

AGA KHAN DEVELOPMENT NETWORK



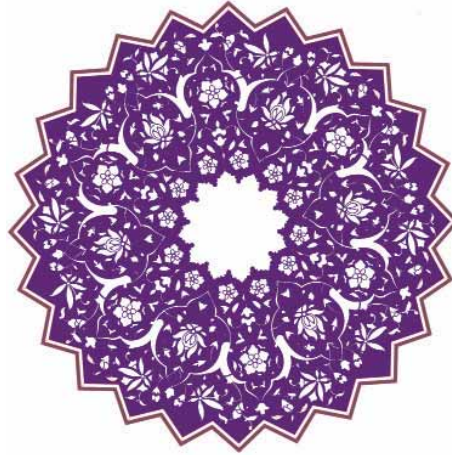
Humayun's Tomb - Sunder Nursery - Nizamuddin Basti
urban renewal initiative

Annual Progress Report-2009

HUMAYUN'S TOMB
SUNDER NURSERY
NIZAMUDDIN BASTI

urban renewal initiative

A PUBLIC-PRIVATE PARTNERSHIP INITIATIVE OF ARCHAEOLOGICAL SURVEY OF INDIA
MUNICIPAL CORPORATION OF DELHI - CENTRAL PUBLIC WORKS DEPARTMENT
AGA KHAN FOUNDATION-AGA KHAN TRUST FOR CULTURE



“It is my hope that these models will inform collaborative ventures among the private and public sector, national and international organisations and civil society. Done well, these collaborations can have a catalytic effect on the revitalisation of communities - raising incomes, restoring pride, improving the quality of life and, most importantly, restoring hope. The evidence shows that culture is clearly not an add-on or a luxury, but an integral part of overall development in both the developing and developed worlds.”

-His Highness the Aga Khan

Partner Agencies



ARCHAEOLOGICAL SURVEY OF INDIA



MUNICIPAL CORPORATION OF DELHI



CENTRAL PUBLIC WORKS DEPARTMENT



AGA KHAN TRUST FOR CULTURE



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Co-funded by:

SIR DORABJI TATA TRUST



FORD FOUNDATION



SIR RATAN TATA TRUST

Supported by:

BRITISH COUNCIL



U S EMBASSY, INDIA

World Monuments Fund, starting 2010, is to co-fund conservation works on Isa Khan's Tomb in the Humayun's Tomb complex.

J M Kaplan Fund co-funded conservation works on Mughal Pavilion and Sunderwala Burj in 2008.

Public Works Department, Government of Delhi, under a recently signed MoU has agreed to implement landscape works on the Nallah adjoining Nizamuddin Basti.

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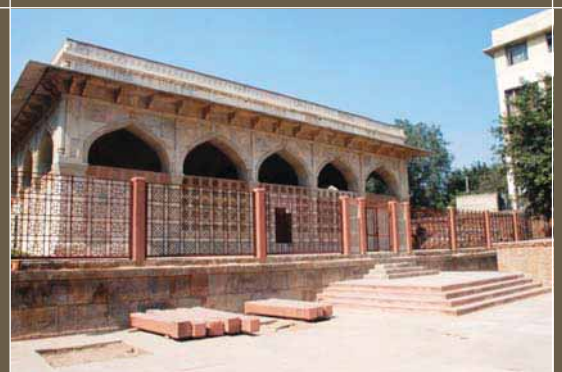
Construction of community toilets

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Solid Waste Management

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Landscaping of Parks



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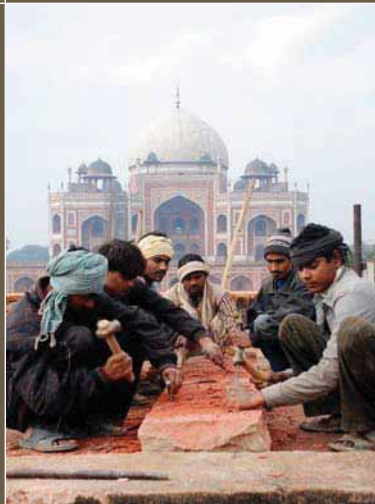
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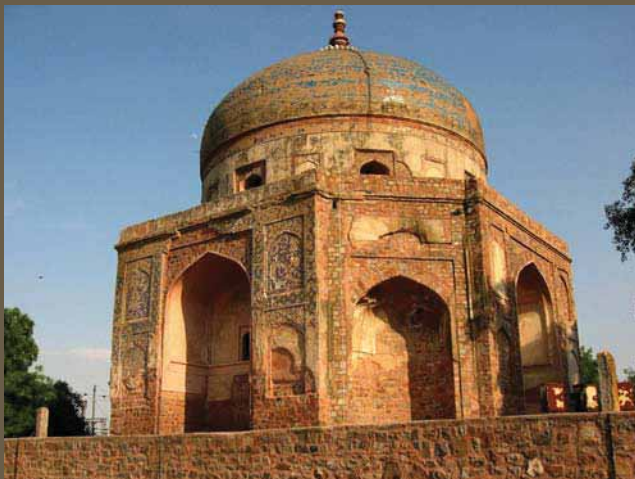


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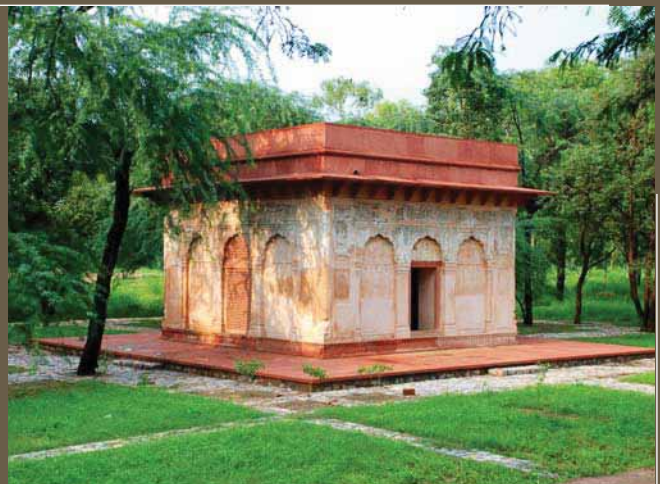
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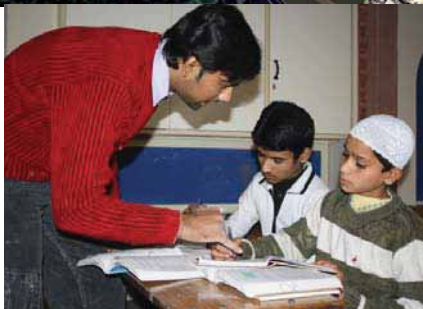


Conservation

Sunderwala Mahal
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Arched Platform
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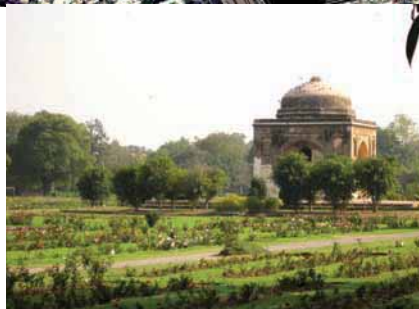
Annexure:

1. List of reports prepared
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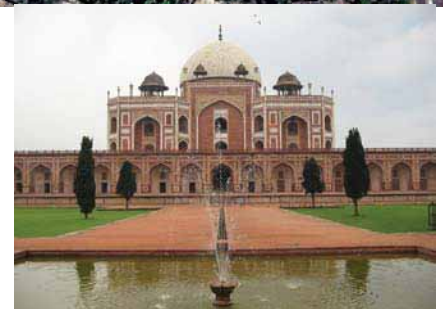
- Spirit of Pluralism and Inclusion
- Historical significance appreciated
- Employment opportunities
- Access to larger open spaces
- Revival and Patronage to music traditions
- Conservation led development
- Improved facilities for pilgrims/visitors and residents

Nizamuddin Basti



- Significant green space created and made accessible to 1 million annual visitors
- Environmental education through nature trails and Delhi's only arboretum
- Heritage Assets appropriately showcased through conservation
- Provision for cultural functions
- Improving nursery management
- Cultural and natural heritage tourism

Sunder Nursery



- Enhanced cultural significance through conservation
- Improved interpretation and visitor experience
- Additional visitor attractions developed
- Significant employment opportunities and training for craftsmen
- Improved site management

Humayun's Tomb

Executive Summary

The Humayun's Tomb – Sunder Nursery – Hazrat Nizamuddin Urban Renewal Initiative commenced with the five partner agencies (Archaeological Survey of India, Central Public Works Department, Municipal Corporation of Delhi, Aga Khan Foundation and Aga Khan Trust for Culture) signing an MoU on 11 July 2007. The Public Private Partnership project has been further strengthened with co-funding received from the Tata Trusts (Sir Dorabji Tata Trust co-funding the Humayun's Tomb Conservation & Sir Ratan Tata Trust co-funding the education initiative in Hazrat Nizamuddin Basti), from Ford Foundation (Cultural Revival programmes at Nizamuddin Basti) and World Monuments Fund will be co-funding conservation and landscaping of the Isa Khan Tomb complex and surroundings.

Recently, a MoU has been signed with the Public Works Department, Government of NCT of Delhi who will be implementing an AKTC designed landscape scheme on the nallah that bounds the project area. Another MoU with Delhi Development Authority to permit landscaping of Nizamuddin Basti parks is to be signed shortly. The US Embassy and British Council are supporting English education for youth in the Basti. It is hoped that in 2010, the MCD will implement a major street improvement project in Nizamuddin Basti, designed, in consultation with the local community by the project team, and which would significantly enhance the historic character and significance of the Delhi Master Plan designated Conservation Area.

The broad objectives of the project at the onset can be grouped under three distinct headings- **CONSERVATION**, **SOCIO-ECONOMIC INITIATIVES** and **ENVIRONMENT DEVELOPMENT**; these also help define the mutually shared objectives, of the partner agencies, of carrying out a model project that would lead to conservation based development, improve quality of life for local communities, improve access and enhance cultural significance of this conservation area and provide additional attractions and facilities to Delhi's citizens, pilgrims and tourists to this unique heritage zone.

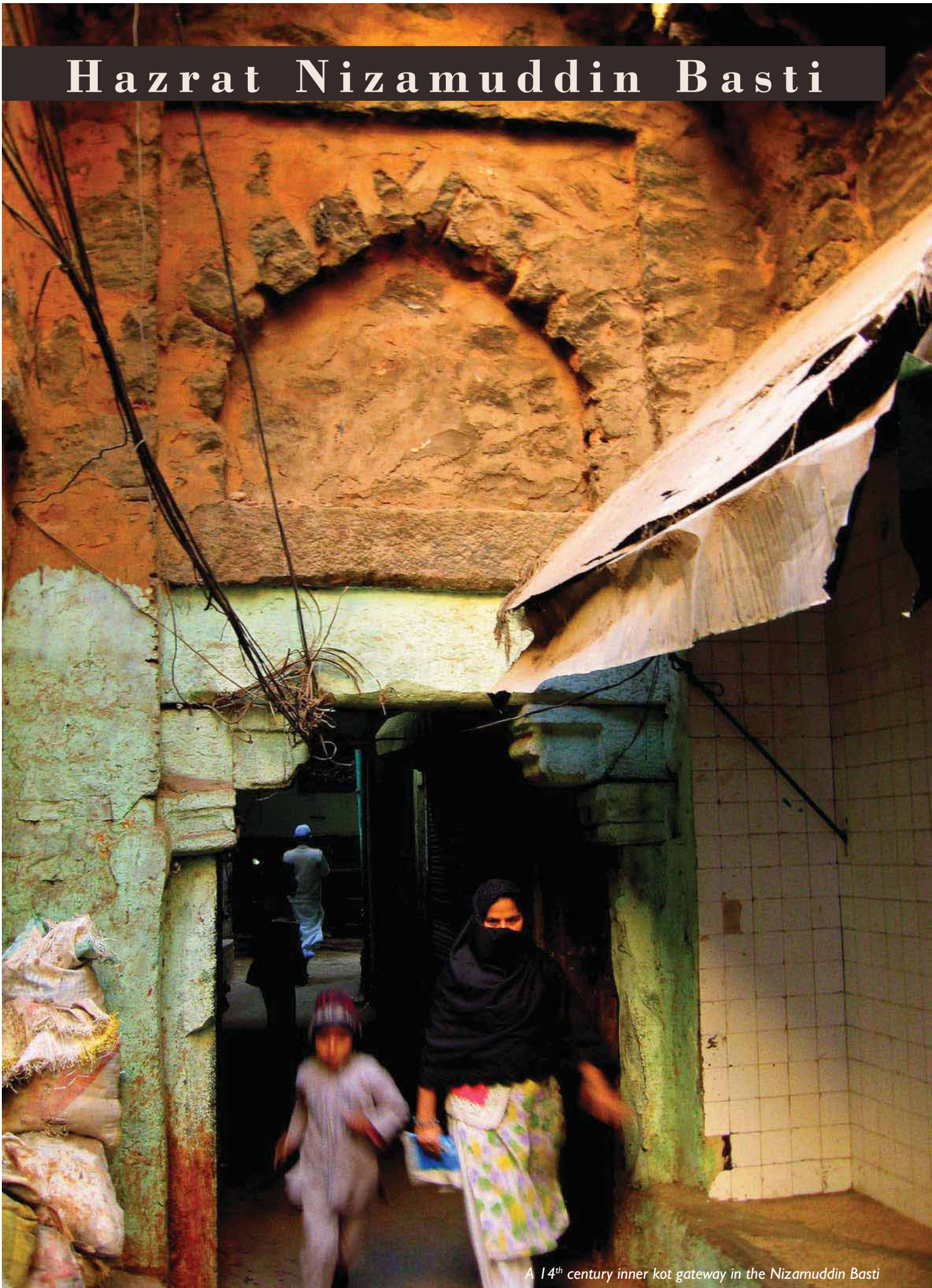
With significant support from partner agencies and from the local community, project objectives for 2009 have been achieved. At Nizamuddin Basti, Enrolment of children at the completely renovated MCD school has been increased from 180 to 413 students in little over a year; over 10,000 pathology tests have been carried out at the new laboratory at the MCD health clinic; over 100 children are attending bridge classes and 62 youth have undergone English Language Teacher Training. Self Help groups have been established to operate and maintain the rebuilt public toilet, to produce and market Paper cut products. Conservation works on significant monuments such as the 14th century step-well, Akbari period monument of Chaunsath Khambha and on Mirza Ghalib's tomb enclosure are nearing completion.

At Sunder Nursery, works are on schedule to be completed by end 2011 and a market research/ financial feasibility study has been carried out by Ernst and Young to determine post-project sustainability of the developed nursery. Civil works on the northern half of the nursery and on the central axis will be completed in 2010.

The Entire Humayun's Tomb complex has been documented using state-of-art laser scanning technology, which allows a 100% accuracy on a 1 mm scale. For the facade of the lower plinth, a condition assessment documenting each stone has been completed. Following the removal of one million kilos of concrete from the terrace of Humayun's Tomb, concrete was similarly removed from the over 12000 sqm area of the lower plinth and the original stone paving, comprising stones weighing over a 1000 kilos each was manually lifted and reset. The Dome was carefully repaired with lime mortar and the 6 m finial, with its gold finish repaired.

The progress of works has been possible with a determined public – private partnership and the high levels of enthusiasm of all partner agencies, team members and especially the community workers/ volunteers. With continued support, the project hopes to establish a model for participatory, conservation led development.

Hazrat Nizamuddin Basti



A 14th century inner kot gateway in the Nizamuddin Basti

Nizamuddin – the name carries the flavour of a heritage rich in history and culture. The importance of its legacy and the environs are not lost on the people of Delhi or indeed, India. This area- the Humayun's Tomb, Nizamuddin Basti, and the Sunder Nursery Conservation Area is visited by millions of tourists and pilgrims each year. Project components in the Hazrat Nizamuddin Basti couple socio-economic development, urban improvements, conservation and ecological objectives. Community consultations and participation underpin design and implementation of the project which aims to improve the quality of life of the residents of the Basti. Key components being implemented include:

Baselines & Surveys >>

Socio Economic Survey:

A representative survey amongst 500 households was completed to capture status against quality of life indicators.

Education: An education baseline was established for learning achievement, teachers' pedagogic perceptions, beliefs and practices, and capturing voices of children and the community on issues related to the school and education in the two Municipal Corporation Primary Schools catering to the basti.



<< Early Childhood Care & Development

The baseline to establish benchmarks against key ECCD indicators has been discussed with the Department of Women and Child Development to elicit involvement of anganwadi workers. With exposure visits and workshops on early education with the anganwadi workers and nursery school teachers, the process for setting up an ECCD resource centre has been initiated.

- Aspects such as civil works and implementation of Building as Learning Aid (BaLA) as well as the replacement of school furniture have been completed. Work on the school façade has commenced.
- Interventions for improving the quality of education include in-school processes such as:
 - onsite support to students (430) and teachers (20),
 - capacity building of school staff and community teachers (20),
 - improved school management processes have been initiated.
- The school-community interface has been strengthened through the revival of the Parent Teacher Association (PTA) and periodic events to share progress made and home based contacts.
- Learning support in English and Maths has been made available to senior students (100) of classes 8 to 10.

<< Education Programme





Vocational Education & Training

Vocational Education and Training interventions have been concretized through a series of assessments and cover three core trades:

- Tailoring and Embroidery for adolescents and women
- English Language Training
- Computer Education



CLINICAL SERVICES (MCD POLYCLINIC)

- The established pathology laboratory (2008) now provides for 31 routine tests and almost 10,000 tests have been conducted until date.
- The gynaecology consultations, once every week has benefited more than 1500 patients.
- Additional equipments allow better diagnosis for eye, ENT curative services.
- A health outreach team placed in the polyclinic.



<< Health Initiatives



<< Life Skills Education

The Life Skills Education component has emerged as a priority and a larger need due to socio cultural reasons and the limited exposure of children and youth (especially women). Basic life skills abilities have been identified as important for adaptive and positive behaviour to enable project beneficiaries to deal effectively with the demands and challenges of everyday life.

<< Urban Renewal Programme

URBAN STUDIES

- Physical Survey of the Nizamuddin Basti was carried out.

STREET IMPROVEMENT INITIATIVES

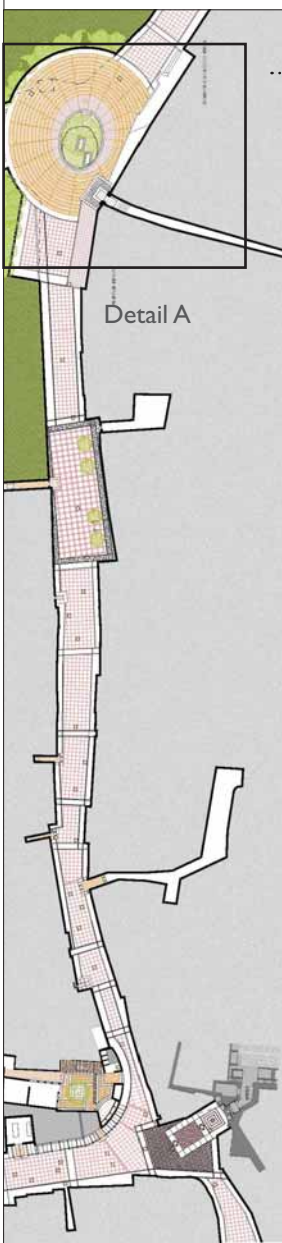
- Principal seven streets in the Basti have been identified for an improvement programme
- Condition of existing infrastructure has been identified
- Improvements will include upgrading of streets lights, additional parking facilities
- Discussions and meetings have been held with various stakeholders including the MCD

OPEN SPACE DEVELOPMENT

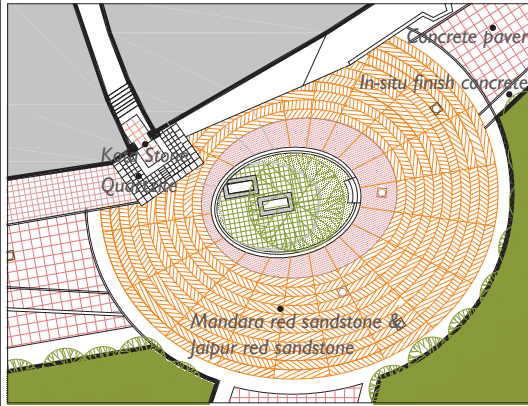
- To provide the local residents a much needed, easily accessible and usable green space.
- Landscape plans for all parks have been prepared.
- MoU with DDA to undertake Landscape works signed on 24 November 2009

SANITATION PROGRAMME

- Building Community Toilets
- Redevelopment of the Nallah
- Solid Waste Management



Detail A



Proposed designs for Parks



Cultural Revival Programme >>



CULTURAL MAPPING

- Cultural Mapping of the project area
- The inventory of built heritage for the basti has been completed

PROMOTING QAWAALI MUSIC

- Documentation of the qawwal families associated with the dargah was completed

CULTURAL AWARENESS AMONGST YOUTH

- Generating awareness on the basti's heritage among the youth and children

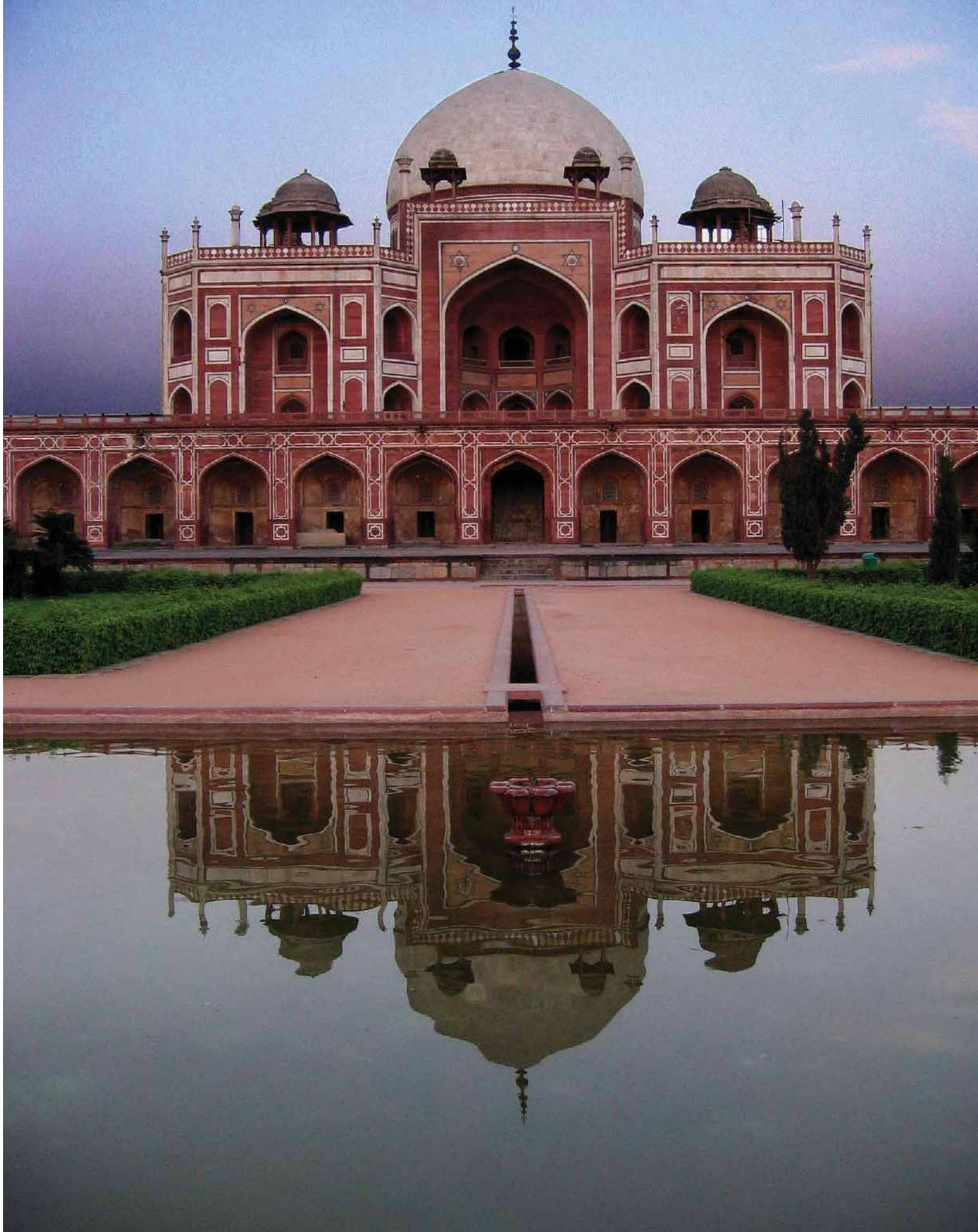
PAPER-CUTTING ART TRAINING

- To promote linkages with the heritage monuments in the area while creating economic opportunities

HERITAGE VOLUNTEER PROGRAMME

- Group of tour guides are undergoing a series of training workshops

Humayun's Tomb Complex



The Conservation Proposals, finalised in March 2008, outlined on the basis of archival research, documentation, structural analysis, included a statement of significance and the conservation philosophy rooted in UNESCO/ICOMOS charters. These were peer-reviewed by independent experts. The ASI - AKTC team also ensures a high level of supervision for all works carried out on site associated works

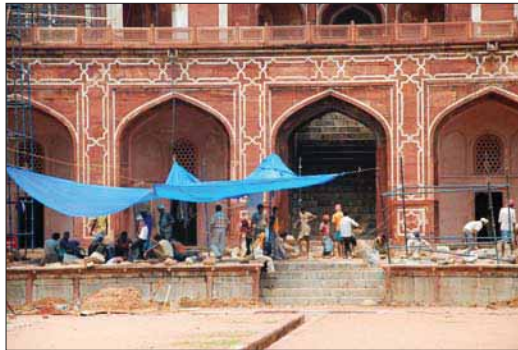
Research & Documentation

CONDITION MAPPING- NECK OF DOME & LOWER PLINTH

- Each stone individually measured using 3-D laser scanning data
- Condition Assessment on a stone by stone basis of the lower plinth façade

LASER SCANNING

- High Definition Survey using 3D Laser scanning technology on the entire complex.



Humayun's Tomb



ROOF

- Re-terracing of Humayun's Tomb Roof
- A 10 cm thick layer of Lime concrete laid on the terrace with appropriate slopes
- Existing water spouts were cleaned and repaired

INNER DOME

- The inner dome surface was carefully cleaned and all stone and brick joints re-pointed.
- The entire inner surface of the dome was re-plastered in lime plaster.

FINIAL

- State-of art lightning conductor installed after removing 13 lightning conductors.
- Not visible from ground level and does not in any way disfigure the character of the finial.

DOM REPOINTING

- The marbles joints were carefully cleaned
- Marble dome re-pointed

LOWER PLINTH

- Restoration of 12,000 sq m Lower Plinth
- DQ flooring of all the four sides of the lower plinth have been restored to the original pattern
- Stones were reset in position as per the original pattern using lime mortar

LOWER CHAMBERS

- Lime plastering completed on the wall surface of the east chambers on the lower plinth
- Dismantling cement lime plaster works on wall surfaces of the lower cells has been completed on the eastern wing
- Sandstone door frames restored to the lower cells.

DE-SILTING OF HISTORIC WELL

- Emergency conservation works on the North Well carried out



Trainings & Workshops



AGA KHAN PROGRAM FOR ISLAMIC ARCHITECTURE WORKSHOP

A multi-disciplinary team of post-graduate students from MIT carried out their semester project on various components of the Humayun's Tomb – Sunder Nursery – Nizamuddin Basti Urban Renewal project.

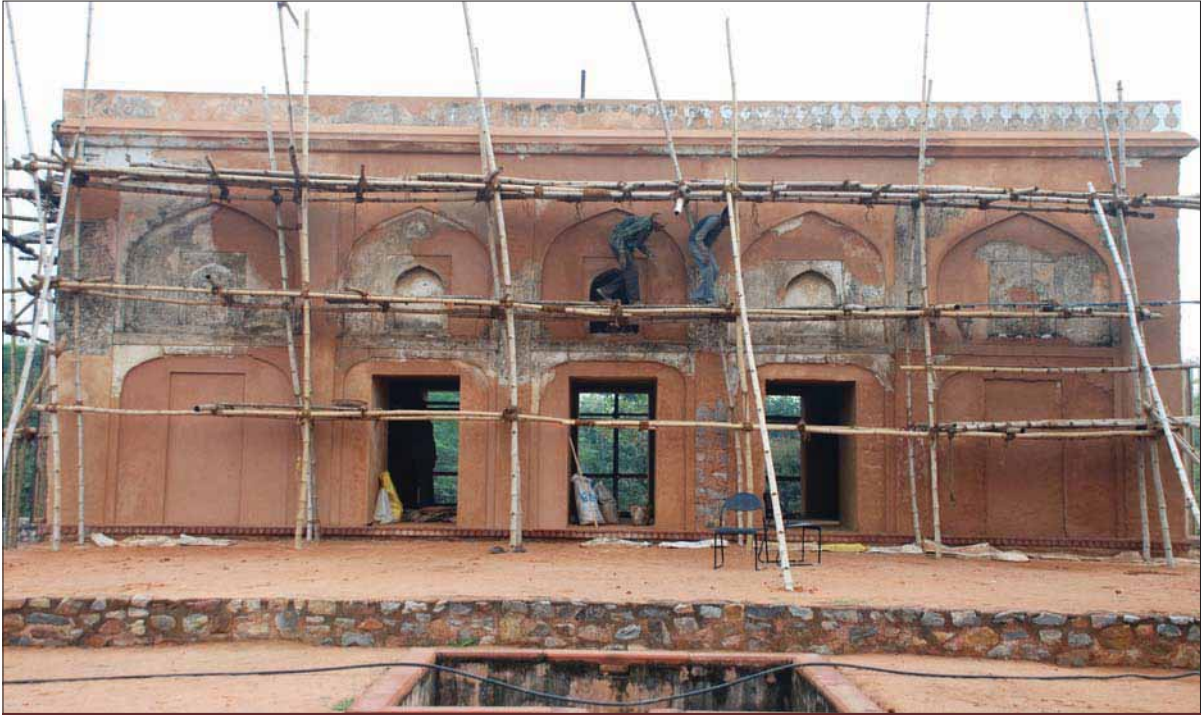
LIME TRAININGS

- Eight workshops have been conducted which were attended by 105 officers of the ASI/ Institute of Archaeology

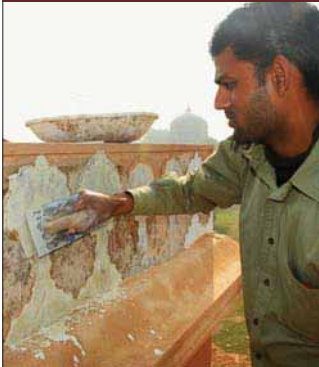
INTERNATIONAL TILE WORKSHOP

- 40 participants from nine tile producing countries of (Afghanistan, Bangladesh, India, Iran, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan and Uzbekistan) participated in the 2-day long interaction at the Humayun's Tomb and Sanskriti Kendra, which was organised by AKTC.

Baradari



- Conservation works ongoing on the East Pavilion and North-east pavilion



Nila Gumbad

CONSERVATION

- The original arcade of Nila Gumbad was discovered in 2008 and carefully conserved.

LANDSCAPING

- Landscape proposal for the area was submitted by ASI to Northern Railways in December 2007; approval is awaited.



Conservation

Landscape

Horticulture

Conservation

- Conservation of Lakkarwala Burj
- Sunderwala Mahal- Conservation and Landscaping
- Garden Pavilion- Conservation and Landscaping

Special Tasks

SUNDER NURSERY BUILDINGS ARCHITECTURAL COMPETITION

- Various facilities such as an Interpretation Centre, Restaurant and Mist Chambers have been planned at Sunder Nursery.
- For this purpose an architectural brief has been prepared in close consultation with ASI and CPWD officers.

