

Rehabilitation of the City of Shibam

Wadi Hadhramaut
Yemen

GTZ Technical Office
GOPHCY



Introduction

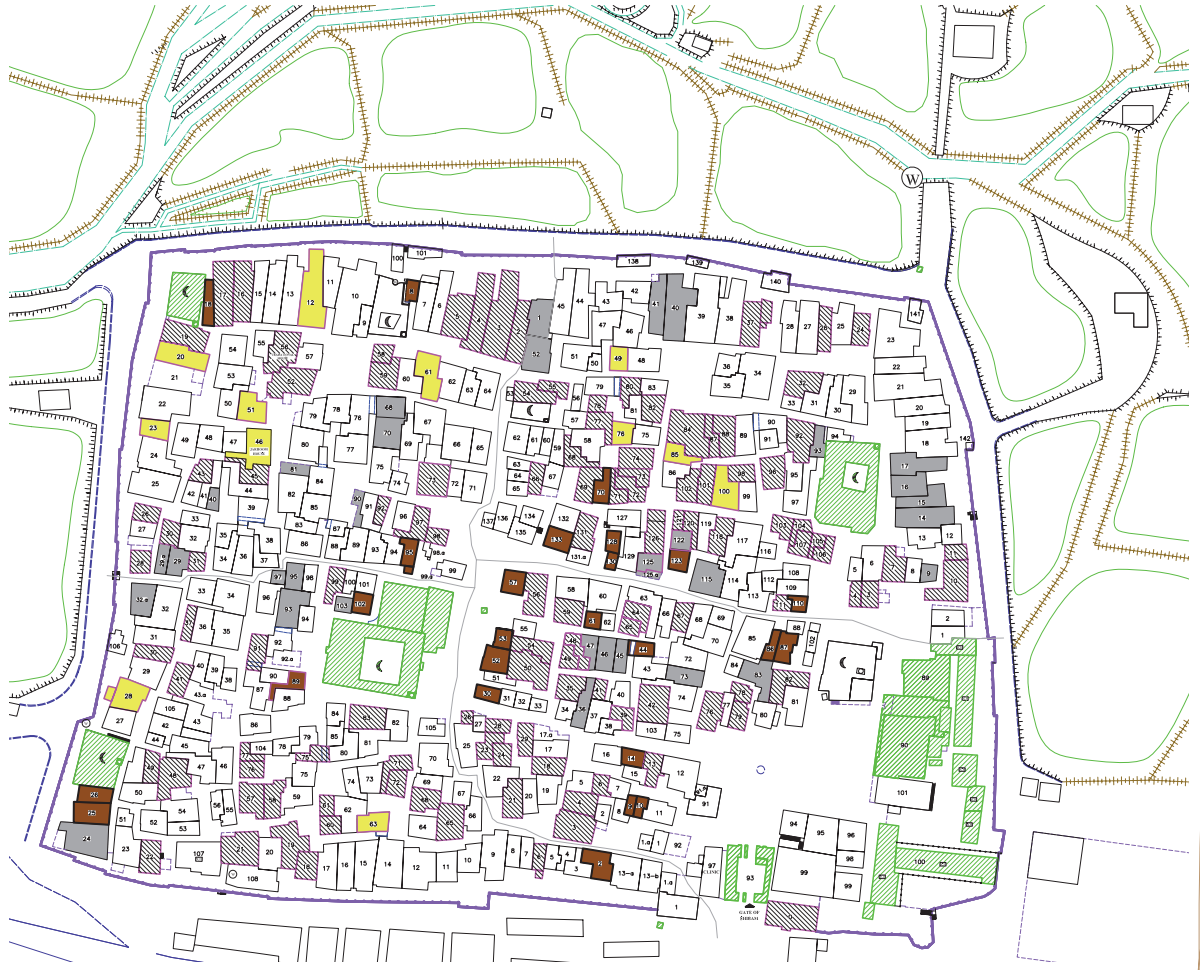
The mud-brick high-rise buildings of Shibam cluster in a walled mass that exudes the genius of Yemeni architecture. As an urban monument, Shibam is of international architectural significance, yet the motor of this rehabilitation project is not the preservation of buildings but rather the creation of new economic and social structures that will restore the vitality of the city. A joint Yemeni-German initiative, the Shibam Urban Development Project has stemmed depopulation by providing technical and financial support for the renovation of almost half of the housing stock. It has worked with the local authorities to improve essential services and infrastructure. Most importantly, it has given local people the means and the confidence to take concrete steps towards improving their lives. Through new community-based organisations local craftsmen are being trained, women are being offered literacy classes and the chance to learn new skills, and agriculture in the outlying area is being revived through the restoration of the old canal and spate irrigation system.

