djingareyber Mosque was built in 1325 by King Hâdî n a Djouma upon his return from a pilgrimage to Mecca, and has experienced a number of modifications over time. The main earthen ornaments on the qibla wall and some pillars may date to the 16th century. Archaeological test pits carried out in the main prayer hall revealed that at least three previous buildings occupied the site. In 1988 the Mosque was included in UNESCO’s World Heritage List.

Challenges

Project Risks

Timbuktu is remote. Sourcing quality construction materials in the immediate environment is difficult due to the decline of appropriate mud construction techniques. Logistics and local transportation, combined with the lack of skilled mid-level labour and security threats, are also challenging. As a result, the work on Djingareyber Mosque was entirely in-house managed, employing traditional masons active in the neighbourhood’s corporation. This mode of operations also enabled direct quality control, flexibility in resource allocation and on-the-job training in traditional building crafts and contemporary conservation methods to more than 140 community masons and craftsmen. Literacy classes were offered to all implementation crew and foremen as well as training in basic computer skills.

Siting Conditions

Timbuktu lies at the crossroads between the Niger River Delta and the Sahara Desert, an area affected by growing desertification. Trees that once served as the raw materials for the Mosque’s carpentry are no longer available. The organic nature of the Mosque’s earthen architecture makes the building vulnerable to weathering elements. Wind erosion and accumulations of sand deposits in the city’s open spaces are of concern for the safeguard of the Mosque and overall city fabric.

Infrastructure

The systems of water and sanitation in Timbuktu Old City are based on infiltration pits and built on sandy soil, posing hygiene hazards.

Building Conditions

Djingareyber Mosque’s structure is threatened by a weakened wall-bearing system, water ingress in the roofing due to defective slopes and accumulation of earth fill, and the medroso system of local mud plasters associated with the decline in usage of traditional building techniques.

Significant Issues and Impact

Data Collection/Surveys

The AKTC project performed the first topographic and architectural surveys of the Mosque in 2007. Documentation of the work in progress is regularly compiled to form the basis of a set of as-built drawings.

Historic Buildings/Monuments Conserved

Conservation of the historic Mosque was the main objective of the AKTC project. An interior space of 2000 m², together with 800 m² of courtyard spaces, was fully restored. The roofing system was improved using tie beams to evenly distribute the roof loads (lime-based mortar and layers of mud insulation).

Community Involvement/Programme

Vocational Training/Capacity Building

Although there are currently no building codes applicable to earthen architecture, the project is in line with conservation principles drawn up by ICOMOS and calls on the best practice of earth architecture specialists.

Partners

Public Partners

Ministry of Culture, Republic of Mali.

Community Partners

Comité de gestion de Tombouctou.

Authoritative Framework

Memorandum of Understanding signed in 2004 between AKTC and the Ministry of Culture, providing the framework for an Earthen Architecture Programme in Mali.
Bamako, the capital of the Republic of Mali, is located in the Niger River Valley. The city covers approximately forty square kilometres and it is estimated that its population has exceeded one million inhabitants. Since colonial times, Bamako has experienced significant population growth and this, in turn, has stimulated a constant growth of the urban area and demand for residential and public facilities.

The site defined and proposed for Bamako Urban Park lies within a larger protected forest reserve of 2100 hectares, a green belt of some magnitude and significance in this large but mainly arid country. The project site itself covers a total of 103 hectares comprising an inner active, cultural core zone of forty-nine hectares and an outer, more passive ecological buffer zone of fifty-four hectares. It is a large, semicircular canyon area that lies beneath the terraced outcrops of the Koulouba plateau between the National Museum and the Presidential Palace complex in a protected forest that remains in a relatively natural state. The central portion comprises the existing botanical garden, arboretum and zoo. The remainder is composed of the terraces and slopes beneath the 415-metre contour containing geological features such as caves, prehistoric habitats and an important range of flora and fauna.

The existing botanical garden, initiated in the 1930s, used to serve as a conservatory of local botanical species and a nursery for imported ones. A series of dams were constructed along the small riverbed to protect the area from devastating floods during the rainy season. The zoo, developed in a later stage, houses a number of African animals in cages. Small buildings were constructed throughout the period in the arboretum and zoo to accommodate maintenance staff and technical installations. What remains today of this earlier landscape are an arboretum affected by lack of irrigation with alignments of trees covered by alien vegetation, a dilapidated zoo and several small semi-neglected buildings.

Given its natural attractions, its large size and its location next to the museum complex, it was envisioned that the Park could become a large open space for leisure and educational activities, focused on the general public, school groups and tourists. The project brief called for the unification of the sites of the National Museum, the existing Botanical Garden and the Zoo into a single cultural/ ecological park of significant value, with natural and cultural attractions.
In 2008 the Aga Khan Trust for Culture (AKTC) developed detailed planning and a schematic design for Phase 1 of the project, while technical and economic feasibility studies were advanced for the totality of the proposed project. Phase 1 is seventeen hectares in area and contains a number of new building facilities, as well as rehabilitated open spaces and gardens.

There is a comprehensive pedestrian circulation network and formal promenades throughout the Park. The Park contains fitness, jogging, cycling and mountain walking tracks of varying difficulty and diverse interpretive awareness trails for botany, birds and nature. This pedestrian network provides easy access to the full extent of the 103 hectares of parkland and connects existing successful nodes, such as the National Museum, with other attractions, such as the amphitheatre dedicated to education or the performing arts.

An important part of Phase I planning includes the redevelopment and integration of approximately eight existing buildings, to be used for internal park operations, food and beverage points and storage. Built facilities, designed by Diébédo Francis Kéré, an Aga Khan Award for Architecture recipient in 2001, will include entry structures (a primary and secondary gate and entry building), a youth and sports centre cluster, a restaurant, public toilets and kiosks.

The garden spaces offer varied types of indigenous flora in different settings, from open lawn areas to flower gardens, wooded areas and a medicinal garden with explanatory signage. The installation of a range of interpretive educational material, in signage or display, and the potential for the development of trained guides could reveal a new depth of educational experiences to all visitors. By combining an environmental undertaking of a high standard with leisure and cultural facilities, all possibly under a public-private partnership approach, an important development model can be put in place in a favourable political context.
Phasing 2007 – 2013

**Master planning**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>2007</td>
<td>Letter of intent signed between AKTC and the Government of Mali, details agreement</td>
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<tr>
<td>2008</td>
<td>Construction of Phase 1 core area</td>
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<tr>
<td>2009</td>
<td>Completion of Phase 1; Park inauguration and start of Park operations</td>
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<tr>
<td>2010</td>
<td>Construction of Phase 2 and zoo rehabilitation</td>
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**Infrastructure**

The municipal infrastructure did not have capacity for potable water, sewage treatment or irrigation requirements. Electricity supply was erratic.

**Building conditions**

Access to building materials was limited due to the remoteness of the location.

**Significant issues and impact**

**Data collection/surveys**

The documentation prepared before the interventions included an evaluation of all site features: rock outcrops, specimen trees, boundary condition, various trial opportunities, off-site areas, adjacent development proposals and catchment dynamics. Prototypes of construction materials and details were produced early in the planning process to inform design and define acceptable levels of workmanship. Engineering flood-line calculations were required to establish a no-build zone.

**Master planning process**

A general programme was detailed, staging interventions prior to the development of capital works and management objectives such as sustainability. This led to the preparation of site plans, drawings, descriptions of works, operational standards and budgets.

**Planning issues**

Site works were programmed to take advantage of dry weather for building and infrastructure, and natural rains for plantings. Shift work enabled paving manufacture and construction to take best advantage of the seasons. Elements such as roofs and street furniture were prefabricated to expedite works and counter seasonal installation constraints. Natural stone was easily available and an on-site factory for cutting stone paving was installed. Scrap valves were installed in existing dams and new flood detention basins created. Standby electricity generators were also included in the infrastructure package. As long as the Park remained underused, informal use continued. Completion of the perimeter fencing was necessary to secure the site and ensure public safety. Grunting is excluded from the perimeter. Loss of mature trees was a consideration in the planning and the minimum number, largely alien species, were felled to assimilate the design. Many new plantings have been provided as an offset. The vast majority of required plant material was obtained from local sources or grown on site. Emphasis was placed on the use of indigenous vegetation to preserve the Park’s character. The Park’s natural fabric – valley gorges, rock outcrops, woodland and roadside trees, and a rich fluvial habitat – was preserved and will now be protected and enhanced.

**Historic buildings/monuments conserved**

Administration and maintenance functions were dispersed at the Park edge. Several buildings were rehabilitated for new use as boutiques, a hotel, tea-houses, cafes and environmental education centres. A range of buildings including formal entrance points, a gym and youth club, an environment centre, bistro, administration office, ten cable and ablution facilities were either erected or rehabilitated and the National Museum landscape was redesigned.

**Partners**

**Public Partners**

Ministry of Culture, Ministry of Environment and Sanitation, Republic of Mali.

**Community Partners**

Associations of Park Users, Sports Club, Environmental Club.

**Authoritative Framework**


Background

**Brief history of project site**

The Park site is situated in a valley that during Mali’s colonial era was designated as part of a ‘storm water mitigation’ system. The site eventually became a formal Park, and subsequently a scientific estate with a zoo, botanical garden and the National Museum. A small road bisected the area separating the Park and Museum components. The seasonal watercourses crossing the site were dammed at intervals and stone footpaths constructed to link various park features. Many indigenous trees were conserved, largely along the main stream, and formal, open lawns were set out behind indigenous trees were conserved, largely along the main stream, and formal, open lawns were set out behind indigenous trees were conserved, largely along the main stream, and formal, open lawns were set out behind indigenous trees were conserved, largely along the main stream, and formal, open lawns were set out behind.

**Site conditions**

Virtually no formal facilities remained operational, including the original irrigation system. The planning process identified opportunities to recycle the Park and Museum through real estate use and to restore and enhance the natural facilities and activities offered by the natural valley site.

**Environmental concerns**

Water is a practical resource here and potential depletion of groundwaters is an issue. Physical testing indicated that planned boreholes and water consumption were sustainable.
Damascus Houses

DAMASCUS, SYRIA

Considered one of the oldest continuously inhabited cities, Damascus displays in its urban fabric the remains of the successive civilizations inhabiting its site, the latter being, before contemporary times, the Ottomans, who have profoundly marked the city during their four hundred years of presence. Among the most significant palaces constructed during the classical Ottoman period in Damascus are Bait Sibai and Bait Nizam. They are typical Syrian courtyard residences, the result of intensive reconstruction works after the earthquake of 1759 and refurnished several times according to the fashion of the time. Instead, Bait Quwatli, built in 1868, contemporary to the arrival of telegraph communication and rail transport, shows Western influence adapted to the local taste and construction methods.

The involvement of the Aga Khan Trust for Culture (AKTC) in Damascus commenced in the last quarter of 2008 following the signature of project framework agreements in August 2008. AKTC and the Tourism Promotion Services of the Aga Khan Fund for Economic Development (AKFED) embarked on the development of two hotels of distinct nature: one converting the Aleppo municipal Serai dating from the early twentieth century; the other in the Old City of Damascus reusing three historical palaces – Bait Sibai, Nizam and Quwatli – that were carefully restored prior to conversion into a boutique hotel.

The properties, owned in the past by prominent Damascene families, had become government owned in 1974 and since then, in spite of temporary use as film sets or for receptions and high-profile events, had deteriorated to the point of collapse. Although major restoration was carried out by the authorities on Bait Sibai and Bait Nizam in the 1980s and on Bait Quwatli in the early 2000s, lack of use and maintenance led to rapid damage. When AKTC initiated architectural surveys and condition assessments, the analysis revealed that much of the damage was related to lack of use and maintenance. The buildings had also been subject to a large number of recent alterations.

The conceptual approach to the conservation of the palaces and adaptive reuse as a boutique hotel associated a cultural dimension of heritage conservation aimed at conserving the authenticity of the fabric and at ensuring long-term conservation and a for-profit activity of hospitality, providing economic opportunities...
Background

BRIEF HISTORY OF PROJECT SITE
Damascus, with six million inhabitants, is considered one of the world’s oldest continuously inhabited cities. This site is profoundly marked by 400 years of Ottoman presence. Bait Sibai and Bait Nizam are typical Middle-Eastern courtyard residences, the result of intensive reconstruction works after the earthquake of 1759. Bait Quwatli, contemporary to the 19th-century arrival of telegraph communication and rail transport, shows Western influence adapted to local tastes and construction methods.

Challenges

PROJECT RISKS
New uses for historic buildings might result in rising prices in the neighbourhood, and consequently in produce gentrification. Socio-economic programmes are intended to balance such reactions. Heavy vehicular access, intensive commerce and a recent increase in international tourism can undermine the historical value and monumental qualities of the site.

SITE CONDITIONS
The Old City of Damascus remains an important centre of urban activity.

INFRASTRUCTURE
Parts of the site’s infrastructure date to the Roman era, but most of its electricity, water and sewage networks were built during the French Mandate period and require upgrades for future needs. Sewage and water leakage is seeping into and damaging the historic built fabric.

BUILDING CONDITIONS
Bait Sibai and Bait Nizam have undergone previous conservation works, using methods such as cement repair and synthetic varnish that damaged the historic fabric. Bait Quwatli was used as a school and a Palestinian refugee camp before being abandoned, and is today in very poor condition.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
A comprehensive architectural survey of the three houses was conducted by a local team of young professionals, trained in total station and rectified photography.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
In addition to Bait Sibai, Bait Quwatli and Bait Nizam, neighbouring remnants of an Ayyubid wall and a sabil (public fountain) were included in the conservation project.

NEW BUILDING FACILITIES
Two modern, but obsolete structures were replaced by new buildings to accommodate the site’s infrastructure while displaying a form and scale more appropriate in design for the Old City.

VOCA TIONAL TRAINING/CAPACITY BUILDING
The architectural survey and restoration project (including conservation works in stone, wood, plaster and paint) provided several recently graduated architects and other building professionals with an opportunity to acquire skills required for monument preservation, a field with potential in a city that includes a World Heritage Site.

CONTRACTING METHODS
Conservation work on areas with significant decorative or morphological value was carried out by labour directly recruited by AKTC. Reconstruction works were left to contractors under AKTC supervision.

Donors
Tourism Promotion Services.

Authoritative Framework

Public Partners

and social development in the area: employment, training, open-space upgrading and tourism. Conversion into a hotel facility, therefore, not only continues the previous use of the palaces as private residences but also guarantees to the authorities that the asset will be managed and maintained.

In functional terms, the large culturally-sensitive halls, located mainly on the ground floor around vast courtyards, are used for public functions, while the first-floor spaces were converted into high-standard guest rooms. To minimize the impact of modern hotel services in the existing buildings, a large portion of back-of-house, technical services and guest rooms were accommodated in two new buildings designed on adjacent plots in substitution of two obsolete concrete buildings: an elementary school and a fire brigade. The Syrian authorities view this project as an opportunity to set high standards in the country for adaptive reuse initiatives in sensitive buildings, a booming trend in Syria that poses quality challenges. Thus, emphasis is given to project methodology and process, calling for a large variety of specialists, both Syrian and international, and an important component of training and capacity building of local professionals and craftsmen.
The Aga Khan Development Network (AKDN) has made a long-term commitment to working with the people and Government of Syria to support and contribute to the improvement of prospects for economic, social and cultural development. These efforts are undertaken within a ‘Framework for Development Cooperation Agreement’ between AKDN and the Government of Syria, which was ratified by the Syrian Parliament in 2002.