MARKET RESEARCH & FINANCIAL FEASIBILITY STUDY

- A market research study has been conducted by Ernst & Young to evaluate the feasibility of post project management and maintenance of the redeveloped Sunder Nursery.
- Ernst & Young have also helped estimate the potential increase in revenue generation to ensure financial sustainability of the completed project.



Nursery



Civil Works

CONSTRUCTION OF PERIPHERAL ROAD

- 2.2 km high-grade concrete peripheral road is ready.
- Sandstone strips used for dividing concrete panels and creating a regular pattern.
- Not a single tree cut or damaged during laying of road.

LAYING EFFICIENT HYDRAULIC AND ELECTRICAL INFRASTRUCTURE

- Water requirements assessed by hydraulic engineers and layouts proposed.
- Tenders awarded to contractors in October 2009 and work begun.
- Electrical plans also developed for the site keeping in mind a variety of lighting requirements.

NURSERY DEVELOPMENT

LANDSCAPE & HORTICULTURE DEVELOPMENT

- Delhi quartzite paving around the Garden Pavilion, Arched Gateway and Lakkarwala Burj completed.
- Special forest species, seeds and plant cuttings procured for planting in Sunder Nursery.
- Two plant nurseries established and maintained at Sunder Nursery and Humayun's Tomb.

PREPARATION OF NURSERY BEDS

- 9 acres of nursery beds prepared towards the north of Sunder Nursery.
- Beds will be used by the CPWD to transfer plant propagation activities.

CREATION OF MICROHABITAT ZONES

- Stone and earth mounds are being prepared to host a variety of native plant species.
- The mounds, lake and rocky tracts under construction will reflect a microcosm of Delhi's original landscape.

NURSERY STEEL FRAME STRUCTURES

- Two modern structures prepared to house potted plants for sale and display.
- An intricate lattice pattern will cover the steel trusses enabling it to host plant varieties requiring shade.





Socio-Economic Initiatives



BASELINES AND SURVEYS

TASK:

Carry out a Socio-economic survey to establish a baseline on quality of life indicators.

PURPOSE:

To identify benchmarks for key quality of life indicators for residents of Hazrat Nizamuddin Basti.

ACTION TAKEN:

A representative household survey (500 households) was completed in 2008 to establish baseline on agreed set of AKDN quality of life indicators.

Key Findings

Demographic Indicators (Population):

- Average family size: 6 (Delhi: 5).
- Sex ratio: 925 (Delhi: 821)
- Dependents per 100 persons in labour force: 52

Economic Indicators (Households)

- Single wage earner: 54 %
- Annual median household expenditure on food and non-food items: USD 1908 (house owners) and USD 2003 (tenants).

Education Indicators (Population)

- Children (4-5 years age): 50% enrolled in anganwadi centres; 23% in a day care centre or nursery school
- Youth literacy rate (15-25 years): 100% for boys and 94% for girls.
- Literacy Rate (26+ years): Females-66% and Males-90%.
- Completion Rates: Primary (boys-77; girls-64); secondary (boys: 40; girls 34).

Health Indicators (Respondents)

- Incidence of Chronic Diseases: 18% males; 36% females.
- Institutional deliverers: 75%
- Reported home based contacts: Males-8% and females 27%
- Reported health messages: 75 % (television)

Built Environment (Households)

- One room: 46 %
- Problems in sewage disposal system: 44%
- Using public stand pipes: 33%
- Using public toilets/sharing neighbour's toilet: 25%
- Access/usage of parks and open spaces in the Basti: 2%.

Social Relations:

Existence of local savings groups or self-help groups, associations: Negligible.

NEXT STAGE:

The survey findings have informed strategies and initiatives now being implemented in the Basti. These benchmarks will be used for tracking changes in the future-key programmatic indicators.

Socio Economic Survey: Indicators and Programme Interventions

The overall workforce participation rates in the Basti are lower (41 %) as compared to the Muslim population in all urban areas in India (51% in 2006). To address youth unemployment and related issues, the project includes life skills and vocational training with linkages to employment opportunities including those generated within the project in Nizamuddin, Sunder Nursery and Humayun's Tomb.

The project has begun to improve health care, including both clinic-based and outreach activities. As the project develops, it hopes to address priority areas such as awareness initiatives on vector borne diseases, tuberculosis and skin infections.

While people's livelihoods are heavily dependent on pilgrims/ visitors to the Basti, the quality of life worsens in the periods of heavy visitor influx due to pressures on the existing infrastructure. The project has begun to improve public services such as public toilets, standpipes, and waste management.

The western and northern periphery of the Basti has some parks but less than 2% of residing population is able to use these parks. Upgrading these spaces for use by residents, especially children and women will commence now as Delhi Development Authority permission has been received, on 24th November 2009.

There is a very low level of participation in various community groups and associations. The project has begun to constitute and empower self-help groups for livelihood related interventions as well as management of public utilities such as community toilets.



Urban improvement of open spaces, water-points is planned for 2010 and is coupled with a vocational training, education, health and sanitation improvement measures.



EARLY CHILDHOOD CARE AND DEVELOPMENT

TASK:

Set up an ECCD Resource Centre in Hazrat Nizamuddin Basti.

PURPOSE:

Implement early childhood care and development (ECCD) programme to facilitate holistic development of children and their transition to a formal learning system.

ACTION TAKEN:

- Visits by AKDN staff, anganwadi workers and nursery school teachers to resource Centres established by other AKDN institutions such as Aga Khan Education Service, India and schools in Delhi such as St. Mary's School, Nursery school in Indian Institute of Technology, Katha etc..
- Consultations and needs identification along with functionaries and workers, community and parents to identify key focal areas for ECCD.
- Since August 2009, workshops with the anganwadi workers, their Supervisor, nursery school and community teachers (20 beneficiaries) have been initiated.
- 3-5 day workshops are held each month and include aspects such as:
 - Holistic child development, orientation on child centred, activity based teaching learning processes.
 - Material development and usage for cognitive, language and psycho-motor development.
- Provision and orientation on resource materials for early simulation and education.

NEXT STAGE:

- Strengthen the anganwadi centres through sharing of modules and materials on aspects covered during orientation workshops.
- Equip the anganwadi centres and nursery schools with resource materials following capacity building for effective usage of these materials.
- Assess additional human resource requirements.
- Identify and build capacities of mother/community teachers.
- Incorporate health and nutrition related interventions.



With a view to set up an ECCD Resource centre, various workshops on child development and on material development for cognitive, language and psycho-motor development have been initiated.

EDUCATION BASELINE

TASK

Establish baseline on key education indicators.

PURPOSE

- Develop intervention strategies for enhancing the quality of schooling experience by children
- Developing community commitment in the functioning of the MCD Primary school.

ACTION TAKEN:

An education baseline, which captures learning achievement of children in Mathematics, Hindi, and Urdu; teachers' pedagogic perceptions, beliefs and practices, and voices of children and the community on issues related to the school and education in general has been completed.

Key Findings:

Maths (Problem Areas)

- Identifying numerals, seriating numbers and performing basic arithmetic operations, linking intuitive mathematical understanding to the formal school knowledge meaningfully from class 2 onwards.
- Low performance on everyday mathematics in class 4 and 5.

Hindi

- High oral proficiency to articulate in Hindi, fairly reasonable listening ability to attend to language details.
- Rudimentary reading and writing skills, difficulty in identifying letters and *matras*, thereby limiting reading and comprehension ability.

Pedagogic Belief and Practice (Needs)

- Disassociate pedagogic practices from the social identity of children.
- Create interactive learning situations and address children's specific learning difficulties.

- Build a classroom culture that helps children think and apply knowledge.
- Sensitize teachers towards learning needs and aspirations of parents - children.

Children's Voices

- Value higher education and to realize their career options, want learning support after school hours.
- Need expressed for co-curricular activities.

Community Voices

- Value quality schooling experiences for their children.
- Have an informed perspective on what constitutes quality education.
- Education for their child is seen as a way to enhance their social status and self-esteem.
- View schooled knowledge as important to strengthen intellectual faculties.

NEXT STAGE:

Continue ongoing interventions in areas of Art Education, professional development of staff and learning support for children, strengthened school-community interface and Improved classroom and school management techniques.



The education baseline, completed in 2009, captures learning achievement of children, pedagogic perceptions and community voices on issues related to school and education.



EDUCATION PROGRAMME



Aanganwadi Programme

- Enrolment in anganwadi centres (7) 59 %
- Enrolment in nursery class/day care centre (3-4) 23 %



EDUCATION PROGRAMME



Dr. Ashish Ghosh,
Consultant
(Art Education)

“With improved availability and access to common areas for activities such as the morning assembly the number of children attending school regularly and with a greater sense of punctuality has increased.”

EARLY CHILDHOOD CARE AND DEVELOPMENT

TASK:

Securing formal collaboration with the Integrated Child Development Scheme (ICDS), Department of Women and Child Development (DWCD), Government of NCT of Delhi.

PURPOSE:

- Implement an Early Childhood Care and Development (ECCD) programme at the existing Anganwadi's in the Hazrat Nizamuddin Basti.
- To facilitate holistic development of children and their transition to a formal learning system.

ACTION TAKEN:

Following sustained dialogue with the ICDS functionaries, a MoU has been signed with DWCD.

The scope of the project, developed following a baseline against key ECCD indicators includes:

- Facilitate universal access and reach to government services for health and nutrition for mothers and children less than three years of age while ensuring inclusion of the marginalised and children with special needs.
- Continued early childhood education for children of three to six years of age with child-centred learning programmes and provision of training for professional and family caregivers.
- Continued implementation of activities to empower women, adolescents, and young adults, including provision of adult literacy and numeracy, and provision of economic skills.
- Creating information, education and communication (IEC) products and tools for community-led improvement of mother and child health, education and nutrition.
- Support the creation and operations of a ECCD Resource centre or a 'Mother Anganwadi' in Nizamuddin Basti, which will support capacity building, training, IEC, workshops and local forums etc.

NEXT STAGE:

- Securing field level coordination with the existing anganwadi centres and the Child Development Project Officer (CDPO).
- Joint six-monthly reviews for progress of ECCD activities.



The ECCD baseline was commissioned to capture status against health and nutrition and linkage related indicators.



Workshops on child development have been initiated.

EARLY CHILDHOOD CARE AND DEVELOPMENT

TASK

Establish baseline on key ECCD indicators.

PURPOSE

To identify benchmarks and formulate and implement early childhood care and development (ECCD) programme.

ACTION TAKEN:

- Findings from the feasibility study completed in 2008 covering seven anganwadi centres have been consolidated to formulate an outline for the ECCD baseline.
- DWCD and AKF have jointly commissioned the baseline. The baseline will help in strengthening the monitoring system under the ICDS programme of DWCD.
- The baseline, initiated in November 2009, establishes benchmarks to formulate strategies for:
 - Improving the status of health and nutrition amongst children and women in reproductive age (15-49).
 - Strengthening the preschool component to address socio-emotional and intellectual needs of children in 3-8 years for their optimum growth and development.
 - Implementing initiatives for economic empowerment of adolescents and women.
 - Strengthening capacities of various stakeholders for meeting demands, effective coordination and convergence.
 - Setting up an ECCD Resource Centre for management and monitoring of initiatives.
- ECCD indicators with respect above mentioned five core areas have been finalised.

NEXT STAGE:

Complete the baseline in February 2010.

Following the initiation of various child centred activities and professional development of staff, a formal collaboration with the Department of Women and Child Development (DWCD) has been secured to work with the existing anganwadis in the Basti.



SCHOOL IMPROVEMENT INITIATIVES





Drinking water on all floors



Increased width of the staircase and incorporation of learning elements



- Toilets,
- Drinking Water
- Assembly area

Improved basic amenities such as drinking water and toilets (separate for girls) have been coupled with a school sanitation and health and hygiene programme.



All toilet blocks have been renovated and include provision of separate toilet blocks for girls and teachers.

SCHOOL IMPROVEMENT INITIATIVES

TASK:

Physical improvement including major civil works aimed at incorporating Building as Learning Aid (BaLA) elements and improving infrastructure.

PURPOSE:

- Ensure access, improved efficiency, and quality of school education
- Enhance the school experience for the 400+ students.

ACTION TAKEN:

- Civil works to ensure availability of basic amenities such as drinking water and toilets (separate for boys and girls) have been completed.
- Rebuilt school includes safe electricity connections, wider staircases and an additional door in each classroom to ensure adherence to disaster management/ safety norms.
- Window panes have been fitted with high quality, unbreakable panes as glass was prone to repeated vandalism from outside the school.
- Easily accessible storage spaces for teachers and children have been provided.
- Students and teachers are now using incorporated learning elements.
- New specially designed furniture has been provided in the school.

NEXT STAGE:

- Renovation of the School façade in lines of the work carried out on the interiors.
- Set in place an appropriate, effective and sustainable maintenance regime.



Learning elements on building surfaces provide for self learning, creative display of work and collective management skills. The excited students of class V, MCD School, collectively voice 'there ought to be swings in the school, and a water pit and may be even a roller coaster'.

SCHOOL IMPROVEMENT INITIATIVES

TASK

Implement School Improvement Initiatives

PURPOSE

Ensure access, improved efficiency and quality of school education

ACTION TAKEN:

• Art Education

- 56 days of continued on site support to students (classes 3 to 5).
- Arts in Education interventions to regularise school assembly,
- Introduce Bal Sabhas, reinforce activity based learning in classrooms and student based interventions related to arts, singing/music classes, photography, theatre.
- Three performances organised for parents to strengthen school-community interface.

• Pedagogical Support

- Learning support to 110 school children (classes 3 to 5) for 46 days through a summer learning camp to build core competencies in Maths, Language and habits of hygiene.
- Since October, 2009, sustained inputs for professional development of teachers and community teachers is being provided.
- In classroom support for nursery to class 5
- After school learning support to students in classes 3 to 5.
- Participation of school and community teachers in theme specific trainings and work shops and in workshops on Life Skills Education, early learning, developing education kits.

• Strengthen School and Classroom Management

- Building capacities of teachers on lesson planning, usage and management of teaching learning aids.
- Regularisation of school assembly has resulted in punctuality and increased school hours
- Organised distribution of mid day meals.
- Regularised forum for leadership, action and interaction amongst students (Bal Sabhas, library committees, health and hygiene promotion committees).
- Monthly Review and Planning meetings with school staff, community teachers and Resource persons.

NEXT STAGE:

- Continue ongoing interventions for school improvement.
- Set up a Teacher's Resource Centre, reading and activity corners in all classrooms.
- Initiate the School Sanitation, Health and Hygiene Promotion programme.

Art Education interventions are beginning to have a positive impact in terms of confidence, language skills, self expression and communication skills amongst children.



SCHOOL IMPROVEMENT INITIATIVES

TASK:

Strengthen School-Community Interface

PURPOSE:

Ensure access, improved efficiency and quality of school education

ACTION TAKEN:

- Formation of Parent Teacher Association (PTA) of which regular meetings are being held.
- Home based contacts with parents by community teachers.
- Monthly meetings with parents to share progress made by children. These meetings also help MCD and community teachers better understand the socio-cultural context and issues faced by students.
- Periodic events in the school for sharing ongoing activities such as implementation of BaLA, Art Education and learning support activities.

NEXT STAGE:

Continue ongoing interventions for strengthening school community interface.



Periodic parent-teacher meetings, school based events and home based contacts are beginning to stimulate the relationship amongst teachers and parents.

Ms. Tazeen,
MCD School Teacher

“The community was disconnected from the school. Now with the various AKDN interventions, the school has become a hub of activities for people of the basti.”

SCHOOL IMPROVEMENT INITIATIVES

TASK

Learning Support to Senior School Students in English and Maths.

PURPOSE

Ensure access, improved efficiency and quality of school education

ACTION TAKEN:

- Establishing a learning support centre for strengthening core concepts in Maths and English for over 100 students in classes 8 to 10.
- Improved performance of students has been recorded with a large proportion of students attending these classes scoring 60% or more in respective subjects.
- From December 2009, for a period of two years, the English Access Micro-scholarship Program aimed at supporting the teaching of English to 14-16 year old students from disadvantaged communities will be initiated. The program is supported by the US Embassy.
- The Centre will enrol 100 students and their English Language skills will be improved through 360 hours of interaction with a team of trained English Teachers.

Farheen, student

“My grasp of English has improved a lot and my performance in Mathematics has also improved. Wish we had classes for Science as well.”

NEXT STAGE:

- Smooth implementation of the English Access Micro-scholarship Program
- Plan learning support for students in classes 6-7 for English and Maths and learning support in Science for classes 8 to 10.



In addition to the ongoing learning support in English and Maths for students in classes 8 to 10, the English Access Microscholarship programme, aimed at teaching language skills to 14-16 year olds will be initiated in December 2009.



embroidery training |

english training |

tailoring unit |

career development centre

skill ENHANCEMENT



Azhar,
ELTT master trainer,
2009

“I can clearly visualize a bright career for myself now that I’m working as a trainer within the ELTT programme. I think I want to be a teacher...”

Mr. Arif,
Instructor

“The girls are gradually feeling empowered. They have made attractive products with intricate embroidery (aari, zardosi work) that would fetch a handsome sum in the market. Through continued support and exposure, they can without a doubt become financially independent”

EMBROIDERY AND TAILORING PROGRAMME

TASK:

Establish and operate an Embroidery and Tailoring Centre

PURPOSE:

- To enhance skills amongst unemployed youth to meet with livelihood challenges and equip them with skills for sustainable livelihood options.
- Implement courses for demand based vocations for youth (18-25 years).

ACTION TAKEN:

- Based on community needs assessment, a centre for embroidery and tailoring has been functional since May 2008.
- To date, over 100 adolescents and women from the Basti have learnt/improved their skills related to hand (aari, zardosi) and machine embroidery and tailoring.
- The courses are now certified by the Jan Shikshan Sansthan (JSS), Ministry of Human Resource Development, Government of India.
- A curriculum is being designed for the certified courses and will be shared next year with the JSS for possible further replication to other centres under its purview.
- Functional literacy is being provided to illiterate women.
- Enrolment of girls in class 10 (National Open School) and Bachelors degree programmes (correspondence through Jamia Milia Islamia University) has been facilitated.
- Beneficiaries have addressed project related requirements for bean bags, fill bags, handkerchiefs for Pre School and school children.
- The beneficiaries are also receiving life skills education, assistance for organising themselves into a Self Help Group and preparedness to establish linkages for marketing of products.
- Samples of finished products are being made and shared with potential agencies/ individuals for procuring orders.

NEXT STAGE:

- Finalise the curriculum for adaptation and use by JSS.
- Continue linking beneficiaries to further education opportunities.
- Form and build capacities of a core group of 25-30 skilled workers for production and marketing of products.
- Incorporate health awareness and preventive care interventions for adolescent girls and women.



At the embroidery centre functional literacy is imparted and life skills workshops are continuously conducted.

ENGLISH LANGUAGE PROGRAMME FOR EMPLOYABILITY

Maryann Vaisoha,
Senior Instructor,
British Council

“Confidence levels have zoomed. They were extremely hesitant to speak; now they have no qualms taking forestage in any discussion. This programme has been beneficial not only in terms of providing opportunities for the learners and the trainers, but also equipped them to identify such opportunities.”



Gazala,
ELTT student,
2009

“I don't hesitate while talking to someone in English anymore. I know that I often speak incorrectly, but I'm learning and I know with time I will only get better.”

TASK

- To provide English Language skills for employability
- Implement courses for demand based vocations for youth.

PURPOSE

To enhance skills amongst unemployed youth to meet with livelihood challenges and equip them with skills for sustainable livelihood options.

ACTION TAKEN:

- Need for English Language for Employability assessed following emerging needs to
 - Build local capacities for involvement in project activities such as cultural revival and;
 - Gain fluency in English for better education and employment opportunities.
- A three-phase research to understand obstacles young people face when seeking employment was completed in collaboration with the British Council and the need for a sustainable model for vocational English education was established.
- The programme entails training motivated youth (9 males and 6 females) from the Basti (60 hours training) to deliver vocational English courses (Master Trainers).
- Under the guidance of a Senior Trainer from the British Council, the Master Trainers are delivering 180 hours of vocational English to 47 students from the Basti (September-January 2010).
- The Master Trainers use Communicative Language Teaching methodology in the classroom.
- The Master Trainers and students have access to library at the British Council and have been oriented to identify relevant resources in the library and use these effectively.
- The intervention has shown a visible change in the Master Trainers' confidence to communicate with a degree of fluency, correct pronunciation and interact with English speakers more effectively. Students have completed their first session with an average assessment score of 70%.
- Based on performance and commitment levels of Master Trainers and students, their aspirations and emerging needs in various project activities, the Master Trainers and aspiring students will be employed in the project.

NEXT STAGE:

- Final assessment and certification of Master Trainers and students.
- Placement of prospective students in various employment opportunities within the project.
- Develop and implement a plan for post intervention support (language as well as mentoring) to Master Trainers and students to maintain a minimum level of competency to gain better education and employment opportunities.



CAREER DEVELOPMENT CENTRE

TASK:

Set up a Career Development Centre for computer training in the Basti

PURPOSE:

To enhance skills amongst unemployed youth to meet with livelihood challenges and equip them with skills for sustainable livelihood options.

ACTION TAKEN:

- Following discussions with youth in the Basti, a need for computer skills that help them gain employment in formal industry such as Retail has been identified.
- A Career Development Centre is being set up in the Basti in collaboration with The NIIT Institute (TNI). TNI has set up 10 Career Development Centers (CDC) in urban slums in Delhi to help youth gain employment in formal industries.
- The setting up of the CDC in the MCD School, Nizamuddin will be complete in 2009.
- A study to establish aspirations of potential beneficiaries and ascertain the relevance of course content has been initiated and to be completed by December 2009.
- The CDC curriculum includes three modules: (i) basic information technology; (ii) communication skills and professional development and (iii) customer service and industry overview.
- Up to 150 students will benefit from the pilot phase of six months starting January 2010.
- The final assessments and enrolment of students, as per criteria, will be undertaken during December 2009.

NEXT STAGE:

- Establish administrative systems for initiation of the CDC in January 2010.
- Establish systems for ensuring smooth functioning of the CDC including feedback mechanisms (students, faculty), regular consultations, and meetings with students.



A Career Development Centre is being set up in the Basti in collaboration with The NIIT Institute

LIFE SKILLS EDUCATION

TASK:

- Undertake a beneficiary specific assessment of Life Skills Education needs.
- Orientation and workshops for key project functionaries and beneficiaries on relevant core life skills.
- Process documentation of various sessions with an objective of developing booklets and modules for further dissemination.

PURPOSE:

To develop an understanding of the multifaceted needs of project functionaries and beneficiaries and impart training on 10 core life skills with an aim to develop their capacity to deal with problems and challenges of everyday life.

ACTION TAKEN:

Needs Assessment

Focus group discussions have been held with community workers and key project beneficiaries to understand perceptions and manner of dealing with anxieties and attributes related to life skills.

Orientation Training to the project beneficiaries.

In all, 135 project beneficiaries and 15 field implementation staff have participated in 25 days of orientation programmes on core life skills such as interpersonal relationships, communication, decision making, self awareness, team building, problem solving, critical thinking and creative thinking.

Observations during Training Sessions

- Beneficiaries' desire to bring about a change in the community was evident.
- Change in behaviour of trainees clearly reflects their ability to re-define relationships.
- Most beneficiaries can perceive a change in their attitude towards day-to-day problems and challenges.
- Some community workers are now conducting sessions on life skills.

Process Documentation of the sessions undertaken

Each session has been documented and the documentation is being used for developing booklets and modules for further dissemination.

NEXT STAGE:

- Assess and incorporate emerging needs of beneficiaries as new interventions are initiated.
- Build capacities of a core group of community workers to cascade life skills education.



Following a needs assessment, life skills education has been imparted to 135 project beneficiaries. Advanced trainings will be conducted in 2010 and related plans will be drawn up in December 2009.



Pathology Lab



Gynae Services



ENT Services



COMMUNITY HEALTH

31 types of tests being carried out at MCD Polyclinic, 10000 tests on 3000 patients carried out

Gynae Services:

Total patients treated: 1,188 (210 referred) Eye & ENT OPD

Eye and ENT services:

Increase in per day OPD visits

Eye: 15 to 30 patients

ENT: 22 to 32 patients

Marked decrease in referral cases



HEALTH PROGRAMME

Dr. Shrivastava,
Chief Medical Officer

“Patient care in the polyclinic has gone up by leaps and bounds since the beginning of this AKDN intervention. The system of referrals only makes things better.”



CLINICAL FACILITIES

TASK:

- Upgrade the services at MCD Polyclinic (Government Health Centre)
 - Set up a Pathology Laboratory
 - Upgrade existing eye and ear, nose and throat (ENT) facilities
 - Establish OPD for gynaecology consultations

PURPOSE:

To strengthen the clinical services at the MCD Polyclinic government health centre for better diagnosis and reduced referrals.

ACTION TAKEN:

Pathology Laboratory:

The pathology laboratory was set up in August 2008 and 33 types of routine tests can now be conducted at the laboratory, increased from 22 following a review in January 2009.

Since October 2009, 9776 tests have been conducted on 3213 patients.



Gynaecology OPD:

With the placement of a visiting gynaecologist and an Auxiliary Nurse Midwife (ANM) since August 2008, a total of 1188 adolescent girls and women have availed the services up-till October 2009.

Following a review of services provided, referrals have been established for conducting specialised tests.



Eye and ENT Facilities:

Additional Eye and ENT equipments are available at the MCD Polyclinic:

- Since August 2008-October 2009, a total of 1051 patients visited the Eye OPD. Following installation of additional equipment, number of daily visits of eye patients has increased from 15 to 30.
- Similarly, 1606 patients have visited the ENT OPD since August 2008 with an average of 32 daily patients.



Since October 2009, 9776 tests have been conducted on 3213 patients.

Patient Records and Monitoring System:

Data related to patients visiting the polyclinic and pathology laboratory is being monitored on a monthly basis.

Periodic Meetings with the MCD:

Routine meetings have been undertaken with the MCD Officials (Health Inspectors, Medical Officer) to update them on project progress and key areas of support for sustaining services.

NEXT STAGE:

In view of the increased number of patients now visiting the polyclinic, dialogue with the MCD has been initiated for possibility of (i) establishing Ultra Sound facilities; (ii) increase visitations by eye and ENT specialists for 2 days/week; and (iii) include weekly visitation by a paediatrician.

OUTREACH PROGRAMME

TASK

- Develop and implement a health outreach strategy
- Capacity building of community workers and select health volunteers for community outreach activities from the MCD Polyclinic.

PURPOSE

To strengthen community outreach activities through awareness and preventive health.

ACTION TAKEN:

- Health outreach activities have been established at the MCD Polyclinic. A team of three volunteers help the patients with prescriptions and arranging subsidised treatment facilities.
- Routine capacity building of community workers to cover aspects related to awareness and preventive care for diseases like tuberculosis, diabetes, eye care, vector borne diseases (dengue and malaria), and issues related to maternity and child health.
- With respect to key needs identified, Information, Education and Communication materials have been procured from institutions/agencies like Voluntary Health Association of India, MAMTA Health Institute for Mother and Child etc.
- Orientation and training to community health workers on usage of awareness generation materials has been organised.
- Growth monitoring for children in 0-6 age was completed through the anganwadi centres on a pilot basis.

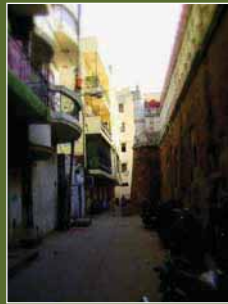
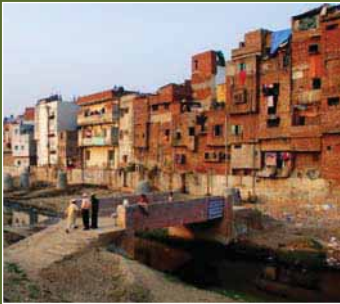
NEXT STAGE:

To develop a broader health outreach strategy covering awareness generation and preventive care on issues faced by children, youth, adolescents and women.



A health outreach team placed at the polyclinic helps patients with prescriptions and with linkages to subsidized treatment facilities in the vicinity of the Basti

URBAN RENEWAL



urban studies |

street improvements |

open space development |

urban sanitation



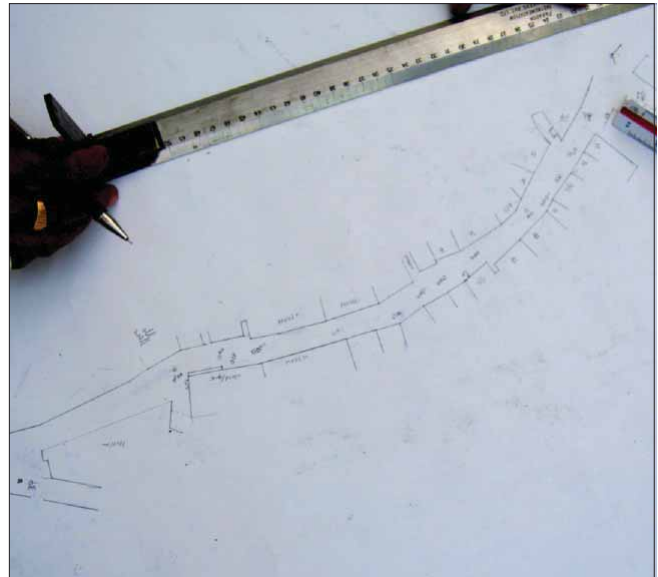
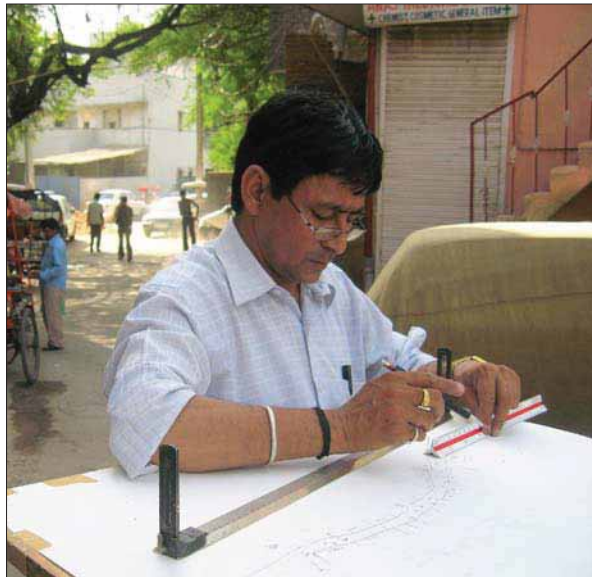


URBAN STUDIES

Physical surveys have been completed and exhaustive consultations with the resident community are planned together with landscaping of open parks and a street improvement initiative that will enhance the quality of life and the historic character of the Basti.



Over summer 2009, a detailed physical survey of the Basti was carried out, on the basis of which urban improvements will be designed. To enable this and get community support for the initiative, regular evening street meetings with residents were held.



Plain table survey being carried out along the streets in Nizamuddin Basti

PHYSICAL SURVEY OF NIZAMUDDIN BASTI STREETS

TASK:

To document, prepare maps and plans and analyse the urban setting and spatial relationships of the Basti

PURPOSE:

- To prepare a local area plan in consultation with local community as per Delhi Master Plan requirements
- To identify urban and spatial problems of the Basti and to plan phased upgrading and street improvements in the Basti.

ACTION TAKEN:

Physical survey of Nizamuddin Basti streets

- A detailed physical survey was carried out in the months of June - August 2009 of the Nizamuddin Basti. This was necessary since the previous survey was carried out in 1941 and since then the Basti has seen phenomenal growth.
- All streets and street infrastructure including pavements, street lighting, drainage and sewage has been mapped in the Basti. The survey was carried out from 5 am –noon as the narrow streets become too crowded during the day.
- In order to conduct the survey smoothly and to explain the purpose of the survey several meetings were held in the Basti with residents before and during the survey.
- The survey includes mapping of individual plot boundaries
- The physical survey has been followed by condition mapping, typology and other physical features of the built environment. A detailed land use map has also been developed.