Jury Citation

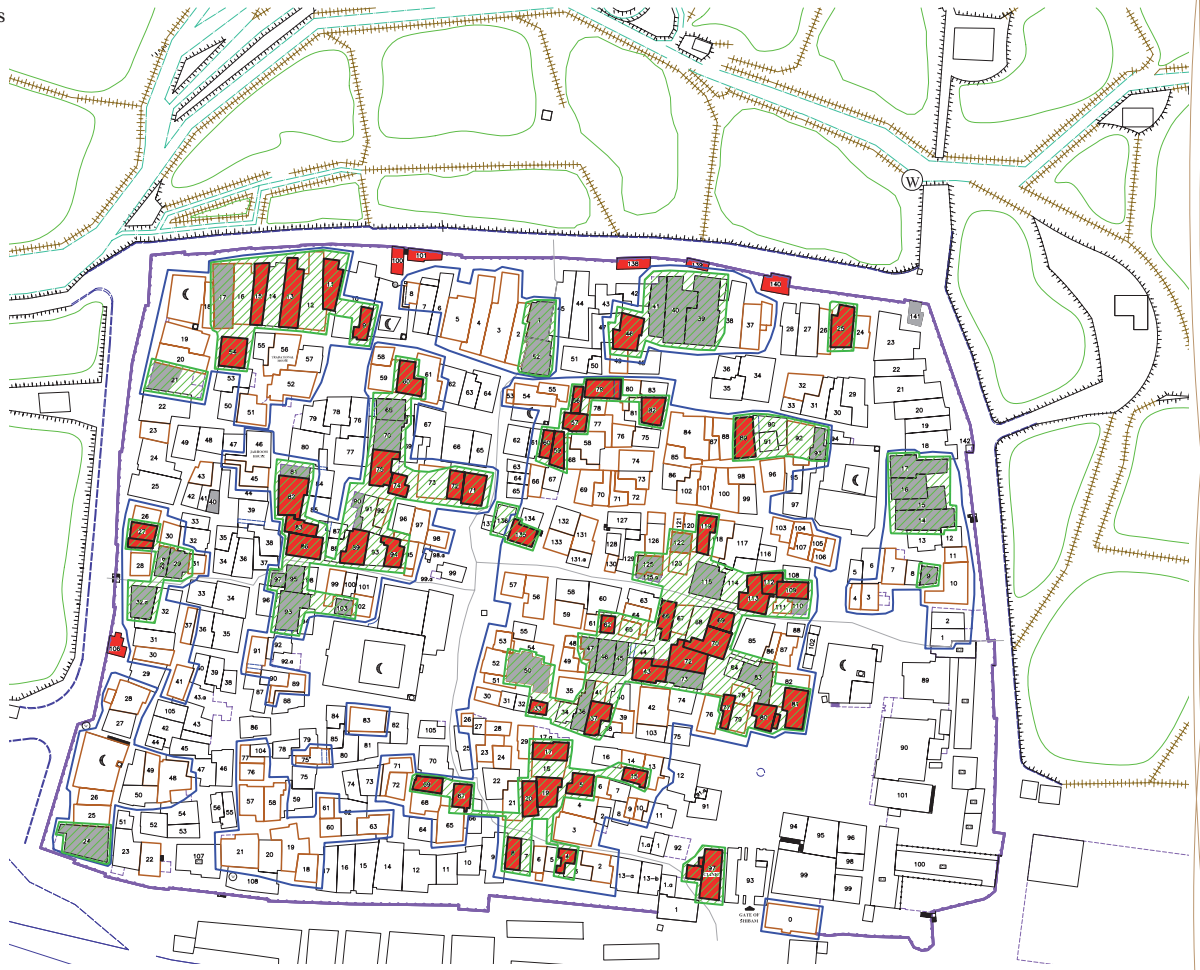
Over the course of two decades, a number of agencies and individuals have committed time and resources not simply to preserve the unique urban and architectural heritage of the ancient city of Shibam, but also to establish a viable alternative to the mundane mass architecture found in many economically depressed parts of the world. In restoring nearly 200 houses and disseminating social services, the Urban Development Project has approached the city as a living community rather than a historical artefact frozen in time.