AKDN programmes in Syria span six provinces (Aleppo, Damascus, Hama, Lattakia, Sweida and Tartous), and serve both rural and urban populations. Priority areas include rural economic development, employment and enterprise development, enhancing the quality of services, strengthening civil society organizations, protecting cultural heritage and developing sustainable tourism.

The Aga Khan expressed the interest for AKDN in Syria: “My interest in working in Syria is to take the various leading countries of the umma and say, let’s start, let’s move together, let’s revive our cultures so that modernity is not only seen in the terminology of the West, but in the intelligent use of our past.”

The Historic Cities Programme (HCP) has been active in Syria since 1999, when the Government of the Republic of Syria approached the Aga Khan Trust for Culture (AKTC) for assistance in the restoration of the three citadels of Aleppo, Masyaf and Salah al-Din. A partnership agreement was signed with the Syrian General Directorate of Antiquities and Museums in 1999. Consistent with the Area Development approach developed by AKTC in Egypt, Pakistan and elsewhere, under the agreement AKTC would also work to improve the area around the Citadels. During the early stage of the Citadel restoration projects, HCP expanded the initial scope of pure conservation work to include the contextual dimensions of the three sites. Building on its work on the Citadel of Aleppo, HCP expanded its mandate to include the planning and landscaping of the Citadel Perimeter, the creation of a new Park, and social development projects in the Old City.

One of the oldest cities in the Middle East, Aleppo developed as a crossroads between East and West, straddling important trade routes linking the desert to the sea. Until 1930 the city remained more or less confined within its medieval boundaries, limited by its walls and early suburbs, which were surrounded by pistachio, fig and olive groves.

Today, approximately 100,000 people, or five per cent of the population of the city as a whole, live in the historic Old City. A great many monuments are

Aleppo Area Programme

Programme Scope / Objectives

In Aleppo, AKTC aims to revitalize the Old City and bring social and economic benefit to its residents by restoring the Citadel and adding a visitor centre. The conservation and adaptive reuse of a historic hammam and government building into a hotel are also included, as are the planning and landscaping of public spaces around the Citadel perimeter. The creation of a sustainable public park with development initiatives taking place in adjacent neighbourhoods is also part of the programme. The initiative relies on a ‘Public-Private Partnership Framework’, which is new to Syria.
found amidst the historic fabric of the city and it was recognized by UNESCO as a World Heritage Site in 1986.

Within the World Heritage Site lies the Citadel of Aleppo, located at the heart of the Old City. The area around the Citadel used to act as an oversized roundabout, with a constant stream of vehicles cutting off access from and into the historic town and creating a rupture in the urban fabric. In 2006, HCP initiated a planning project on the Perimeter of the Citadel, working in close collaboration with the Old City Directorate and the German Technical Cooperation Agency (GTZ). The scope of the planning project includes major infrastructure improvements, traffic management plans, landscape design and proposals for the reuse of key historic structures.

In 2007, a ‘Memorandum of Understanding’ was signed between the Governorate of Aleppo and AKTC to create a Park located at the edge of the Old City and to formulate a socio-economic project in the surrounding neighbourhoods. Bab Qinessrine Park will be an important gateway to the Old City. Capitalizing on the efforts already undertaken on and around the Citadel, the Park will attract locals and tourists, thereby providing opportunities for employment and services.

Although Aleppo is the second largest city in Syria and receives over four million tourists every year, proceeds from tourism have not led to a status of relative well-being for the population living around the Citadel. Aleppo’s population to the east and south of the Citadel is considered amongst Syria’s most marginalized, with income levels per capita that are often below the level of US $1 per day. The reasons for this are numerous, but foremost amongst them is a general lack of employment opportunities, low education levels due to high drop-out rates and inadequate upkeep of residences.

Three key areas of socio-economic intervention have been established in the two neighbourhoods immediately adjacent to the future Bab Qinessrine Park, with local needs researched through a baseline survey. These initiatives include increasing literacy levels amongst those above fifteen years of age; ensuring education for potential school drop-outs; increasing access to health and promotion, as well as revival of cultural heritage; raising family incomes through vocational training and employment; providing linkages with micro-credit; the improvement of access to and upgrading of open spaces; and the physical improvement of dwellings.

The thrust of these efforts in Aleppo is to enhance the historic urban fabric and stitch together two attractive poles on the northern and southern ends, realizing the potential for these projects to become significant contributors to the economic development of the Old City.
The Citadel of Aleppo is one of the remarkable examples of military architecture in the Middle East. The recently discovered Temple of the Storm God dates human use of the hill from the beginning of the third millennium BC. The Citadel of Aleppo, which has been built on a natural limestone hill, is the result of numerous constructive phases, large changes and destruction. The record of these changes is still recognizable in a few structures. Most of what remains today is from the Ayyubid and Mamluk periods. The monument represents a unique cultural heritage for the quality of the architecture, the variety and quality of the materials, and for the complexity of the historical stratifications.

The Citadel rises above the Old City of Aleppo, which since 1986 has been a UNESCO World Heritage Site. In the same time, the Citadel is the landmark for the new Aleppo, a city with almost two million inhabitants that attributes a strong symbolic value to the Citadel. Indeed, the site is one of the most famous monuments of Islamic architecture and one of the most visited sites in Syria.

The Aga Khan Trust for Culture (AKTC) signed a ‘Memorandum of Understanding’ with the Directorate General of Antiquities and Museums in Syria (DGAM) on 1 December 1999 to propose support in the restoration of three citadels in Syria (Aleppo, Masyaf and Salah al-Din).

The Citadel of Aleppo is a very large complex containing a series of buildings and monuments with different historical features, which call for a diversified approach and different forms of conservation and maintenance targeted to the specific requirements of each structure or category of structures. These can be listed as the bridge and the main gateway; the ring walls and the towers; the mosques; the citadels; the palace complex; the arsenal; the hammam; the barracks; the tunnels; and the new theatre.

Three major axes of implementation were developed by AKTC from 2000 to 2008, after the finalization of the Master Plan in 2000. The main goal of the Trust was to develop several levels of intervention: upgrade the local staff in the preservation of the masonry; the development of a real tourist infrastructure; and intervention in place of the local Directorate of Antiquities when foreign expertise was needed.

Project Scope / Objectives

The goals of the restoration project are to train local Antiquities staff, engineers, conservation and craftsmen in up-to-date conservation techniques. The programme provides guidance on proper environmental protection and management of complete areas, the creation of visitor routes of tourist interest in neglected areas, and the creation of a visitor centre, equipped with documentation and guidebooks for visitors.
The Trust initiated a restoration project that included the preservation of remaining elements. This task concerns essentially the preservation of the medieval ruins, and consisted in a traditional but necessary exercise of masonry conservation. These interventions were completed over the years, through the training of the Antiquities staff, local engineers, contractors and craftsmen in up-to-date conservation techniques.

The Trust developed the visitor infrastructure, including the creation or upgrading of a ticket office, a visitor centre, paths, rest points and view points, signage, sanitation services, brochures and a guidebook. Through this initiative, the Citadel, along with those of Masyaf and Salah al-Din, was the first monument in Syria, to provide visitors with a comprehensive visit.

The Trust invested its expertise in the preservation of some highly sensitive buildings, such as the Ayyubid cistern and well. Plural-disciplinary teams were involved in the conservation of these two subterranean structures. High-technology techniques such as geo-radar analysis were used. The results of these analyses permitted the Trust to choose suitable techniques of conservation.

Since that time, in the Citadel of Aleppo, a considerable amount of work has been completed through cooperation with the Antiquities authorities. Only a number of historically or spatially coherent areas within the site were selected to become the focus of conservation efforts, with the intention that the DGAM would continue work elsewhere using methodologies and skills acquired during the implementation of the joint project.

The work has developed along the lines of international standards and methodology of restoration and rehabilitation. The choices made were the result of a careful analysis of the monument’s history, of its present physical and figurative state, and of its conservation status. During these years in fact detailed surveys were carried out with the analysis of materials and systems of decay. The reconstruction or restoration of structures has sought to avoid the creation of facsimiles of how they might once have appeared as much as possible. The limited reconstruction of specific elements has been carried out only where it was absolutely necessary.

AKTC’s work started in 2000 on one of the towers of the ring walls. From 2000 to 2008 the Trust initiated a large mission of surveys, to obtain documentation on the complete site. From 2001 to 2004 the Trust carried out sizeable works on large sections of the walls, including underpinning and important structural stabilization, as well as the consolidation of the northern advanced tower. During the years 2001 and 2002 the western area was the subject of a mission of archaeological excavation and conservation of the Ottoman remains discovered. In 2002 and 2003 pilot projects were developed on some major gullies located on the glacis. From 2002 to 2004 an important effort was made on the preservation of the Ayyubid Palaces, a large complex including residential and reception functions. During these works the pavement of the central part of the main reception hall was restored. From 2003 to 2006 efforts were also concentrated on the development of the visitor infrastructure. In 2005 a reinforcement of the cladding stone of the cistern was completed. From 2005 to 2007 the Trust worked on the conservation of the Ayyubid cistern and well, tasks that included structural reinforcement as well as architectural interventions. In 2007 the portal of the throne hall was completely cleaned. During 2008 a large mission of upgrading and cleaning the site was undertaken. The World Monuments Fund provided support for the work on the Ayyubid complex, some intervention on the ring walls, and participated in the archaeological excavations in the area of the temple, the Ayyubid cistern and the portal of the throne hall.

The Trust finalized its intervention by the definition of a cultural site management plan for the DGAM: a maintenance programme includes the routine upkeep of the structures and periodic checks to ensure that all mechanical systems are in working order, as well as repairs to materials and components that are subject to predictable wear and tear. But it was also important to include unplanned maintenance in this programme, in case
Within the site, several archaeological excavations are still ongoing; the Citadel will continue to dominate the Aleppo skyline, a powerful symbol of the city’s heroic past. The earliest archaeological evidence of occupation found in the Citadel dates to the third millennium BC, although it is likely that the site was occupied even earlier. Most of what remains today are the ruins of military, ceremonial and residential structures built in the 13th century and later.

The medieval drainage was full of debris and the long-neglected landscape prevented surface rainwater from draining, resulting in major leakage at the foot of the ring walls. Although several high-pressure electrical lines cross the site, no suitable electricity network existed within the Citadel.

A succession of invasions, bombardments and earthquakes have taken their toll on the area within the ring walls, but amongst the ruins stand some fine mosques, a hammam and the remains of a palace and houses, dating to the Zengid, Ayyubid, Mamluk and Ottoman periods.

Significant Issues and Impact

A large sector of the Citadel has now been preserved. The main maintenance-related problems in the Citadel are seriously impaired without prior conservation work. The medieval drainage was full of debris and the long-neglected landscape prevented surface rainwater from draining, resulting in major leakage at the foot of the ring walls, with amongst the ruins stand some fine mosques, a hammam and the remains of a palace and houses, dating to the Zengid, Ayyubid, Mamluk and Ottoman periods.

New Building Facilities

Prior to AKTC-implemented conservation work, there were no suitable structures for tourists. In cooperation with the DGAM of Syria, AKTC equipped the Citadel with a visitor centre and upgraded sanitation facilities in addition to rehabilitating the cafeteria located within the Citadel walls.

Community Involvement/Programme

At the project’s outset, meetings were held with the DGAM of Syria to define and agree on interventions for the Citadel’s major historical sites.

Vocational Training/Capacity Building

AKTC initiated training sessions and programmes to provide the DGAM of Syria, contractors and craftsmen with instruction in methodologies for documentation and conservation. Specialised and accredited international and local experts conducted the training.

Contracting Methods

The choice of contractors was based on tender procedures after selected invitations.

Relevant Codes/Standards Adopted

Local codes and international standards.

Partners

Public Partners

Donors

Authoritative Framework

On 1 December 1999, AKTC signed a Memorandum of Understanding with the Directorate General of Antiquities and Museums of Syria for providing support and expertise to the ‘Restoration of Three Citadels in Syria’. One of these sites was the Citadel of Aleppo.
The Citadel of Aleppo is the centre of a historic city, which is registered as a World Cultural Heritage Site. The conservation project undertaken by the Directorate General of Antiquities and Museums (DGAM) and the Aga Khan Trust for Culture (AKTC) within the Citadel of Aleppo underlined the need for an intervention at its perimeter. Within the scope of the ‘Project for the Rehabilitation of the Old City of Aleppo’, an urban design study was implemented for the Perimeter of the Citadel of Aleppo, in cooperation with the Old City Directorate and GTZ (German Technical Cooperation Agency). The City of Aleppo and AKTC signed a protocol in 2003 detailing the objectives and conditions of this study.

One of the main objectives of the Citadel Perimeter project involved the planning and control of the spread of commercial functions in ways that might jeopardize the comfort, economy and environment of the adjacent residential areas. It was also important to open new cultural development opportunities through the reuse of existing historic buildings and to steer tourist and commercial functions into a direction that is beneficial to the particular areas involved and the Old City in general.

Condition of the Perimeter of the Citadel of Aleppo

The traffic situation of the Aleppo Citadel Perimeter was no longer suitable for the quality of such an exceptional site. An appropriate traffic management system supported the function of the central commercial zone created by the souks of the Old City. The optimization of traffic permitted the creation of the main public spaces as a representative cultural zone for the whole city.

The main objectives for the Old City comprise reorientation of the traffic in and around the Citadel area, including pedestrian issues, public transport networks and parking areas; the control of future planning and the protection of the physical and historical environment of the Citadel Perimeter; the control of the spread of commercial functions in ways that might jeopardize the comfort, economy and environment of residential areas; steering the commercial development in a direction that is most beneficial to the particular areas involved and the Old City in general as tourism activity; protecting the surrounding residential areas, especially from the pressure of commercial functions; adoption of a land-use plan that takes into account the cultural heritage of the site.
plan that enhances the tourist and cultural functions and complements rehabilitation efforts; proposition for future use of each of the major public or vacant buildings; and the improvement of public spaces, infrastructure elements, landscaping, pavements, lighting, details and so on.

Potentials of the Perimeter of the Citadel

The Citadel and its surroundings are one of the most famous cultural heritage sites in the Near East. They are at the heart of a lively historic town and the traditional administrative centre of the city. The Citadel is the landmark of a city of two million inhabitants and of high value for the image of the city. Together with its surroundings, the Citadel is a recreational area for residents and visitors, a cultural attraction of international and national standing, and an archaeological site of great importance for scientific research.

An Urban Study

The Citadel Perimeter envelope is a conglomeration of attractive historic buildings and plain new structures, creating a façade unified only through the use of limestone as its main building material. Its open spaces were poorly defined and badly employed. A privileged zone of the Aleppo Citadel Perimeter was the southern area of the project and in particular the area between the souk entrance and Yalbougha Hammam. This newly created pedestrian plaza now serves as a recreational and pleasure outlet for area residents, and for those of the city as a whole. It also acts as an attractive tourist activity zone. The proper conception of the overall design, details of the surface treatment, urban furniture and other essential elements in a pedestrian public space for creating an amiable urban area were essential to the success of the project. Reference to the traditional urban landscape was a priority, but as a voluntary spirit of continuity and not as an effort to create facsimiles or copies. The project completes the signature of each historical building from the different eras in a real sense of local modernity. Preferences were always given to local techniques and materials with durable qualities implemented by local labour.