Urban study report

- The base map and the property map have been further used to identify and map cultural, social and infrastructural issues in the Basti.
- Similarly cultural features unique to the Basti such as Atar Shops, graves, monuments and other traditional buildings have also been identified on the map to form part of an urban study report.
- Condition of existing infrastructure such as condition of water points, drainage and sewage networks have been identified.
- In addition several interviews and discussions were held with community members and prominent leaders in the Basti to record oral history and to understand the growth of the Basti over the last 50 years.

Setting up of a Geographic Information System (GIS)

- The information collected from the survey and the property map has been tabulated and linked to GIS information base for the Basti. Apart from the physical parameters, the GIS will extend to include information on social and cultural aspects of the Basti.

NEXT STAGE:

To finalise urban guidelines and the Local Area Plan for Nizamuddin Basti based on the studies and in consultation with local community.

TASK:

To develop and implement URBAN RENEWAL and reform initiatives in the project area.

PURPOSE:

To improve the overall urban environment of the project area and to enhance its cultural and social identity

ACTION TAKEN:

Street Improvements

- The principal seven streets in the Basti have been identified for street improvement initiative. These streets are entry points to the Basti and lead to important spiritual/ religious/ heritage/cultural sites such as the Dargah, Kalan Masjid, Baoli and the MCD complex of buildings (polyclinic, school, barat ghar, toilets).
- Improvements in these streets will include upgrading of streets lights, additional parking facilities, change of street paving, and improvements in water points, drains and sewerage where ever required.
- Designs for the streets take into account the existing site conditions and are done keeping in mind the unique cultural identity of the Basti. A range of paving patterns have been used to highlight street intersections, chowks and entries to the Dargah, Baoli and other areas of interest.

Consultations with various stakeholders

- Discussions and meetings have been held with various stakeholders including the MCD, shopkeepers and local residents. Preliminary designs have been shared with the local residents who have further informed the design development.

Agreements and consultations with Government (MCD and PWD)

- The designs have also been shared with the concerned government agencies including the MCD and the PWD (Lodhi Road upgrading). Information shared includes material specifications and BOQ's.
- The PWD has agreed to make required design changes in the upgrading of the Lodi Road and the Subz Burj area.

NEXT STAGE:

- Finalisation of materials for surface treatment of the streets and street infrastructure
- Preparation of working drawings for the selected streets
- Submission to MCD of finalised designs.
- Support to MCD during implementation
- Community dialogue to support smooth implementation of street upgrading.

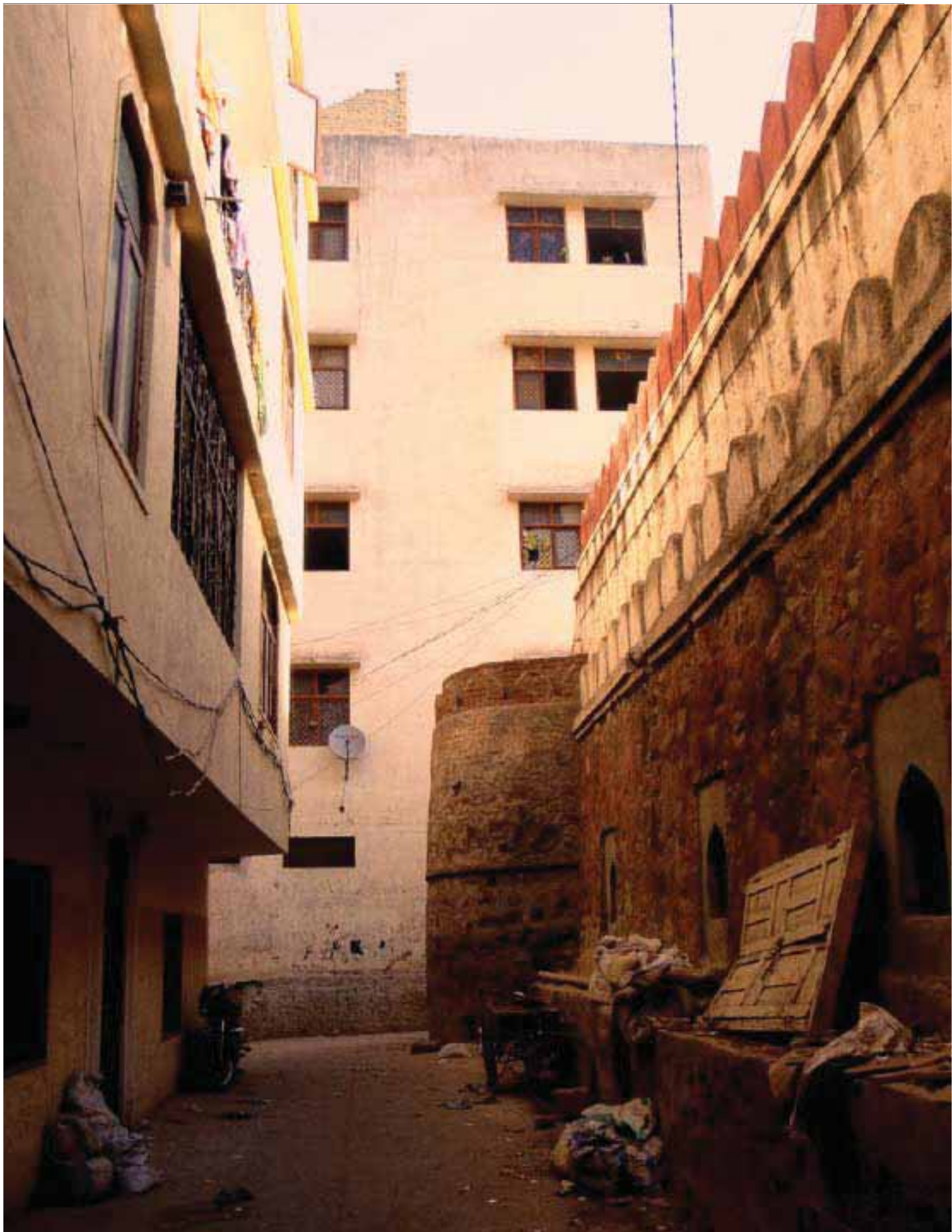
NIZAMUDDIN BASTI

Mohalla MAP



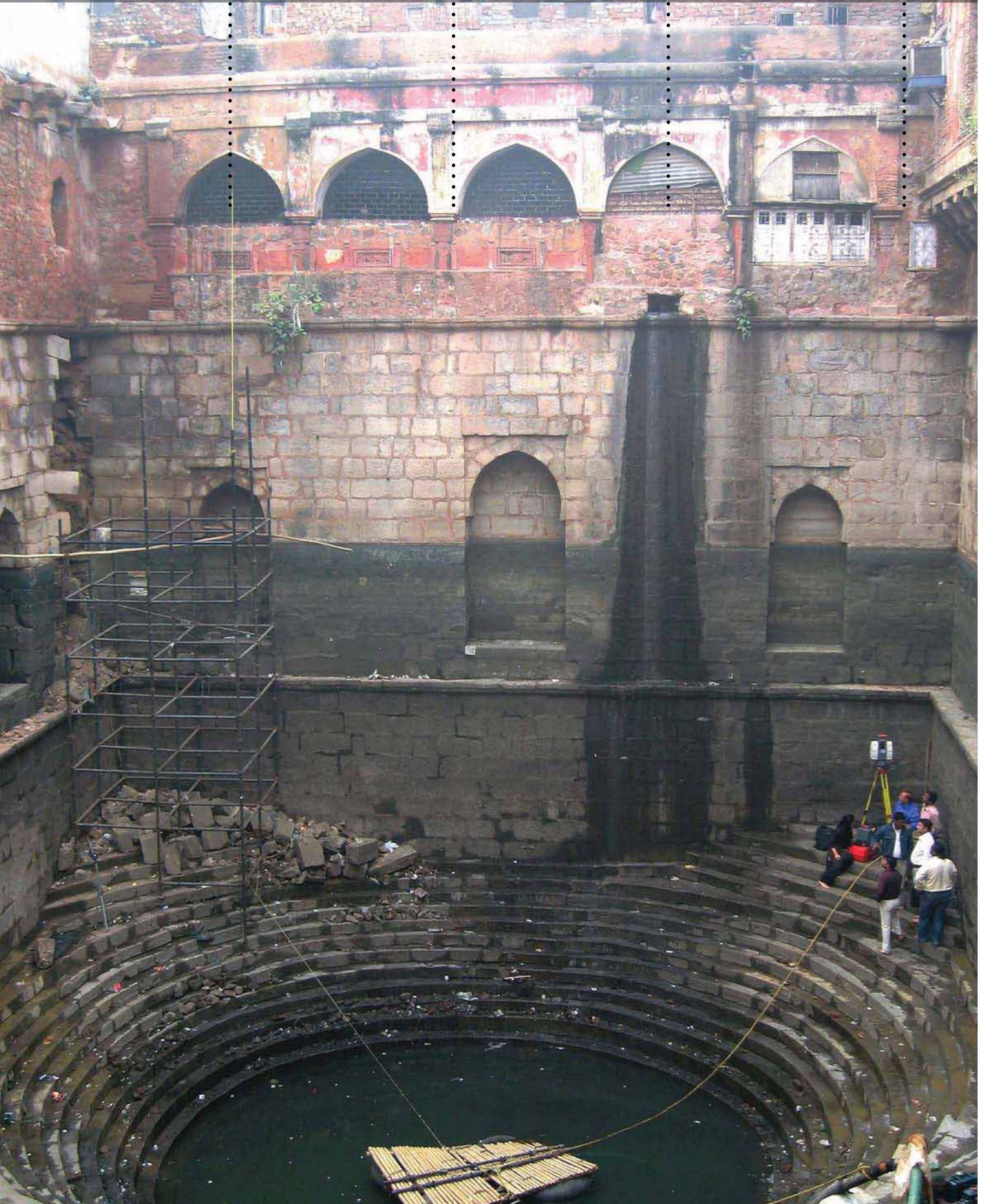
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Living with History

Hazrat Nizamuddin Baoli



RELOCATION OF FAMILIES

TASK:

Assist families with support needed to ensure a satisfactory relocation resulting from partial collapse of the Nizamuddin Baoli.

PURPOSE:

To ensure families, presently occupying the Baoli, portions of which have collapsed, get adequate compensation and are provided all necessary support in the relocation process.

ACTION TAKEN:

Survey of Government relocation sites

- Surveys of the two designated relocation sites (Savda Ghewra and Madanpur Khadar) were conducted to assess ground situations.
- It was found that very a limited number of plots were available at Madanpur Khadar. These plots were away from each other and some of them were under litigation.
- Savda Ghewra (SG) was chosen due to the plots and other facilities (schools, dispensaries etc) were in a much better condition.

Survey and allotment of plots to 14 families

- After several requests to the MCD and consultations with the office of the Hon'ble Lieutenant Governor, Government of NCT of Delhi, the MCD Slum Wing conducted a bio-metric survey of all families listed for relocation at the Baoli. The MCD collected documents from the residents and noted down their identification proofs. Of the 19 families only 14 families were finally approved for allotment of plots in Savda Ghewra based on their identity papers.
- A draw of lots was conducted for 14 families on 31st of July in which plots were allotted in Savda Ghewra. These plots were located in different blocks away from each other.

Consultations with LG office, ASI and MCD for allotment of adjoining plots

- A special request was again made by the councillor, Mr. Farhad Suri, to provide adjoining plots to the 14 families so that they continue to live as a community and can build their homes together.
- As a special dispensation, the MCD agreed to re-conduct the draw of plots for the 14 families who have now been allotted plots in one block where all plots are adjoining each other.

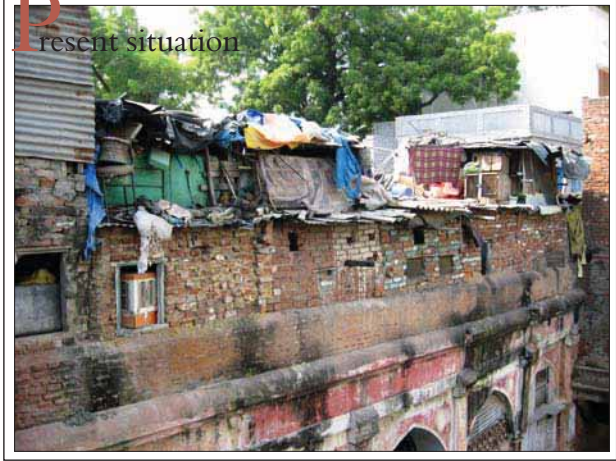
Re-survey and allotment of plots for 5 additional families

- A survey of the five families that had been left out of the earlier allotment were re-surveyed by the MCD after several requests from the ASI and AKTC.
- Their identification papers are at present under review by the MCD.

Archival



Present situation



Nineteen families reside over the southern arcade of the baoli; following partial collapse of the baoli this portion has suffered severe cracks putting these families and the thousands of daily visitors at risk. To carry out urgent conservation works on the arcade, these families are to be relocating and AKTC is assisting these families to ensure the relocation causes minimum dis-comfort. AKTC will be constructing houses and paying all costs of plots allotted by MCD.

Finalisation of designs of houses for relocated families

- Housing design options were developed for the new plots at Savda Ghewra through a two months exercise with students from the University School of Architecture and Planning, New Delhi. A group of 10 students came up with 6-7 different design options for the plots based on the needs expressed by the families. Two designs were selected from the group as the two final design options.
- These were discussed by the families who selected the final design for the new housing at Savda Ghewra.
- The final date of allotment from MCD is awaited for the construction and relocation to commence.

Agreement with local NGO as handholding support for one year

- The Centre for Urban and Regional Excellence (CURE) is a local NGO running several programmes in the relocation site. CURE has been contracted to support the relocated families through new livelihood opportunities, site supervision of house construction and other social services related to health and education.

NEXT STAGE:

- Removal of existing housing at the baoli and construction of new housing at Savda Ghewra for the affected families.
- Follow up with MCD for allotment of five more plots at Savda Ghewra.

CONSTRUCTION OF COMMUNITY TOILET COMPLEX

TASK

Construction and Management of Community Toilet Complexes in Nizamuddin Basti

PURPOSE

To improve access to sanitation services for the residents of the Basti, where a significant proportion of the population relies of public toilets.

ACTION TAKEN:

Completion of construction of community toilet complex

- Construction of the community toilet complex adjacent to the Baoli gate of the Dargah was completed in September 2009. It was inaugurated on 14th October 2009 by Mrs Tajdar Babbar and Mr Farhad Suri, Councillor, Nizamuddin Basti and has since been in use.

Community campaigns and children campaigns for CTC

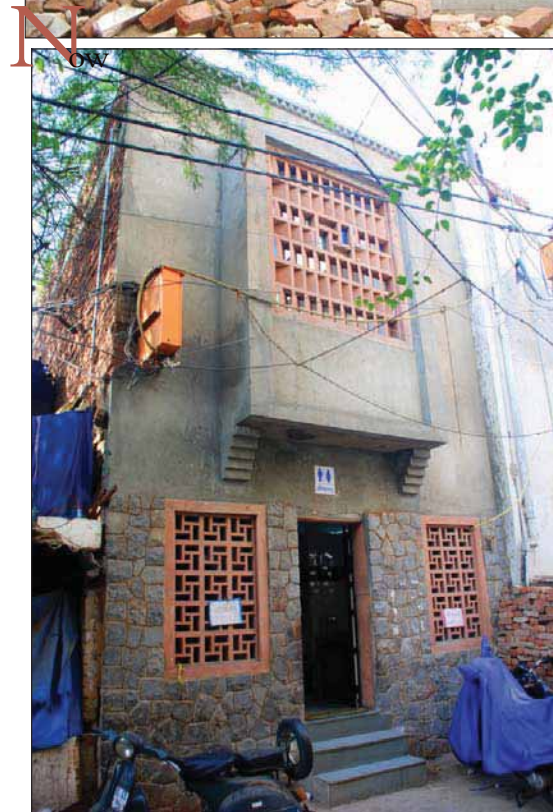
- Prior to the inauguration of the toilet, several campaigns were carried out by the children from the Basti to spread information about the toilet complex; its facilities and its management and payment systems.

Management of the community toilet complex

- An overall plan for the management of all community toilet complexes has been put in place. This relies on community managed 'pay and use' facilities in the Basti. In the long term the plan includes additional toilets in Nizamuddin Basti and similar facilities in Sunder Nursery and Humayun's tomb complex in order to make the operation and maintenance sustainable and economically viable.
- A community group (Rehmat Nigrani Samooh) of interested individuals has been set up in the Basti who are responsible for the daily management of the toilet complexes. This includes collection of payments, maintenance and oversight of the complex.
- The group was set up in January 2009 and since then it meets every month to review the construction/operations of the toilet complex. The group is being extensively supported by AKTC and MCD in monitoring daily activities at the CTC in order to build their management capabilities. A separate bank account was set up for the



The WCs of the new, community managed toilet, are in stainless steel and the building provides privacy and a dignified clean environment



Several meetings and training sessions with the newly formed Self Help Group to manage the toilet were held before the inauguration by Mrs Tajdar Babbar. The resident families have been given family cards to enable use at negligible cost of Rs 30 per month for a family of five

Daily operations and management of the CTC

- The CTC is being used by residents and pilgrims to the Dargah. Nearly 150 daily users and an additional 25 resident families (125 people) are using the CTC on a daily basis.
- Residents with family cards are charged at Rs 30 per month while visitors pay Rs 2 per use. The CTC facilities are free for children (below 14) and the disabled.
- In the first month of operation the user charges amounted to Rs 6500. This amount was used for purchase of material for the CTC and the savings were deposited in the management group's account.
- The operation costs of the CTC are being shared by the group and AKTC where AKTC covers the costs of staff salaries with the group taking care of other material

NEXT STAGE:

- Continued handholding support for management of CTC
- Training and capacity building of the Community Group
- Finalisation of design and construction of next CTC in the Basti

SOLID WASTE MANAGEMENT

TASK:

Solid Waste Management

PURPOSE:

To improve waste disposal systems in the Basti

ACTION TAKEN:

Preparation of a Solid Waste Management (SWM) Plan for the streets to be improved

- A Solid waste management and disposal plan has been prepared as part of the street improvement initiative.
- The plan identifies locations and points for placement of dustbins and pick-up points, staff requirements and distribution and need for awareness and advocacy on SWM. The plan has been discussed with the MCD for implementation along with the street improvements

Cleanliness campaigns and school programs for SWM

- Monthly cleanliness campaigns were held with children in the community on plastic waste, waste recycling and garbage dumping. A hand washing campaign including a film show was also done in the school as part of the summer learning camp held at the MCD school.
- An Environment awareness program has been initiated with children from the Basti and the MCD School.

Waste Collection

- The door to door waste collection programme has been extended to Kot Mohalla. This programme now covers 150 households.
- Evening street sweeping has also been initiated in some of the commercial streets of the Basti.
- In view of the high density of population in the basti and the large number of national and international pilgrims, MCD has been requested to increase number of times principal streets are swept to twice a day.



Houses adjoining the nallah were dumping waste into the nallah; following removal of 160 truckloads of accumulated waste a system of waste collection for these houses was established and now covers 150 households

NEXT STAGE:

- To Implement SWM plan for select streets in partnership with the MCD.
- To increase the door-to-door waste collection program.
- To set up Eco-clubs for environmental awareness in the Basti
- An Eco Literacy Program and an Eco Youth Club will be set up in the Basti under the environmental awareness programme.

Regular campaigns involving basti children and youth are organised to spread awareness on critical health and sanitation issues



REDEVELOPMENT OF NALLAH

TASK

To improve the landscape of the nallah (Storm Water Drain) running along the southern edge of the Basti

PURPOSE

- To allow community use of this significant green space.
- To improve the quality of open spaces in the Basti and to develop an ecological park along the Nallah front.

ACTION TAKEN:

MOU with PWD for greening and landscaping plans for the nallah

- A MoU has been signed with the Public Works Department (PWD), Government of Delhi, that is responsible for the construction of the elevated road over the nallah.
- AKTC will provide designs for the landscape scheme to be implemented by PWD along with the elevated road construction for the forthcoming Common Wealth Games in October 2010.
- A preliminary design has also been sketched out for the nallah bed which will include walking paths along the nallah and environment friendly plant varieties that help in organic/natural treatment of the nallah water. The preliminary design also includes several flower beds that can be used for floriculture by the local communities.
- Hydraulic engineering consultants have also been hired for the design of the nallah to especially to address issues of flooding and other safety measures during the monsoon months.

Sewerage Connections

- A linear drain has been built along one edge of the nallah to help segregate sewage water emanating from the Basti from entering the nallah. This drain collects the waste/sewage water of nearly 50 houses along the nallah and connects them to the main sewerage network of the city.
- The sewerage line along the nallah and eight manholes have been repaired in consultation with the Delhi Jal (Water) Board who are responsible for the maintenance of the line.

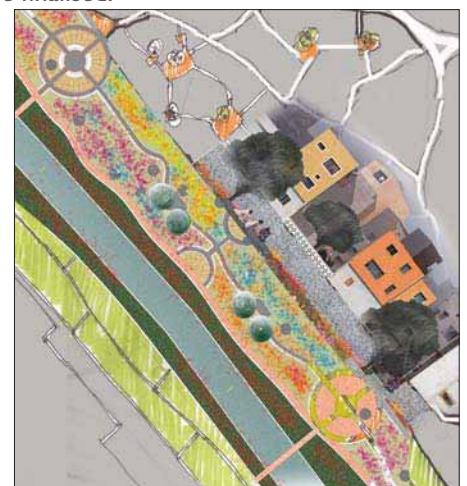
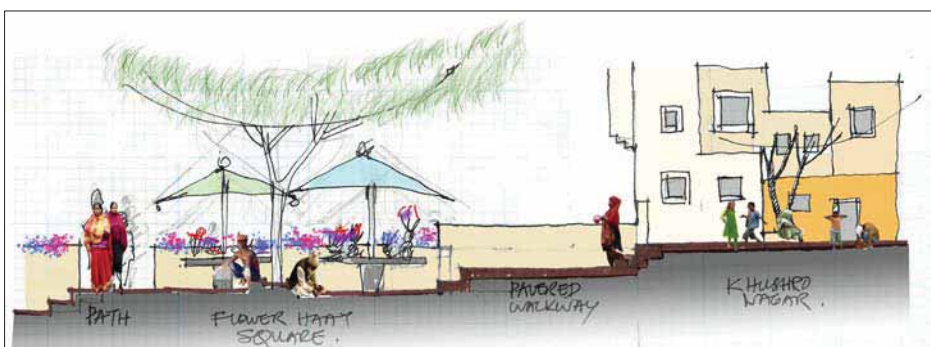
NEXT STAGE:

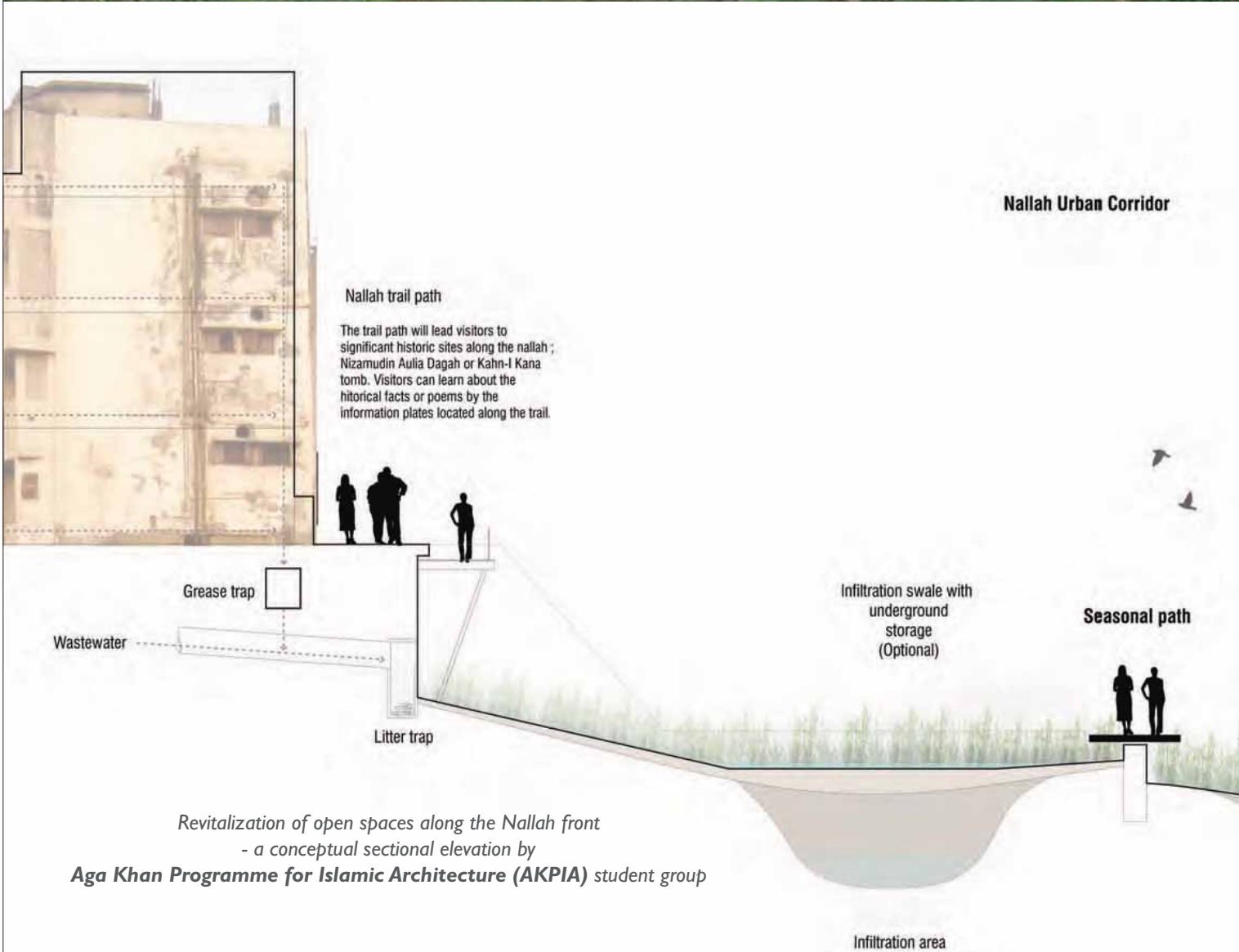
- Landscape and environmental engineering design to be finalised.
- Finalisation and submission of design to PWD.

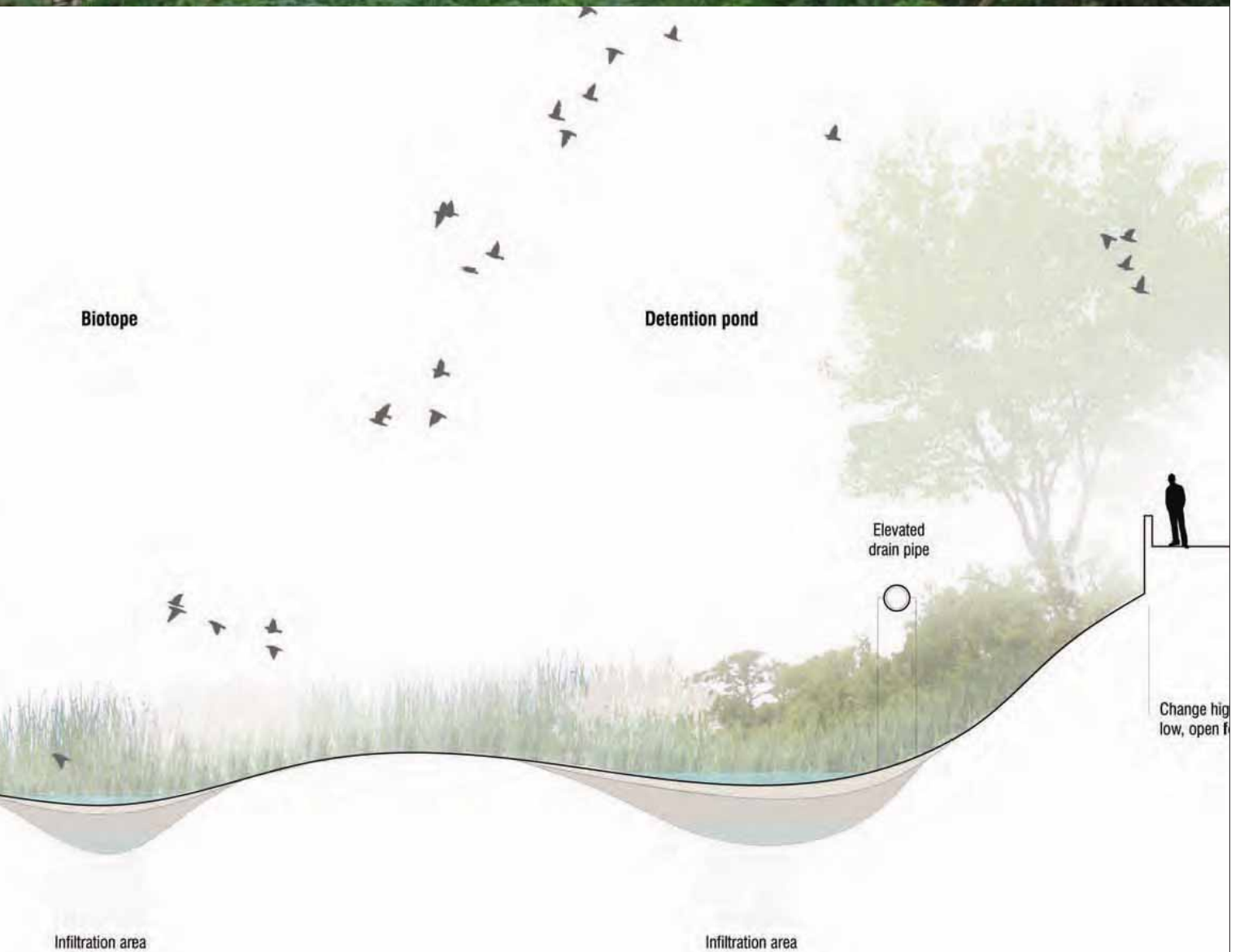


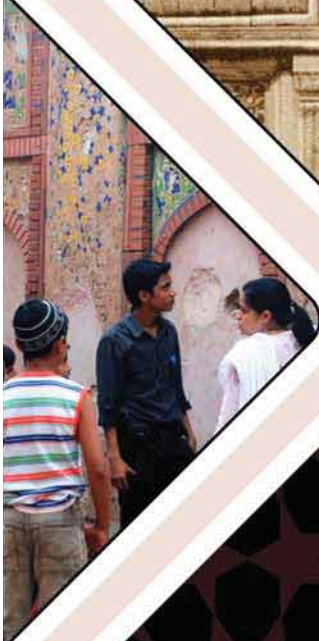
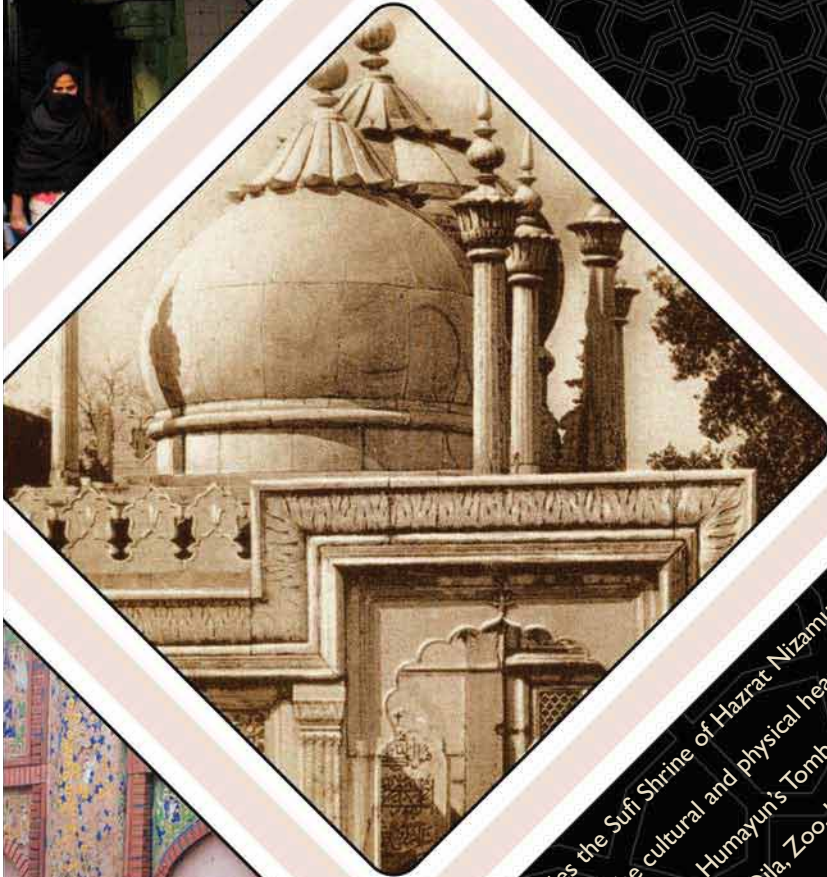
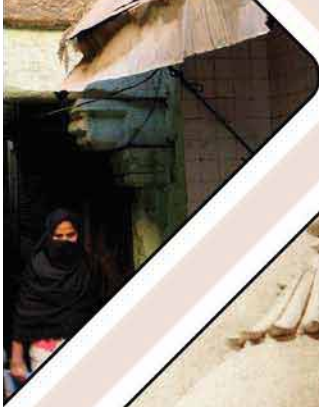
Over 100 toilets have been connected to the city sewage network and sewer lines along the basti have been repaired and portions re-laid.

