



## MALI EARTHEN ARCHITECTURE PROGRAMME

By about 300 A.D., camel caravan routes had been established throughout West Africa, linking West African cities with Europe and the Middle East. Timbuktu, Gao and Djenné – all major cities along the West African routes – became important cultural, as well as trading, centres. In major cities, schools and universities were endowed and vast libraries were built.

This important legacy had been in decline for many years. Beginning in 2004, under a public-private partnership, the Aga Khan Trust for Culture (AKTC) began working to revitalise the centres of three cities in Mali. AKTC started with the restoration of the Great Mosques of Djenné and Mopti and the Djingereyber Mosque in Timbuktu, as well as the public spaces around them.

The mosque restorations became the most visible part of a multidisciplinary programme aimed at improving the quality of life in the cities. These efforts included the installation of new water and sanitation systems, street paving, early childhood education, training, health care and economic development.

## MOPTI

Following the completion of the restoration of the Great Mosque of Mopti in 2006, the Trust implemented an urban regeneration programme that aimed to raise the standard of living for residents in the Komoguel area. Several public water points were established to increase access to safe, clean drinking water; an underground sewerage system was built with connections to individual households in the area; a treatment facility for raw sewage was installed; 4000 square metres of streets were paved with locally manufactured bricks (made from recycled polythene bags and sand) and a system for collection of solid waste was introduced. A flood barrier built to withstand periodic flooding was constructed. A visitor centre housing the Centre for Earthen Architecture, a community centre and public toilets were also constructed. In the process, 345 people were trained in construction techniques, plumbing, masonry, brick manufacturing, carpentry and metal work.

## TIMBUKTU

Following the work in Mopti, AKTC initiated comprehensive conservation works on the Djingereyber Mosque in Timbuktu at the end of 2006. The mosque, built in the 14th century, is the oldest earth construction building in sub-Saharan Africa. Officially listed as part of the Mali's cultural heritage, it was designated a World Heritage Site by UNESCO in 1988.

Because the Mosque is constantly subject to the depredations of a harsh, arid climate, AKTC worked to reverse the deterioration of this important landmark and to develop existing technical capabilities through training. The project included: conservation of the building's roof, minaret and exterior facades; conservation of the building's interior prayer space, with improvement of the existing electrical, ventilation and sound systems; on-the-job training of local craftsmen and apprentices in traditional earth building techniques and in new restoration methods; and, technical assistance to local authorities for the post-construction phase.



The Great Mosques of Djenné (top), Mopti (centre) and Djingereyber Mosque in Timbuktu (bottom) after restoration are all part of AKTC's Earthen Architecture Programme.

## DJENNÉ

Djenné, founded by merchants in the ninth century (near the site of an older city dating back to 250 B.C.) is the oldest known city in sub-Saharan Africa. Its historic centre, where more than 2,000 traditional houses have survived, was also designated a World Heritage Site by UNESCO.

AKTC's work in Djenné began in 2006, when a preliminary study of the Great Mosque revealed that despite its well-known annual maintenance process, the Great Mosque of Djenné was at risk of collapsing. In an attempt to make the mosque structure watertight, each year more "banco" – a mix of mud and rice chaff – was placed on the walls and on the roof. Over 500 tonnes of this "banco" mix was overloading the roof and hundreds of tons of it were stressing the wall structure.

AKTC's conservation of the Mosque, which began at the end of 2008, encompassed the complete rehabilitation of the roof, restoration of the mud-brick load-bearing wall structure and the complete replacement of the interior lighting, ventilation and sound systems. In reversing the deterioration of this important landmark, AKTC has been working with the local corporation of masons, the "barey-ton", to revive traditional construction techniques and develop technical capabilities through training.

As in Mopti, Phase 2 will encompass the improvement of public spaces, the installation of water and sanitation and other measures designed to improve the quality of life in the area.

## BAMAKO - NATIONAL PARK OF MALI

The population of Bamako, the capital of the Republic of Mali, has risen rapidly in recent years to over one million inhabitants, creating new demand for housing and public facilities. In this context, the need for far-sighted urban planning was crucial.

The Government's response was to define the outlines of the National Park of Mali, a space of 103 hectares within a larger protected forest reserve of 2,100 hectares, which forms a significant greenbelt in this mainly arid country. Under the terms of the public-private partnership, the Government asked AKTC to concentrate on the Park's 103 hectares, a large, semi-circular canyon of protected forest that lies beneath the terraced outcrops of the Koulouba plateau, between the National Museum and the Presidential Palace Complex.