Through the efforts of NGOs, architects and stakeholders, Shibam has eluded imminent obsolescence under the amnesiac pressures of globalisation, growing into a platform for the reinvention of the vernacular high-rise in twenty-first century conditions. Located on the threshold between past and present, tradition and modernity, this walled city of vertical mud-brick high-rises, with its labyrinthine streets and lanes, unfolds its own iterative narrative in a stunning, almost oneiric topography. All these efforts have allowed the citizens to re-imagine their city beyond its sheer liminality in the cosmopolitan discourse of contemporary urbanism.

- restored private owned houses
- restored (AWGAF owned)
- restored public buildings & monuments
- valuable houses restored
- ruins (33u)



- priority interventions required
- ruins
- limits of degraded zones in 2006
- restored houses through SHHP
- degraded zones before restoration through SHHP



Project Description

Shibam is one of the few historic cities of the Hadhramaut valley that is not built directly against a mountain backdrop. Instead, it sits on a raised earth dais thought to be the rubble of an ancient city, and is surrounded by a city wall. Along with Seyoun and Tarim, it is one of major urban centres in Hadhramaut. In times past it was also the commercial capital where caravans assembled on the Arabia trade route. Although there is no definite date for the construction of Shibam, its name is mentioned in early texts and in pre-Islamic poetry (Umru' al Qais). The older buildings date back 200 to 300 years, and they have been repeatedly reconstructed over the centuries to sustain the architectural mass and volume of the city.

The vertical expansion of the buildings was informed by the topography and by the need to preserve the surrounding agricultural land. The ground floors of houses in this region are traditionally taken up with grain and staple food storage. In Shibam the ground and first floors have dark and lofty depots with few openings for ventilation. Sheep and goats are kept in adjacent rooms and terraces on the first floor at night. The second and third floors are occupied by several living rooms (*mahadir*) used by the men, while the fourth and fifth floors contain living areas for the women, along with kitchens, washrooms and toilet facilities. The sixth and upper floors are used by children or by newlyweds in the extended family. Terraces placed at the upper levels make up for the lack of open courtyards in the house.

When the Urban Development Project started in 2000, many of these houses were in danger of collapse and people were leaving the city. Improvements to the housing stock had to be a matter of priority. An economist, Burkhard von Rabenau, was asked to analyse possible ways of assisting owners to carry out the necessary improvements to their houses. He suggested that the people of Shibam were being indirectly taxed for living in a listed site, since they were denied development rights and the option of building to lower standards. To offset this situation, it seemed appropriate to offer a subsidy. The proposal was discussed with the Social Fund for Development of Yemen, which agreed to fund the subsidies provided they were offered on a clear and transparent basis, with residents contributing their fair share, and that the work involved a strong training component, benefiting the local workforce.

As a matter of principle, the project insists that owners take charge of the restoration of their property – that they actively set their own priorities for the intervention, commission the master builder of their choice, and

manage the construction budget. Subsidies are given directly to the owners in stages, as the work progresses.