Conceptual designs for the redevelopment of open spaces









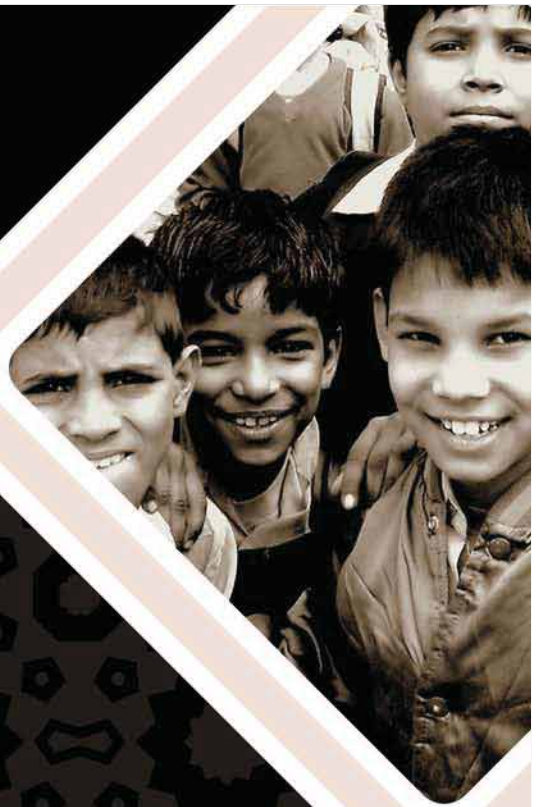
Cultural Revival through living Sufi traditions



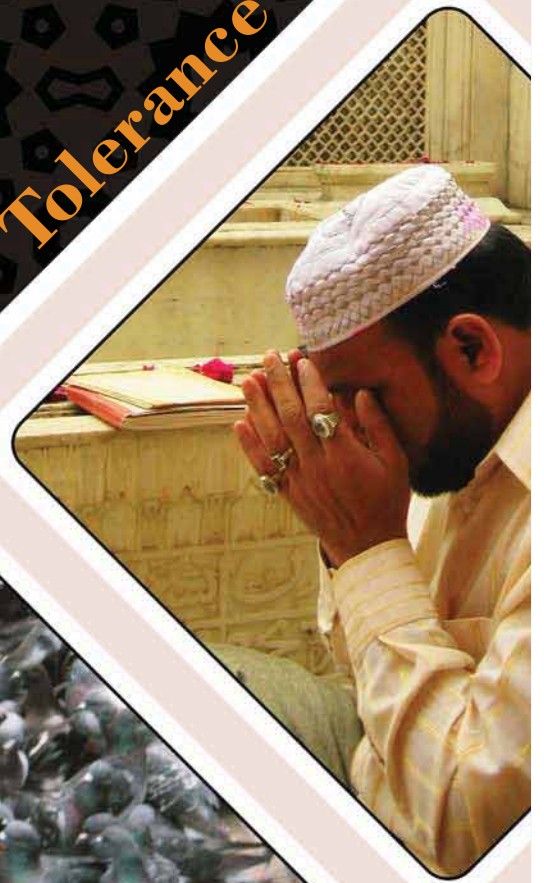
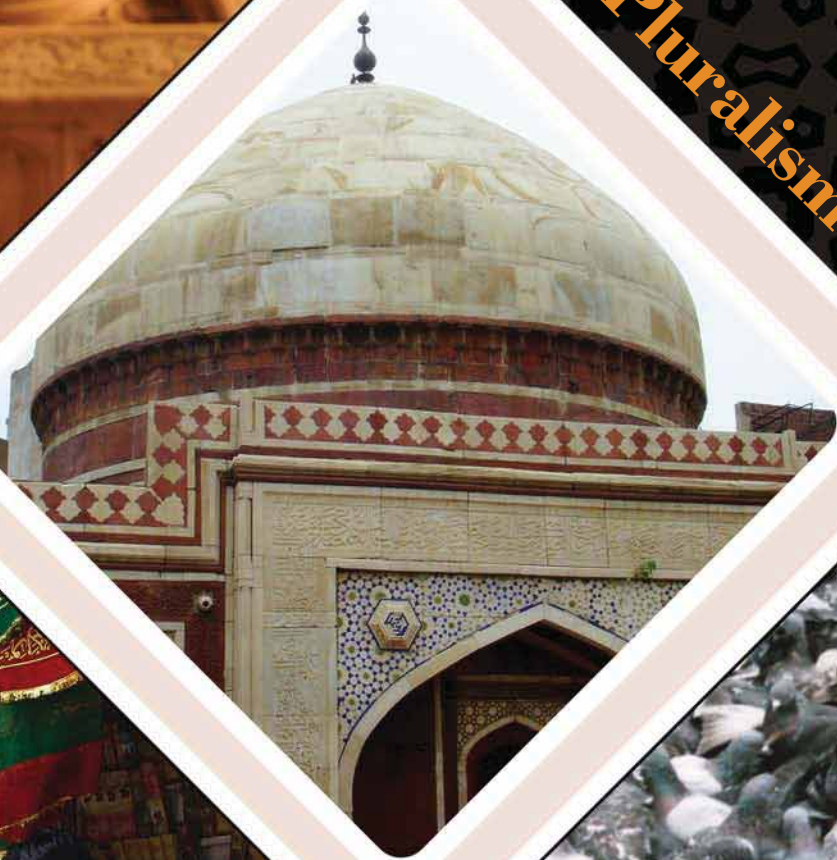
Besides the Sufi Shrine of Hazrat Nizamuddin Auliya being the cultural and physical heart of Basti, its proximity to Humayun's Tomb Complex, Sunder Nursery, Purana Qila, Zoo, Kahn-i-Khan's tomb and other Delhi local points of interest. The Basti can itself boast of many important monuments, a fading cultural essence and a way of life, traditional urban fabric and local trade which makes it a very essential historical and cultural locale of Delhi in many ways. The new Master Plan of Delhi has declared it a "Heritage Zone" and has marked it for Urban Conservation" initiative.

Enhanced public spaces





Pluralism & Tolerance



LANDSCAPING OF PARKS

TASK:

Landscaping parks in the Basti for community use

PURPOSE:

- To provide the local residents a much needed, easily accessible and usable green space.
- To improve the environment of the Basti and the quality of life for local residents.

ACTION TAKEN:

Community dialogue on open spaces

- Several discussions have been held with various stakeholder groups such as the Dargah Committee, youth, elders, women and children to understand their need for open spaces.
- At present the open spaces are hardly usable by local residents. Women hesitate in using the existing parks as they are poorly maintained and unsafe. Children are mostly seen playing in the narrow streets of the Basti close to their homes.
- Most of the children and young boys expressed the need for open play fields especially for outdoor games such as cricket and football while young girls and women wanted a separate park only for women.
- The older age group wanted open spaces with clean sitting spaces and walking paths.

Concept designs for all Basti parks

- Landscape plans for all parks have been prepared. These parks are connected with each other through walking paths. A separate children's park was incorporated in the design next to the MCD school to allow use of the space by school children as well as other children of the basti. The women's park was located close to the children's park so that the entire space may be used only by children and women. Spaces for the weekly Monday market and parking for cycle rickshaws were also incorporated in the design.
- The parks facing the main roads were designed as open play areas where out door games may be organised. A small section of the park located close to the barat ghar has been incorporated with seating and walking paths that may be used for functions as an extension of the barat ghar or by residents for morning walks etc.
- One of the parks which is centrally located and presently used extensively for weddings, has been designed as a central plaza where festivals and melas may be organised.

Detail designs prepared for one park

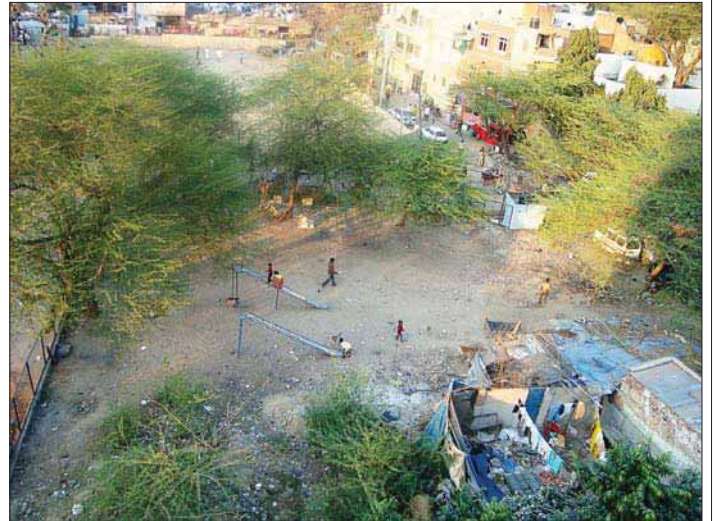
- The working drawings of the central park have been prepared and the contracts for construction work have been given out. Landscape works will commence once the approval from the Delhi Development Authority has been received, awaited since September 2008.

MOU with Delhi Development Authority

- All the parks are owned by the Delhi Development Authority. An MOU to be signed with the DDA for landscaping, upgrading and maintenance of the parks for a period of two years is being discussed.
- As part of the MoU, the DDA will remove encroachments in the park adjoining the school to facilitate the upgrading works.

The western edge of the basti is bounded by parks owned by the Delhi Development Authority. It is proposed to landscape these parks for community use and extensive consultations have been held to determine proposed designs. The parks on the outer edge are presently being used to store building material.

P



While there are about 10 open spaces/parks in the Basti, most of these are not used by the residents. The parks are being redesigned and improved keeping in mind specific needs of women, children and youth.

Proposed

Open Community spaces

| Landscaping of Parks

| Women's Parks

| Children's Park



Secure and separate parks for children and women will be located near the school, while large play fields and open grounds that can be used by youth and for public functions will be located at the periphery of the basti. These parks, if maintained well, will enhance the quality of life of the residents of Nizamuddin. They will act as a green lung for the otherwise highly dense urban settlement of the basti.

While there are about 10 open spaces/parks in the Basti, most of these are not used by the residents. The parks are being redesigned and improved keeping in mind specific needs of women, children and youth.



NEXT STAGE:

- To start landscape works once the required approvals from the DDA have been received.
- To encourage positive community activities and children activities in the newly upgraded parks.

CULTURAL REVIVAL

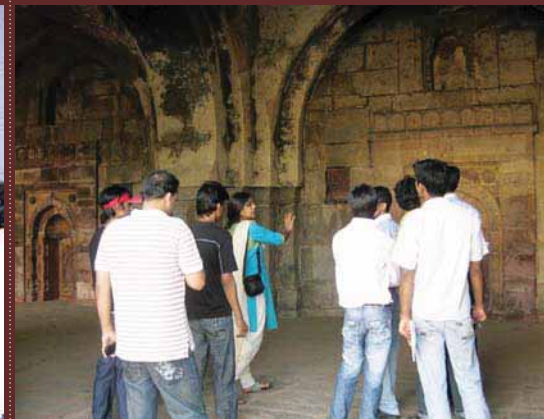
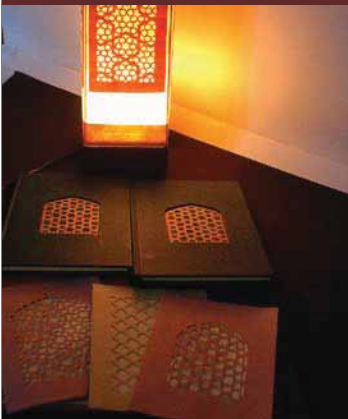
Any policy for development must be profoundly sensitive to and inspired by culture itself.



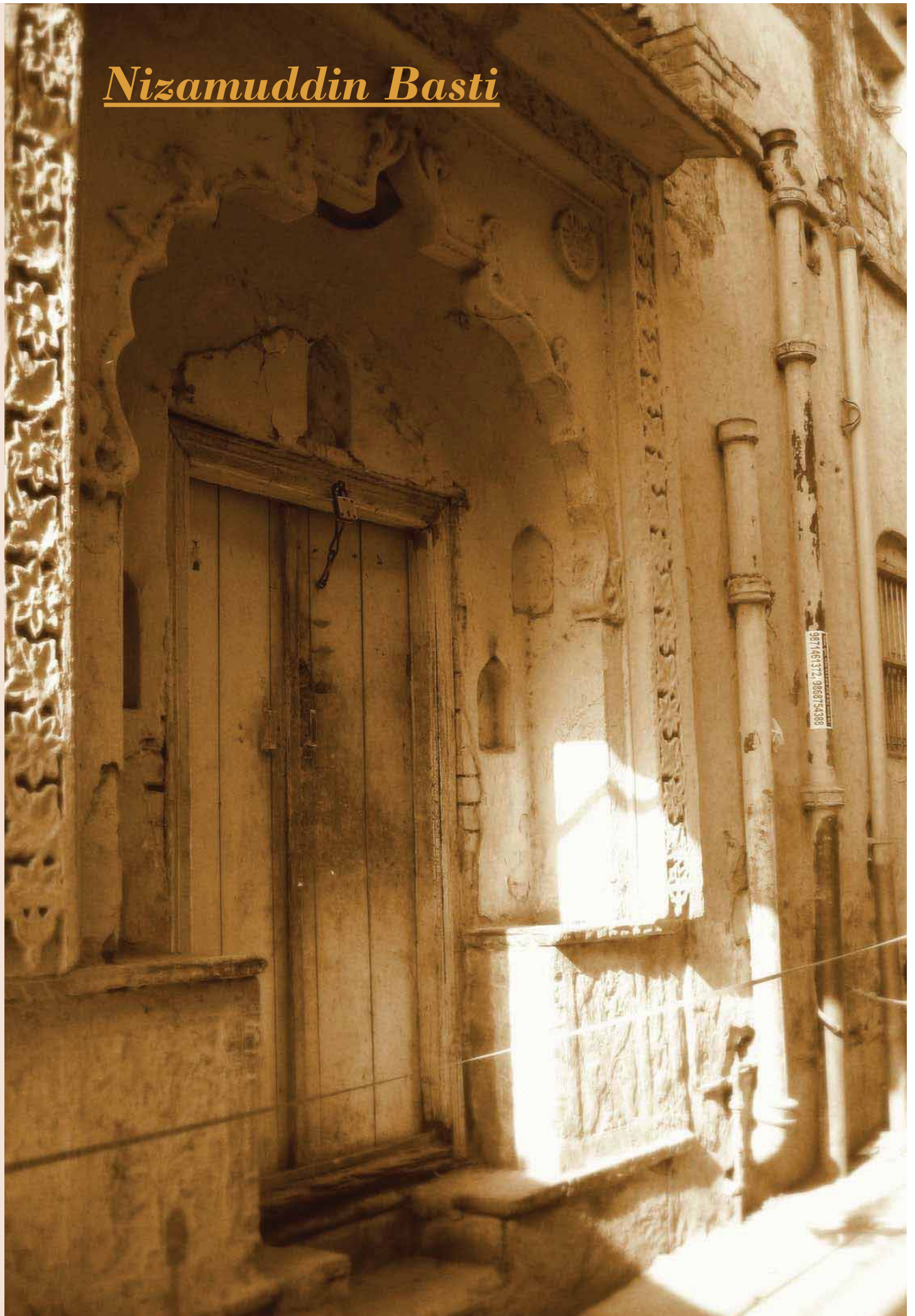
creating
MARKET LINKAGES

reviving
TRADITIONAL MUSIC

generating
EMPLOYABILITY OF YOUTH



Nizamuddin Basti



QAWAALI PROGRAMME

TASK:

Promoting the Qawwali music and cultural legacy of Amir Khusro

PURPOSE:

Amir Khusro Dehli's tomb stands adjacent to the Dargah of Hazrat Nizamuddin Auliya.

The programme aims at Cultural revival of the basti through the promotion of Khusro's music legacy.

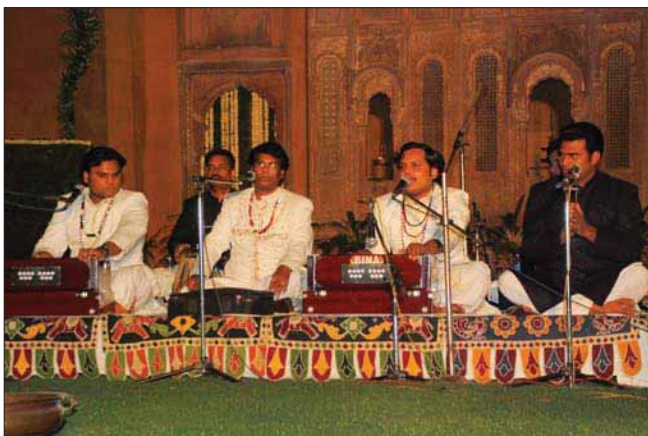
ACTION TAKEN:

- A basic documentation of the qawwal families associated with the dargah was completed and the feasibility for setting up a music centre explored.
- Due to a lack of interest from the qawwals themselves it was decided to expand the programme to focus on Khusro's music legacy in different genres of music with qawwali being one of the genres.
- Interviews and studio recording have commenced and two groups of qawwals from Amroha and Rampur have been documented. The recordings will form a part of an audio archive and will also be used for the final CD
- Preparations for the 3 day Khusro festival to be held in March 2010 have begun. A draft programme for the festival has been generated. Institutional collaborations are being sought with the India International Centre to co-host the festival.

NEXT STAGE:

- Outstation visits to Uttar Pradesh, Punjab and Rajasthan to document Khusro's music legacy in folk, qawwali and classical genres
- Khusro festival to be held in the first quarter of 2010.

Qawwali music traditions originated with Amir Khusro Dehli, whose tomb stands in the Dargah complex. The project hopes to promote this significant intangible heritage associated with the Nizamuddin Basti through performances, exhibitions and recordings



PAPER-CUTTING TRAINING

TASK:

Formation of a Self Help Group for women trained in the art of paper cutting

PURPOSE:

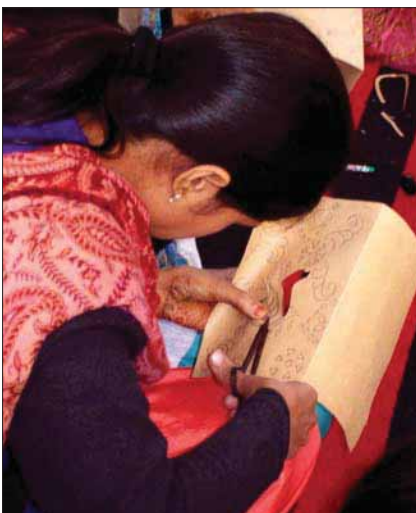
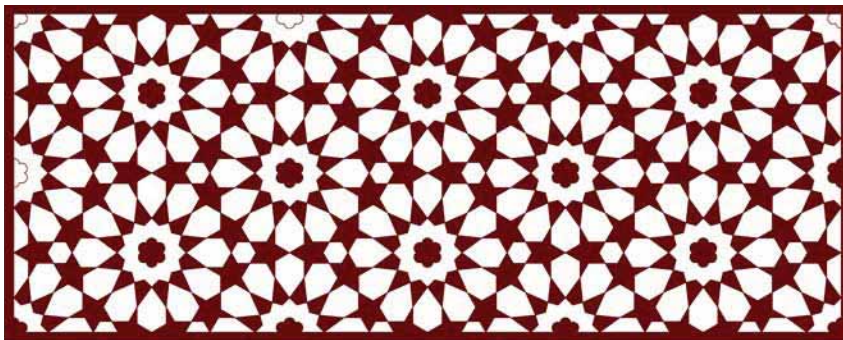
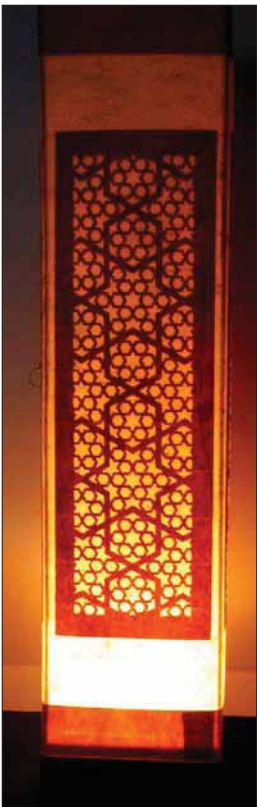
To promote linkages with the heritage monuments in the area while creating economic opportunities, a group of women have been trained in the art of paper cutting which draws design elements from these monuments.

ACTION TAKEN:

- After completing the training programme, a group of ten women were linked to form a Self Help Group, *Noor*, for the marketing and promotion of their products. A designer worked with them to develop some products including notebooks, cards, lamps etc.
- Linkages with other craftspeople were also created to produce a range of lamps drawing on design elements from the historic monuments in the area. The products will be marketed through a souvenir shop at the Humayun's Tomb in addition to other outlets.
- The products being developed by *Noor* have already begun to generate income for the women.

NEXT STAGE:

- Training the women to run the Self Help Group.
- Developing market linkages
- Developing a business model for the group



Sanjhi is a traditional paper cutting craft practiced in Western Uttar Pradesh. As part of the project, master craftsmen of the art have been training women from the basti, who have now formed a Self Help Group, **Noor**, to produce and market products made at home

DEVELOPING HERITAGE GUIDEBOOKS

TASK

Producing a heritage guidebook for the basti

PURPOSE

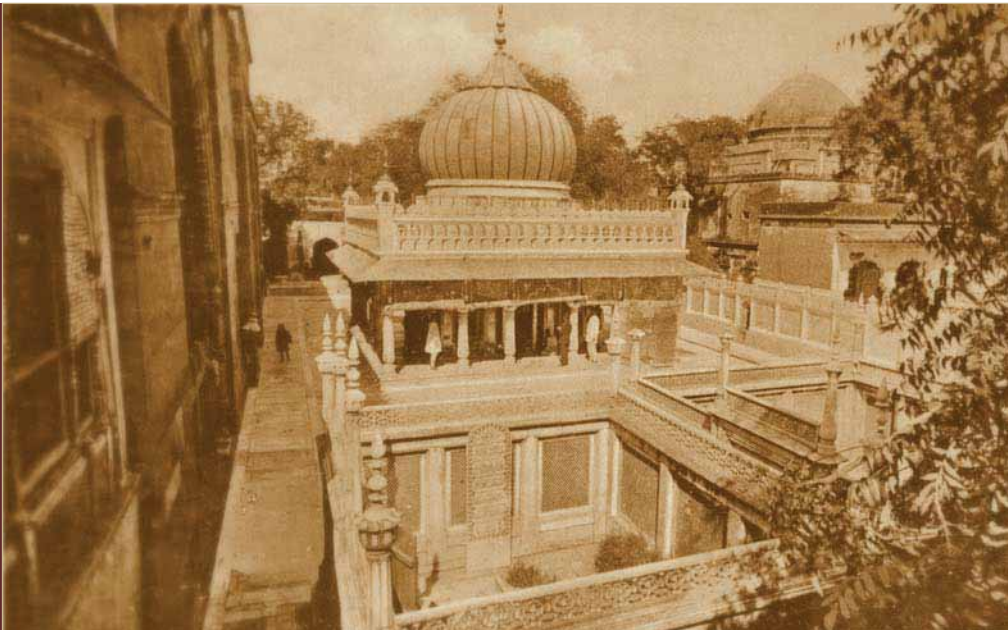
A heritage guidebook is being developed for the Humayun's Tomb – Nizamuddin Basti – Sunder Nursery area to promote awareness among the larger public and tourists on the rich architectural and living culture of the area.

ACTION TAKEN:

- The content for the guidebook has been drafted and is being finalised. It focuses on the basti and the other project areas of Humayun's Tomb – Sunder Nursery.
- In addition to the historic monuments in the area, the guidebook focuses on the living culture including the music, cuisine and crafts associated with the basti.

NEXT STAGE:

Printing of the guidebook



A general view of the Hazrat Nizamuddin Auliya's Dargah and the tomb of Jahan Ara Begum

HISTORICAL RESEARCH

TASK

To collect historical information that will be used for the Site Museum/ Interpretation centre.

PURPOSE

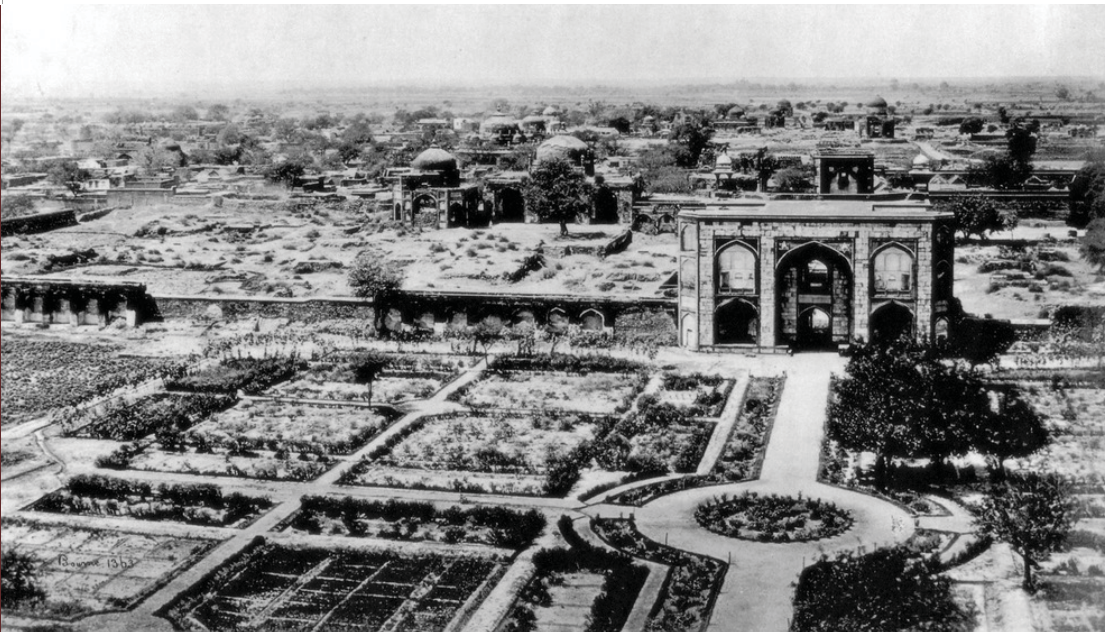
To understand the evolution of the area as one of the most significant heritage areas in the city of Delhi and to highlight this through site exhibitions, publications and other dissemination programmes

ACTION TAKEN:

- A team of historians and Persian language specialists have been appointed to undertake research on the area.
- Sources that have been studied include records at the Delhi State Archives, Waqf Board, DDA Nazul land records, Tis Hazari records and National Archives of India.
- Old maps and plans of the area as well as documents pertaining to the conservation of historic monuments in the area have been sourced.
- Historic narratives have been referred to create an account of the evolution of the area since the time of Hazrat Nizamuddin Auliya.

NEXT STAGE:

On completion of the research into archives in Delhi, outstation archives such as those at Rampur, Aligarh and Patna will be accessed to source archival material



An understanding of the historical development of the Humayun's Tomb – Sunder Nursery – Nizamuddin Basti through archival pictures, Persian manuscripts, traveller records is essential to plan for the sustainable development of this area

CULTURAL MAPPING

TASK:

Cultural Mapping of the Nizamuddin basti and Humayun's Tomb complex and buffer zone

PURPOSE:

The cultural mapping of built and intangible heritage in the Nizamuddin basti is being undertaken to create a resource for monitoring the state of heritage as well as for developing urban design guidelines, building regulations, management plans, income generation and heritage education activities for children and youth.

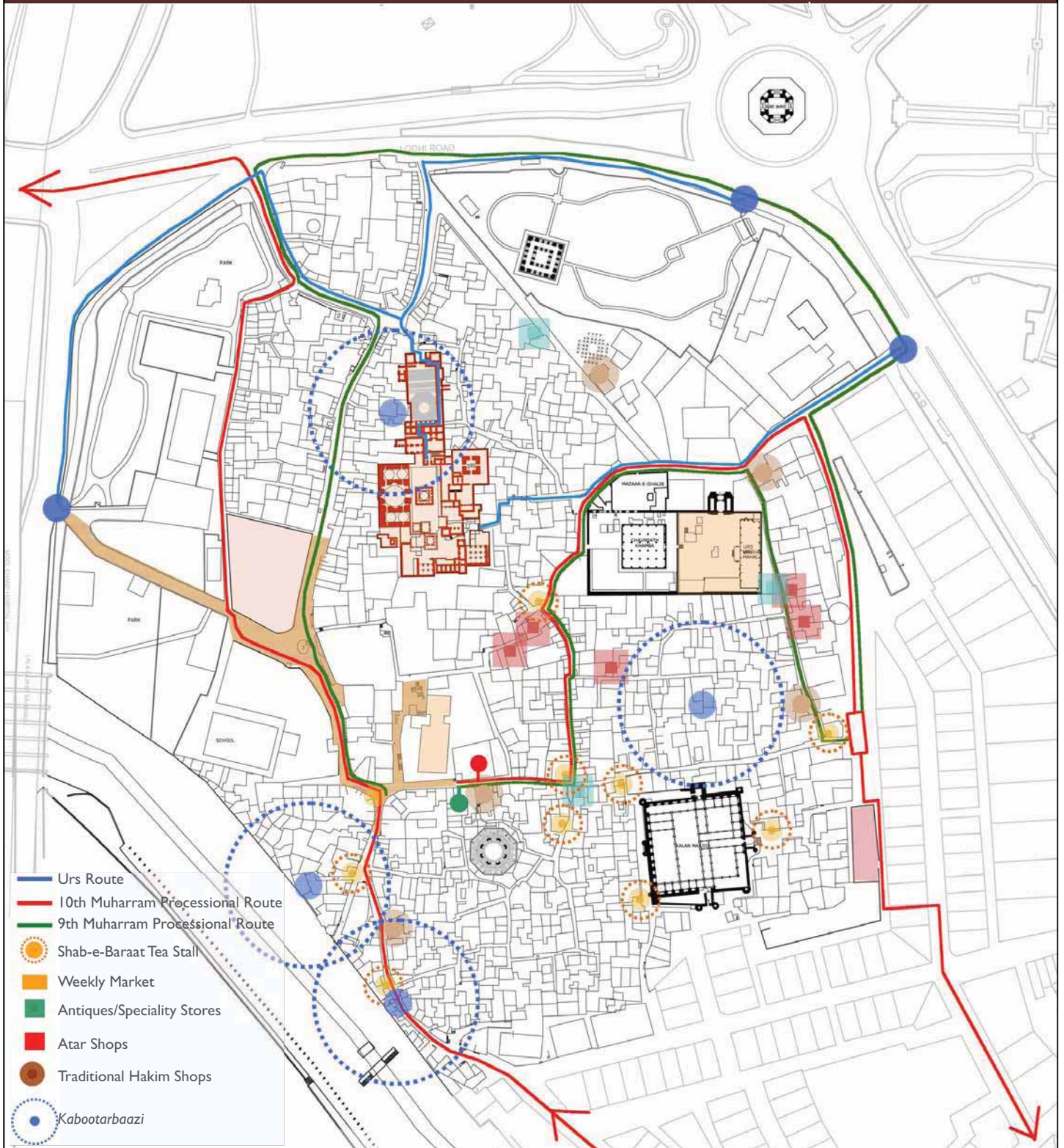
ACTION TAKEN:

- Local youth were trained in identifying, photographing and recording buildings of heritage value.
- This training included lectures, visits to other sites in Delhi and in Ahmadabad, Gujarat.
- The inventory of built heritage for the basti has been completed.
- A mapping of ritual spaces and specific crafts within the basti has now commenced.