Given the Park's natural attractions, its large size and its location next to the National Museum Complex, the Park was designed to offer large open spaces for leisure and educational activities for the general public, school groups and tourists. The project brief called for the unification of the sites of the National Museum and the existing Botanical Garden and Zoo into a single cultural/ecological park of significant value, with natural and cultural attractions. Phase 1 included the rehabilitation of 17 hectares of open spaces and gardens and the construction of several new facilities.

The Park features a comprehensive pedestrian circulation network and formal



A Water and Sanitation Programme (above) in Mopti, a part of the broader, multidisciplinary programme, was designed to improve living conditions for residents living around the Great Mosque.

The National Park of Mali, (below) which seeks to provide a much-needed public green space in Bamako, features an inner, active, cultural core zone of 49 hectares and an outer, more passive ecological buffer zone of 54 hectares.





*His Highness the Aga Khan (centre), former Prime Minister Mr. Ahmed Mohamed Ag Hamani (right) and Mr. Abdramane ben Essayouti, the Imam of the Mosque (left) in front of the 14th century Djingereyber Mosque, Timbuktu, with other local dignitaries, in 2003.*

promenades throughout. It contains fitness, jogging, cycling and mountaineering tracks of varying difficulty and diverse interpretive awareness trails for botany, birds and nature. The pedestrian network provides easy access to the 103 hectares of the Park and connects existing facilities, such as the National Museum and the amphitheatre. The latter is dedicated to education and the performing arts.

Phase 1 also included the redevelopment and integration of eight existing facilities. The architect Diébédo Francis Kéré, an Aga Khan Award for Architecture recipient in 2004, was commissioned to design a primary and secondary gate, an entry building, a youth and sports centre, a restaurant, public toilets and several kiosks.

The garden spaces feature indigenous flora in varied settings, from open lawn areas to flower gardens, wooded areas and a medicinal garden. The installation of a range of interpretive educational signs and displays, and the development of trained guides, is expected to offer new educational experiences for visitors.

### ABOUT THE AGA KHAN TRUST FOR CULTURE

The Aga Khan Trust for Culture is the cultural agency of the Aga Khan Development Network. Through its programmes, the Trust engages in the physical and social revitalisation of communities with the aim of improving the quality of life; promotes debate about contemporary design problems; and, through education and cultural initiatives in the realm of music and the arts, aims to highlight the contributions of the Muslim world to global cultural heritage.

The Trust has been active in Mali since 2004, working on the restoration of mosques in Mopti, Timbuktu and Djenné under the auspices of the Earthen Architecture Programme. This restoration work is, among other projects, a part of a Memorandum of Cooperation, signed by Mali's Ministry of Culture and AKTC, relating to the conservation of Mali's earthen architecture. The Trust's work relies on close co-operation with local institutions and stakeholders and the participation of experienced local masons and specialists in restoration.

### ABOUT THE AGA KHAN DEVELOPMENT NETWORK

The Aga Khan Development Network (AKDN) is a group of development agencies with mandates that include the environment, health, education, architecture, culture, microfinance, rural development, disaster reduction, the promotion of private-sector enterprise and the revitalisation of historic cities.

The Network's overall objective in Mali is to contribute to poverty reduction and the improvement of the quality of life for the people of Mali. Several agencies of AKDN are currently operating in Mali, including the Aga Khan Trust for Culture, Aga Khan Foundation and Aga Khan Agency for Microfinance. Activities have grown to encompass: cultural restoration projects; economic development projects ranging from packaging for agricultural products to infrastructure investments in the water, electricity and aviation sectors; a coordinated multi-input area development project involving health, education, microfinance and civil society strengthening in the Mopti region; and the creation of a large public park in the country's capital city.

*For more information about the Mali projects or the Aga Khan Trust for Culture, please visit*

*www.akdn.org or contact:*

*Aga Khan Trust for Culture*

*PO Box 2049*

*1211 Geneva 2*

*Switzerland*

*Tel. +41 22 909 7200*

*Fax. +41 22 909 7292*

*Email: info@akdn.org*



AGA KHAN TRUST FOR CULTURE



**MALI PROJECTS 2004 - 2010**