To date almost 200 houses have been restored, along with a number of public buildings and monuments including mosques, historic fountains, watchtowers and the city gate. The project followed the advice of senior master builders in treating structural problems in the mud buildings. Responses include adding wooden stilts (*ma'atin*) along damaged facades to help reduce the load of the upper floors, using horizontal wooden beams to 'stitch' vertical cracks in walls, replacing defective structural elements, and in extreme cases removing added floors to reduce the extra loads imposed on the buildings. All of these structural interventions are traditionally practised in Shibam, though it was necessary to engage senior master builders to supervise the work of the younger builders and train them in these techniques.

All structural elements are made from ilb, a local hardwood, except in extreme cases where the upper floors are supported by steel tubes (a method used in spanning ceilings in mud brick building in Hadhramaut since the 1980s). Renderings are usually made from mud mixed with local hay and straw. Alluvial mud is collected from the agricultural fields around the city after every few floods. This returns the fields to their original level, and the funds raised from the sale of the mud are used to maintain the irrigation system. For waterproofing the outer surfaces of the building, lime is applied in two layers followed by a final wash. The first application is thick while the second layer is thinner and is usually mixed, while wet, with fine sand that acts as aggregate to stabilise the lime. The final lime wash is usually mixed with a small quantity of red sugar.

Yet the restoration of the built fabric is just one strand of the programme. The other vital components are the mobilising of community-based organisations and the initiating of interventions based on community participation and priorities. In this way, the economic and social impact of the project has extended beyond the historic city, reaching the whole district of Shibam through the organisations it has helped set up.

The Hawtah Women's Charity and Social Association runs literacy programmes, classes in sewing, hairdressing and computing, and a scholarship programme enabling young high-school graduates to go to university in the nearby town of Seyoun.

The Hazm Community Centre provides workshops for women living in extreme poverty. A core unit of around 35 women is currently adapting traditional weaving techniques to create more lucrative products for the tourist market.

The Agricultural Cooperative Associat-

ion is based on the old tradition of the water rights committee and brings together about 80 per cent of the farmers and landowners in the spate irrigation lands around the historic city. Working with the project, the association is coordinating the rehabilitation of the intricate irrigation system.

The Mud Architecture Association, with some 33 active master builders and 220 workers and apprentices on its register, oversees all the restoration work supported by the project. The association negotiates salaries of workers and apprentices and has also established a social security fund to compensate workers who are injured on site. The demand for skilled labour in the city has quadrupled since the project's inception.

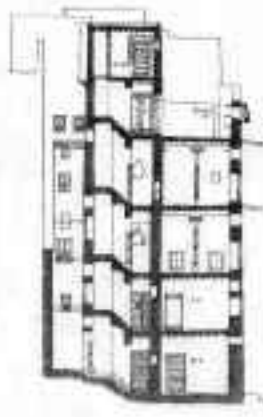
Inspired by the success of these organisations, other community groups have launched their own initiatives and sought the project's assistance to implement programmes. Local schools are organising lessons in traditional crafts, a music ensemble is reviving musical traditions to pass them on to younger generations, a private museum has set up a workshop training high-school students to build models of Shibami houses, local craftspeople are developing new products to sell to tourists, a cultural club has organised a travelling exhibition of historic photographs, and so on. The project is ongoing. What has been achieved so far highlights the importance of Shibam as a living site rather than a museum – a place where the inhabitants are developing and modernising the structures that improve everyday life, creating a contemporary setting with their urban heritage.