NEXT STAGE:

- Mapping of ritual spaces within the basti to be completed.

CULTURAL MAPPING



HERITAGE VOLUNTEER PROGRAMME

TASK

Training youth from the basti as TOUR GUIDES for the basti and surrounding areas

PURPOSE

The heritage guides training programme is being developed as an income generation programme for the youth in the basti to enable economic benefits from increased tourist numbers at the Humayun's tomb accruing to the residents of the basti

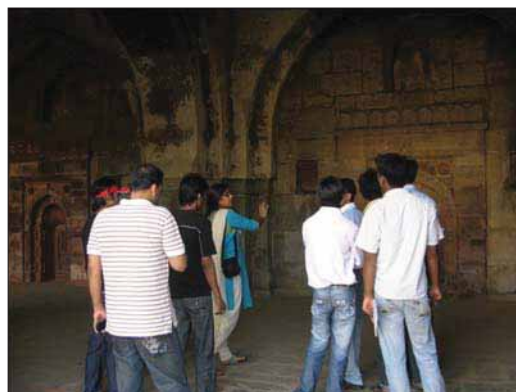
ACTION TAKEN:

- The group of tour guides are undergoing a series of training workshops including training on life skills and communication.
- Through a collaboration with the British Council, English classes have been organised for these youth for English language training.
- The walk route and script for the heritage walk have been finalised and practice sessions with the guides have commenced.
- Interactions with residents and commercial establishments along the walk route has been undertaken to seek their support for the walks.
- The heritage guides group have also helped in the mapping of specific cultural elements within the basti which is being used to develop the heritage map. The content of the heritage brochure has been drafted and will be finalised for printing by 2010.
- The walks will commence with the basti and will gradually expand to cover the Humayun's Tomb complex and surrounding areas.
- An exposure visit to Ahmedabad was arranged for these youth to experience first hand and learn from the heritage walks held there.

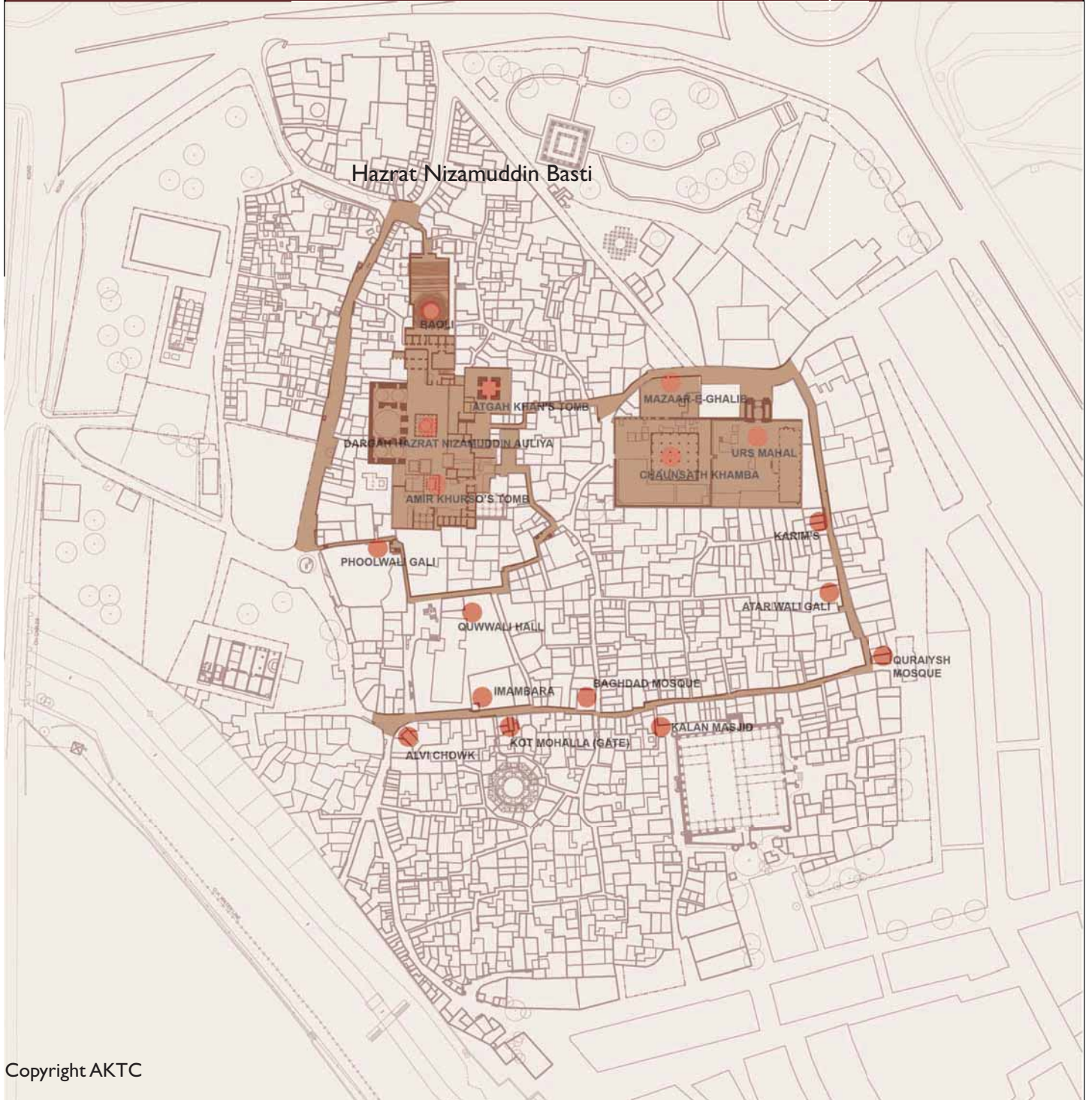
NEXT STAGE:

- Creation of a Self Help Group for the guides
- Commencement of walks on a regular basis
- Marketing and promotion of the walks through posters, media coverage, linkages with hotels and travel agents.

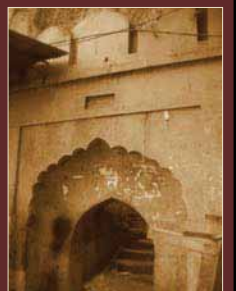
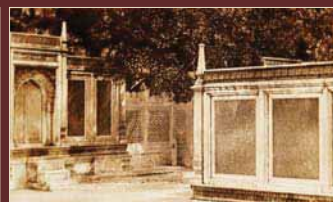
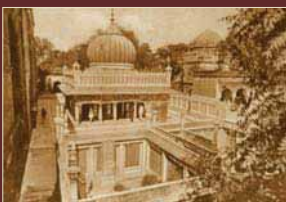
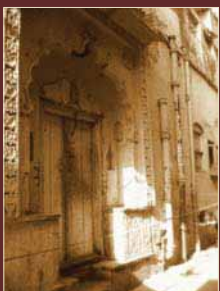
Millions of visitors and pilgrims visit the Humayun's Tomb – Nizamuddin Basti area annually; to enhance visitor experience and allow economical benefits of tourism to local community a group of youth from the Basti are being trained, with an emphasis on English, history, to become tour guides



HERITAGE TRAIL



Copyright AKTC



WORKING WITH THE YOUTH

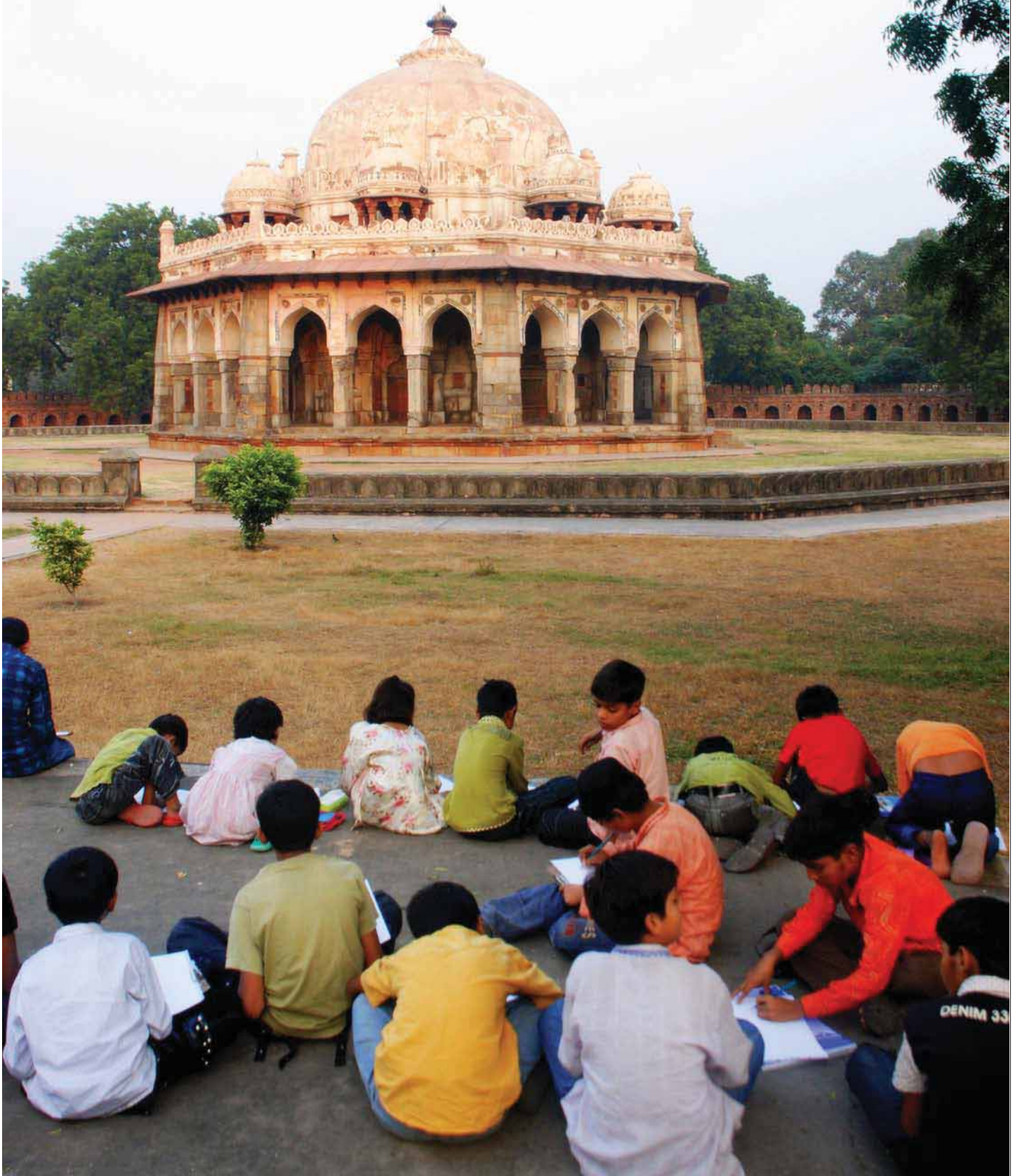
HERITAGE
walks

NATURE
walks

HERITAGE
quiz

PAINTING
competitions

3-D MODELLING
workshops



CHILDREN AWARENESS PROGRAMMES

TASK:

Cultural awareness programmes with the children and youth in the basti.

PURPOSE:

- Generating awareness on the basti's heritage among the youth and children to promote a better understanding of the area's heritage amongst its residents – the largest stakeholders in the programme.
- This programme is in addition to programmes being conducted at the MCD school and reaches out to Basti children.

ACTION TAKEN:

- Several day long events have been organised with the basti children.
- Heritage walks were organised both within the basti and outside, at sites such as Lodi Gardens.
- A nature walk was conducted at Humayun's tomb and the new temporary nursery set up at the site to cultivate saplings and plants to be used in the Sunder Nursery. The talk included discussions on indigenous species of trees, local names by which they are popularly known and some of the medicinal and other properties of these trees. The children then helped in retrieving seeds from pods which they then planted in pots gifted to them.
- A heritage quiz was conducted with children from the different areas within the basti. Preparatory meetings were held with the children prior to the quiz to discuss the various historic characters, contemporary landmarks, monuments, festivals associated with the basti.
- Prior to the quiz, a painting competition was organised for the children to highlight the present condition of the basti and what changes they would like to see in their neighbourhood
- Abdur Rahim Khan i Khanan who lived at the time of Emperor Akbar was a well known poet and his sayings/proverbs are still immensely popular today with children. His tomb stands in Nizamuddin East. His couplets known as *dohe* highlight the message of peace, tolerance and pluralism of the day and were written in the colloquial language making them popular with the ordinary people of the day. Selected *dohe* were shared with the children and these were illustrated through their drawings.
- To understand the concept of 3 D modelling different materials were used such as clay to create models of significant heritage sites. Models of the Dargah, Atgah Khan's tomb and Humayun's tomb were created by the children.
- Painting sessions were also organised at the tomb of Isa Khan
- A play was developed and performed by the children reciting the story of the baoli – its creation and present day condition. The skit was performed by the children for their parents at the MCD school.
- A special workshop on bamboo crafts and papier mache was organised at the MCD school where the children were taught these traditional crafts.

NEXT STAGE:

- Continuation of awareness activities such as the heritage walks and painting and craft sessions
- Development of plays on specific stories
- Collection of stories from the basti

Future of the heritage assets of Nizamuddin Area will be secured with the awareness of their historical significance to the youth. A sustained awareness programme with basti children is now being undertaken as part of the project



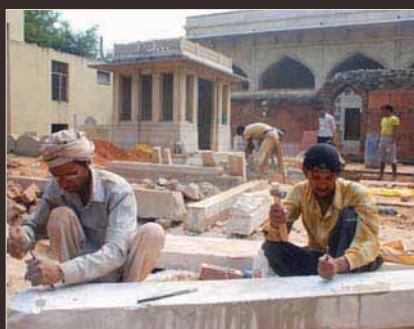
For over seven centuries millions have used water from this stepped well; in keeping with requests from the Dargah Committee and local community, the conservation works on the collapsed portions of the baoli were coupled with a mammoth effort to clean the step-well of all debris, 700 years of accumulated dust. The manual lifting of sludge required over 8000 man-days of work.

CONSERVATION

The project will seek to improve living standards in the Hazrat Nizamuddin Basti, considerably enhance visitor experience and, through rehabilitation of critical monuments and civic open spaces, enhance the area's value and significance in terms of history, places of spiritual importance and recreation.



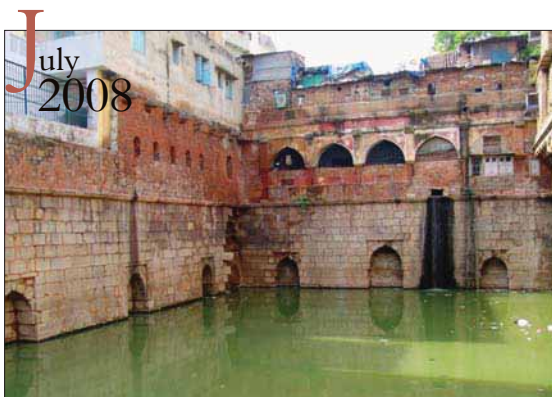
Chaunsath
Khamba



Mirza Ghalib's
Tomb



Hazrat Nizamuddin
Baoli



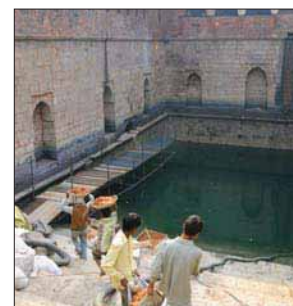
Built during the lifetime of Hazrat Nizamuddin Auliya in the years 1321-22, this is the only Baoli in Delhi which still has underground springs. In July 2008, portions of the Baoli collapsed and after exhaustive scientific analysis and consultation with the community, conservation works to rebuild the collapsed portion could commence. For the first time in centuries, the baoli was de-silted to its original depth of 80 feet below the ground level and major repairs including the removal of the 20th century epoxy layer carried out



Craftsmen completing the reconstruction of the collapsed portion reusing the original stone. This required exhaustive studies, analysis, strict supervision, traditional materials and the most skilled and determined craftsmen to work tirelessly



Over 700 years of accumulated debris was removed from the baoli



Work is now ongoing to repair vault. The underground passage was originally used to access the Baoli from the courtyard of the mosque, following wuzu. Though this passage is now, portions discovered during conservation works are being repaired, including re-installing collapsed keystones of the vaulted roof.

TASK:

Conservation of Hazrat Nizamuddin Baoli

PURPOSE:

- Repair collapsed portions of Baoli
- Remove modern materials such as chemical epoxy that have accelerated the decay process
- Enhance the setting of the baoli, especially by replacing modern materials used in public areas with traditional materials.

ACTION TAKEN:

Structural analysis

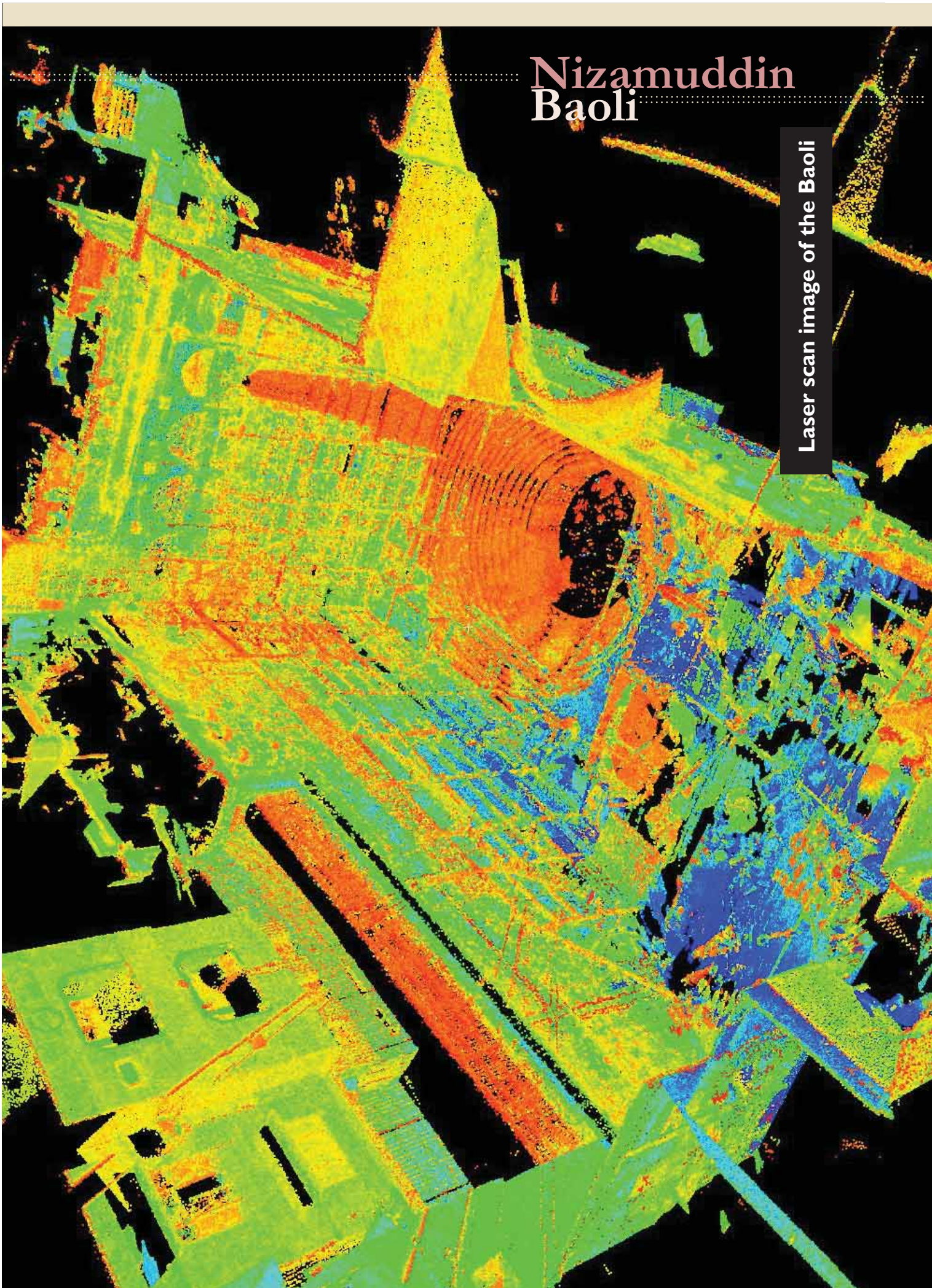
- Following the collapse of a portion of the Baoli in July 2008, detailed geotechnical studies, structural analysis was carried out by national and international experts as a precursor to conservation works.
- To carry out an accurate condition assessment, sectional profiles were created using 3 D laser scanning data that allowed actual structural deformations to be mapped.
- A structural analysis of the structures surrounding the baoli, especially the southern arcade was also carried out.

Repair of the collapsed wall

- The rebuilding of the collapsed wall was a priority especially since thousands of pilgrims use the passage over the collapsed portion to reach the Dargah.
- As a first step, temporary shoring was installed to prevent further collapse and safeguard pilgrims.
- Conservation works could commence only once the structure built over the collapsed portion was demolished. This demolition was carried out after AKTC had built an alternate dwelling unit for the family.
- For four weeks during critical conservation works, the passage leading to the Dargah had to be closed for pilgrims, possible only with significant community support.
- The collapsed portion was rebuilt and portions of the Baoli dismantled prior to rebuilding using traditional building materials and building techniques. Works were carried out from sunrise to sunset for over six months to rebuild this portion.
- Ashlar facing stones which had fallen in the Baoli and were buried in the sludge were lifted manually collected and reused.
- Conservation works also required the careful and painstaking removal of a 3-5 cm thick epoxy layer applied to the Baoli in 2002 by the Delhi Jal Board. This treatment used for concrete tanks was inappropriate for the historic structure and accelerated decay.

Nizamuddin Baoli

Laser scan image of the Baoli



- Following the rebuilding of the collapsed portion and the removal of epoxy, the entire wall surface was grouted and re-pointed with lime mortar to fill the underlying voids identified in the GPRS study.
- During conservation works a passage leading from the Baoli to the Mosque at the Dargah, possibly used by the saint, Hazrat Nizamuddin Auliya was discovered.
- Works are now ongoing to remove rubble filled in this passage and carry out required repairs to the vaulted roof of this passage – portions of which have collapsed.

De-silting of the well

- Conservation works on the collapsed portion were an opportunity to de-silt the well of the debris accumulated over hundreds of years. This was done manually while ensuring that a few inches of water remained in the Baoli to respect the community sentiment and allow the fish to remain.
- A water quality test of the stagnant Baoli water before reconstruction revealed very high levels of E coli indicating sewage contamination. Following re-laying over 100 m of sewer pipes, by AKTC, as part of the conservation initiative, the ground water sources as well as the well water were retested post reconstruction and it was found that the water quality had considerably improved with a drastic reduction in E-Coli levels .

As part of conservation works, the water from the Wuzu area – draining into the Baoli was re-routed in a complex procedure that required a pumping station to be installed in the narrow lanes leading to the Dargah.



Removing epoxy layer and cement mortar

NEXT STAGE:

- The discovered passage that originally led from the Baoli to the Mosque in the Dargah complex will be repaired; this would require re-fixing keystones, several of which have collapsed, using traditional techniques.
- Once 19 families residing on the southern arcade are relocated into new houses to be built for them, the southern arcade would require urgent conservation works.
- Digital monitoring systems would be fixed at various location to monitor the structural stability of the monument for a period of at least two years.
- Stone lattice screens would replace the metal grills in the arched openings of the corridor passage leading to baoli.
- Cement plaster from the wall and the ceiling surfaces will be removed and redone with appropriate materials and designs.
- Flooring of the corridor will be redone with appropriate slopes and designs.

NIZAMUDDIN BAOLI

TASK:

Providing alternate dwelling unit in lieu of structure over Baoli to be demolished.

PURPOSE:

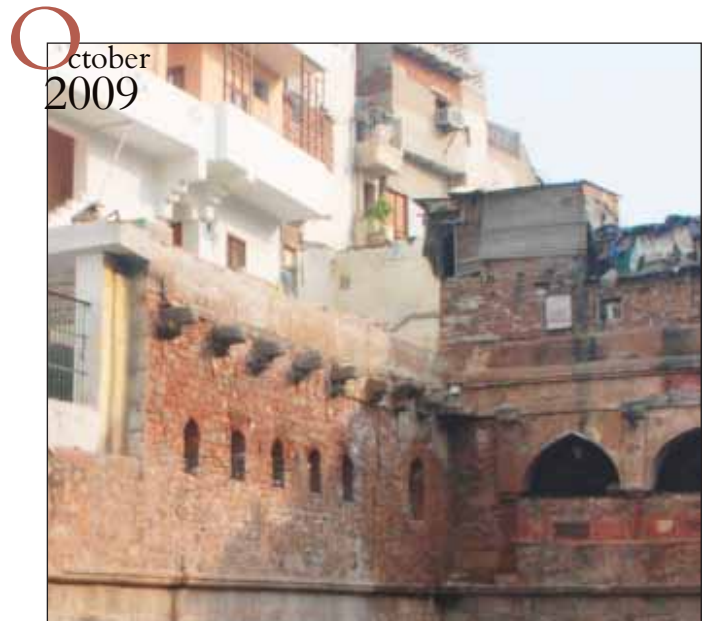
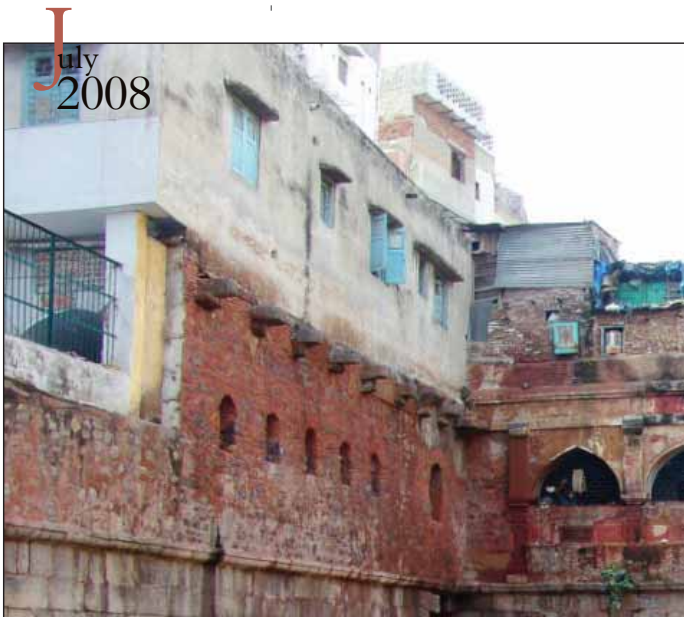
- Conservation works on the collapsed portion could not commence until this structure was dismantled. An alternate structure was thus built prior to dismantling the original structure.

ACTION TAKEN:

- After prolonged consultation with the owners, the alternate dwelling unit was designed to cover a similar area of the original construction.
- The construction, including the interior finishing has now been completed.

NEXT STAGE:

Remove concrete from over the passage of the baoli and strengthen the vaulted masonry.



The dwelling unit built, in the 1980's, over the covered Baoli passage was dismantled with the co-operation of the owner family and after constructing an alternate unit – recessed from the Baoli structure



Conservation

CHAUNSATH KHAMBA

TASK

Landscaping the Chaunsath Khambha forecourt.

PURPOSE

- Chaunsath Khambha, a unique *Akbari*-era monument, was not visible following the construction of a wall in 1960's, separating it from the monuments forecourt.
- To enhance the historic character and cultural significance of the monument implement a sensitively designed landscape scheme.

ACTION TAKEN:

- The forecourt, where stands the Urs Mahal is used for ceremonies associated with the Dargah twice a year. Following community consultations and required approvals a landscape design was finalised in 2008.
- The masonry wall separating the monument was demolished and replaced by a metal fence. The design of the metal grille was based on the stone lattice screen on the Chaunsath Khambha.
- The random stone paving of the courtyard was removed and a new paving layout implemented.
- This included a formal central axis and enhancing the access to the monument.
- The steps to the monument can also be used as a stage for quwwali performances.
- The historic well that was, in recent years clad with sandstone was restored to its original, historic appearance.

NEXT STAGE:

Planting, benches and signage need to be installed for the monument.

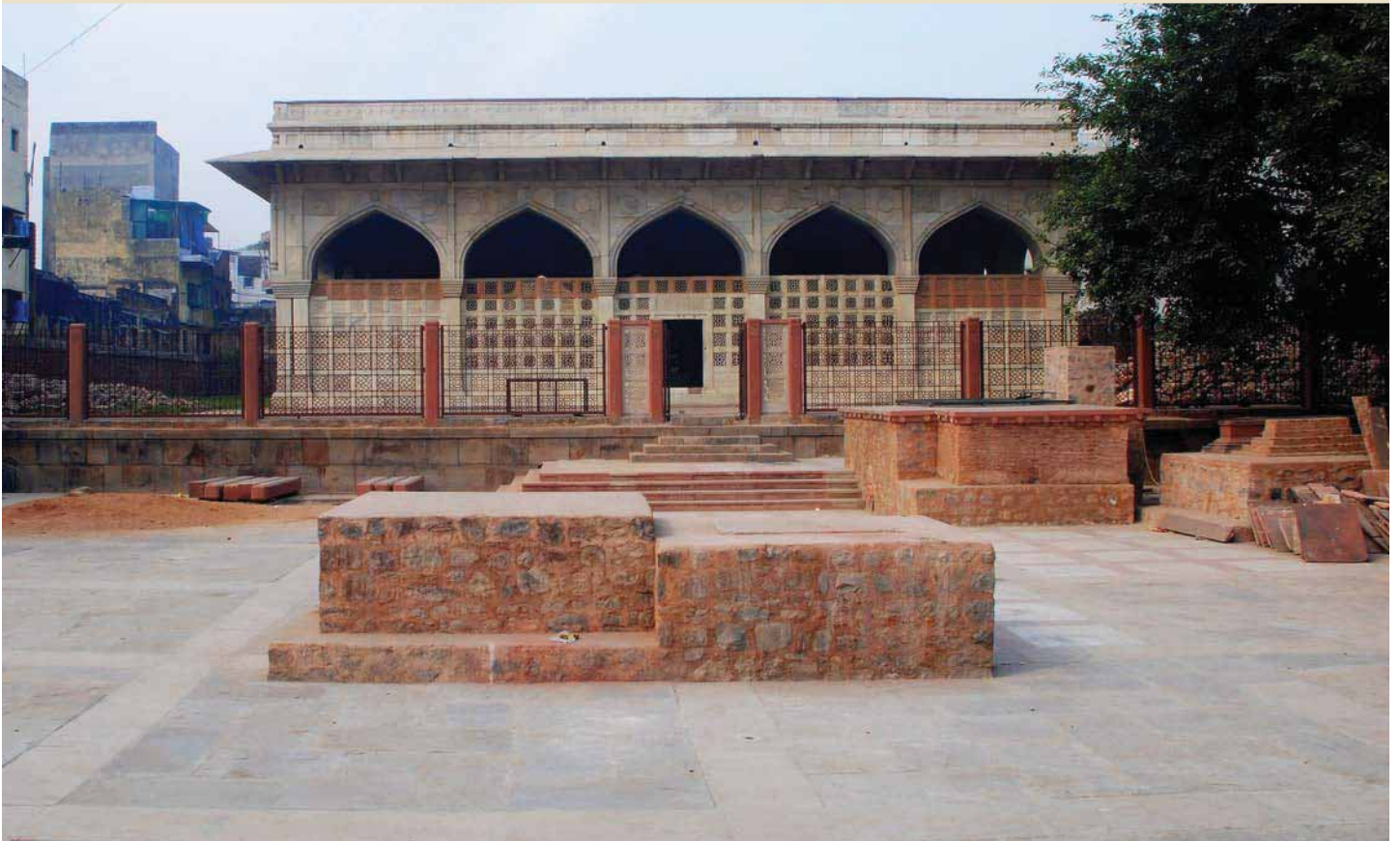
In the 1960's, to protect from vandalism and encroachment, the magnificent Chaunsath Khambha was enclosed in a rubble masonry wall. Removal of this wall, coupled with the implementation of a sensitively design formal landscape scheme has significantly enhance the historical character of this space, used for community functions and the annual Ur's ceremony of Hazrat Nizamuddin Auliya and Amir Khusro Dehli.