Implementation

The implementation of the traffic concept under existing conditions proved to be a complex exercise in its own right. Accordingly the execution of the whole project was divided into five phases. Zone 3, the plaza across from the Citadel entrance, was funded by AKTC and is now completed. Zones 1 and 2 were funded by the Directorate of the Old City and completed in 2010. Zones 4 and 5, the car parks and the completion of the pedestrian zones, will be the subject of a tender procedure after final approval of the local authorities.
The Bab Qinessrine Park project is the result of a previous engagement by the Aga Khan Trust for Culture (AKTC) in the conservation of three historic citadels in Syria over 1999 – 2005, including the Citadel of Aleppo and the planning and redesign of the latter’s urban Perimeter space. This first phase of engagement by the Trust in Syria was marked by the inauguration of the Citadel of Aleppo by His Highness the Aga Khan in 2008. The seventeen-hectare site of the future Park lies in a strategic location, just outside the city’s historic walls, and takes its name from the south-western gate itself. The site is just a hundred metres from the Grand Mosque and traditional souk and only another forty metres from the Citadel of Aleppo.

The proposal for the redevelopment of the mostly barren site into a municipal Park was one advanced by the Government of Syria following a visit of high-level officials to Azhar Park in Cairo (see p. 310). Similarities between the former condition of the site in Cairo and that of Bab Qinessrine are striking: in their pre-existing states, these two sites represented mostly marginalized inner urban land, just outside the historic city walls, adjacent to economically challenged but vibrant communities, with considerable topography and poor soils. The Syrian authorities were keen to apply similar methods used in Cairo to this disadvantaged but central site.

Beyond the above-mentioned physical constraints, impediments to the project existed in the site’s western edge where mid-rise multi-family housing blocks had experienced differential settlement, a large percentage of which had already been condemned, residents relocated and the buildings demolished. A remaining series of buildings await similar evacuation. Park design proposals also need to take into account the mosque and small cemetery located on the site’s north-western corner and two known caves which run roughly north-south in the chalk strata below the site.

As is often the case, certain site constraints can be advantages, such as the high elevation of the central part of the site which affords views northwards towards the city gate and the Citadel. With careful master grading, the site will allow for a three-dimensional landscape with terracing of planted and walking areas and facilities that will provide interesting views over the city and city walls.

The Bab Qinessrine is an area of waste ground outside the Old City which the AKTC is developing into a Park to provide green space and to form a visitor circuit through the Old City. The Park is the core component of what is expected to become an urban regeneration project in the immediate area through a package of initiatives, including environmental rehabilitation and economic and social improvements, with additional benefits from private inward investment as a complement to the Park investment, and with public-sector investments on the periphery for roadways and other similar public infrastructure.

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The Park is planned to feature a palm-lined walkway with water channels and fountains.

The Park’s Master Plan design has been entrusted to the Cairo-based practice, Sites International, landscape architects for Azhar Park.

The Park design consists of two major zones with distinct design themes. The first zone occupies the northern area of the site alongside Bab Qinessrine Gate’s approach road, consisting of a series of courtyard and low-scale retail modules arranged on both sides of a wide promenade punctuated with pools and fountains and lined with trees. Designed to accommodate large numbers of strollers and to provide diverse retail and food and beverage outlets, this zone will allow the Park to generate funds for its ongoing operations while screening the northern parking zone from the main park area.

The second and far larger Park zone consists of the sloping areas of the site, designed to provide areas for leisure along curvilinear paths and terraces. At the northern end an amphitheatre has been set into the slope at the eastern end of the main promenade, facing the historic city gate itself. The higher areas of the Park to the south will contain a small lake, a playground for children, a café and, at the highest point, a restaurant with indoor and outdoor seating for residents and tourists.

The Park design process has been accompanied by careful deliberation and planning with the Governorate of Aleppo regarding an appropriate future management system for the Park that will safeguard the quality and finish of the completed project. The Trust has entered into a ‘Memorandum of Understanding’ whereby the Park will be designed, built and then managed by the Trust for a period of time, allowing the management system to be put in place and operated in the best interest of park users, the city of Aleppo and neighbouring communities.

As the Park planning and design proceed, AKTC is in close coordination with the Aleppo authorities in the development of a series of proposals that aim at enhancing the quality of life in the adjacent communities. A socio-economic baseline survey has been undertaken to assess the present quality of life indicators and to identify the highest priority needs, and a community-based office has been set up. Consistent with other AKTC projects in inner city areas, the Park and socio-economic projects will be coordinated to provide a multiplicity of linkages and benefits across the project areas.
Project Scope / Objectives

The scope of tasks included documentation, history research and the definition of principles for the conservation of masonry. The project included the development of techniques for stabilization and structural reinforcement, and masonry conservation and major repairs. HCP was involved in the creation of tourism infrastructure and the access esplanade.

Brochures and guidebooks for tourists were also created.
The project began in 2000 with the documentation work and the definition of the concept and principles of the preservation process. The whole mission, detailed documentation was created, including topographical and architectural surveys of the six main levels of the Citadel. Plans of these levels and precise sections were drawn. In 2001 the consolidation of the eastern wall was executed. As the structural base of the historic Citadel, the rocky promontory was also the object of periodic controls. From 2001 to 2003 efforts concentrated on the core of the Citadel, and in particular on the western and eastern areas, which presented major structural issues. During this period, archaeological excavations were carried out. From 2003 to 2004 the Trust completed the work on the upper levels. In the whole Citadel, drainage problems have been resolved by channeling water away from the wall's foundations towards the interior areas of the complex. Rain falls have been redefined to avoid concentration of groundwater near the walls to avoid aggravating the existing problems of erosion and the future occurrence of landslides: although both the ring walls and the walls existing within the Citadel have been repaired and often rebuilt with protective caps. The realization of the screeds on the terraces was executed according to traditional local techniques. The preservation of the entrance complex, in and out of the portal, was undertaken during 2004 and 2005. Tasks were consolidation of the hammam; preservation of the barbican and the removal of the former modern stair access to the Citadel in favour of a visitor route, and cleaned, and electrical networks were installed underground. Significant issues and Impact

DATA COLLECTION/SURVEYS
ANTC carried out architectural, structural and topographical surveys of most of the site, documenting areas of intervention and detailing conditions before conservation or rehabilitation works.

MASTER PLANNING PROCESS
A general plan was defined for strategies related to emergency measures, drainage problems, visitor infrastructures and the phasing of interventions. The objective was to restore the Citadel and make it a catalyst for socio-economic development in the city, particularly through tourism. After its preservation, the Citadel was included within the National Plan defined by the Ministry of Tourism. The number of visitors increased from less than 100 per year to more than 6000 in 2009.

PLANNING ISSUES
To develop visitor facilities, minimal but efficient infrastructures were planned and installed in co-operation with the Directorate General of Antiquities and Museums (DGAM). One of the major interventions was the development of tourist interpretation on the site. In addition to the tourist trail and signage, brochures and guidebooks were planned for availability in a new visitor centre. To enhance the appearance of the esplanade and re-create a view of the Citadel as it was in medieval times, the natural top of the site was excavated and cleaned, and electrical networks were installed underground.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
The Citadel and its immediate surroundings were the main conservation project.

NEW BUILDING FACILITIES
The Trust purchased 12 blocks of buildings blocking the western approach to the Citadel in 2000 and replaced them with an esplanade. Parking for tourist buses and cars was provided. A visitor centre and sanitation facilities were created, and a tourist route was defined and equipped with signages.

VOCATIONAL TRAINING/CAPACITY BUILDING
Accredited international and local experts conducted training sessions and programmes in up-to-date methodologies of documentation and conservation for the benefit of DGAM staff, contractors and craftsmen.

CONTRACTING METHODS
ANTC carried out most of the works with a team directly employed by the Trust in order to upgrade local workforce and technical skills. Contractors were chosen for structural non-intrusive of the ring walls, based on tender procedures after selected invitations.

NEW TECHNOLOGIES INTRODUCED
The monument’s preservation entailed the revival of traditional building methods (such as lime-based mortar injection) that had disappeared during the last decades.

PARTNERS

PUBLIC PARTNERS
Directorate General of Antiquities and Museums, Governorate of Hama, City Council of Masyaf Town.

Authoritative Framework
On 1 December 2000 ANTIC signed a ‘Memorandum of Understanding’ with the Directorate General of Antiquities and Museums of Syria for providing support to the Restoration of These Citadel in Syria. One of these three sites was the Citadel of Masyaf. In 2001 the Trust signed a protocol with the Governorate of Hama and the City of Masyaf.

Background

BRIEF HISTORY OF PROJECT SITE
The town of Masyaf is located in the centre of the Syrian coastal mountains. Masyaf Citadel is one of the most intact medieval strongholds of the Syrian littoral. Built on a rocky promontory, most of the Citadel’s walls are based on structured dates in the thirteenth century (12th and 13th century) when Masyaf was the state capital. A Byzantine structure that pre-dates the Citadel was included in the medieval fortresses. In the Ottoman period some constructions were added. During the 20th century the Citadel was the subject of several consolidation campaigns, performed without any historical or architectural bias. Prior to HCP intervention the site was completely abandoned.

CHALLENGES

PROJECT RISKS
The site analysis and definition of new structures and historical ruins represented a challenge, as did the effort of de-restoration (removing former substandard conservation and reinforcement works).

SITE CONDITIONS
Structural damage, erosion, human impact and long-term abandonment caused deterioration to the site. The western approach to the Citadel was blocked by a series of shabby informal apartment buildings.

INFRASTRUCURE
The site lacked of electricity, water, rainwater and waste-drainage infrastructure.

BUILDING CONDITIONS
The Citadel was in an advanced state of decay. Parts of the ring walls had collapsed.

An access corridor in the Citadel is a 60-metre-long tunnel divided into sections separated by raised arches.
The scope of work included architectural, archaeological and historical research, documentation and actual conservation of the Salah al-Din Palace. The implementation on site mainly concerned the conservation of the Islamic complex: the mosque, palace and hammam. Tourist infrastructure was also created.

The Castle of Salah al-Din is a very large complex containing a series of buildings and monuments of different historical periods, which call for a diversified approach and different forms of conservation and maintenance targeted to the specific requirements of each structure or category of structures.

The main structures are the moat and the needle; the main gateway; the ring walls; the towers and the master tower; the Byzantine fortress and ramparts; the Islamic period 1 structures, and the master tower (the highest point of the complex).
In terms of cultural site management, a maintenance programme includes the routine upkeep of the structures and periodic checks to ensure that all mechanical systems are in working order, as well as repairs to materials and components that are subject to predictable wear and tear.

Furthermore, the Castle is still the subject of archaeological investigations and historic research. The main areas of potential research concern firstly, an area east of the Islamic complex, the Byzantine rampart, which is partially under excavation. Some Ayyubid structures appear, and some excavations in this area could be of interest. Secondly, the DGAM has partially cleaned the lower part of the Castle. The need and effect of these excavations is evident for understanding the whole of the Lower Town. And thirdly the industrial sector and the area north of the Byzantine fortress where some excavations are needed for a better comprehension of the economic activities in the Castle.

The conservation work has been performed by local craftsmen. This choice seems successful, since, from the time of the HCP interventions, the DGAM in Syria, through its Department in Lattakia, is continuing this project with the restoration of certain Byzantine, Frankish and Islamic structures.
Background

BRIEF HISTORY OF PROJECT SITE
Standing against the striking backdrop of the Syrian coastal mountains, the Castle of Salah al-Din bears witness to more than 1000 years of history. The remains date to the Byzantine, Frankish, Ayyubid and Mamluk periods. These successive occupants did not destroy their predecessors’ work, but instead strengthened existing structures and expanded the site to create the largest enclosed fortification in the Middle East.

The only restoration of the site was performed by French architects in 1937 and 1940. A rare melange of architectural styles, the Castle, along with Crac des Chevaliers, was listed as a UNESCO World Heritage Site in 2006.

Challenges

PROJECT RISKS
Interventions needed to preserve the topography and vegetation that contribute to the site’s evocative atmosphere.

SITE CONDITIONS
Prior to HCP interventions, the site had been long abandoned. Located in an area of heavy rainfall, the site was severely eroded and overgrown.

INFRASTRUCTURE
Electric cables and telephone lines were installed at the Castle entrance and remedial lighting was provided in some areas by the Directorate General of Antiquities and Museums (DGAM). Aside from these interventions, there was no infrastructure on site.

BUILDING CONDITIONS
Except for the main tower and parts of the fortifications, the structure had suffered from more than 60 years of abandonment. The first floor of the Ayyubid palace was no longer visible and the hammam was in ruins. Most roofs were not intact and water leakage affected most of the covered spaces.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
Prior to the intervention of the Trust, site documentation consisted of several imprecise drawings. AKTC carried out architectural, structural and topographical surveys of the Islamic complex.

MASTER PLANNING PROCESS
A general plan for future interventions was based on strategies related to emergency measures, drainage problems, visitor infrastructure and phasing of the work.

PLANNING ISSUES
Improving visitor interpretation was a major concern. In addition to the design and execution of tourist trails and signage, a visitor centre was planned, including historical information panels, newly published brochures and guidelines.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
The conserved Islamic-era structures include the Castle mosque, its minaret and the adjacent room; two levels of the Ayyubid palace, with its private hammam; the public bath; the Burg al-Banat, rehabilitated into a cafeteria; and the entrance tower rehabilitated to serve as a ticket and information space.

NEW BUILDING FACILITIES
Sanitation facilities were built outside the fortification.

VOCATIONAL TRAINING/CAPACITY BUILDING
Accredited international and local experts employed by the AKTC conducted training sessions and programmes in up-to-date methodologies of documentation and conservation for the benefit of the DGAM and other local staff, contractors and craftsmen.

CONTRACTING METHODS
The bulk of the work was contracted. The choice of contractors was based on tender procedures after selected invitations. Miscellaneous maintenance works were executed by a team employed directly by the Trust.

Partners

PUBLIC PARTNERS
Direcctorate General of Antiquities and Museums, Governorate of Lattakia, Municipality of Haffeh.

Authoritative Framework

On 1 December 1999 the Aga Khan Trust for Culture signed a ‘Memorandum of Understanding’ with the Directorate General of Antiquities and Museums of Syria for providing support to the ‘Restoration of Three Castles in Syria’. One of these three sites was the Castle of Salah al-Din.
In the Old City of Cairo, the activities of the Aga Khan Trust for Culture (AKTC) started with the reconversion of a vast barren site (a hilly rubble-dump between the Fatimid city and the Mamluk cemetery) into a thirty-hectare urban Park with many visitor facilities. The Park has all of the geometric elements of traditional Islamic gardens and features soft-shaped hills and a small lake. A network of informal pathways surrounds the more formal garden areas and leads through all levels and corners of the site. The Park combines both widespread leisure areas inviting people to meet, to rest and to picnic on the ground, and more sophisticated facilities such as the Citadel View Restaurant on the hill and the Lakeside Café. The design of the Park provides the visitor with a dramatic and rich visual experience not available in any other area of Cairo.

Currently, Azhar Park receives more than two million visitors a year and has proven to be a catalyst for urban renewal in one of the world’s most congested cities. Additionally, the Park manages to provide its visitors with an accommodating public space of quality that caters to different social and economic classes, while encouraging their integration. This has been achieved through tactful management and operation policies that offer the residents of Historic Cairo a reduced entry fee, while ensuring that the Park facilities provide quality services to different community classes and groups.