Text adapted from a report
by Salma Samar Damluji

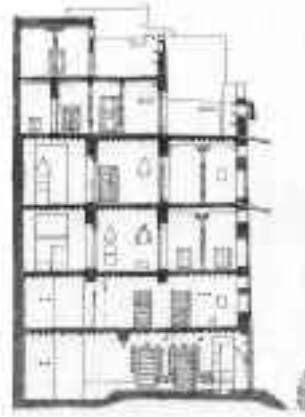
house A



elevation

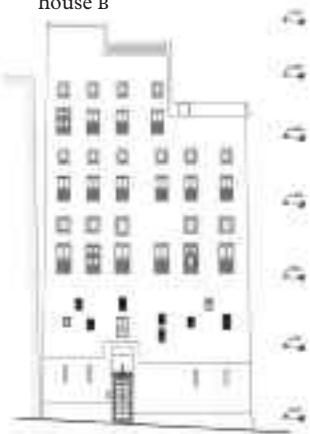


sections



floor plan

house B



elevation



floor plans



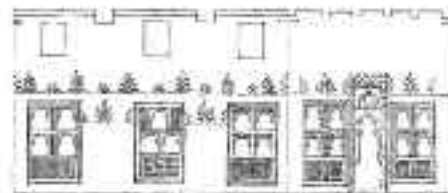
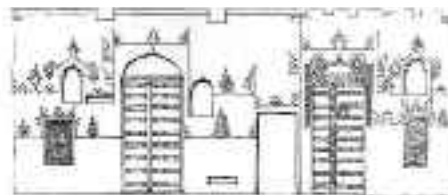
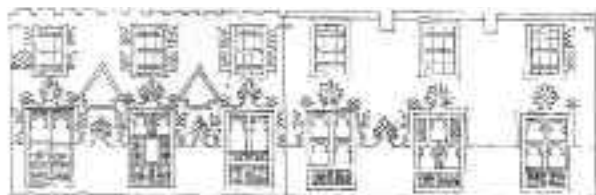
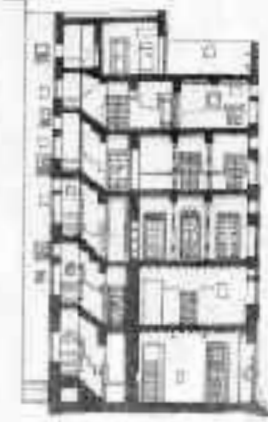
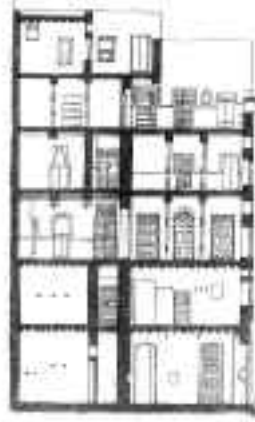
house C



elevation



sections



interior elevations

Rehabilitation of the City of Shibam
Shibam, Governorate of Hadhramaut, Yemen

Client

German Federal Ministry of Economic Cooperation (BMZ), Germany; Ministry of Culture, Yemen; local community, Shibam

Local Council: Tariq Talib Falhum, director general, Shibam District; Mari'i Badr Jabiri, secretary general; Hud Bazurais, Shibam representative

Implementing Agencies

General Organisation for the Preservation of Historic Cities of Yemen (GOPHCY): Abdullah Zaid Ayssa, director (2006–2007); Abdullah Bawazir, director (2000–2005). German Technical Cooperation (GTZ), Sana'a: Thomas Engelhardt, director (2007); Helmut Grosskreutz, director (2000–2006). GTZ Shibam office: Omar Abdulaziz Hallaj, team leader (2004–2007); Ursula Eigel, team leader (2000–2004)

Other Sponsors

Social Fund for Development, Yemen; German Development Services (DED), Germany

Architects and Engineers

GTZ and DED: Omar Abdulaziz Hallaj (GTZ), development of housing programme/project support; Tom Liermann (DED), historic features programme and training for technical unit; Mohamad al-Kaderi (GTZ), management of technical unit (2002–2005); Erik Schweikhardt (GTZ), support for technical unit; Martin Zeifert (DED), plumbing and infrastructure expert
GOPHCY: Jamal Bamakhrama, management of GOPHCY contribution; Sadiq al-Mashhour, management of technical unit (2006); Ali Baraja, field architect; Mazin Sheikh al-Masawi, field engineer