Chaunsath Khamba

The tomb of Mirza Aziz Kokaltash, known as Chaunsath Khamba on account of the sixty-four marble pillars dates from the early 17th century and is unique in architectural design and ornamentation.

The area comprising of Chausanth Khamba, Urs Mahal courtyard and Mirza Ghalib Tomb, form the largest open space in Nizamuddin Basti. The three presently segregated sites will be integrated by the landscape design thereby enhancing the cultural significance of the place and allow appropriate community usage.



The large forecourt has been paved, in a formal design, reflective of Mughal style. This required the existing paving to be removed though portions of the stonework could eventually be re-used in the new design.



The random rubble masonry wall built in the 1960's, disfigured the historic relationship of the monument to its forecourt. This wall has now been demolished and replaced with a protective metal fence that allows visibility of the monument



Craftsmen install the sandstone pillars that support the metal fencing.

Conservation

CHAUNSATH KHAMBA

Chaunsath Khamba

The historic well - during conservation works

The historic well in the Chaunsath Khambha courtyard was clad in brick masonry and sandstone cladding – disfiguring its architectural and historical character. The modern layers have now been peeled away restoring the original stone masonry wall and sandstone edging



Chaunsath Khamba

The forecourt - during landscape works



01



02



03

Before Conservation



During Conservation



During Conservation



MIRZA GHALIB'S TOMB

TASK

Landscaping and Conservation of Mirza Ghalib's tomb enclosure

PURPOSE

- To enhance the cultural significance of Mirza Ghalib's Tomb
- To restore serenity to the tomb enclosure despite being located on a busy street
- To create a setting that brings dignity to the enclosure and allows visitors a place of contemplation.

ACTION TAKEN:

- The landscape design aims to create a courtyard effect to allow small gatherings and enhance the character of the enclosure as well as the street.
- The design uses traditional building materials and craft techniques.
- Following the completion of the landscape works at Chaunsath Khambha works were commenced at Mirza Ghalib's Mazar.
- The paving of red and buff coloured sandstone is nearly complete.
- Tree pits left in the enclosure have had 1.5 m deep brick walls built around them to prevent damage from mongoose.
- The enclosure wall, including sandstone screens is nearing completion.

NEXT STAGE:

- The sandstone gateway needs to be built.
- The marble paving in the immediate vicinity of the tomb is to be implemented.
- Conservation, including restoring missing sandstone cladding on the outer face of the northern enclosure wall of Chaunsath Khambha will be carried out.



Mirza Ghalib's Tomb

Mirza Ghalib was a very significant personality of Hindustani culture and his tomb's setting needs to sensitively reflect that – as the ongoing works will' – K.N. Shrivastava, Director General, Archaeological Survey of India.

Mirza Ghalib's tomb stands on a busy street, the existing paving was not considered of a historically appropriate design and the proposed works aim to provide a serene space that allows contemplation and holding an occasional mushaira, in honour of the famous 19th century poet

Proposed Design



Landscape works include white marble inlay work in sandstone and aim to create a place of peace, where admirers of the poet can collect to pay their respects



The iron fencing of Mirza Ghalib's tomb enclosure is being replaced with a stone masonry wall with sandstone lattice screens that will help create a courtyard effect and also lend considerable historic character to the principal street leading to the Dargah

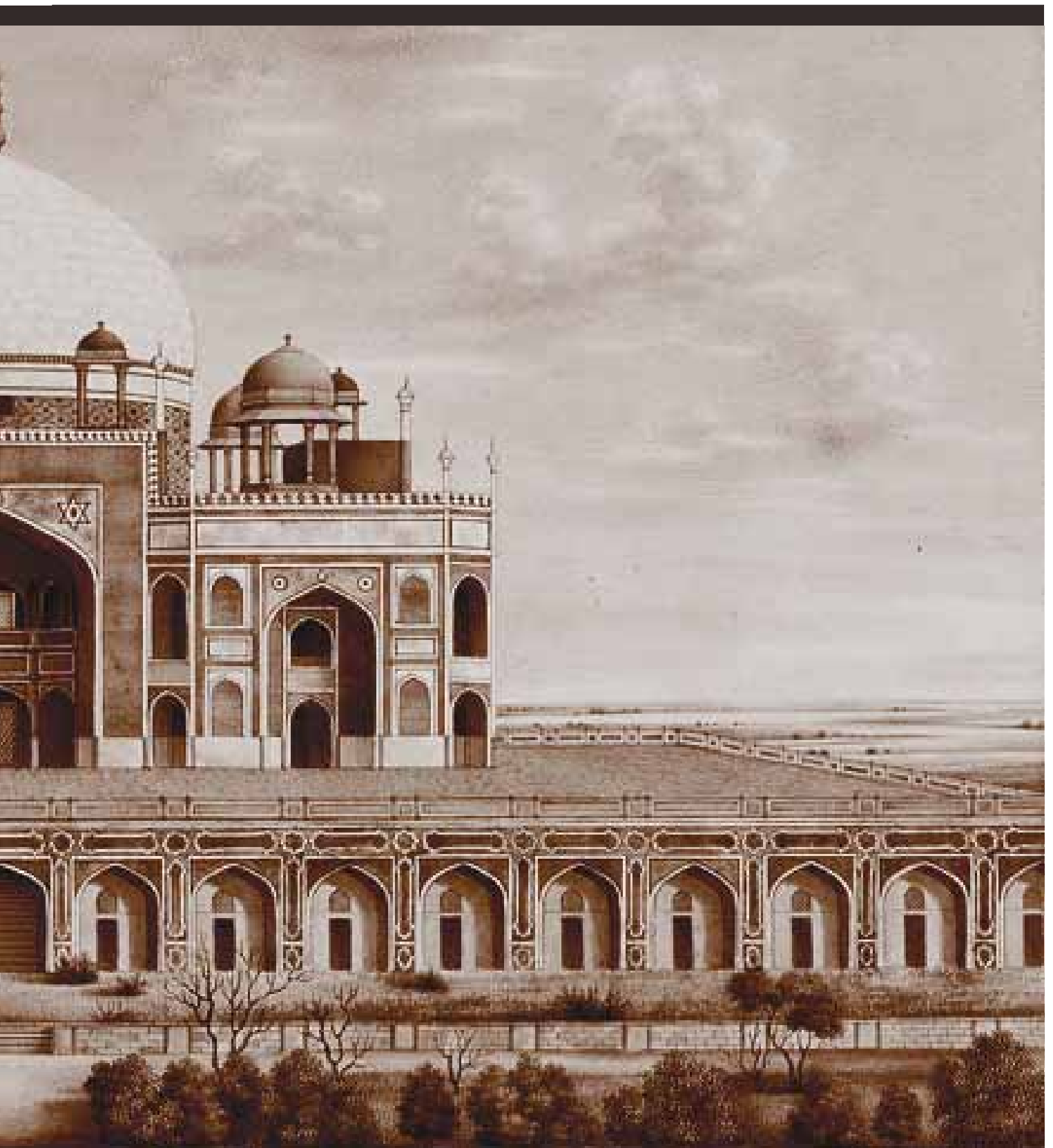


The hand crafted sandstone screens, using contemporary motifs, have been prepared by master craftsmen using traditional tools and craft techniques.

Boundary wall of Mirza Ghalib's Tomb







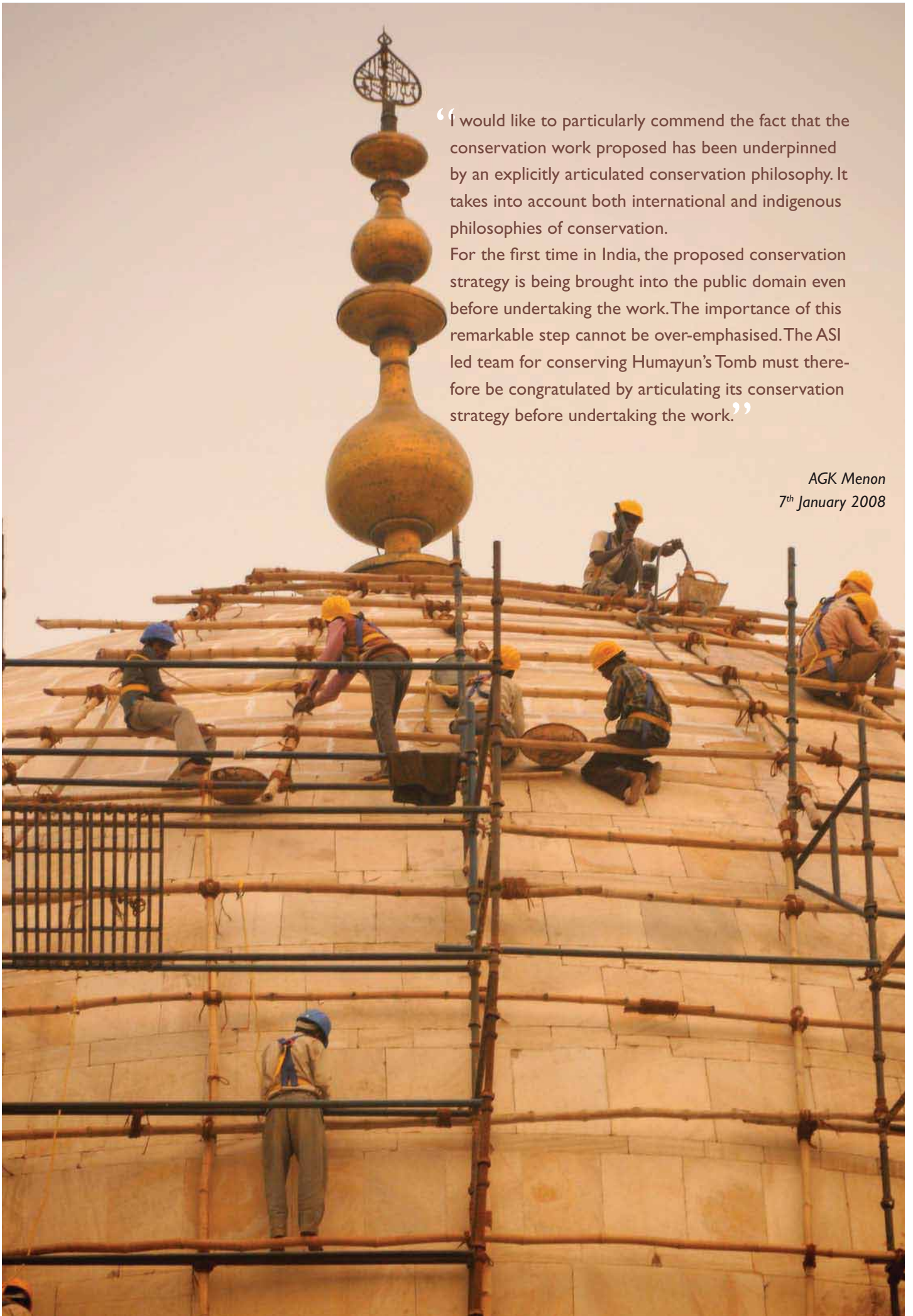
HUMAYUN'S TOMB

The mausoleum of Mughal Emperor Humayun is well known as the pre cursor to the Taj.

As the first major building built by the Mughals and due to its unique architectural style, craftsmanship, scale and setting the tomb the site has been listed on the World Heritage List. Humayun's Tomb and its peripheral buildings, though in a largely safe structural condition are in need of urgent conservation works aimed at enhancing the cultural significance of the site and ensuring the long term preservation, restoring the architectural character lost

“I would like to particularly commend the fact that the conservation work proposed has been underpinned by an explicitly articulated conservation philosophy. It takes into account both international and indigenous philosophies of conservation. For the first time in India, the proposed conservation strategy is being brought into the public domain even before undertaking the work. The importance of this remarkable step cannot be over-emphasised. The ASI led team for conserving Humayun’s Tomb must therefore be congratulated by articulating its conservation strategy before undertaking the work.”

AGK Menon
7th January 2008



“The Nizamuddin project is a fabulous opportunity for good and if it is only half as successful as the restoration of the gardens has been then it will be a great success for all the partners involved and a demonstration of the good that Delhi’s energy can generate for the benefit of the world.”

Benjamin Tindall, President,
Society for the Protection of Ancient Buildings in Scotland,
14th March 2008

“**This is a pioneering endeavor** in more ways than one. The basic approach of integrating conservation with revival of traditional crafts and skills as well as Socio-Economic development of the people will go a long way in giving new direction to conservation practice in the Indian context. I will follow this project with great interest as it unfolds.”

Dr. Rohit Jigyasu,
Conservation Architect,
18th March 2008

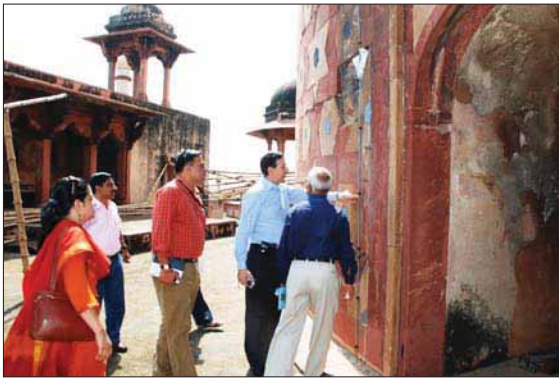
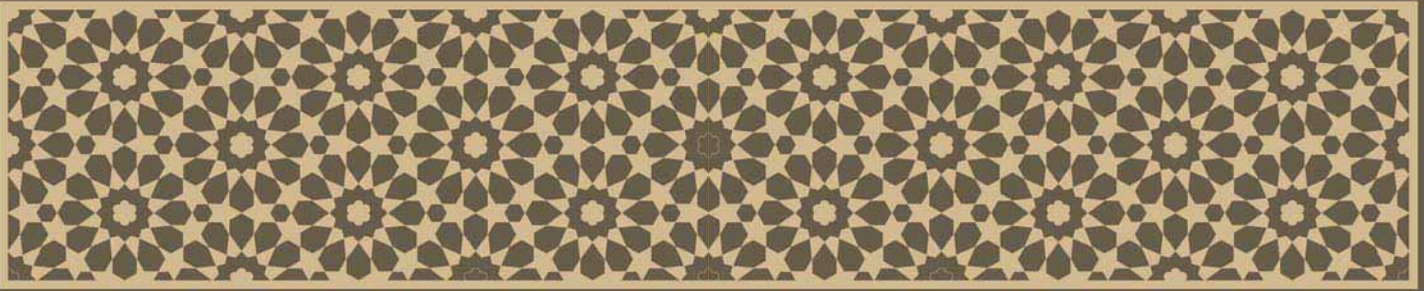
“I am able to write of being inspired. Inspired by the qualities of the WH site brought to life by the landscaping scheme, the flowing waters, inspired by the desire to recover the architectural integrity of the Tomb building and inspired by the potential for the recovery of the Sunder Nursery Monuments precinct. Half a lifetime’s work ahead – but time to be well spent.”

Herb Stovel,
Former Director, ICCROM
19th April, 2008

“It has been a great pleasure, honour and learning experience to have had this extended visit with the project team. The scope, structure and commitment in this project **have the potential and likelihood, of establishing a new precedent for linking heritage conservation with environmental and socio-economic development.** I look forward to following this project closely and wish the team every success.”

James Wescoat,
10th August 2008



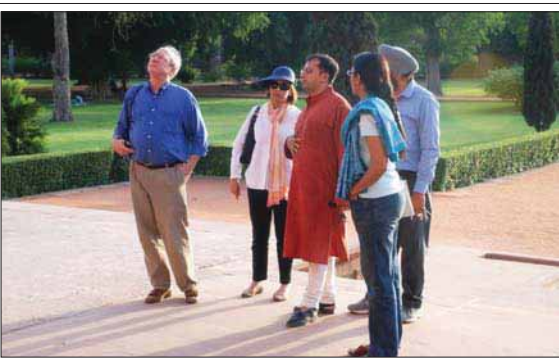


“From my visit to Humayun’s Tomb, I keep a very good memory and I want to express my congratulations to ASI and AKTC colleagues for the impressive works of conservation that are being undertaken. I hope ICCROM will also be joining these efforts. Congratulations!”

Mounir Bouchenaki,
Director General, ICCROM, Rome.
23rd September 2008

“Thank you very much for receiving me at the Humayun’s Tomb and for giving me such an interesting explanation of its history and the renovations you are undertaking. I wish to congratulate you on the **high quality of the work which is contributing to restoring the splendour of this world heritage site.**”
(In a letter dated 9 March 2009).

Marcio Barbosa,
Deputy Director General, UNESCO,
26th February 2009



“What a wonderful job ASI-AKTC are doing at Humayun’s Tomb. I shall always remember this roof top tour and know that the world heritage site is in the best of hands.”

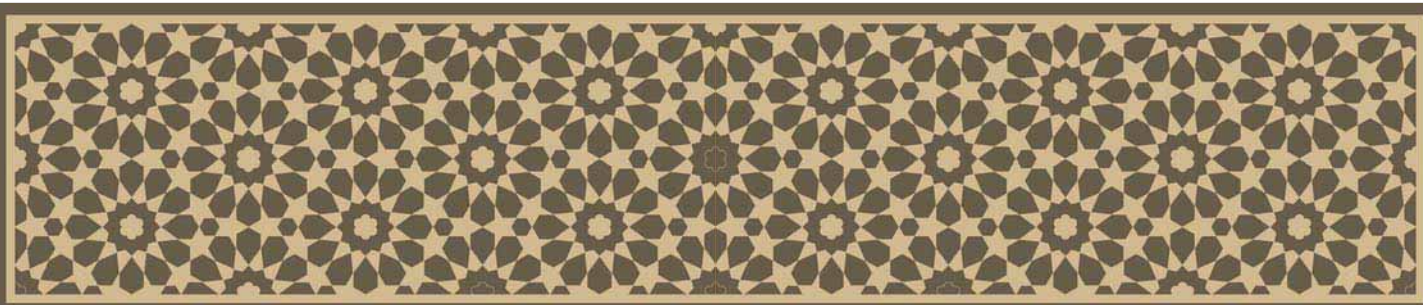
John Stubbs,
World Monuments Fund,
17th April 2009

“We spoke about the surface finish of the main terraces surrounding the tomb. It was very clear that the modern concrete that had been used in the 1950’s to cover the surface of the stone terraces was completely out of place and unsympathetic to the stonework of the tomb. We saw some areas where the concrete had been removed, which showed the marvellous original stone terracing below. The effect was colourful, informative of the way the terraces had been built and fully sympathetic to the stonework of the tomb itself.

I hope that this can be carried through for Humayun’s Tomb and that **the work of the original masons can be fully seen in all its colour and interest as intended by the original designers.**”

Giles Downes,
Sidell Gibson Architects, London,
21st April 2009 (in an e mail)



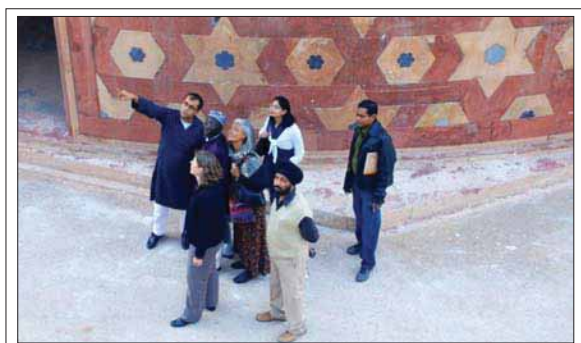


“How ambitious, this scheme to restore the dignity of one of the outstanding monuments of the world. To remove tones of concrete and to match the standards of the time of the origin of the monuments. What more can you expect?! **A new standard for conservation emerges for South Asia.**

Thanks a ton to the project team for spending an entire day with our ‘authenticity group’ from the Centre for Excellence, Asia and Europe of Heidelberg University.

I wish to express my thanks which go beyond words. You must allow me to say, that the six hours we spent with your team were really wonderful. I have never seen such a project management in South Asia and I think that has to be said. I fully support your project philosophy that is based on the “spirit of the architecture”. I envy the way you prepared the Historic Structure Report and I wish you success in regaining the blue colour of the canopies to restore the dignity of the building which is not at all a ruin but one of the most powerful structures in the world. Again: thanks a lot for having spared time with us and being patient with our questions. *(in an e mail)*”

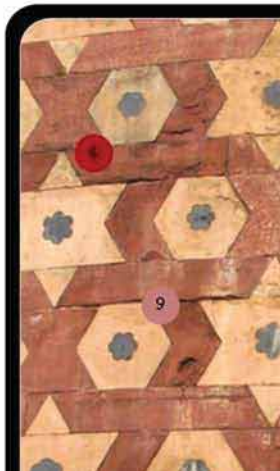
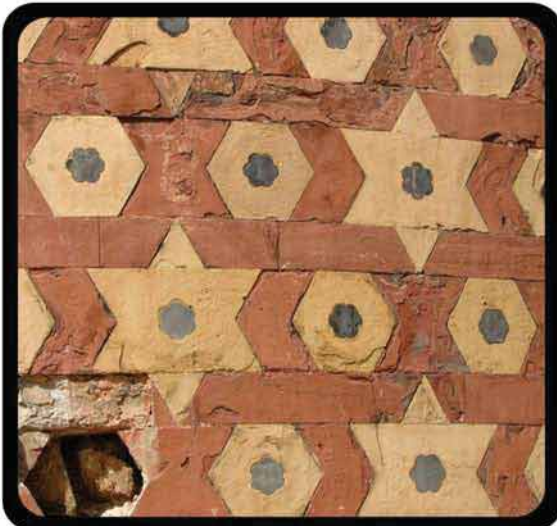
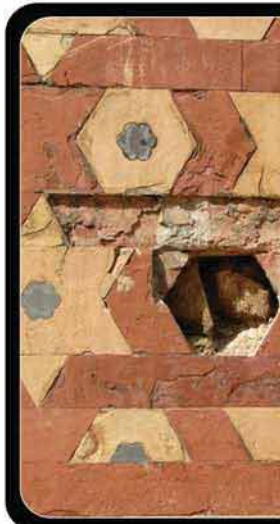
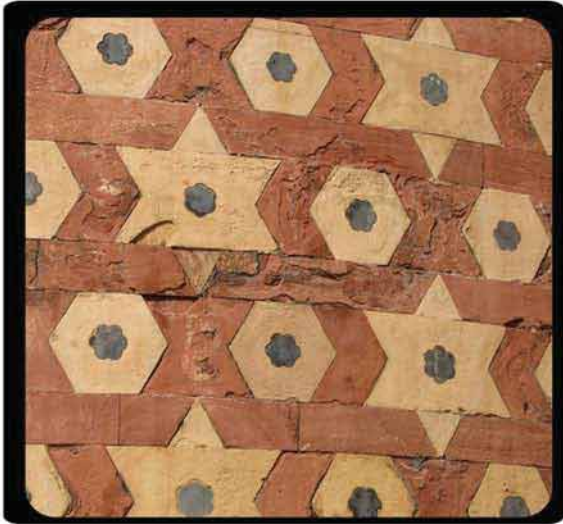
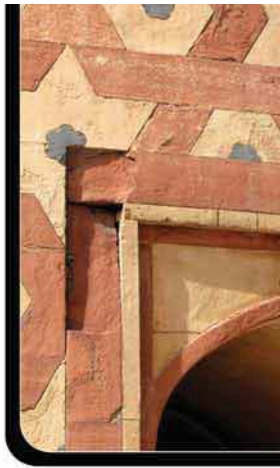
Niles Gutschow,
14th November 2009

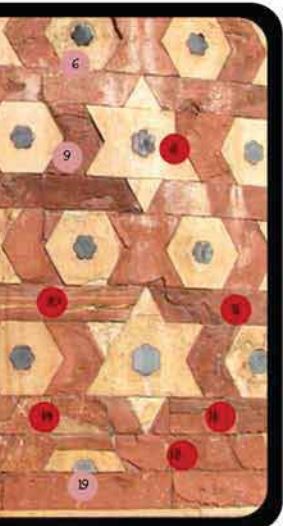
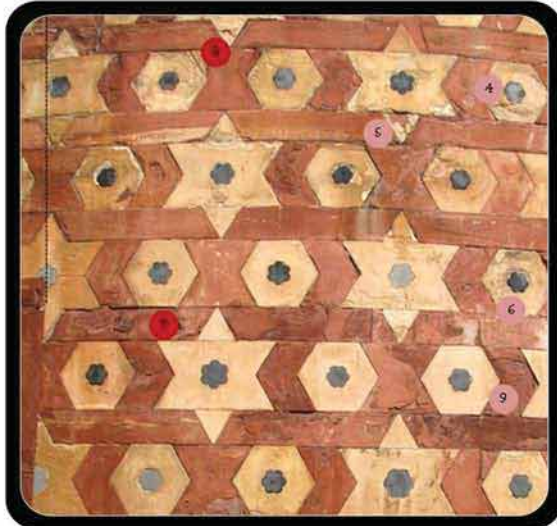
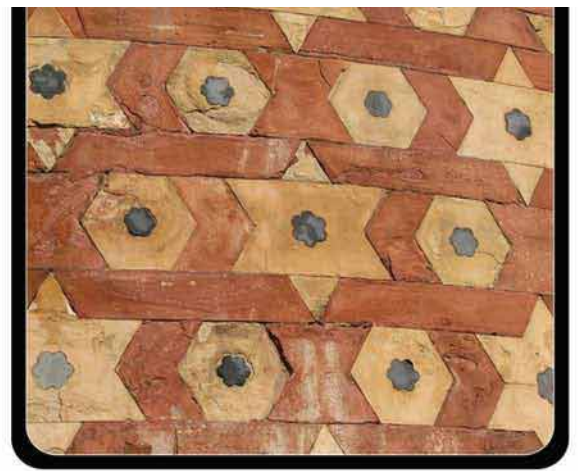


“Thank you for your heritage consciousness, your sensitivity to add a major C = COMMUNITY, to your preservation philosophy. **I am equally inspired by your sensitivity to authenticity and integrity of the site.** Please keep it up and make sure that you apply the same rigorous approach when you prepare your dossier for an extension.”

Ulabiya YAI,
Chairman Executive Board of UNESCO and
former Vice-President of the World Heritage Committee,
20th November 2009

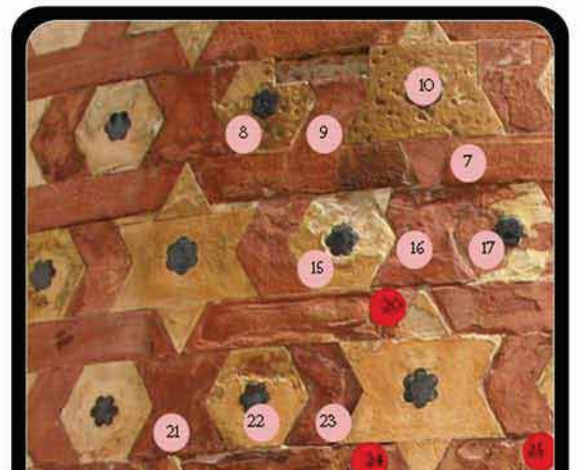






CONDITION MAPPING

An exhaustive survey, documenting each stone, has been undertaken on the neck of the dome as a precursor to conservation works. This has allowed a scientific condition mapping aimed at ensuring minimum replacement of original stonework. Any defect in stonework is individually marked out and the studies have also drawn upon the 'traditional knowledge systems' of the master craftsmen employed at Humayun's Tomb as part of the project. It is estimated that approximately 8% of the stone is required to be replaced.



CONDITION MAPPING- Lower plinth & neck of the dome

TASK:

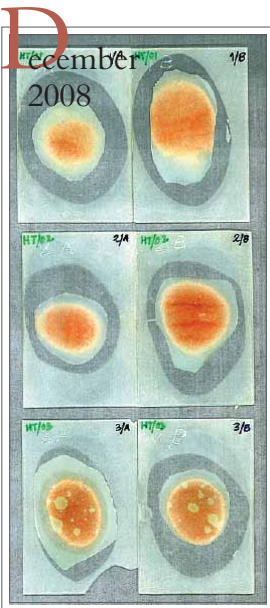
Condition mapping of individual stones

PURPOSE:

- As a precursor to any repair work and replacement of stone.
- Accurate evaluation of individual stone of the Humayun's tomb to ensure policy of minimum intervention is followed in conservation works.

ACTION TAKEN:

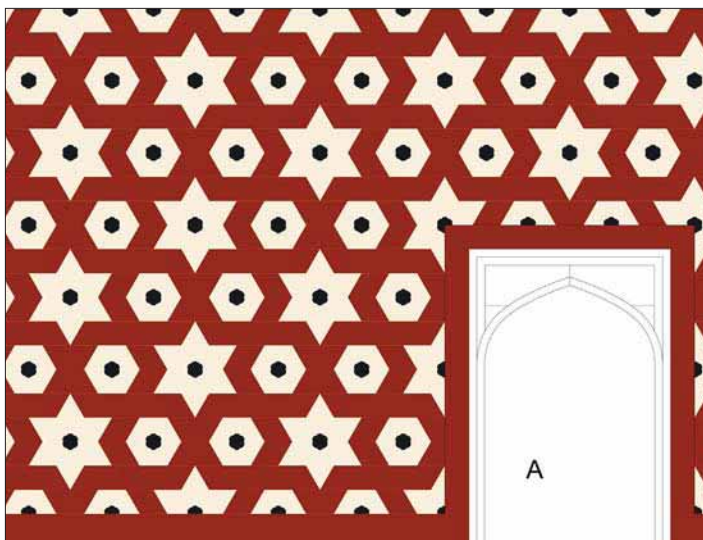
- Individual stones have been measured with High Definition Survey using 3D laser scanning data.
- The condition of the individual stones are marked on the images and on detailed drawings on 72 arches of the Lower plinth, corner canopies and the neck of the dome
- 8.5 % of the total stones are considered to be beyond repair and are proposed to be replaced with new stone. Prepared using the same tools and techniques as followed in the original construction.
- Stones to be replaced have been marked on site for evaluation, discussion and site preparation works. Each stone with ornamentation, such as the corner pilasters is individually numbered
- Stone glossary published by ICOMOS has been referred for the analysis of the stone defects present in Humayun's tomb
- A glossary of the stone defects for the Humayun's' tomb have been prepared for the further reference
- A 300+ page, A3 size report on the condition mapping has been submitted to the ASI and also discussed with independent conservation experts.