The Darb al-Ahmar neighbourhood, directly abutting the Park, is socially and physically depressed, but still features a lively and cohesive residential community. Over the past few decades, Darb al-Ahmar has gone through a spiral of decay affecting the living conditions of its inhabitants. This was primarily due to the decline in social status of the historic city since the early twentieth century because of the exodus of the local bourgeoisie into newer urban districts. Another reason behind this decline was the lack of a coherent urban management system that could deal effectively and appropriately with the particular problems and intricacies of the Historic City. Currently, several mosques, old palaces, historic houses and public open spaces have been, and are being, rehabilitated in an effort to make them accessible to the local community and visitors. The most prominent of these are the sixteenth-century Khayrbek Mosque with the adjacent sabil kuttab and an attached eighteenth-century house, the fourteenth-century Alin Aq Palace, Umm al-Sultan Shabaan Mosque and Madrasa, Aslam Mosque and Aqsunqur Mosque (the Blue Mosque). These all
The minarets and domes of Cairo seen from Azhar Park: in the forefront, the dome of the Khayrbek Mosque complex, with the domes and minarets of Sultan Hassan and Rifa‘i mosques behind.

The minarets and domes of Cairo seen from Azhar Park: in the forefront, the dome of the Khayrbek Mosque complex, with the domes and minarets of Sultan Hassan and Rifa‘i mosques behind.

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represent significant assets of the Darb al-Ahmar community. Some of them are located adjacent to the Park. Many of these restored structures are reused for community purposes so as to enhance the identification and solidarity of residents with historic buildings and their district. In conjunction with physical upgrading, a wide range of ongoing socio-economic development initiatives have been implemented, beginning in the year 2000. The objective is to provide residents with new opportunities, including training, employment and micro-credits for small enterprises. Special programmes are targeting health issues, women’s affairs and environmental problems. House owners and tenants are being provided with technical assistance, grants and micro-credits for upgrading their premises, and many local enterprises are now benefiting from the physical rehabilitation activities.

The uncovering of the formerly buried Historic Wall, with its enormous gates, towers, and interior chambers and galleries, is in itself one of the most important archaeological discoveries of the past decades relating to the Islamic period in Egypt. Over 1300 metres long, the Wall forms a distinctive third element of significance between the Park and Darb al-Ahmar, providing an interesting enclosure and backdrop for the Park, as well as a monument which can be visited. It physically separates the Park from Darb al-Ahmar and the Old City, but also acts as an attractive visual and functional connection, offering opportunities to visitors to enter the city from the Park, and vice versa. Over the centuries, the houses and monuments built against the Wall on the city side became an integral part of Cairo’s urban and social history. Selective removal of encroaching elements was taken into consideration as part of the restoration process. Alongside this process, a valuable archaeological site was uncovered, bringing with it the development of a museum and visitor centre.

The ‘Urban Plaza Development Project’ is designed to be a mixed-use retail mall and commercial car park facility, situated on a site of approximately 17,900 square metres in the Old City of Cairo. The site is bounded on the east and south by Azhar Park, on the west by the old Historic Wall of Cairo, and on the north by al-Azhar Street. A landmark building for Cairo, it will create a new entrance to Azhar Park.

The Historic Cities Programme works to improve the lives of the residents of Darb al-Ahmar, a district close to Azhar Park. Above, engineers and planners study the Darb al-Ahmar Master Plan. A craftsman below, works on the restoration of the decorative inlay of a door at the Programme’s wood workshop.
Background

BRIEF HISTORY OF PROGRAMME AREA
Following the fall of the capital of Egypt in AD 1990, the city of Cairo was heralded to house the capital court. Between 1887 and 1902, the city walls were expanded to incorporate an area to the south, now known as Darb al-Ahmar. Located between the then-future citadel and the old seat of power in the walled city, this wall defined the eastern edge of the Darb al-Ahmar and the boundary between the urban area of the new citadel and the dumping grounds for the city’s rubbish. Over the course of centuries, formidable remains of desolate, accumulated, known as the Al-Diwan Islands, dwarfing and eventually burying the city walls. The early decades of the 20th century saw Darb al-Ahmar attempting to emulate the newer quarters of Cairo. New construction techniques, using reinforced concrete, began to replace traditional building materials, and ‘modern’ urban design policies came into effect. The Al-Diwan Islands remained unutilized until the late 20th century. In the early 1990s, the site was selected by AKTC for the construction of a ‘city park’ and, as a result, the formation of the ‘Darb al-Ahmar Revitalization Project’ (Phase 1) was inaugurated. The project worked on implementing a more flexible process. The project worked on implementing these actions plans using an integrated approach that encompassed restoration of key monuments and public buildings together with housing rehabilitation and the upgrading of infrastructures and public open spaces. BASELINE STANDARDS Along with various sector-based surveys and studies carried out since 1996, the project conducted a major baseline survey in 2003 covering the entire area of Darb al-Ahmar (13,1900, 100,000 inhabitants). The results were used as the base for a post-implement-ation survey carried out in 2008 in seven core sites, highlighting light on the project’s impact over this period of time. SOCIO-ECONOMIC INITIATIVES Since the project follows a multi-impacted integrated approach towards urban revitalization, socio-economic initiatives are a core element of the process. Besides the built environment programmes, AKTC works closely with other agencies (Aga Khan Foundation and Aga Khan Agency for Microfinance) on a wide range of initiatives: health, education, support to civil society organizations, and environment; in addition to a range of economic initiatives including access to micro-credit, business development, vocational training and employment. CONSERVATION ASPECTS Restoration of key monuments in Darb al-Ahmar was an indispensable component of the project. During the course of the project a significant number of these buildings were restored including the eastern Historic Wall. In addition to the above, AKTC worked closely with the Ministry of Antiquities (Egypt), the Egyptian Organization for Solidarity. The project continued to support the Ministry of Antiquities (Egypt) in the training and capacity-building of local authorities and the local community’s awareness of the monuments’ value, in addition to the training and capacity-building of local craftsmen in order to generate employment opportunities. QUALITY OF LIFE After Park presented a new opportunity to provide a major public space of quality to benefit Cairo’s inhabit-ants. Since the mid-1990s, and following the project’s inception, Darb al-Ahmar’s population decline started to reverse. A 2003 post-implementation survey showed that the percentage of inhabitants suffering from child diseases and allergies have decreased significantly between 2003 and 2008. Plagiarism and poor hearing also showed significant decreases. These improvements might be attributed to the housing interventions and their impact on the area’s lifestyle, not to mention completion of construction activities at Azhar Park. POST-IMPLEMENTATION PLANS Both Achar Park and the Urban Plaza projects are managed through long-term agreements with the Gov-ernment of Egypt. Neighbourhood activities are currently in their third phase, during which the majority of the pro-grammes and initiatives are meant to be phased out and handed-over to the appropriate governmental and civil societies organisations. Project sustainability is achieved financially through increasing support from Achar Park’s surplus revenues along with finance gener-ated from other neighbourhood activities, such as the project’s Darb al-Ahmar carpentry workshops.

Challenges

PROGRAMME RISKS Income-generating activities such as Achar Park and the Urban Plaza significantly contributed to the financial sustainability of the Cairo projects, but the institutional sustainability of these interventions represents a major challenge. The current capacity of both governmental and non-governmental agencies in the area requires intensive support to ensure the institutional sustain-ability of the project’s approach.

SITE CONDITIONS
The Park’s site represented a major challenge given the unobstructed nature of its soil and the fact that the Historic Wall was almost entirely buried beneath that compacted network of debris. Despite its central location, Darb al-Ahmar lacks access to quality health services especially in the area of maternity and early childhood problems.

AVAILABILITY OF DRINKING WATER AND PROPER SANITATION FACILITIES
Almost all houses in Darb al-Ahmar are connected to drinking water and sanitation services; quality, however, is an issue, especially regarding drinking water.

ENVIRONMENTAL CONCERNS
In Cairo, the per capita share of green space is meagre. Aside from environmental hazards related to the deteriorated condition of existing infrastructure, Darb al-Ahmar also lacks adequate waste management services.

INFRASTRUCTURE
While the Park’s site included some recently added infrastructure mainly related to water reservoirs, the infrastructure in Darb al-Ahmar was inadequate for many years of neglect. Only in the past decade has the government paid some attention to upgrades. Conse- quently, the majority of households are now connected to infrastructure utilises but investments in water, sewage and electricity networks only impacted major streets.

HOUSEHOLD ECONOMY
The economically active represent 30% of the popula-tion out of which 58% are involved in production-related occupations (small-scale industries and work-shops), 28% in the services sector, 16% in the commerce sector and only 2% in professional occupa-tions. In 2003 the average income per capita was US $307 (7 times lower than the average for Egypt as a whole).

ACCESS TO OPEN SPACE
The quality of public spaces has diminished, unless they are public places identified to certain activities. Open spaces in Darb al-Ahmar mostly consist of small nodules at road intersections or leftover spaces due to the demolition of older structures. These few open spaces, in addition to the existing street network, suffer from continuous deterioration, use of inappropriate fin-ishing materials and interventional vehicular move-ment. The possibility of providing a quality public space that can serve all social and economic classes and encourages their integration was a challenge for Achar Park.

BUILDING CONDITIONS
The Park site included some minor public structures that were either removed or incorporated in the Park’s overall design. Monuments and major public buildings in Darb al-Ahmar were in a state of decay due to the prolonged absence of public investments. Moreover, existing housing stock suffered from severe deterioration. Aside from environmental hazards related to the unstable nature of its soil and the fact that the Historic Wall was almost entirely buried beneath five centuries’ of debris, the constrained site was characterized by low-rise traditional buildings connected by narrow streets and alleyways.

DEMOGRAPHICS
Between the mid 1970s and mid 1990s Darb al-Ahmar experienced an almost 50% population decrease from 146,000 to 78,000 inhabitants. The average household size in Darb al-Ahmar is five persons and 79% of the residents are tenants. More than 70% of the resi-dents have been living in the area for more than 20 years.

Phasing

1997 – 2000

Construction of Achar Park

1997, Achar Park Revitalization Project

Phasing

Achar Park Surveys and studies and design phase

Monument restoration

ADARAP, Phase 1 begin

Existence baseline survey undertaken in Darb al-Ahmar

Monument restoration

Turkey-Pakistan Partnership agreement with Governance of Cairo

Inaguration of Achar Park

Urban Plaza Project

ADARAP, Phase 2 begin

ADARAP, Phase 3 begin

MONUMENTS

Phasing

1997 – ongoing

Achar Park is situated in one of the most important parts of Cairo; the Citadel is seen to the left and the Historic Old City to the right. The early decades of the 20th century saw Darb al-Ahmar attempting to emulate the newer quarters of Cairo. New construction techniques, using reinforced concrete, began to replace traditional building materials, and ‘modern’ urban design policies came into effect. The Al-Diwan Islands remained unutilized until the late 20th century. In the early 1990s, the site was selected by AKTC for the construction of a ‘city park’ and, as a result, the formation of the ‘Darb al-Ahmar Revitalization Project’ (Phase 1) was inaugurated. The project worked on implementing a more flexible process. The project worked on implementing these actions plans using an integrated approach that encompassed restoration of key monuments and public buildings together with housing rehabilitation and the upgrading of infrastructures and public open spaces. BASELINE STANDARDS Along with various sector-based surveys and studies carried out since 1996, the project conducted a major baseline survey in 2003 covering the entire area of Darb al-Ahmar (13,1900, 100,000 inhabitants). The results were used as the base for a post-implement-ation survey carried out in 2008 in seven core sites, highlighting light on the project’s impact over this period of time. SOCIO-ECONOMIC INITIATIVES Since the project follows a multi-impacted integrated approach towards urban revitalization, socio-economic initiatives are a core element of the process. Besides the built environment programmes, AKTC works closely with other agencies (Aga Khan Foundation and Aga Khan Agency for Microfinance) on a wide range of initiatives: health, education, support to civil society organizations, and environment; in addition to a range of economic initiatives including access to micro-credit, business development, vocational training and employment. CONSERVATION ASPECTS Restoration of key monuments in Darb al-Ahmar was an indispensable component of the project. During the course of the project a significant number of these buildings were restored including the eastern Historic Wall. In addition to the above, AKTC worked closely with the Ministry of Antiquities (Egypt), the Egyptian Organization for Solidarity. The project continued to support the Ministry of Antiquities (Egypt) in the training and capacity-building of local authorities and the local community’s awareness of the monuments’ value, in addition to the training and capacity-building of local craftsmen in order to generate employment opportunities. QUALITY OF LIFE After Park presented a new opportunity to provide a major public space of quality to benefit Cairo’s inhabit-ants. Since the mid-1990s, and following the project’s inception, Darb al-Ahmar’s population decline started to reverse. A 2003 post-implementation survey showed that the percentage of inhabitants suffering from child diseases and allergies have decreased significantly between 2003 and 2008. Plagiarism and poor hearing also showed significant decreases. These improvements might be attributed to the housing interventions and their impact on the area’s lifestyle, not to mention completion of construction activities at Achar Park. POST-IMPLEMENTATION PLANS Both Achar Park and the Urban Plaza projects are managed through long-term agreements with the Gov-ernment of Egypt. Neighbourhood activities are currently in their third phase, during which the majority of the pro-grammes and initiatives are meant to be phased out and handed-over to the appropriate governmental and civil societies organisations. Project sustainability is achieved financially through increasing support from Achar Park’s surplus revenues along with finance gener-ated from other neighbourhood activities, such as the project’s Darb al-Ahmar carpentry workshops.

Partners

PUBLIC PARTNERS

Authoritative Framework

Cooperation protocol agreements with Cairo Gover-norate, The Supreme Council of Antiquities and the Egyptian Awal Authority (Islamic Endowment); Achar Park Revitalization Project (Phase 2) was im-plemented according to a tripartite agreement including AKTC, Cairo Governance and the Egyptian Social Fund for Development.
Once construction activities for Azhar Park had commenced in earnest in the late 1990s, the Historic Cities Programme (HCP) began to focus on the development of Darb al-Ahmar, the impoverished neighbourhood adjacent to the future Park. Named after the historic street that passes through this area, today’s Darb al-Ahmar is a vibrant but impoverished district that in no way resembles its rich past. Since the beginning of the twentieth century, this part of Historic Cairo saw a steady but continuous decline in living conditions. With the city expanding in all directions, offering improved standards of living to some, Darb al-Ahmar saw many of its wealthy residents replaced by people from poorer parts of Cairo, who had substantially lower incomes and lower education levels than those who had left. This shift in population led to rapid dilapidation of the built environment, as funding for maintenance of landmark buildings was no longer available. A virtual freeze on rent introduced by the government in the 1950s further accelerated the decline of Darb al-Ahmar. Many landlords saw no reason to finance the upkeep of buildings that had virtually no rental value and whose occupants could not be removed. With houses collapsing due to lack of maintenance, few employment opportunities and insufficient availability of utilities and municipal services, the area started to attract criminals and for some time even became the hub of the drug trade in Cairo. By March 2000, when HCP began its first activities, population levels had declined to 100,000 from an estimated 170,000 in 1972–77.