Administration

Khalid Gaashan (GTZ), project officer/planner

Documentation and Archiving

Monaf Abboud and Abdullah Sabain (GOPHCY)

Consultants

Burkhard von Rabenau, economist; Hadi Saliba, conservation planning; Jamal Jaber, wood conservation; Khaled Sharif and Nabil al-Jerafi, solid waste management; Nadim Rahmoun, infrastructure implementation

Community Development Officers

Aisha Said, senior community development officer (2000–2004); Hana Bin Taleb and Eshraq Aidan, community development officers; Amina Bin Taleb, junior community development expert (all GTZ)

Principal Master Builders

Housing Programme: Said Baswatayn, supervisor; Monuments Fund projects: Jam'an Basaida, Mbarak al Juraydi and Awad Huwaydi, supervisors. Mud Architecture Association: Salem Awad Msawnaq, chair (2007); Faraj Salim Kwayran, chair (2005–2007); Senior Master Builders' Committee: Salem Msawnaq, Ubayd Basawatayn, Salem al Hadri, Jama'an Basaida, Mahfuz Huwaidi, members

Master Builders (Housing and Monument Restoration)

Ali Marbash, Faraj Kwairan, Saleh Bahdaila, Kamal al-Hadri, Hazmi al-Hadri, Khairan Bayashout, Mahfouz Bahdaila, Mohamad Baswaitin, Omar al-Hadri, Faraj Badawi, Awad Baziad, Ahmad Bayashout, Ashour Kwairan, Said Wadaan, Ahmad Houwaidi, Ali Bakrbashat, Jum'an Mouzaynan, Ahmad Badawi, Awad Wad'an

Master Carpenters

Ahmad Bajidah, Omar Bajidah, Mahfuz Bajidah, Sabri Kharaz, Fadil Bajidah, Ahmad Baya'shut, Brik Zubair, Ali Zoubair

Project Data

Site area: 81,000 m²
Cost: US\$ 4,000,000 (calculated December 2006)
Commission: January 2000
Design: 2000–2006
Construction: 2000–2006
Completed: 2006 (new phase ongoing)

Websites

www.gtz.de
www.shibam-udp.org

The German Technical Cooperation Agency (GTZ) is an international cooperation enterprise commissioned by the German Federal Ministry of Economic Cooperation (BMZ) to implement technical development cooperation programmes worldwide. Yemen is a priority partner country and GTZ has been active there since 1969. BMZ also sponsors the German Development Services (DED) to place seconded experts with development partners.

The General Organisation for the Preservation of Historic Cities of Yemen (GOPHCY) was established in 1984 as the organisation responsible for the preservation of the urban fabric of the Old City of Sana'a. The scope of its mandate was later enlarged to include all of Yemen, and it is the state authority for historic preservation of urban heritage, reporting to the Ministry of Culture.

The Social Fund for Development is a Yemeni organisation established in 1997 as a major component in the national social safety net. It implements community development programmes to improve people's access to basic services, and works to create an enabling environment for small and micro enterprises.

The Shibam Urban Development Project was initiated in 2000 through the efforts of Ursula Eigel (team leader 2000–2004). After completing her studies in law and social sciences in Frankfurt, Munich and Paris, she joined GTZ in 1975, directing urban programmes in Zambia, Jordan, Yemen and Nepal among many other countries. She was the team leader for the GTZ project on government reform in Kenya from 1988 to 1996.

The project's current team leader, Omar Abdulaziz Hallaj, is a Syrian architect trained at the University of Texas at Austin, where he received both his bachelor's and Master's degrees. Hallaj works on urban development, planning and heritage conservation. Prior to his work in Shibam, he had a private architectural practice in Aleppo, Syria, where he also served as the chairperson of the technical committee responsible for the preservation of the Old City of Aleppo.