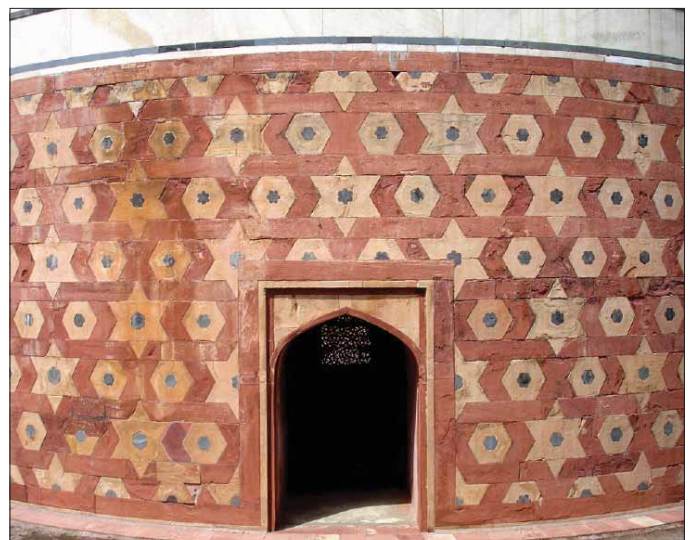
Microscopic analysis of Sandstone fragments from the tomb carried out as part of a Petrological study

NEXT STAGE:

- Condition mapping on upper external elevations, internal walls, flooring, staircase and paving.
- Repair of stonework on lower plinth to commence in early 2010



Architectural drawing of the part Surface Elevation of the neck of the dome of the Humayun's Tomb showing the decorative geometrical pattern created using sand stone.



Neck of the dome where stone conservation work is in progress.

Neck of the Dome

LEGEND:

DETERIORATION

- P FRACTURE
- EC FAIR CRACK
- SP SPLITTING

DETACHMENT

- BR BURSTING
- PB PEELING AND BLISTERING
- DL DELAMINATION
- CS CONTOUR SCALING

DISINTEGRATION

- DX GRANULAR DISINTEGRATION

FEATURES INVOLVED BY MATERIAL LOSS


- AV ACRYLIZATION
- ER EROSION
- P PITTING
- MI MECHANICAL IMPACT
- MM MISSING MEMBERS

DECOLORATION AND DISCOLORS


- BC BLACK CRUST
- BC SALT CRUST
- LC LIMB CRUST

RECENT INTERVENTIONS (BYE 2008)

- NEW STONES

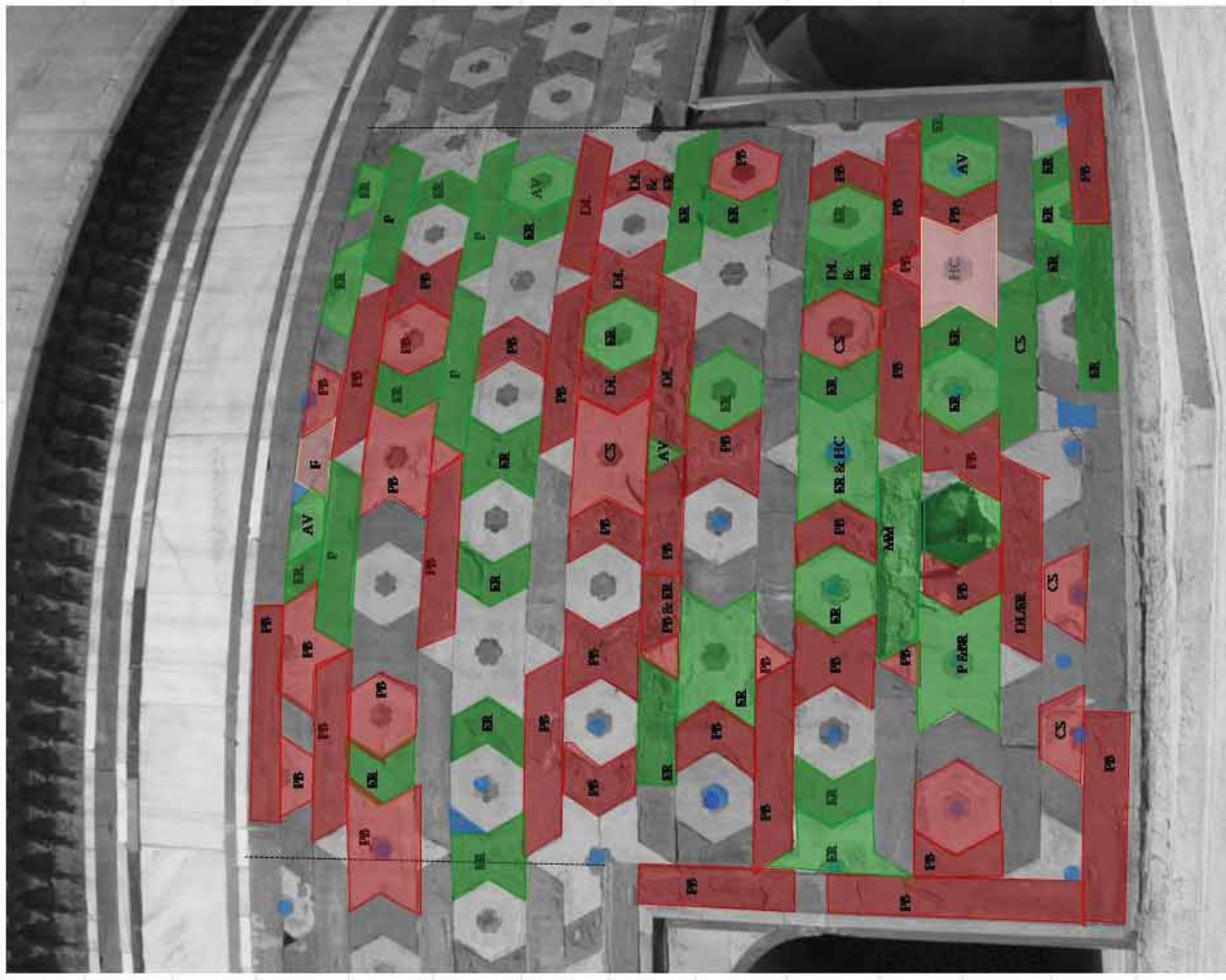


ARCHAEOLOGICAL SURVEY OF INDIA



TIBRAGA KRAM TRUST FOR CULTURE
HUMAYUN'S TOMB
HAZRAT NEZAMUDDIN DASTI
SUNDAR NURSERY
DELHI, INDIA

**HUMAYUN'S TOMB
CONDITION ASSESSMENT
LOWER PLATFORM
SOUTH EXTERNAL ELEVATIONS**



PANEL 1- CONDITION MAPPING

LEGEND:

- STONES FOR CLEANING
- STONES FOR PARTIAL REPLACEMENT
- STONES FOR COMPLETE REPLACEMENT
- AREAS FOR PLASTER REMOVAL AND REPLASTERING WITH LIME MORTAR

ARCHAEOLOGICAL SURVEY OF INDIA
UNIVERSITY OF DELHI

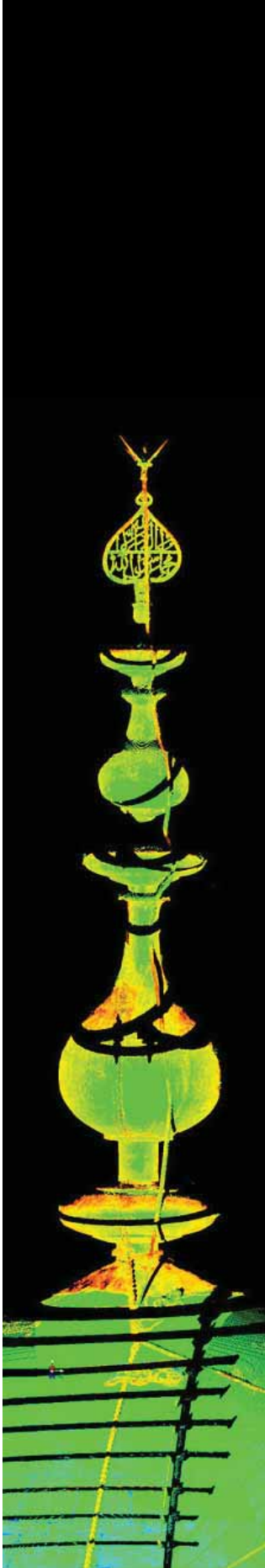
TULSI JI TRUST FOR CULTURE

HUMAYUN'S TOMB
HAZRAT NEZARUDDIN BALSHI
SUNHAR MANSARA
DELHI, INDIA

HUMAYUN'S TOMB
CONDITION ASSESSMENT
LOWER PLATFORM
SOUTH EXTERNAL ELEVATIONS

PANEL 1- PROPOSED CONSERVATION WORKS





TASK

High Definition Survey using Leica 3D laser scanning equipment

PURPOSE

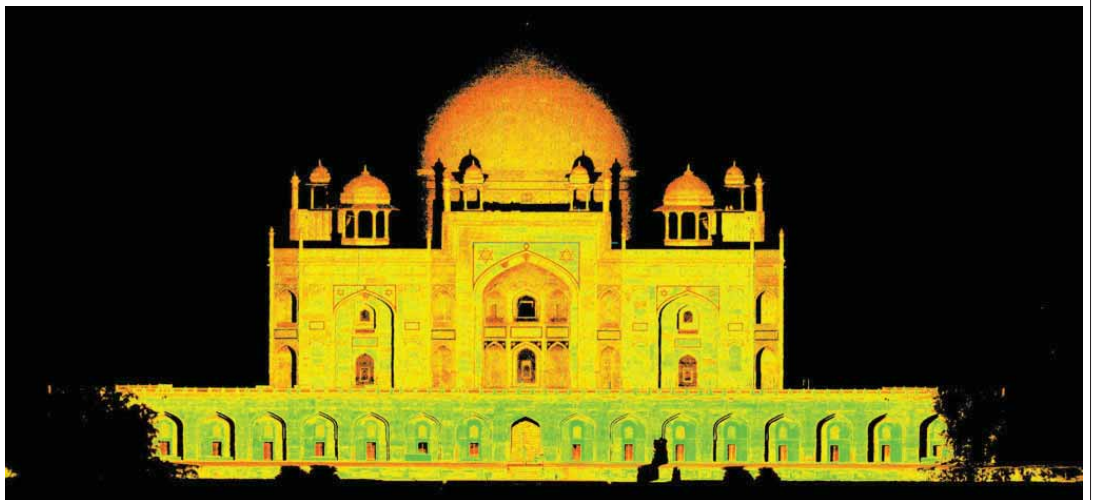
An accurate documentation of the entire Humayun's Tomb complex for conservation works, as a record and to prepare AutoCAD drawings.

ACTION TAKEN:

- All buildings in the Humayun's Tomb complex, Nila Gumbad, Isa Khan complex, Bu Halima complex, Sabz Burj have now been documented.
- All external, internal surfaces of the Humayun's tomb have been scanned, including all lower cells.
- AutoCAD drawings, using the laser scan data, have now been prepared for the Main Mausoleum including working drawings of jalties, columns, kangura patterns, chatires, lower plinth and double dome.
- These drawings demonstrate that the shape of the dome, other features at Humayun's Tomb are significantly different from those indicated in earlier drawings.
- Detailed measured drawings are prepared for North East pavilion, attached well and Eastern Pavilion.
- The documentation has also been used a training opportunity for ASI officers and Conservation professionals.

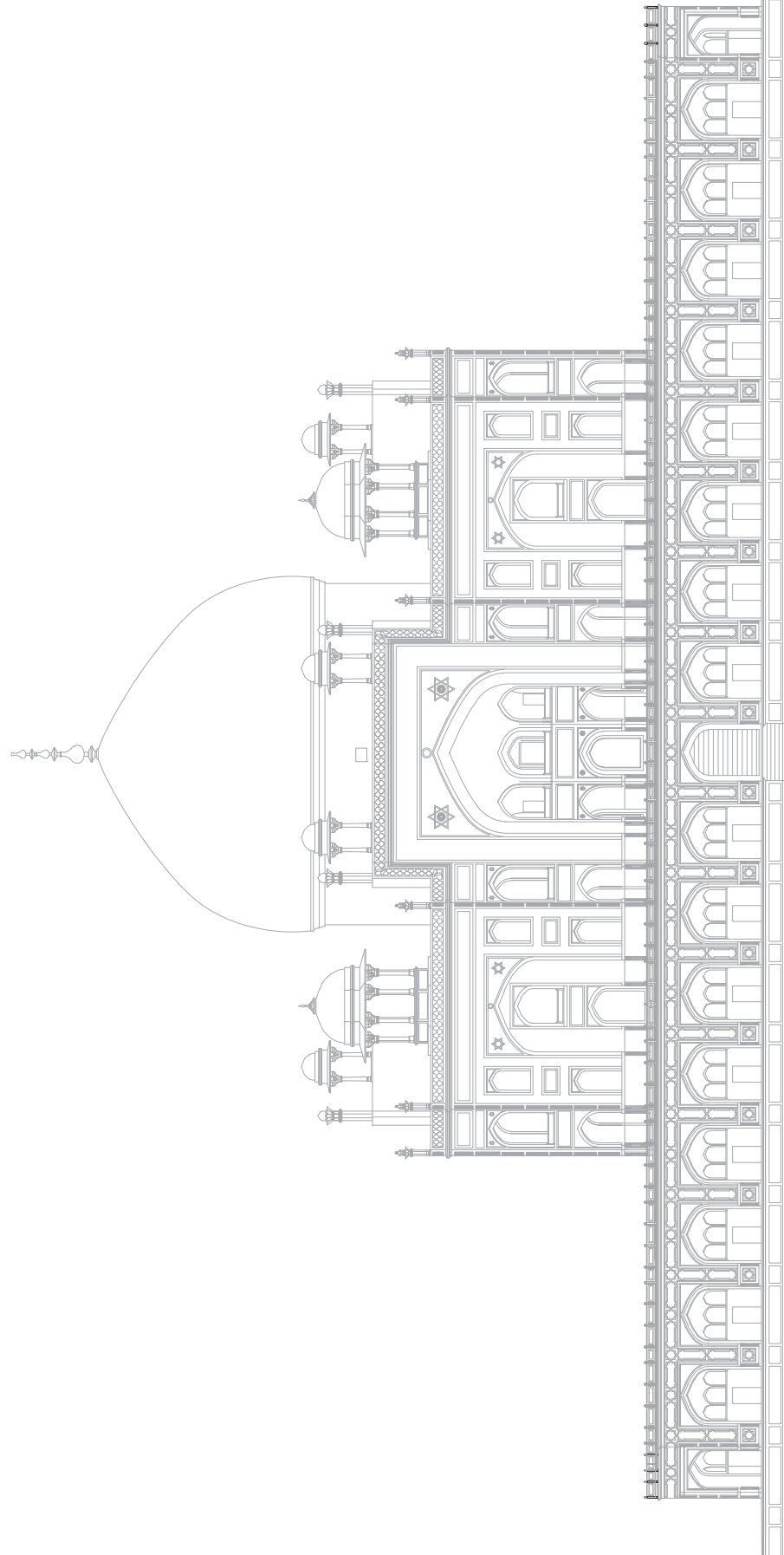
NEXT STAGE:

- Through presentations, demonstrate the accuracy and efficiency of the technology to document monument complexes.
- To suggest that the technology is adopted by the ASI, INTACH for other World Heritage Sites and significant sites in India.



3-D Laser Scanning humayun's tomb

Humayun's Tomb elevation- before laser scanning data



Restoring Lower Plinth



Restoration of the original character of 12,000 sq m plinth which is a significant interface between the mausoleum and the garden.



The DG ASI has established a Core Committee chaired by the ASI Regional Director, and its members include Director (Conservation), ASI, SA, Delhi, Cirele, ASI and AKTC Projects-Director. This core committee meets monthly.

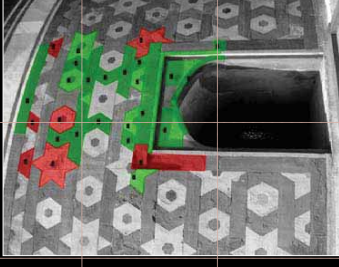
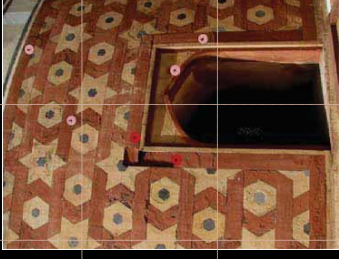
Lime Plastering in lower chambers



Fixing Sandstone door frames



Condition Mapping

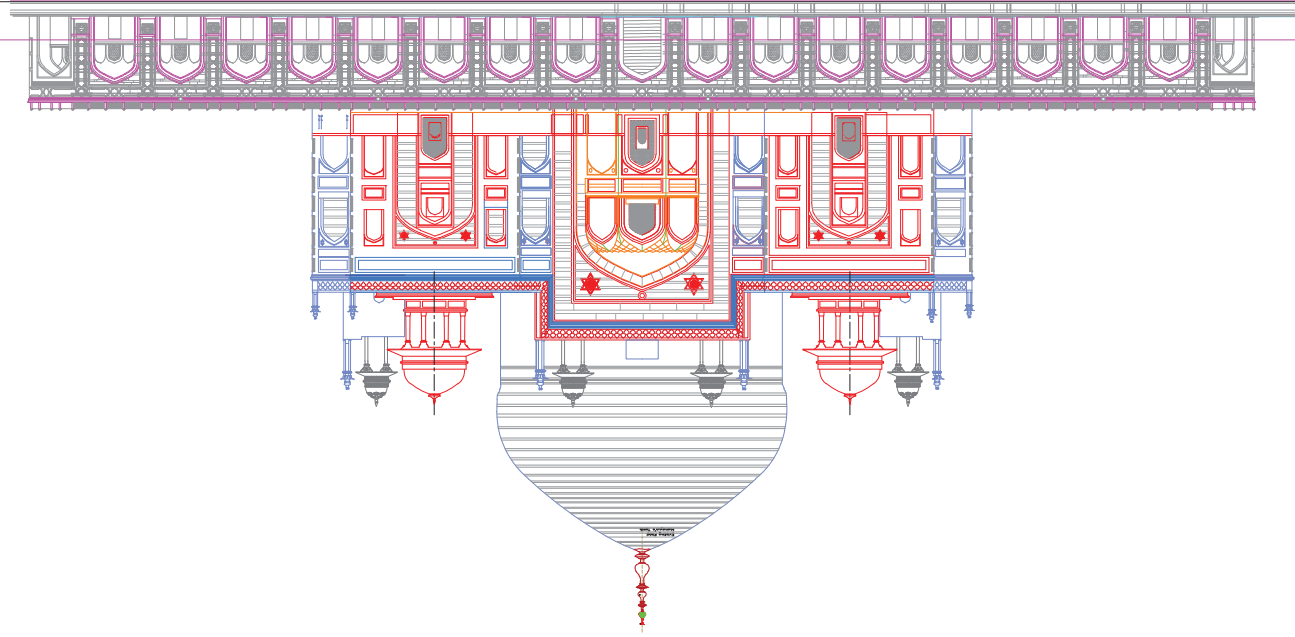


A sustained process of archival research, documentation, structural analysis, was undertaken. Prior to any works being carried out a detailed condition assessment and other scientific studies have always been carried out. For example every stone on the neck of the dome and the lower cells has been recorded and analysed, every stone.



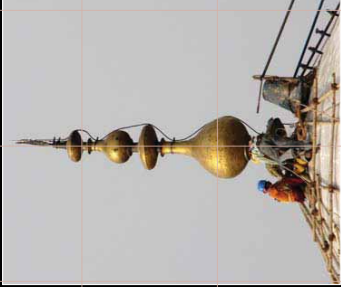
3-D Laser Scanning Humayun's Tomb

Humayun's Tomb elevation- after laser scanning data

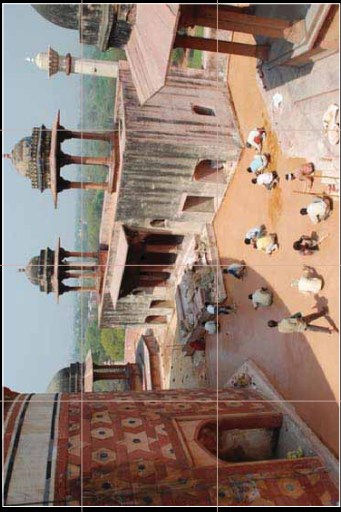


CONSERVATION WORKS 2009 in

Repair works on Roof



Lighting conductor on the final |



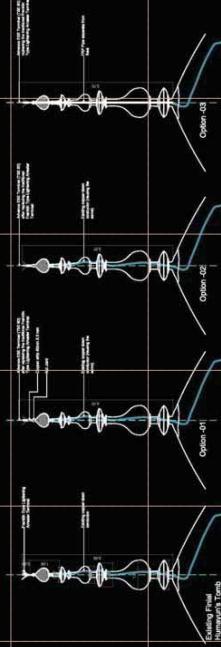
Re-terracing the roof |



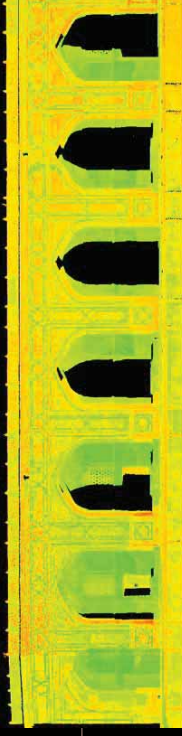
Repair works on Inner Dome |

Re-pointing of the dome

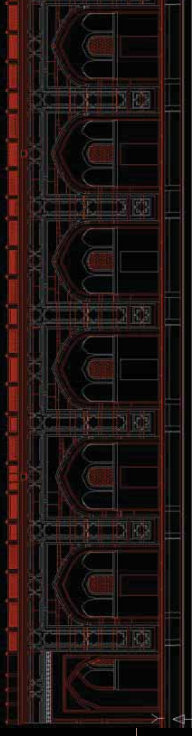
Removing over a million kilos of concrete, laid in the 20th century. The process allowed for original architectural elements to be exposed once again, allowed easy rainwater disposal which had been causing severe deterioration to stonework below and lifted an un-necessary dead weight from the building.



Laser scanning of Humayun's Tomb



Point Cloud Data of lower platform of Humayun's tomb



AutoCAD drawing generated out of the Point cloud data

The entire site, including all exterior and interior spaces have been documented using High Definition Survey techniques using a Leica 3D Laser Scanner, which has been acquired for the project. This has a 100% accuracy.



LOWER PLINTH

TASK:

Restoration of the 12,000 sq meter lower plinth

PURPOSE:

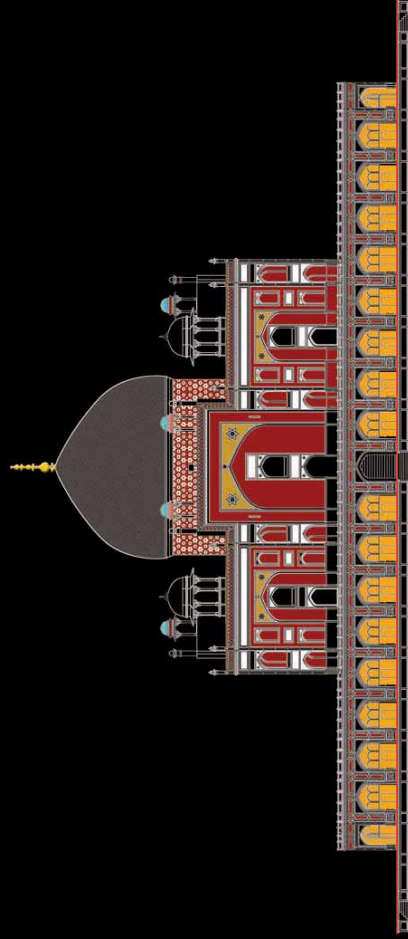
- The plinth is a significant interface between the mausoleum and the garden; the removal of concrete and re-setting of original paving blocks will significantly enhance the Outstanding Universal Value of the WHS.
- Concrete was probably laid to compensate for the unequal settlement of the stone paving, as described in early 20th century ASI records. Adding a lime concrete layer below the reset stones will ensure no unequal settlement takes place.
- A slope of 45 cm in the paving will ensure that rainwater run off is quick and does not cause any further deterioration.

ACTION TAKEN:

- Prior to commencing any works levels at 1 m intervals were taken on the whole plinth. This exercise allowed the proposed slopes to be determined.
- At the onset a small section was exposed in the North-east corner to allow discussion and debate on the best solution for the plinth.
- The sandstone edging of the lower plinth first had to be dismantled together with the removal of concrete.
- Works were carried out in sections to ensure any disturbance was easily localized and tourists could continue to visit Humayun's Tomb.
- Concrete layers form the DQ floor of the plinth have been removed using appropriate tools with out damaging the original building fabric underneath.
- Raised Cement concrete platforms were dismantled carefully. These were located underneath each water outlet to avoid any damage to the paving stones during heavy rains.
- Levels of the exposed DQ flooring was surveyed and the existing condition was analyzed to arrive at an appropriate conservation process.
- Appropriate levels were fixed and areas identified for leveling, repairs, resetting and redressing of the DQ stones.

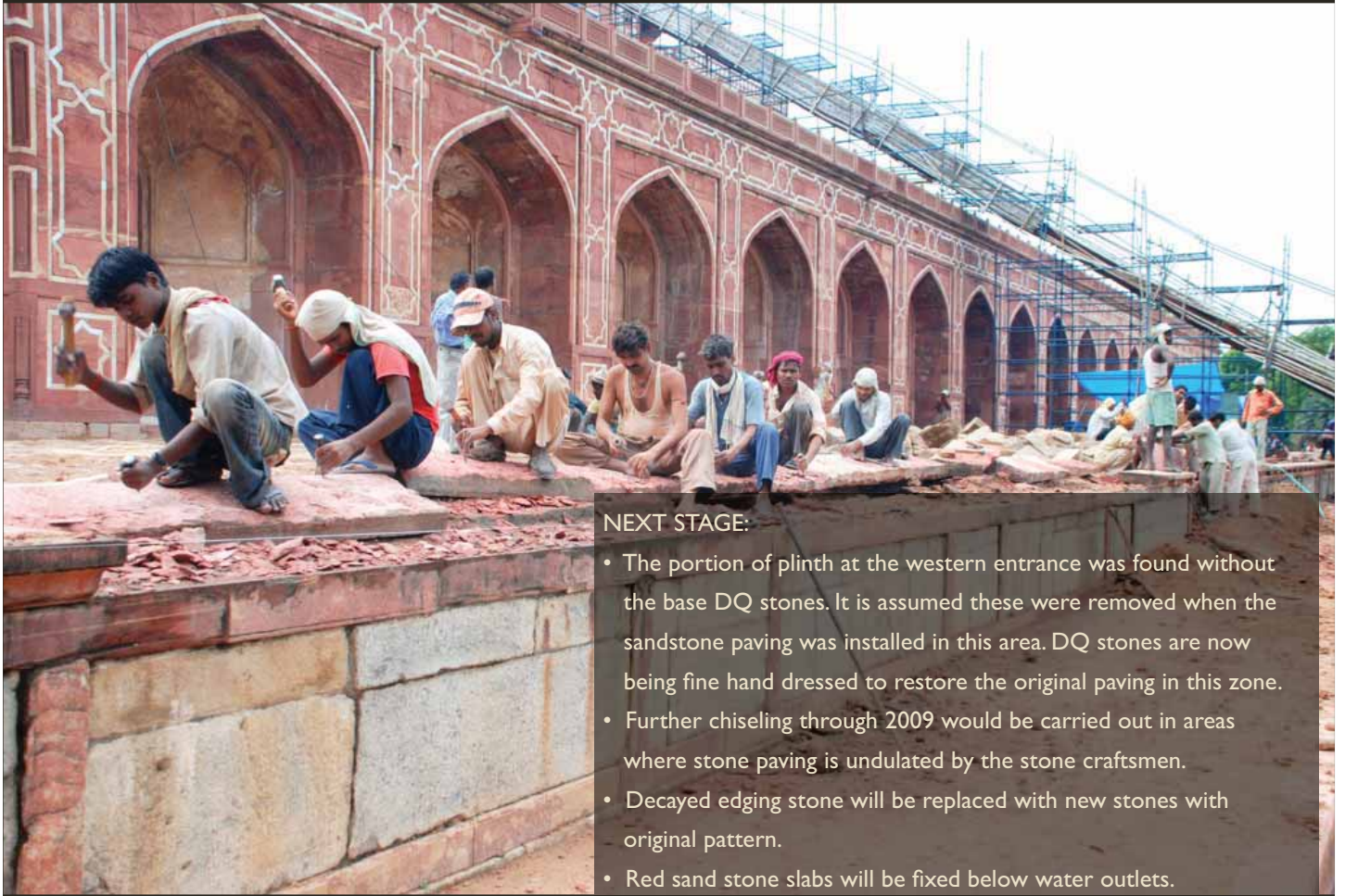


Archival pictures showing the lower plinth with the stone paving and the concrete being laid in 1956 to cover the paving, which, by then, had settled unequally



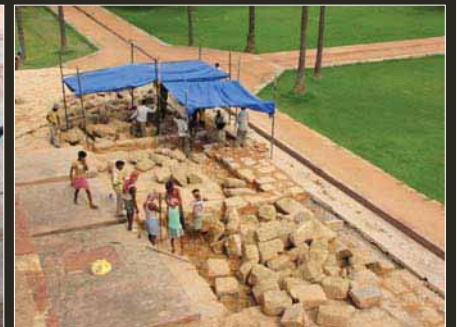
HUMAYUN'S TOMB conservation

Lower Plinth



NEXT STAGE:

- The portion of plinth at the western entrance was found without the base DQ stones. It is assumed these were removed when the sandstone paving was installed in this area. DQ stones are now being fine hand dressed to restore the original paving in this zone.
- Further chiseling through 2009 would be carried out in areas where stone paving is undulated by the stone craftsmen.
- Decayed edging stone will be replaced with new stones with original pattern.
- Red sand stone slabs will be fixed below water outlets.



In order to restore the architectural integrity of the lower plinth – an important interface between the garden and the mausoleum – it was necessary to lift nearly all of the 120,000 sq feet of heavy quartzite paving. The larger stones required over 15 craftsmen to lift and reset them in level.



Before Conservation



During Conservation



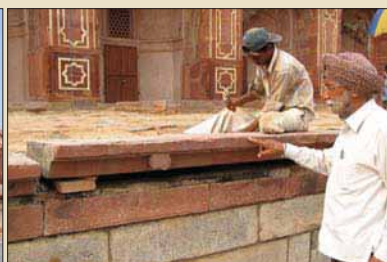
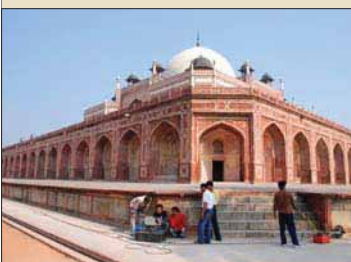
After Conservation

The unsightly concrete layer on the plinth was replaced with the original Mughal period quartzite paving, in original patterns and with a 45 cm slope to ensure quick drainage of rainwater

Restoration of the original character of this plinth which is a significant interface between the mausoleum and the garden

Lower Plinth

Before Conservation



Dr. Ebba Koch

“I am very impressed by the team’s efforts to get rid of the concrete and bring to light again the original quartzite paving of the plinth of the mausoleum, one of the most important Mughal monuments...”