HCP’s main objective for the development of Darb al-Ahmar is to improve the quality of life of the inhabitants in terms of their economy, housing conditions and health and education. In addition to this, HCP intends to preserve the social fabric by ensuring that the benefits of its activities will go to the actual population and not to newcomers with higher income levels. HCP realizes, however, that it has limited means at its disposal to counter gentrification. The socio-economic development of Darb al-Ahmar started with a first phase that was initially designed for a three-year period (later extended by one more year) and that was chiefly co-funded by the Egyptian-Swiss Development Fund and the Ford Foundation. Activities that were identified as having the highest priority during this period were: improved housing; access to micro-credit; vocational...
training and employment; educators; and, to a more limited extent, access to primary health care. Although largely successful during the initial four years, Phase 1 only had a limited reach in terms of its health activities and its micro-credit. Furthermore, most of the vocational training had been limited to the trades that were directly related to the building sector. With the experience gained during the first phase, a more accurate needs assessment was compiled through an extensive baseline survey, which was completed in late 2003. This survey not only looked at the needs of local inhabitants from a household perspective, but also took stock of the needs of local entrepreneurs as potential lenders from a micro-credit programme that, as of 2005, became a responsibility of the Aga Khan Agency for Microfinance (AKAM).

The outcome of the baseline survey of 2003 provided the inputs for a detailed implementation plan for Phase 2. Co-financed by the German Development Bank KfW, through the Egyptian Social Fund for Development, the Ford Foundation and a large number of other donors, Phase 2 started in January 2005 and continued until December 2009. A post-implementation survey of the same households that were first interviewed in late 2003, carried out by an independent external evaluator, provided HCP with a number of interesting before and after observations, showing the results and the outcome of some of the better and some of the less successful interventions.

The post-implementation survey consisted of a household survey and focus group meetings. The survey was conducted in seven core shiyakhat of Darb al-Ahmar (the entire district is made up of thirteen shiyakhat) during February 2009. The households surveyed in 2009 represent seventy-five per cent of those that were first surveyed in 2003 (the missing 25% having moved out and being replaced by others, coming from within the district). In addition to this survey, two focus group discussions were held, one with men and another with women, covering relevant population groups. Although relatively small in size (the people surveyed in 2009 represent just under 2% of the population of the area) the fact that the same households are compared before and after the completion of Phase 2 makes this post-implementation survey relevant.

Housing Improvement

Since HCP started its housing improvement activities in 2000, eighty-four housing units – representing 218 individual apartments for 1100 people – have been completed as either newly built or completely renovated houses. Because families in the area lack cash, this work was carried out with a grant component that could rise as high as eighty per cent.

The 2009 survey found that over the preceding five years the average number of rooms per house had increased. This, however, was not due to an increase in living space, but because of more partitions within the existing space and hence higher levels of privacy within the household. Observations regarding crowding conditions and ventilation showed that de-crowding has improved. However, ventilation had worsened (there was an increase in percentage of non-ventilated windowless rooms), showing a need for more light wells and ventilation shafts.

People’s perception of the market value of their house showed a remarkable increase. Estimates in 2003 ranged from EGP 10,000 to EGP 70,000 in 2003, whereas in 2009 they ranged from EGP 70,000 to EGP 250,000 and more.

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The average declared monthly household income doubled from EGP 497 in 2003 to EGP 983 in 2009. In 2003 more than seventy per cent of households earned between EGP 100 and EGP 600 per month, while in 2009 less than forty per cent fell into this category. Taking inflation into consideration, real gains in household income levels between 2003 and 2009 ranged from twenty per cent to twenty-five per cent. Evidence of increased household income levels comes from a noticeable reduction in expenditure on food as a percentage of the household budget. 2009 data showed that fifty-one per cent was spent on food items compared to fifty-six per cent in 2003. In all likelihood, food expenditure as a percentage of the household budget would have dropped well below the fifty per cent threshold (a key poverty indicator) had it not been for the exceptionally high inflation of prices for food items. The cost of food increased by twenty-five per cent in 2008 when many subsidies were removed.

Employment

More than 4300 people have been assisted with finding employment through the programme since 2000, either by finding (new) employment or through job referrals. Not
surprisingly, most of the respondents in the household survey reported knowing the ‘Employment Programme’ (second to ‘Housing’, where only 19% reported not knowing the programme). As a result of HCP’s interventions, the percentage of economically active individuals increased from thirty per cent in 2003 to thirty-four per cent in 2009. Of this thirty-four per cent, nearly three quarters (78%) were employees (generally employed by other family members) whereas twenty-two per cent were self-employed (that is, they own their own business, or they work in the family business without wages). Comparisons with 2003 show that there is a decrease in the percentage of those who work for family members without wages. This change can in part be contributed to the substantial number of beneficiaries who, over the past ten years, found employment with the help of the programme’s employment unit.

Education

The 2009 study reports a decrease in the levels of literacy among those surveyed (a 5.5% drop in literacy for men and a 2.5% drop for women). HCP’s literacy classes since the survey have continued at the same level and literacy levels are therefore expected to drop even further. School drop-out rates, a measurement of success of HCP’s engagement with parents of school-going children who are at risk of leaving school prematurely, went down by 3.5 per cent during the course of Phase 2. However, the success was nearly entirely due to more girls completing primary school (drop-out rates were down from 16% in 2003 to 13% in 2009). Boys’ drop-out rates, unfortunately, remained critical with no measurable changes between 2003 and 2009.

Health

The creation of a new health-care centre located close to Khayrbek Mosque in Darb al-Ahmar Street and following a review of the principal health development activities (which resulted in a programme change whereas focus would be on mother and child health care), the health programme saw a dramatic improvement in its outreach to the community during the second phase. More than three thousand children received a health check-up and a large number of counselling sessions were held for teenagers and women on subjects ranging from ‘Cares for the Elderly’ and ‘Cares for Working Children’ to issues such as ‘Female Genital Mutilation’ and ‘Domestic Violence’.

Quality of Life

Disputes among neighbours in the past twelve months, an indicator for local perceptions of changes in the quality of life, showed a remarkable drop amongst those polled (from 18% in 2003 to just 1% in 2009). This reflects positive community participation potential for the future. In direct relation to the observed reduction in the numbers of conflicts, perhaps, comes a measurable increase in the desire to continue living in the same locality. Willingness to stay in Darb al-Ahmar was already high in 2003 (89% wished to stay) and has increased during the course of the second phase, now reaching ninety-three per cent. During focus group discussions where residents revealed general appreciation of the revitalization efforts by the project, housing rehabilitation and open-space development were in particular mentioned as key points.
Despite its central location, valuable cultural assets, strong community ties and active community of artisans, Darb al-Ahmar, a historic inner-city district of 100,000 residents, is one of Egypt’s most distressed neighbourhoods. Over the past decades the area has been suffering from social, economic, cultural and environmental deterioration resulting in general urban decline that has led to the gradual loss of irreplaceable social, economic and cultural assets. The immediate causes of this decline can be grouped in two major categories. First, socio-economic causes including low incomes and lack of housing finance mechanisms, together with a weak level of community mobilization, sense of ownership and participation. And second, institutional causes including a lack of governmental interest or awareness of heritage and urban conservation concepts; complicated legal procedures, planning constraints and outdated plans; and limited access to appropriate technical support and lack of technical know-how and conservation standards.

These obstacles primarily stem from different social and institutional factors. The social factors include the decline in social status of the historic city since the early twentieth century due to the exodus of the local bourgeoisie into newer urban districts. The institutional factors include the lack of a coherent urban management system that could deal effectively and appropriately with the particular problems and the intricacies of the historic city. In turn, social and institutional factors have led to this rampant physical decay of Darb al-Ahmar over the past decades.

The situation was aggravated due to the absence of public funding for the improvement of infrastructure, services and social facilities on the one hand, and the weak level of private investments on the other. In addition, Darb al-Ahmar inherited a 1973 Master Plan that was in flagrant contradiction with recognized urban conservation practices. According to this plan, major highways were supposed to penetrate Darb al-Ahmar. This plan, if implemented, would have led to the demolition of significant parts of Darb al-Ahmar’s urban fabric.

Several attempts have been made in the past to reverse the spiral of decay in different parts of Historic Cairo. As far as individual monuments were concerned, most of these projects have succeeded. However, attempts at large-scale area

Darb al-Ahmar Urban Regeneration

CAIRO, EGYPT

This 2002 view of Sharia Abdullah al-Guweiny is typical of the terrible state of much of the building stock in Darb al-Ahmar.

Opposite page:
Above, Darb Shouqan Community Centre, a focal point of many of the district’s activities, links up Darb al-Ahmar with Ashar Park and the Historic Wall.

Below, housing repair and reconstruction provides employment opportunities for the local population.
The area’s revitalization has included Aslam Square, seen in 2009 before and after intervention. The square now hosts many public events and the shops facing on to it have undergone rehabilitation.

The ADAARP primarily focused on two major initial tasks. Firstly it took the time to understand the area, getting to know different stakeholders, and assessing local community needs. Secondly it carried out pilot socio-economic and physical initiatives to build trust and partnerships. Based on the success of different pilot initiatives, lessons learned have been used to design comprehensive programmes and intervention packages aiming at long-term sustainability of the project activities. Once successful, these programmes were used to forge, together with different stakeholders, viable development frameworks and plans. These successes encouraged other partners to join the project and helped stimulate local investments in the area.

In practical terms, the ADAARP has been able to resolve some of the complicated legal procedures, planning constraints and outdated plans through: working with different authorities to change the demolition plans in favour of rehabilitation; coordination of transparent decision-making process involving different stakeholders; and legal mediation between tenants and owners.

The project has also been able to address lack of technical know-how and standards for rehabilitation of traditional structures through development – with local craftsmen – of a body of knowledge on cost effective and appropriate rehabilitation techniques; in addition to dissemination of this knowledge through technical manuals and training activities. On the other hand the ADAARP has been able to address economic issues such as low incomes and lack of housing finance through the introduction of a housing finance mechanism offering grants and loans.

Civil society issues have also been addressed by means of: community-based planning through participatory design with different community groups; promoting models of leadership through policies rewarding collective communal efforts; and promoting gender equality through sensitive design and planning measures catering for different groups, especially women.
This wide scope of integrated activities could not be implemented without the active participation of the community and its individual members. The housing rehabilitation programme was an opportunity to demonstrate the latent potentials of public-private partnerships. Following the implementation of the first demonstration projects, a competitive situation was created among the owners and tenants who increased their own financial participation to reach up to fifty per cent of total rehabilitation costs. Meanwhile, a total of 320 apartment units have been restored. And due to its innovative and integrated approach towards addressing housing rehabilitation problems in historic areas, the Darb al-Ahmar housing rehabilitation programme was selected by UN-HABITAT in 2008 as a ‘Best Practice’ for improving the living environment.

These efforts were also complemented by the construction and rehabilitation of public buildings. These buildings have been turned from unaused ruins or empty shells to vibrant nodes of community activities. The adaptive reuse of such buildings provided the area with public services that were much needed by the local residents. Indeed, this was an opportunity to rely on local craftsmanship and human resources to provide appren- ticeship activities, eventually leading to sustainable job opportunities. The purpose of these interventions was not limited to physical rehabilitation or direct economic benefits, but also extended to restoring the community’s self-esteem and confidence. This was possible when the community members, as well as other stakeholders, soon came to realize that the area’s latent resources, if tactfully identified and properly utilized, can become valuable community assets, spearheading the area’s overall socio-economic and physical development.

ADAARP efforts also extended to the public realm where major public spaces and corridors linking Azhar Park and the area’s major attractions were upgraded. Through the open space and infrastructure programme it was possible to improve the existing utilities’ networks, directly impacting the residents’ public health and living conditions. Enhanced public space treatments and designs were developed and employed, in participation with different community groups, in order to provide quality public spaces for the residents as well as the area’s visitors. As a result, the area started to regain its economic vitality and has become an attraction for local investments in terms of housing activities and new business opportunities.

In order to provide an overarching, more formal framework to these grassroots rehabilitation efforts, a conservation plan for Darb al-Ahmar was developed by the ADAARP along with its partners. The objective was to revise and replace the existing 1973 Master Plan with its disastrous proposals. As a result of continued cooperative efforts, a new plan was developed and ratified by the Cairo Governorate in 2005, laying the institutional foundations for a more sensitive urban rehabilitation process in Darb al-Ahmar.

For more than a decade the endevour of the ADAARP was not free of obstacles. Indeed, it was full of challenges at different levels. If it has proven anything, the ADAARP’s efforts were also complemented by the construction and rehabilitation of public buildings. These buildings have been turned from unaused ruins or empty shells to vibrant nodes of community activities. The adaptive reuse of such buildings provided the area with public services that were much needed by the local residents. Indeed, this was an opportunity to rely on local craftsmanship and human resources to provide apprenticeship activities, eventually leading to sustainable job opportunities. The purpose of these interventions was not limited to physical rehabilitation or direct economic benefits, but also extended to restoring the community’s self-esteem and confidence. This was possible when the community members, as well as other stakeholders, soon came to realize that the area’s latent resources, if tactfully identified and properly utilized, can become valuable community assets, spearheading the area’s overall socio-economic and physical development.

ADAARP efforts also extended to the public realm where major public spaces and corridors linking Azhar Park and the area’s major attractions were upgraded. Through the open space and infrastructure programme it was possible to improve the existing utilities’ networks, directly impacting the residents’ public health and living conditions. Enhanced public space treatments and designs were developed and employed, in participation with different community groups, in order to provide quality public spaces for the residents as well as the area’s visitors. As a result, the area started to regain its economic vitality and has become an attraction for local investments in terms of housing activities and new business opportunities.

In order to provide an overarching, more formal framework to these grassroots rehabilitation efforts, a conservation plan for Darb al-Ahmar was developed by the ADAARP along with its partners. The objective was to revise and replace the existing 1973 Master Plan with its disastrous proposals. As a result of continued cooperative efforts, a new plan was developed and ratified by the Cairo Governorate in 2005, laying the institutional foundations for a more sensitive urban rehabilitation process in Darb al-Ahmar.

For more than a decade the endevour of the ADAARP was not free of obstacles. Indeed, it was full of challenges at different levels. If it has proven anything, the ADAARP experience has shown that positive change in underprivileged urban areas is possible. It is possible if a long-term vision is in place, flexible operational frameworks engaging different stakeholders on various levels are employed, and, finally, if local communities are trusted to lead that change.
In spite of its inscription as a World Heritage Site in 1979, Historic Cairo was not given enough attention and individual buildings were suffering neglect, serious deteriorations and lack of maintenance. During the early phases of the design of Azhar Park, new light was projected on the adjacent neighbourhood of Darb al-Ahmar; as the Park hills provide views of a number of magnificent heritage edifices. With its medieval structures, with the domes and minarets amid the dense urban fabric, the Darb al-Ahmar district invites visitors of the Park to come and explore the jewels of Islamic art and architecture.

The conservation projects of the Aga Khan Trust for Culture (AKTC) in Darb al-Ahmar started with two minarets in the vicinity of Azhar Park, that of Umm al-Sultan Shaaban Mosque (1368–69) and that of Khayrbek Mosque (1502–20). Both minarets had lost their upper parts as a result of the devastating 1884 earthquake. Collapses and reconstructions of minarets were not unknown to the history of Cairo. Despite attempts to reconstruct them in 1941, the minarets of Umm al-Sultan Shaaban and of Khayrbek mosques waited until 2003 to recover their integrity, when AKTC, on the basis of historic documentation, started with the Supreme Council of Antiquities in Egypt not only to restore them to their original shape but also to restore and revive the skills and the craftsmanship of artisans whose crafts were, and still are, in danger of being lost.

The technical challenges required multidisciplinary inputs from foreign and local consultants, historians, conservators and archaeologists in order to study Mamluk architecture, especially minarets, and develop adequate designs. These activities included regular conservation activities, such as documentation, condition assessment, fine conservation, architectural and structural conservation, presentation and publication.

The successful reconstruction of the minarets signalled the potential for social change brought by conservation and was followed by the complete conservation of the Umm al-Sultan Shaaban Madrasa and Mosque while the Khayrbek complex was restored and conserved. After restoration was completed in 2006, Umm al-Sultan Shaaban Mosque was returned to its original function and is currently being used as a mosque for the community. The madrasa spaces, neglected and empty before the conservation project, also provided an excellent opportunity for regular activities like cultural programmes and public visits.
The 14th-century Umm al-Sultan Shaaban Mosque was restored by the Historic Cities Programme. The minaret had lost its upper part as a result of the devastating 1884 earthquake. It was returned to its original shape on the basis of historic documentation.

Reuse option for community-based activities. Agreements between AKTC and the Supreme Council of Antiquities were signed in order to reuse these edifices and hence bring life to them and revive their functional integrity, paving the way for many other organisations to follow this example. The reuse integrates the ‘monuments’ into their context and offers a variety of possible functions in the building that encourages local groups to use them and also to take care of their maintenance. As restoration work could not be complete without looking after the environmental needs of residents, conservation of individual monuments was closely followed by infrastructure and urban upgrading of its context.

In a secondary stage, the success of AKTC’s conservation activities attracted donors, such as the World Monuments Fund, and the American Research Center in Egypt through a grant from the United States Agency for International Development, to partner with AKTC for new projects in the Darb al-Ahmar district, such as the Tarabay al-Sharify Mausoleum (1503), Adam Mosque (1348) and Aqsunqur Mosque (also known as the Blue Mosque, 1345–1662).

To date, the impact of the conservation of the majority of historic landmarks in Darb al-Ahmar has to be measured as an integral part of AKTC’s regeneration plan including other physical and social interventions. Impacts can be listed as follows and have:

- reversed decline of monuments’ condition. Projects have ensured the long-term structural stability of the edifices, conserving their authenticity and reinstating their architectural integrity by addressing the problems stemming from decades of neglect;
Above, the wooden minbar and the interior of Khayrbek Mosque complex have undergone thorough restoration.

Below, a view of the interior of Aqsunqur Mosque (known as the Blue Mosque) during restoration in 2009.

Overleaf:
An interior view of Aslam Mosque after restoration.

- established a technical reference of quality in the field of conservation and were the cradle of future local heritage specialists;
- improved environmental and social conditions of the neighbouring community;
- monuments play an important role both for their historic and artistic value as well as for their symbolic, spiritual, and community importance. Conservation can only become sustainable if the social and economic fabric is being simultaneously revitalized and if secondary physical assets, forming the bulk of the urban fabric, are being rehabilitated, together with a provision of basic social services;
- created an economic stimulus for the local market by job creation, local construction suppliers and training opportunities, not only improving income levels but raising awareness towards heritage preservation and introducing new conservation methods in the field. This has also created a critical mass of change in the perception that both residents and visitors have of the area;
- and created visitor circuits along connecting streets between important tourist attractions in Cairo such as the Citadel, the Bab Zuwayla area and Azhar Park.
KHYABEBK COMPLEX

Background

BRIEF HISTORY OF PROJECT SITE
Amir Khayrbek Dey, a former governor of Aleppo under the last Mamluk Sultan al-Ghuri, was appointed as the first Ottoman governor of Cairo following the Ottoman conquest of Egypt in 1517. Khayrbek Mosque, a religious and funerary complex, was built between 1502 and 1503 adjacent to Khayrbek’s residence, the Alin Aq Palace (13th–14th century). The sabil (public water source) (of Jahm al-Ashrafian (1532) was added next, as were two Ottoman houses (17th century). In 1884, an earthquake caused serious damage to the top of the Khayrbek Mosque minaret, leading to the collapse of its top. In 1992, in coordination with the Supreme Council of Antiquities (SCA), AKTC started reconsolidation of the upper part of the minaret and a conservation project involving the entire complex and adjacent structures.

Challenges

PROJECT RISKS
The site was structurally in a very dangerous condition and shored up for a number of years before the conservation project began.

SITE CONDITIONS
The cluster of monuments is located in the cemetery of Bab al-Wazir, relatively distant from public passage. Construction in the area and the monuments were neglected for a number of years.

BUILDING CONDITIONS
All the buildings of this cluster of monuments were in a very poor state due to either serious structural problems or neglect. Despite splendid architecture and decoration, they were unappreciated and inaccessible to visitors.

Significant Issues and Impact

PLANNING ISSUES
Excavation works around the monuments produced a large resealed open space showcasing the Tarabay mausoleum. Located at the future south entrance to Agha Park, this was designed as a testing place for visitors equipped with greenery and benches. A retaining wall secured the cluster of monuments and the landscaping of the lower level (at the monuments’ base) were likewise planned and constructed.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
Conserving the cluster of monuments of Tarabay Mausoleum, Agha Madrasa and Tarabay Sabil and excavating the exterior archaeological remains was the project’s aim. The process of documenting, de-materializing and reconstructing three sides of the sabil’s structure challenged the project architects and craftsmen, illustrating the mastery of the medieval workers who first assembled the sadel.

VOCATIONAL TRAINING/CAPACITY BUILDING
The team working on the Tarabay conservation project was previously trained by ARCC. This project offered the opportunity to deepen acquired skills.

CONTRACTING METHODS
All architectural and fine conservation works were carried out with direct labour recruited and supervised by AKTC professional staff. The retaining wall around the cluster of monuments and the landscaping of the lower level (at the monuments’ base) were likewise designed and constructed.

RELEVANT CODES/STANDARDS ADOPTED
The conservation project followed all the international conservation charters and guidelines. For other aspects, the Egyptian Code for Construction was adopted.

Partners

PUBLIC PARTNERS
Supreme Council of Antiquities.

Donors

World Monuments Fund, American Research Center in Egypt.

Authoritative Framework


TARABAY COMPLEX

Background

BRIEF HISTORY OF THE PROJECT SITE
The project site lies on the southern side of Agha Park, just outside the Historic Wall. The buildings on site include the mausoleum and sabil of Tarabay as well as the site of Ahmad al-Shafii. Bab al-Wazir was purchased as a slave by Mamluk sultan Daybij, and subsequently freed and appointed in the late 11th century. Agha was also purchased by Qaytbay, and appointed to a number of governmental positions. He built his tomb on the northern side of the mausoleum of Tarabay. There is no documentation regarding the relationship between Tarabay and Agha Murur to explain why their mausoleums were constructed in such proximity.

Challenges

PROJECT RISKS
The sabil was structurally in a very dangerous condition and shored up for a number of years before the conservation project began.

SITE CONDITIONS
The cluster of monuments is located in the cemetery of Bab al-Wazir, relatively distant from public passage. Consequently, the area and the monuments were neglected for a number of years.

BUILDING CONDITIONS
All the buildings of this cluster of monuments were in a very poor state due to either serious structural problems or neglect. Despite splendid architecture and decoration, they were unappreciated and inaccessible to visitors.

Significant Issues and Impact

DATA COLLECTION/SURVEYS
Historic photographs and drawings dating from the 1880s were collected before the project started. Architectural surveys were performed using a combination of topographical plotting and written photography. The project was methodically documented throughout the construction phases. A set of in-situ drawings and photography was handed over to the authorities upon project completion.

HISTORIC BUILDINGS/MONUMENTS CONSERVED
The conservation project targeted Khayrbek Mosque and Mausoleum, Alin Aq Palace, the sabil of Jarir al-Hamassy (1532) and two Ottoman houses. The houses were equipped with toilet and plumbing facilities and all buildings provided with electricity and lighting fixtures.

VOCATIONAL TRAINING/CAPACITY BUILDING
This project was among the first AKTC conservation projects in Egypt. Local and foreign experts were consulted in order to provide the adequate and necessary information and training to the team involved. 120 local residents and craftsmen were trained throughout the project’s duration.

CONTRACTING METHODS
A contractor was hired for the reconstruction of the minaret; all other architectural and fine conservation activities were carried out with direct labour recruited and supervised by AKTC professional staff.

NEW TECHNOLOGIES INTRODUCED
The minaret’s base structural damage was addressed using steel anchors acting as tie beams, a technique that required the expertise of a specialized contractor.

RELEVANT CODES/STANDARDS ADOPTED
The conservation project followed all the international conservation charters and guidelines. For other aspects, the Egyptian Code for Construction was adopted.
and fixtures. The water supply and drainage of the
Mosque were undertaken by the Egyptian Civil Engineering
Commission. The construction of the ablution facility was
substandard and haphazardly installed, diminishing its
quality. Reconstructing the ablution facility has raised
public toilet block. The adjacent land was used instead
to stabilize the Mosque. The project plan also included
plumbing and sanitation. New toilets, drainage and water sup-
ply for the ablution and ablution area was designed and built by
AKTC. The reconstruction of the ablution area was in line with
the site’s original function.

Challenges
PROJECT RISKS
In 1982 a powerful earthquake struck Cairo, structurally
damaging a number of monuments. The Blue Mosque
was closed and heavy shoring put in place. The AKTC
project aimed at restoring the structural stability of the
Mosque and reopening it to the public.

SITE CONDITIONS
Aqsunqur Mosque is located on Bab al-Wazir Street,
next to the Citadel and Bal al-Zawya, on the same
street as AKTC projects such as the Khalili collection
and Chafik Khayrbek. The Mosque’s history and architecture make it an ideal destination for
visitors, but it is located on a narrow, busy street, lacking an open public space as buffer zone.

ENVIRONMENTAL CONCERNS
High-pollution levels from traffic, sand and dust affect the
Mosque and the entire area.

INFRASTRUCTURE
The interior of the Mosque had no electrical systems
installed. The water supply and drainage of the
ablution area were in very poor condition. Toilets and
clothing areas did not meet hygiene standards and
sanitation was not properly designed.

BUILDING CONDITIONS
Asthma, earthquake-related structural issues, the Mosque
had suffered damage from rising groundwater,
the loss of material, especially the blue tiles,
and the accumulation of grime on the facade and interior.

Authoritative Framework
The Supreme Council of Antiquities and Anti Khan
Cultural Services-Egypt (2000–08), World Monuments

Public Partners
Supreme Council of Antiquities.

Donors
World Monuments Fund; American Research Center
in Egypt.

Authoritative Framework
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Authoritative Framework
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Public Partners
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Donors
World Monuments Fund; American Research Center
in Egypt.
Azhar Park
CAIRO, EGYPT

Reconciling conservation and development is a prerequisite for achieving improvements in the quality of life in environmentally and culturally sensitive places. It calls for the introduction of appropriate new functions such as the reuse of historic structures, improvement of services, urban regeneration of public open spaces, community supported rehabilitation of historic housing districts and the creation of parks.

Successful parks inspire residents, provide joy to viewers, and foster civil society in the important realm of leisure and connection to nature and one's environment. They become the settings for families to come together, novels, films and festivities, and are often the containers for memories of a society.

The involvement of the Aga Khan Trust for Culture (AKTC) in Egypt began with the Aga Khan's decision to donate a park to the citizens of Cairo, in 1984. Soon thereafter, the thirty-hectare site on al-Darassa was selected, because of its enormous potential as a 'lung' at the very centre of the historic Old City.

The site is surrounded by the most significant historic districts of Islamic Cairo. To the west are the Fatimid city and its extension, Darb al-Ahmar, with their wealth of mosques, madrasas and mausolea, signalled by a long line of minarets. To the south are the Sultan Hassan Mosque and its surroundings, as well as the Ayyubid Citadel. And to the east is the Mamluk "City of the Dead". The hilly topography of the site, formed by debris accumulated over centuries, now provides elevated viewpoints dominating the city and offers a spectacular 360° panorama over the townscape of Historic Cairo.

Following a major programme of debris removal and master grading involving the excavation and off-site disposal of more than one million cubic metres of fill, and the creation of specialized plant nurseries to identify the best plants and trees for the soil, terrain and climate, the experience of the site has been radically changed. The design makes maximum and skilful use of the site's location, elevated topography and unique vistas overlooking Historic Cairo. Transformed from hills of rubble, Azhar Park is a natural, organic landscaped area with an array of amenities next to a dense, urban community and medieval monuments.

The Park is marked by walkways, pools, hills, informal picnic spaces, formal gardens and amenities. Its vegetation varies from dry, succulent plants on the

Project Scope / Objectives

The aim was the master planning and landscape design for the environmental rehabilitation of a 30-hectare site and its transformation into a significant public, green space in the centre of Cairo that could act as an economic catalyst for the adjacent neighborhoods. The success of the works included environmental and geotechnical works, grading, landscape architecture (soft- and hard-scaped areas), horticulture, infrastructure engineering, architectural services for Park amenities, including two restaurants, entry gates, an amphitheatre, a lake and formal gardens, as well as the conservation of the Historic Wall and gates along the edge of the Park.
western slopes to lush, grassy meadows with shade trees, to formal gardens and, finally, to bustan-like orchard spaces. The variety of species, particularly native Egyptian plants, establishes a new benchmark for park spaces in the region. At Azhar Park, historical models of Islamic gardens are evoked in the form of symmetrical layout, inner and outer zones, the defining medium of pools and fountains, and important axes. The Park is held together by a formal axis or spine that itself is tied together along its entire length by a water channel providing an additional and traditional theme from Islamic gardens. Water fountains and pools are dispersed and lead, ultimately, to the freer form of the lake in the south meadow. Gardens and pavilions in the classical Islamic tradition, surrounded by geometrically planted orchards, enhance the arrival point on the edge of the lake. The central pathway, accompanying alleyways and series of formal gardens are anchored at each end by the Citadel View Restaurant and Lakeside Café, which act as internal landmarks. A network of informal pathways surrounds the more formal areas and leads through all levels and corners of the site.

The terrain in the western half of the Park consists predominantly of steep and continuous slopes, running from the summits to the foot of the uncovered and restored Historic Wall. By means of extensive excavation along the Historic Wall, the park topography was brought in cascading slopes down to a new promenade, which forms a principal walkway at the base of the Wall and western slopes, interconnected to all parts of the Park.
The western hillsides is cloaked with flowering and succulent plants with luxuriant tones. Views from the many vantage points along the west, across these slopes and the Historic Wall to Old Cairo, beyond, with its rich constellation of monuments and minarets, offers a walk in an open-air museum, where the impressive history of Cairo unfolds with each step.

Significant time and attention was devoted to exploring the potential for a sound, creative, and interpretative relationship between the architectural design treatment of key architectural features in the Park – in particular, the Citadel View Restaurant, the Lakeside Café and various plazas – and the architecture of Historic Cairo.

Due to size and centrality, Azhar Park fulfills a vital function in expanding park and green space available to the public in Greater Cairo, one of the denser city districts in the world with a population that stood close to nineteen million in 2009. Operated under a Public-Private Partnership Agreement between AKTC and the Government of Cairo, surpluses from Park operations are reinvested into the Park to ensure that the Park would be self-sustainable, yet possible while safeguarding the quality of the physical environment and cultural challenge due to soil conditions and the need for specially prepared sub-bases for hardscape surfaces, terraces for impervious zones and piling support for all substantial buildings.

Significant and interpretative relationship between the architectural design treatment of key architectural features in the Park – in particular, the Citadel View Restaurant, the Lakeside Café and various plazas – and the architecture of Historic Cairo.

The design of the Citadel View Restaurant (above) is inspired by Fatimid archways, whereas the design of the Lakeside Café is modelled to more abstract in its interpretation of Islamic architecture.

**Challenges**

**PROJECT RISKS**

A project of this complexity requires cooperation with government partners. Azhar Park presented a new model of cultural development both for AKTC and for the Government of Egypt and necesitated the need for legal agreements and approvals with regard to public partners and the GOCSS/CR for the design and installation of a park on this site; a legal and technical agreement with the Supreme Council of Antiquities for the restoration of the Historic Wall, and coordination with the Government of Cairo to determine the site’s eastern boundaries. Additionally, there was a large geotechnical risk with respect to the unstable and poorly consolidated soils and extreme slopes which required regrading and special subsurface drainage systems.

**SITE CONDITIONS**

The soils were highly undesirable due to the lack of compaction of the man-made fill. The Park design and landscaping had to accommodate and address steep slopes, highly saline soil and ongoing encroachment of the site on the south by the Bab al-Ashura Cemetery.

**DEMOGRAPHICS**

The population of Greater Cairo at the time of the Park’s planning (1991) and lack of suitable park space in Cairo indicated an extremely high level of violation, especially on weekends and holiday days. The project needed to be open to the largest number of people possible while safeguarding the quality of the plants and horticulture. The ticketing rate needed to ensure that the Park could be self-sustainable, yet would not exclude any income group.

**ENVIRONMENTAL CONCERNS**

The greening of the site presented a significant horticultural challenge due to soil conditions and the need to irrigate such a large area, which are of steeply sloping. The project necessitated the establishment of an off-site nursery in which, over several years, plants, trees and ground cover appropriate to the site conditions and climate were propagated.

**INFRASTRUCTURE**

The site required more than 1,200 cubic metres of water daily for irrigation purposes; a 7,600-square-metre area was cleared to make way for three municipal water reservoirs to irrigate such a large site, areas of which are steeply sloping; irrigation systems with below-ground water storage tanks were to be installed.

**BUILDING CONDITIONS**

Due to the poor geotechnical conditions, there was a need for specially prepared sub-bases for horticulture surfaces, terraces for impervious zones and piling support for all substantial buildings.

**Lessons Learnt**

The project was pioneering in terms of testing and identifying solutions for: the greening of sharply inclined areas of ground cover, plants and trees; a sophisticated blending of a derelict site with a historic district in terms of views, views and compatible architecture; and the development of a detailed operational plan which would ensure the Park’s sustainability. Azhar Park has become a precursor to many subsequent projects in HCP’s portfolio. It offers lessons in planning, design, feasibility studies, liaison to adjacent community development initiatives and operations under a ‘Public Private Partnerships’ arrangement, and now serves as a model for other HCP projects in their conception.

**Partners**

**PUBLIC PARTNERS**

Governorate of Cairo.

**Authoritative Framework**

A protocol agreement between the Governorate of Cairo and AKTC was signed in 1990. A ‘Public Private Partnership Agreement’ between the Governor of Cairo and AKTC for the management and operation of Ather Park was signed in July 2007.

**Background**

**BRIEF HISTORY OF PROJECT SITE**

The al-Darrasa site had been situated for centuries just outside the boundary of Fatimid Old Cairo (the original city during the Fatimid and Ayyubid era), marked by the Historic Wall of these periods. As Cairo grew, the Park site was used as a point for tipping debris and rubble from the Old City, arising from normal urban growth and earthquakes. In more recent times, the Government of Cairo had used the grounds for horse electrile and their construction equipment, which were disposed of during the disassembly of the underground正义and distribution pipeline network (by USAG) and the future Park proposed by AKTC. AKTC and USAG reached special agreement with the General Organisation of Greater Cairo Water Supplies (GOCSS/CR) for the interface between the Park and the water main systems.

**Environmental Design**

The design of the citadel View restaurant, which was designed by Serge Santelli (France), was more abstract in its interpretation ranging from environmental rehabilitation to cultural restoration and has become a driver and catalyst for a whole range of associated urban regeneration projects in Cairo and various plazas – and the architecture of Historic Cairo.

**PlAnning issuEs**

Site surveys originating from aerial and terrestrial surveys were digitalized; numerous geotechnical surveys and soil tests were carried out by Cairo University and foreign partners; research on existing parks in Cairo and abroad was undertaken with the assistance of Shawki Architect (Egypt).

**CoMMunity involvEMEnt/programmE**

The Park project was closely coordinated by AKTC/ AKCS-E with the two related HCP projects under the Area Development umbrella: the conservation of the Historic Wall and Old Cairo socio-economic projects. The entire Area Development Project was the subject of careful coordinated planning and the sharing of technical knowledge and resources.

**vOCational training/CapACity BuiLLIng**

In the construction phases of the Park, training and employment of surveyors and site labour was sourced from the adjacent community. A certain amount of the wood furniture was made in the Darb al-Ahmar carpentry workshop. During operations, the Park has employed a large number of nearby community residents in its operations division.

**ReLEVant CoDeS/standards ADOPtED**

Master planning and surveying, design and structure, were internally supervised and coordinated by a project management team. Site work, landscaping and construction has followed Egyptian building codes. Conservation of the Historic Wall was completed in accordance with international charters.

The project was simulating in terms of testing and identifying solutions for: the greening of sharply inclined and unstable slopes; irrigation systems with below-ground clay and membrane liners and drainage collection; the development of special controlled fill sub-bases for horticulture; the propagation and transplantation of large areas of ground cover; plants and trees; a sophisticated blending of a derelict site with a historic district in terms of views, views and compatible architecture; and the development of a detailed operational plan which would ensure the Park’s sustainability. Azhar Park has become a precursor to many subsequent projects in HCP’s portfolio. It offers lessons in planning, design, feasibility studies, liaison to adjacent community development initiatives and operations under a ‘Public-Private Partnerships’ arrangement, and now serves as a model for other HCP projects in their conception.
Historic Wall

CAIRO, EGYPT

The historic urban Wall is the south-eastern segment of Cairo’s Ayyubid fortifications, which were partially exposed during the works to create the new Azhar Park. The Wall measures over 1500 metres in length, running north from Bab al-Wazir to al-Azhar Street, and forms the boundary between the Darb al-Ahmar district of Historic Cairo and the new Park. It is the longest and best-preserved portion of Cairo’s old fortifications. Following preliminary investigations, the Aga Khan Trust for Culture (AKTC) began restoration works in 2000. Most of the work along the side facing the Park was completed in 2008.

Built in the twelfth and thirteenth centuries by Salah al-Din and his successors, this portion of the city wall was Cairo’s eastern boundary for centuries. Over time, its role changed although it continued to be a defining element for the city. It long ago ceased to be a defensive structure. This shift in function meant that the city gradually spread to and into the very edge of the Wall, following an accretive process common to historic cities everywhere. From the fifteenth century onwards, the area just outside the Wall began to be used as a dumping ground and the Wall gradually disappeared under the debris, where, in fact, it remained protected from the ravages of time and weather.

Today, following the interventions to create the Park, the outer face of the Historic Wall is once again exposed to view and to the elements, while, on the city side, private development pressures as well as institutional requirements raise complex urban development issues. The interventions considered not only the preservation of the Wall, but also how best to intervene in the surrounding urban context. Thus, comprehensive restoration, planning and design policies were established with regard to the monument itself, as well as the residential fabric abutting the Wall, the historic gates and the pedestrian promenade along the western edge of the new Park.

History

Construction of the Historic Wall was begun in 1176 by Salah al-Din, a Kurd of the Ayyubid clan who came to Cairo from Syria and overthrew the Fatimid caliphate in 1171. Salah al-Din’s idea of a single wall surrounding the entire city of Cairo would prove a long-lasting legacy. The new fortifications encircled
The east Wall was built as part of the new fortification and seems to have remained important for two centuries after its construction. Soon after, as the threat posed by crusader armies and other invaders declined, so did the importance of maintaining the defensive walls. On the eastern side, urban expansion virtually stopped. Already during the late Mamluk and early Ottoman periods, although the walls continued to mark the limits of the Old City, the area outside the fortifications became a dumping ground, a practice that continued unabated during the following centuries.

The maps drawn at the time of the French occupation, around 1800, in fact show that buildings in Darb al-Ahmar were generally built right up to the edge of the city. During the rest of the nineteenth century an increasing number of travellers came to Egypt, who sketched and photographed what they saw. A series of panoramas taken by French photographer Pascal Sebah in 1880 provides one of the most valuable visual documents of the eastern Historic Wall, showing that much of the original stonework, including the crenellations, still existed at that time.

In 1882 the government established the Comité de Conservation des Monuments de l'Art Arabe to preserve Egypt’s Islamic and Christian architectural heritage. Although the Comité repaired the city walls from time to time during the first half of the twentieth century, it was not until 1950 that they undertook a major campaign along the eastern Historic Wall. This consisted of the reconstruction of two towers along with extensive replacement of the missing facing stonework in several areas of the flank wall. For the next fifty years no further repairs or restoration were undertaken.
The Historic Wall remained, as it had been for centuries, the eastern boundary of the densely built-up Darb al-Ahmar district of Historic Cairo. The continued dumping of rubbish meant that the mounds of debris, now known as the Darassa Hills, had buried the outer face of the Wall all the way up to the level of the créneaux. It was only after AKTC began moving earth for the future Ashtar Park that the accumulated debris was removed. The regrowing brought to light not only the buried section of the Wall known through early photographs and historic maps, but also the northern section, unrecorded even on Napoleon’s map of 1798, and probably buried since Mamluk times.

The first step in the conservation process was a comprehensive study of the Wall’s physical condition followed by a detailed assessment of each part of the monument that would be subject to intervention. The general study documented the Wall’s overall condition, including an analysis of the masonry and identification of areas of significant deterioration, distinguishing between the loss of facing stone and total loss of the Wall. It also documented the presence and extent of previous repairs. The subsequent detailed condition survey provided a fuller quantitative analysis, complemented with a qualitative assessment of the causes and effects of deterioration. Severity of loss, for example, was classified according to the extent and depth, as well as to whether the process was still active or inactive. In addition, samples were taken for laboratory testing to ascertain the exact nature of the materials and their conditions and problems.

Together, the field survey, graphic documentation and laboratory work yielded a comprehensive record of the construction of the Wall and its present state of conservation, as well as the diagnostic tools needed to formulate an intervention programme. Recommended measures included archaeological investigation, emergency stabilization, masonry treatment (including cleaning, removal of salt and biological growths), grouting, consolidation of deteriorating stone and selective stone replacement, as well as limited reconstruction where needed to maintain the structural stability or visual continuity of the Wall. The resulting policies and guidelines for masonry intervention were designed to achieve maximum retention of the original historic fabric while ensuring the visual and functional continuity of the Wall as an urban element.

Approach and Methodology of Intervention

The restoration works started in 2000 with the launching of pilot interventions on limited sections of the Historic Wall gradually extended to increasingly greater portions of the monument. The principles underlying the interventions can be summarized as follows: firstly, to research and document all evidence, including physical, archival and historical information, before, during and after interventions; secondly, to respect the cumulative age-value of the structure, by recognizing the stratification of human activity, displaying the passage of time and embodying different materials and techniques, as well as changing cultural beliefs and values; thirdly, to safeguard authenticity as a cultural value associated with the original actions of the making or remaining of an object or site, recognized as the embodiment of authorship or the record of a time and place; and fourthly, to avoid harm to the monument, either by minimizing physical interference to re-establish structural and aesthetic legibility and meaning, or by intervening in ways that will allow other options and further treatment in the future.

These tenets are rooted in internationally recognized and accepted standards of conservation, namely the International Charter for the Conservation and Restoration of Monuments and Sites of 1964 (the Venice Charter), it builds on the fundamental principles set out in the Athens Charter (1931) with the added emphasis on the importance of context, the discouragement of reconstruction except in cases of anastylosis (reassembling of preserved fragments), and the integration of modern scientific technology where appropriate and useful.

In line with these general principles, the intervention guidelines applied by the AKTC team to the conservation of the Historic Wall expressed, whenever possible, preference for retention or compatible repair of original fabric over reconstruction. The recommendations for intervention on the surrounding urban fabric advocated respect for the changes accrued over time, in order to preserve the integrity, scale and significance of the Wall in its current configuration and context. Ultimately, the proposed interventions promoted continuity rather than transformation. The long-term goal is to integrate and harmonize the remnants of a valuable past with present realities and future uses in ways that are compatible and sustainable.

The following conservation treatments were carried out between 2000 and 2008 at the Historic Wall: stone replacement, masonry cleaning, epoxy injection and reattachment, repointing, plaster reattachment, core injection, and the application of artificial patinas. All interventions were thoroughly documented. Selected replacement materials were physically and chemically compatible with the original fabric and clearly distinguishable upon close examination.

The Wall as a Cultural Resource and Visitor Destination

Conservation of the original wall structure and preservation of the living city fabric around the Historic Wall are seen as the best antidotes against further decay on the one hand, and destructive commercialization on the other. The actions to ensure that the Historic Wall maintains its original significance and that it be properly reintegrated into its contemporary context included firstly, creating pedestrian circulation along the western side of the Park, and access through the former city gates (Bab al-Mahruq, Bab al-Barqiyya and Bab al-Wazir) to enhance the perception of the Historic Wall as a dynamic edge and meeting point, rather than as a barrier between the community and the Park; secondly, establishing didactic programmes, exhibits and an overall interpretive scheme to enhance appreciation of the Wall as an important urban feature of Historic Cairo, to explain its changing role in the development of the city and to introduce visitors to the life of the Darb al-Ahmar community; thirdly, introducing educational and training activities that are relevant to promoting a deeper understanding of the cultural heritage among visitors and residents and the development of capacity through enrichment of local skills and abilities to preserve and protect Historic Cairo; and fourthly, ensuring the future management and long-term sustainability of the Wall through the establishment of permanent repair and maintenance programmes and the monitoring of future changes and transformations.

The shift in perceiving the Historic Wall as an abstract, isolated monument to its re-invention as part of a larger urban programme can turn this obsolete structure, buried for centuries and removed from the city’s mainstream development, into a cultural asset and vital component of the rehabilitation of Historic Cairo. The challenge ahead lies in safeguarding the remains and true significance of the Historic Wall, while shaping its new role in the years to come.
Background

BRIEF HISTORY OF PROJECT SITE

The eastern portion of the Historic Wall is part of the city wall of Cairo built by Salah al-Din in the later part of the 12th century to contain the Fatimid city and its suburbs, as well as the pre-Fatimid city of Fustat, within a single fortification system. In the following centuries, the area outside the eastern wall became a dumping ground, rising to a height of some 30 metres and eventually burying the fortifications under the debris. The accumulated rubbish formed a major barrier to modern urban expansion and contributed to preserving the Historic Wall to this day. Following the completion of Bab al-Wazir Gate, approximately 1500 metres of Wall were exposed, from Bab al-Wazir to al-Azhar Street, forming the boundary between the Darb al-Ahmar district and the Park. A comprehensive restoration programme began in 2000.

Challenges

SITE CONDITIONS

The poor state of conservation and unstable conditions of some portions of the Historic Wall required extensive shortening. Also, housing encroachments against the walls, as well as inside and on top of the one-time fortifications, posed an additional challenge and greatly complicated restoration work.

INFRASTRUCTURE

New water and sewer connections had to be established for the houses abutting the Wall to avoid infiltration of water and rising damp. New concealed electrical connections had to be established to light the ramparts and interior galleries of the restored monument.

BUILDING CONDITIONS

The recording of the Wall’s general conditions (Level 1) distinguished between total loss (core and facing stones), partial loss (facing stones and parts of the core wall), loss of facing stones, structural instability, presence of earlier repairs, base erosion, and loss of planking along the ramparts. The detailed survey (Level 2) recorded the conditions of the individual stones and distinguished cases of surface erosion, and the presence of black crust or carbon soil, cracking, de-lamination, detachment, disaggregation, displacement, baking, loss and the presence of salts and metal stains. In addition, housing encroachments were classified by type and included houses built along the back face of the Wall; over part of the rampart, within the interior galleries; and to replace, in part or in full, entire sections of the Wall.

Significant Issues and Impact

DATA COLLECTION/SURVEYS

The documentation prepared before the interventions included architectural, archaeological and condition surveys. In addition, laboratory analyses on existing mortars and stones were carried out throughout the restoration work to identify local materials and compatible materials.

MASTER PLANNING PROCESS

These detailed the general programme and priorities of intervention for the entire Wall and led to the preparation of area plans, descriptions of works, operational schedules and budgets.

PLANNING ISSUES

Gates and special areas were subjected to detailed planning, including pedestrian access and circulation, presentation circuits, rehabilitation of houses encroaching on the Wall, promenades on the ramparts and the base of the Wall and rehabilitation of interior galleries and passages.

VOCA TIONAL TRAINING/CAPACITY BUILDING

In order to disseminate and reinforce local expertise in architectural conservation, the Historic Wall restoration served as a training ground for the development of skills among Egyptian professionals and craftsmen. On-the-job training activities included the culling, dressing and dressing of stones, preparation and use of mortar and renders, stone masonry repair and cleaning, and stone masonry construction.

CONTRAC TING METHODS

With the acceptance of a limited number of subcontracts for electrical works, all restoration activities were carried out with direct labour recruited by AKTC, often from the resident community, and supervised by the project’s professional staff.

RELEVANT CODES/STANDARDS ADOPTED

All conservation work was undertaken in accordance with the relevant international charters and in keeping with Egyptian antiquities laws and procedures. The formulation of standards and operational guidelines drew on documented examples of similar types of interventions carried out elsewhere in the region.

LESSONS LEARNED

Techniques and guidelines for the treatment, repair and replacement of materials in traditional construction, as well as the characterization and matching of traditional mortars, were thoroughly investigated and tested during the course of the project. This work provides lessons which can be applied to similar AKTC/HCP projects carried out in the surrounding region and elsewhere.

Partners

PUBLIC PARTNERS
Governorate of Cairo, Supreme Council of Antiquities.

Authoritative Framework

Memorandum of Understanding between the Supreme Council of Antiquities and the Aga Khan Trust for Culture covering the restoration of the Historic Wall and other monuments in Darb al-Ahmar.

The restored Darb Shouglan Community Centre, formerly a school, is integrated into its historic surrounds. Once a barrier, the Wall has become a catalyst for regeneration.
The city of Khorog is the administrative centre of the Gorno-Badakhshan autonomous region and the second largest city in Tajikistan. The city suffers from the lack of a land-use plan and is in need of a clearly defined city development plan. In 2007 AKTC prepared a ‘Development Control Report’ that outlined the development history of Khorog and characterized the hazardous and isolated mountain environment that severely restricts safe land supply and makes servicing a challenge. The report recognized a general lack of local planning methodology and human resource capacity to guide Khorog in the many needed areas of urban services reform, and recommended more orderly controlled growth as a goal with a minimum of disruption to cultural and community norms.

In mid 2009 a planning team was engaged to develop a Master Plan in coordination with the local and national government authorities and with AKDN agencies operating in the city. The planning team proposed a phased pattern of modest growth synchronized with services, sensitive to impacts on individuals while recognizing the need for affordability. Khorog is located in a seismically hazardous corridor, thus there is a need to review future design while allowing time for the construction industry to mature. Approval processes that raise safety standards in this context become all the more paramount.

The Master Plan proposes a set of guidelines and recommendations to address the future growth of the city by defining development patterns that allow the city to expand in a controlled manner while meeting the needs of its citizens. The AKTC commissioned planning team is currently completing a development model that focuses on defining guidelines on city planning and building codes; understanding and guiding the spatial city patterns over the next twenty years; and identifying key areas of intervention, infrastructure requirements and opportunistic areas of economic improvement.

The Master Plan goes into further detail, identifying city-wide impact recommendations that include improving city infrastructure; updating building codes; emphasizing energy efficiency and earthquake-proof building design; developing a life-safety strategy in the event of a natural disaster; increasing the city’s self-sufficiency in food needs through community green spaces; and creating an institutional building and planning unit and properly trained staff.

Khorog City Master Plan

KHOROG, TAJIKISTAN

The town of Khorog is situated on the Gunib River, 2100 metres above sea level in the heart of the Pamir Mountains near the border with Afghanistan.

Oppoise page:
Above, the axonometric view is a detail from the Khorog Master Plan.

Below, a view of the Park’s contiguity with the river.

Previous page:
Children enjoying the Park equipment amongst the poplar trees that are changing colour with the autumn.

Project Scope / Objectives

To stem the tide of unregulated, inefficient urban sprawl in Khorog, AKTC is developing a Strategic Master Plan with the aim of sharing best practices on city planning, service and management with the Government of Tajikistan. The programme seeks to establish a set of design and planning principles that will serve as the foundation for collaborative efforts, and to provide technical services for planning work on building and land control design and management, which recognize the vulnerable nature of the region and the limits of sustainable growth, is also underway.
Follow up missions to Khorog; meetings with mayor and city architect; consultations with stakeholders

Completion of Khorog City Master Plan and submission to Government; planning workshop with the Agency for Construction and Architecture; development of ‘Letter of Intent’ through 2012; planning for next phase of project at the national and local level

Commencement of Khorog City Park project

First mission to Khorog to survey the city and analyse urban growth patterns

Preparation of Khorog ‘Planning Report and Analysis’

Submission of Planning Report to Government of Tajikistan and mayor’s office

Follow up missions to Khorog; meetings with mayor and city architect; consultations with stakeholders

Development of land control and support system; physical rehabilitation project of hospital uplands and planning for post-2011 engagement; planning for additional physical open space work on the river bank

Proposed
1. Four-Storey Mixed-Use Buildings, lining street edge
2. Landmark Buildings, to punctuate important intersections
3. Preservation of Traditional Settlement Areas
4. Four- to Six-Storey Residential Buildings
5. Theatre District Housing
6. New Pedestrian Bridge
7. River-Edge Improvements
8. Cultural Square
9. Water-Edge Library
10. Row-House Typology, along river edge

Existing
11. Food Market
12. School
13. Jamatkhana
14. Khorog City Park
15. Theatre
16. Khorog University

[Map of Khorog City Master Plan with proposed and existing landmarks highlighted.]

Phasing 2005 — 2011

2005
2006
2007
2008
2009
2010
2011

1. Commencement of Khorog City Park project
2. First mission to Khorog to survey the city and analyse urban growth patterns
3. Preparation of Khorog ‘Planning Report and Analysis’
4. Submission of Planning Report to Government of Tajikistan and mayor’s office
5. Follow up missions to Khorog; meetings with mayor and city architect; consultations with stakeholders
6. Development of land control and support system; physical rehabilitation project of hospital uplands and planning for post-2011 engagement; planning for additional physical open space work on the river bank
Khorog City Park

Khorog, Tajikistan

The town of Khorog is the capital of the Gorno-Badakhshan autonomous region in Tajikistan and it is situated in the heart of the Pamir Mountains near the border with Afghanistan. Khorog is a remote settlement and out of necessity must cultivate self-sufficiency. Its dedicated recreational areas are few but vital to the lives of the inhabitants as spaces to socialize and places to play.

The Park site, comprising a run-down open space on the riverfront, is roughly in the city centre of Khorog and is nested on an alluvial plain only a few hundred metres wide, caught between the steep and barren mountain range of the Pamirs and a bend in the Gunt River. The site was gifted to His Highness the Aga Khan on the occasion of the fortieth anniversary of his Imamat, and since 2005 has been the focus of a rehabilitation project designed to offer visitors a high-standard public park with amenities.

Between June and August 2004 the Aga Khan Trust for Culture (AKTC) initiated an exercise of extensive consultation with the population of Khorog, with the aim of assessing what would be core functions and essential features of an upgraded park. The resulting six-hectare Khorog Park is a place to reflect, relax and enjoy nature in the company of friends and family. At its commencement, the project presented an opportunity to provide an enhanced park facility for the entire city; a lively green space and civic space for all of its citizens; recreational facilities for families and children; and the means to integrate the urban green space into the city network.

Construction of the Park commenced in spring 2005. Work on the Park by AKTC included the enhancement of the already well-wooded area; a programme of levelling works, topsoil enhancement, fertilizing and irrigation; the sowing of lawns; planting of appropriate plants and flowers, which were raised in an on-site nursery; and the restoration of stone channels used for irrigation in the summer. The first phase of Park construction was completed in 2007 and involved approximately ninety local workers. Work on the Park’s main features – the pond, the restaurant, tea-house and open-air theatre – was completed in 2009.

The design inspiration for the Park came as a direct response to the dramatic climate and landscape of the region and the common need for a public garden.
A view of the waterfront walk along the opposite page: functions as an ice-skating rink in winter.

Adjacent to the path is a play area. The Pond (The Pond), which in the evening, restrained lighting offers a more urban dimension to the Park experience.

The Pond, subject to erosion, was terraced. It was a conduit for two major cross-town thoroughfares, a pedestrian link below and parallel to the main road, and a riverside walkway on top of falling bank revetments. Encouraged and under-monitored, the pond is a favourite dip, or even historic gravity irrigation canals were integrated into the design and protected during construction. The long, harsh winters make spring and its accompanying blossoms of flowering trees, crab apples and cherries an emotional event. Although short, the summer growing season is special to the inhabitants, who nurture and love flowers. The Park has three formal flower gardens designed as discreet and peaceful chambers with generous seating. They, in turn, link with formal and informal paths for strolling through the woods and glades of the Park.

The stone-paved riverside promenade, an important pedestrian corridor, is enhanced by the extensive lighting and benches, and a public toilet block.

Magnificent mature avenues and groves of Pame poplar, natural rock outcrops and even historic gravity irrigation canals were integrated into the design and protected during construction. The long, harsh winters make spring and its accompanying blossoms of flowering trees, crab apples and cherries an emotional event. Although short, the summer growing season is special to the inhabitants, who nurture and love flowers. The Park has three formal flower gardens designed as discreet and peaceful chambers with generous seating. They, in turn, link with formal and informal paths for strolling through the woods and glades of the Park.

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Publication Acknowledgments

The Aga Khan Trust for Culture would like to acknowledge the teams and individuals who have made this publication on the Historic Cities Programme a captivating story and a fulfilling project of its own. Some of these individuals planned the publication, some contributed essays, and others contributed to the case studies, which, alone, represent many person-years of devotion and labour.

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PROJECT OFFICES
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Ali Esmail, CEO, Aga Khan Cultural Services (Syria)
Mansoor Khan, Technical Director, Aga Khan Cultural Services (Pakistan)
Ajmal Makwana, CEO, Aga Khan Cultural Services (Afghanistan)
Rashid Naqda, Project Director, AKTC India Office

The teams of in-house professionals and consultants working under the direction of the above individuals have prepared painstakingly detailed drawings and accounts of the projects presented and have had first-hand knowledge of the projects during planning and implementation. Input received from Thierry Grandin and Zeina Hirtli (Syria), Dina Bakhoum (Egypt) and Anthony Wain (South Africa) is additionally cited.

AKTC WOULD LIKE TO ACKNOWLEDGE THE CONTRIBUTION OF PRIOR MEMBERS OF ITS STAFF, INCLUDING
Stefano Bianco, Director, HCP, 1992–2006
Amit Sapoo, CEO, AKS (Zanzibar) 2005–2007
Stephen Steel, Project Officer, HCP, 1989–2006
Kamel Bia, CEO, AKTC (Afghanistan) 2002–2003
Mohamed el Mikawi, CEO, AKCS (Egypt) 2003–2008
Oswana Hambisa, CEO, AKCS (Egypt) 1997–2002
Shehna Hirani, COO, AKCS (Zanzibar), 1998–2003
Essa Khan, CEO, AKCS (Pakistan) 1992–2002
Jytte Lassen, CEO, AKT (Afghanistan) 2004–2003

AKDN RESIDENT REPRESENTATIVES
The Trust would also like to thank collectively the AKDN Resident Representatives in countries in which HCP initiatives are situated:

Afia (Kosovo, Kenya)
Anin Kurji, Tanzania/Zanzibar
Ali Mawej, Afghanistan
Muam Nordal, Tajikistan
Farid Nadjmi, Mali
Mohamed Seifou, Syria

HCP PROJECT TECHNICAL TEAMS AND MAIN CONSULTANTS
AKTC and the Historic Cities Programme wish they could list individually the many specialist consultants, staff, contractors and suppliers who have contributed to the realization of the projects presented in this publication. Many such individuals or firms are acknowledged in existing AKTC publications and brochures on specific countries or initiatives. The work in this publication should make manifest the fact that the regeneration of historic cities and sites is a collaborative effort, spanning significant periods of time and relying on a very wide base of involvement by public and private sectors. The Historic Cities Programme would like to acknowledge and thank all those who have been associated with its initiatives, past and present.

Publication Production

This publication benefited from a true collaboration between Prestel publisher’s art department and a number of individuals under AKTC’s direction who interacted with project teams, photographers, the editor and essay and case study authors, to achieve the fine balance required for a publication which combines cultural, socio-economic and urban and architectural concerns.

The Trust would like to thank, in particular, the publishing team:

Curt Holle, Editor (Prestel)
Hannah Graham, Copy Editor (Prestel)
Christian Richters, Fine German Design, Graphic Designers.

Working closely with Prestel on AKTC’s behalf, Shiraz Allibhai oversees the publication and coordinated the graphics, text and case studies; William O’Reilly developed the captions for the publication.

Photography

A publication on a range of sites and communities as dispersed as those featured in this publication could not succeed without a parallel set of high-resolution, professional photography to complete the story. The photographs displayed in this publication derive from years of dedicated effort by in-house professionals and consultants working on the individual projects. The case study materials, in the first instance, were prepared by the AKTC project teams and were supplemented as noted by a team in the main office. In all known instances, these drawings represent original and field-based surveys and designs originating from AKTC’s initiatives on the sites in question and thus represent a major investment of time and care. These drawings present an important set of assets that the Trust is pleased to add to the intellectual capital of the already impressive heritage of these sites.

The editor wishes to thank Shiraz Allibhai and Jeff Allen for their very significant contributions to this book.


In 2009 and 2010, Christian Richters, one of the foremost architectural photographers in the world, was commissioned to photograph all the sites that were intended to be included in the case studies.

ILLUSTRATIONS

The underlying architectural drawings throughout this publication derive from years of dedicated effort by in-house professionals and consultants working on the individual projects. The case study materials, in the first instance, were prepared by the AKTC project teams and were supplemented as noted by a team in the main office. In all known instances, these drawings represent original and field-based surveys and designs originating from AKTC’s initiatives on the sites in question and thus represent a major investment of time and care. These drawings present an important set of assets that the Trust is pleased to add to the intellectual capital of the already impressive heritage of these sites.

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