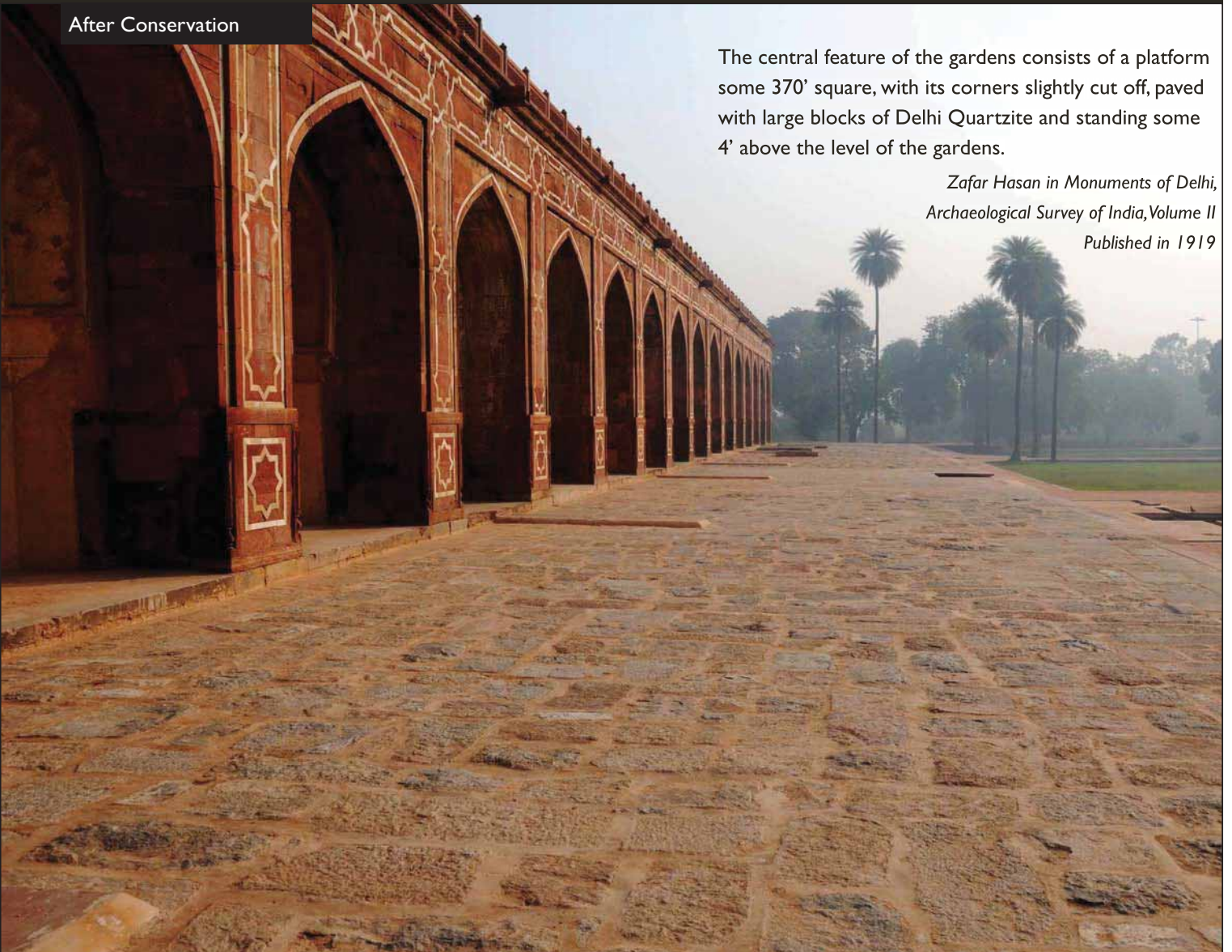
It speaks of a sophisticated hierarchical use of building materials: quartzite for the base and red sandstone and white marble for the upper elements. Moreover, quartzite introduces a specific Delhi touch into the overall red and white appearance of the building. I wish your endeavour to use original materials would be taken to heart more widely by general restoration policies in India.”

Lower Plinth

After Conservation

The central feature of the gardens consists of a platform some 370' square, with its corners slightly cut off, paved with large blocks of Delhi Quartzite and standing some 4' above the level of the gardens.

*Zafar Hasan in Monuments of Delhi,
Archaeological Survey of India, Volume II
Published in 1919*



ACTION TAKEN:

- Heavy DQ stones, weighting up to 1000 kgs were lifted up manually using belts and hand tools.
- These stones were then reset in the plinth with a lime concrete base. Some stones required to be chiseled and dressed to achieve reasonable finish and levels.
- Decayed and broken red sandstone edging stones were individually identified and marked on site and stone will be prepared.
- Stones were reset in position as per the original pattern using lime mortar.
- Where original stones were found missing, the voids were filled with similar DQ stones collected from secondary sources such as road kerbstones since the onset of the project.
- Pointing was done using lime mortar which is being rammed and cured for consolidation .
- Stone edges were hand chiseled on site to make the stone surface more suitable for the visitors.
- DQ flooring of all the four sides of the lower plinth have been restored to the original pattern.

LOWER CHAMBERS

TASK:

Lime plastering the wall surface of the 68 chambers on the lower plinth

PURPOSE:

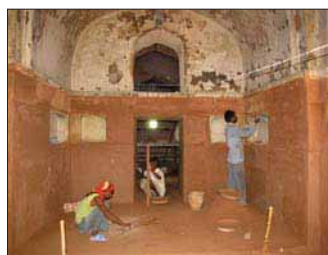
To ensure long term preservation, arrest decay and carry out much needed conservation works

ACTION TAKEN:

- Dismantling cement and decayed lime plaster works on wall surfaces of the lower cells has been completed on the eastern wing.
- Lime plastering in the internal cells on the eastern wing has been completed.

NEXT STAGE:

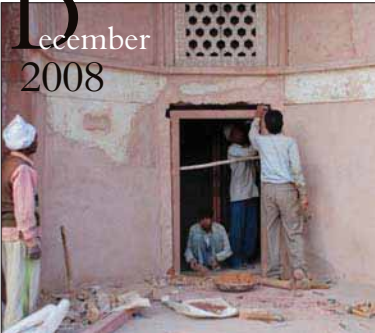
- Plaster removal from south, west and north side chambers
- Lime plastering and lime punning on internal wall surfaces on south, west and north side chambers.



With severe seepage from the terrace of the upper plinth, the lower cells have suffered significantly and require almost 100% of the plasterwork to be restored. In addition the sandstone paving on the roof of the cells will be re-laid, in 2010, in an appropriate slope to ensure no further seepage of water takes place.

DOOR FRAMES

December
2008



TASK

- To install sandstone door frames and wooden doors in the lower cells.

PURPOSE

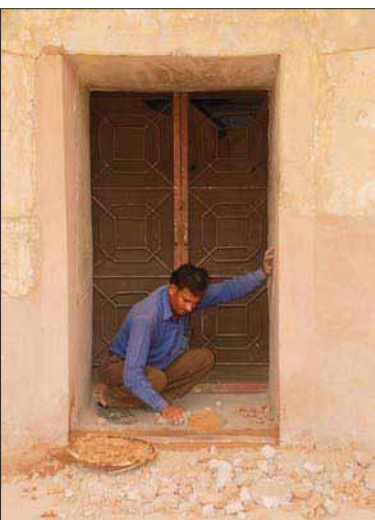
- To restore the 'dignity' and the 'spirit' of the building by removing iron doors.
- In keeping with conservation principles, restore authenticity of material by installing wooden doors and red sandstone door frames as per original pattern.

ACTION TAKEN:

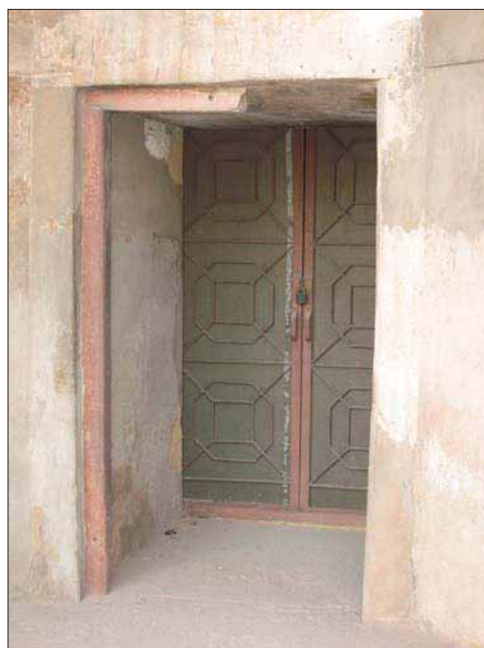
- Archival research demonstrated that the original doors were used for firewood when following Independence and Partition in 1947, the Humayun's Tomb enclosure was used as a refugee camp.
- The iron door frames installed subsequently were not only disfiguring the historic character but also damaging the building.
- Sandstone door frames have been installed in all lower cells.
- Existing Wooden door of the Humayun's tomb complex and other Mughal structures were surveyed and documented to determine the most appropriate design for the door to be fixed in lower chambers of Humayun's tomb.
- Sample wooden door have been prepared and fixed on site as per the approved design and sectional details.
- Wood has been bought and has been seasoned.

NEXT STAGE:

- Wooden doors will be prepared as per the approved design and fixed in all lower chamber.
- Following fixing of wooden doors, presently fixed Iron doors will be removed.



Sixty years after the wooden doors of the lower cells were used for firewood by refugees inhabiting the garden enclosure, these will be restored to the building. The unsightly iron doors will be removed in the process



HUMAYUN'S TOMB- ROOF PAVILIONS

TASK:

Re-terracing Humayun's Tomb roof to the original level, slope.

PURPOSE:

- To reduce the 1 million kilos of additional load over the roof by removing layers of concrete laid in the 20th century.
- To expose original architectural elements buried under excess concrete
- To allow easy disposal of rain water.

ACTION TAKEN:

- In 2008 and early 2009 over a million kilos of concrete were removed from the terrace.
- This required a cut to a depth of 20 cm and on a 1 m grid to be applied on the terrace. Followed by manual removal of concrete using chisels.
- Concrete was removed from the terrace of the four pavilions on the roof.
- On the four pavilions the underlying sandstone was also replaced/ repaired prior to installing a fresh layer of lime concrete.
- A 10 cm thick layer of Lime concrete of same proportion laid on the terrace with appropriate slopes.
- The new layer of Lime concrete was rammed and cured using traditional additives for a period of two weeks to ensure perfect setting of the finished layer
- Existing water spouts were cleaned, repaired and some of these would be replaced when works on the external façade commence.

NEXT STAGE:

Task completed.

The one million kilos concrete removed from the roof was used in the foundation of the peripheral road built at Sunder Nursery, thereby reducing pollution and minimizing cost that would have been involved in its disposal at a land-fill site.

Before Conservation

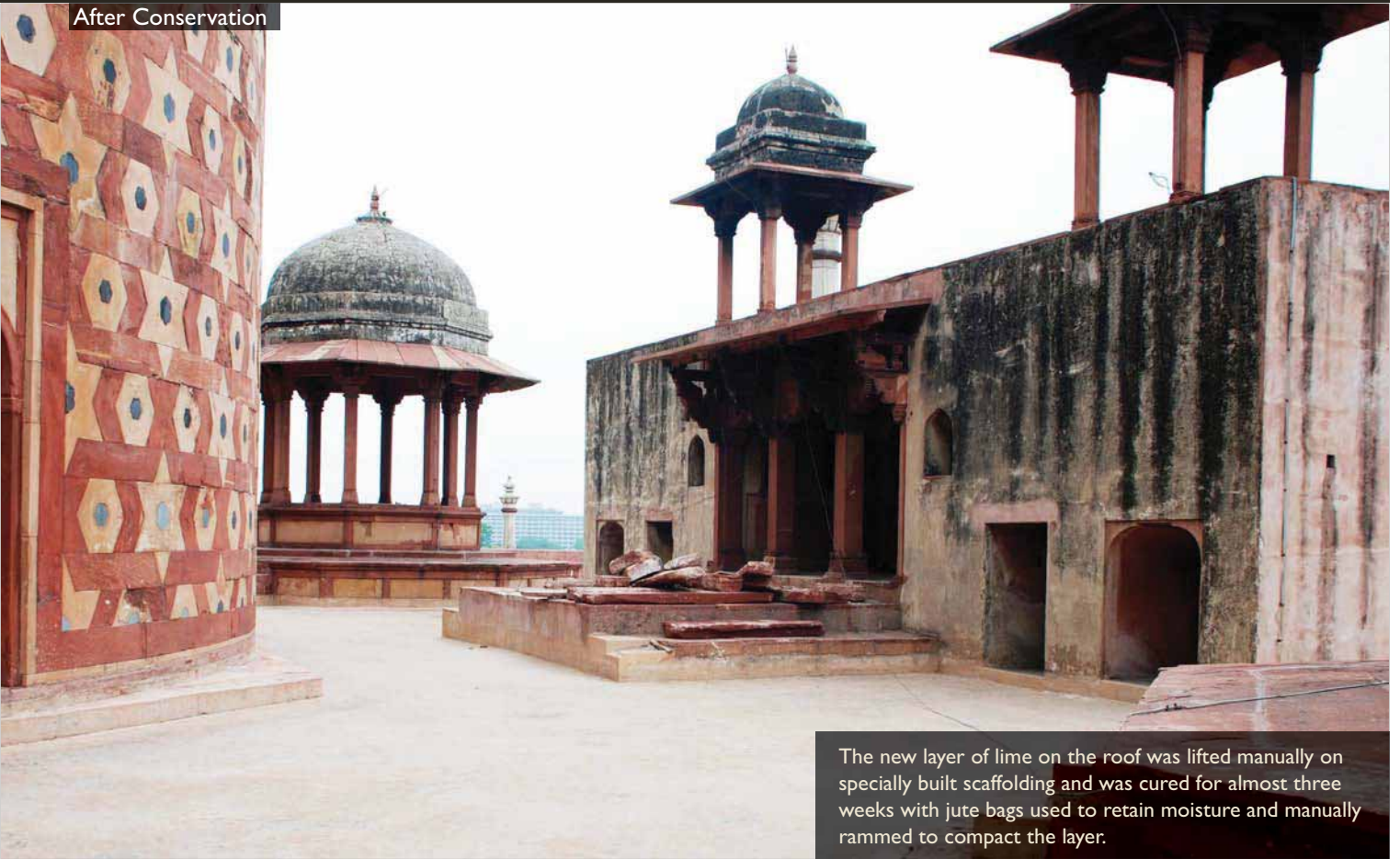


After Conservation



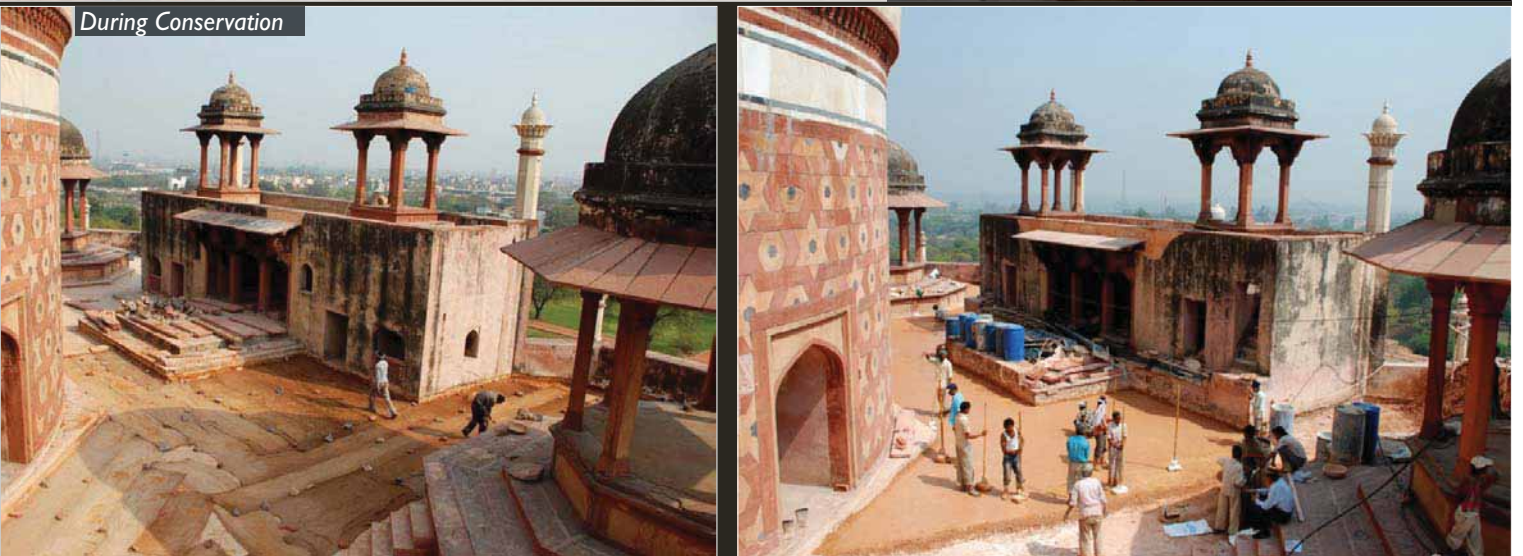
Roof & Pavilions

After Conservation



The new layer of lime on the roof was lifted manually on specially built scaffolding and was cured for almost three weeks with jute bags used to retain moisture and manually rrammed to compact the layer.

During Conservation



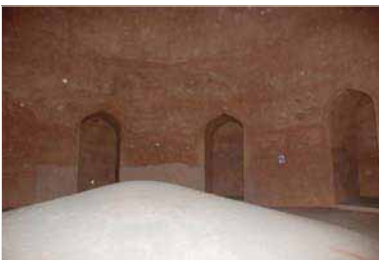
Use of traditional materials



Lifting of material to the roof



HUMAYUN'S TOMB - INNER DOME



(Top) Conservation works are being carried out on the Inner dome of Humayun's Tomb

TASK

Re-plastering inner face of outer dome.

PURPOSE

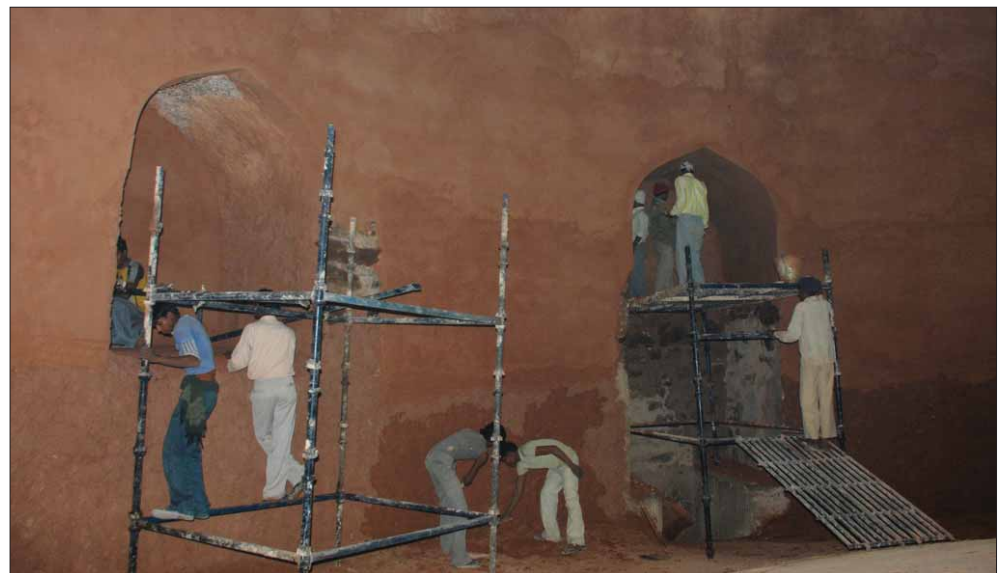
Due to prolonged water penetration the lime plaster on the inner face had almost completely been lost. Plaster serves as a protective layer and it was considered essential to restore the plaster on this surface.

ACTION TAKEN:

- Scaffolding required to be erected on the entire dome surface.
- The inner dome surface was carefully cleaned and all stone and brick joints re-pointed.
- The entire inner surface of the dome was re-plastered in lime plaster.

NEXT STAGE:

Lime wash to be applied on the internal wall surfaces.



The plasterwork on the inner face of the grand outer dome had been completely lost due to water seepage from the open joints in the marble dome. This face was replastered in lime plaster to serve as a protective layer for the masonry and the joints in the outer marble layer were carefully repointed to prevent any further deterioration

HUMAYUN'S TOMB - DOME

TASK:

Pointing the stone joints in the marble dome

PURPOSE:

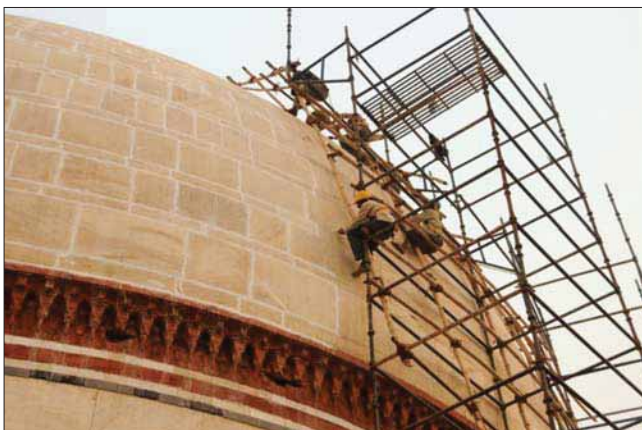
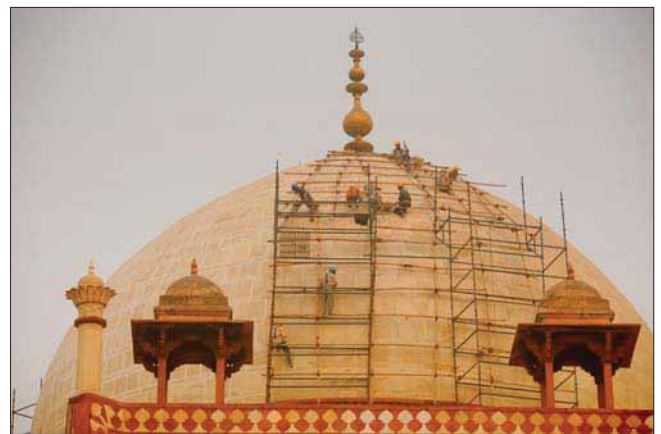
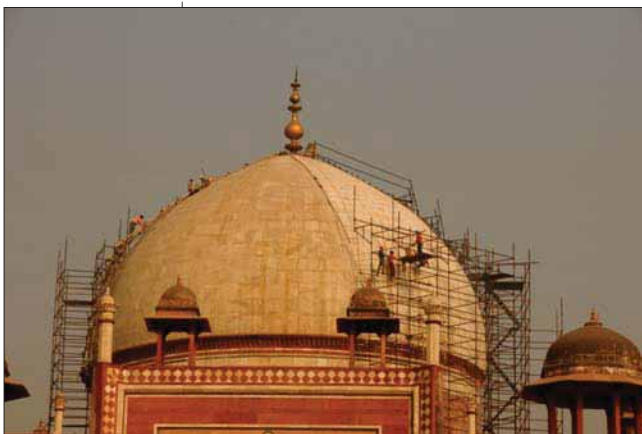
- To fill voids, replace cement pointing and ensure long term preservation of the marble and underlying surface.
- To ensure no water penetrates the marble dome.

ACTION TAKEN:

- Scaffolding were fixed around the marble dome to ensure high standards of health and safety.
- Carefully raking of the joints in stonework using fine tools and skilled craftsmen. This process included removing white cement and accumulations of dirt.
- The marbles joints were cleaned with water spray to remove dust and other deposits in preparation of pointing works
- Cavities were identified and grouting with lime slurry and traditional additives was carried out to fill the joints and consolidation of the inner masonry layers
- Masonry joints are repointed with lime mortar mixed with marble dust.
- Masonry joints are cured with water for two weeks for appropriate setting of the pointing works.

NEXT STAGE:

Task Completed



The joints in the marble dome required careful cleaning and re-filling/ pointing using a carefully prepared lime mortar – marble dust mix. Highly skilled craftsmen used fine tools to carefully remove earlier layers of cement and accumulations of dust prior to repointing

Re-pointing of Dome

During Conservation



Re-pointing of Dome

After Conservation



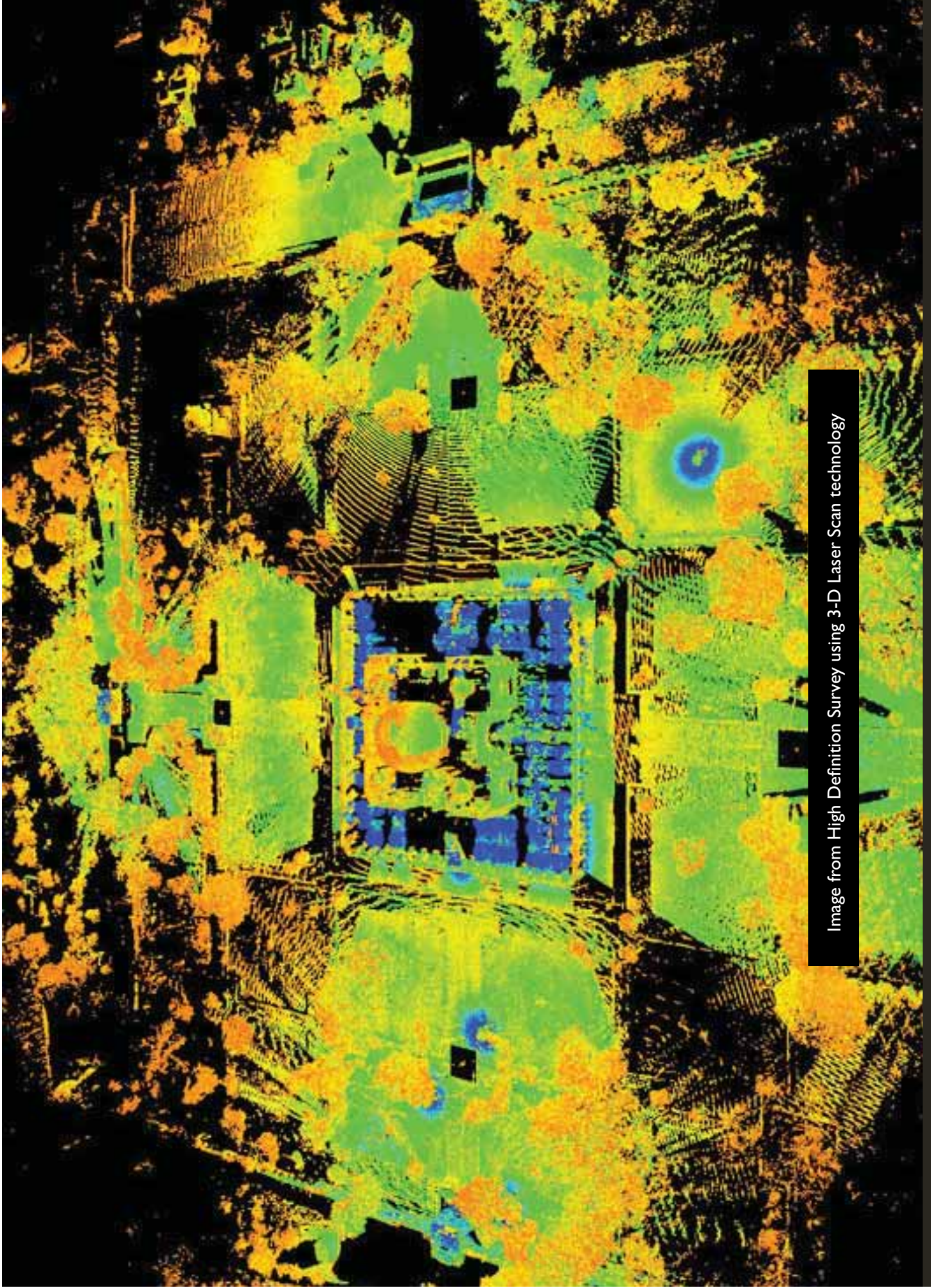


Image from High Definition Survey using 3-D Laser Scan technology

Humayun's tomb – with its Char-Bagh

Integrated database can be used to experience the 3D visualization

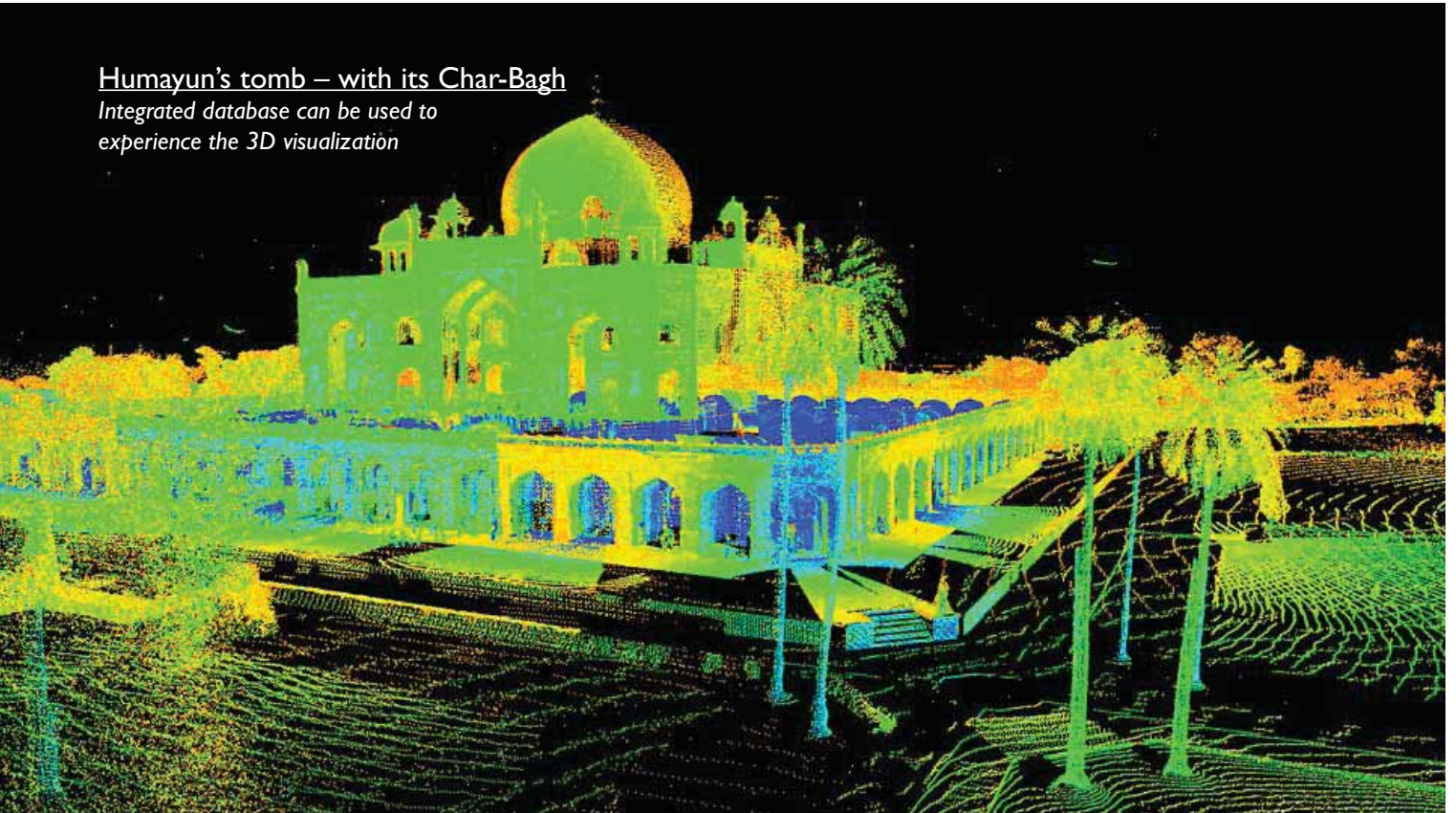
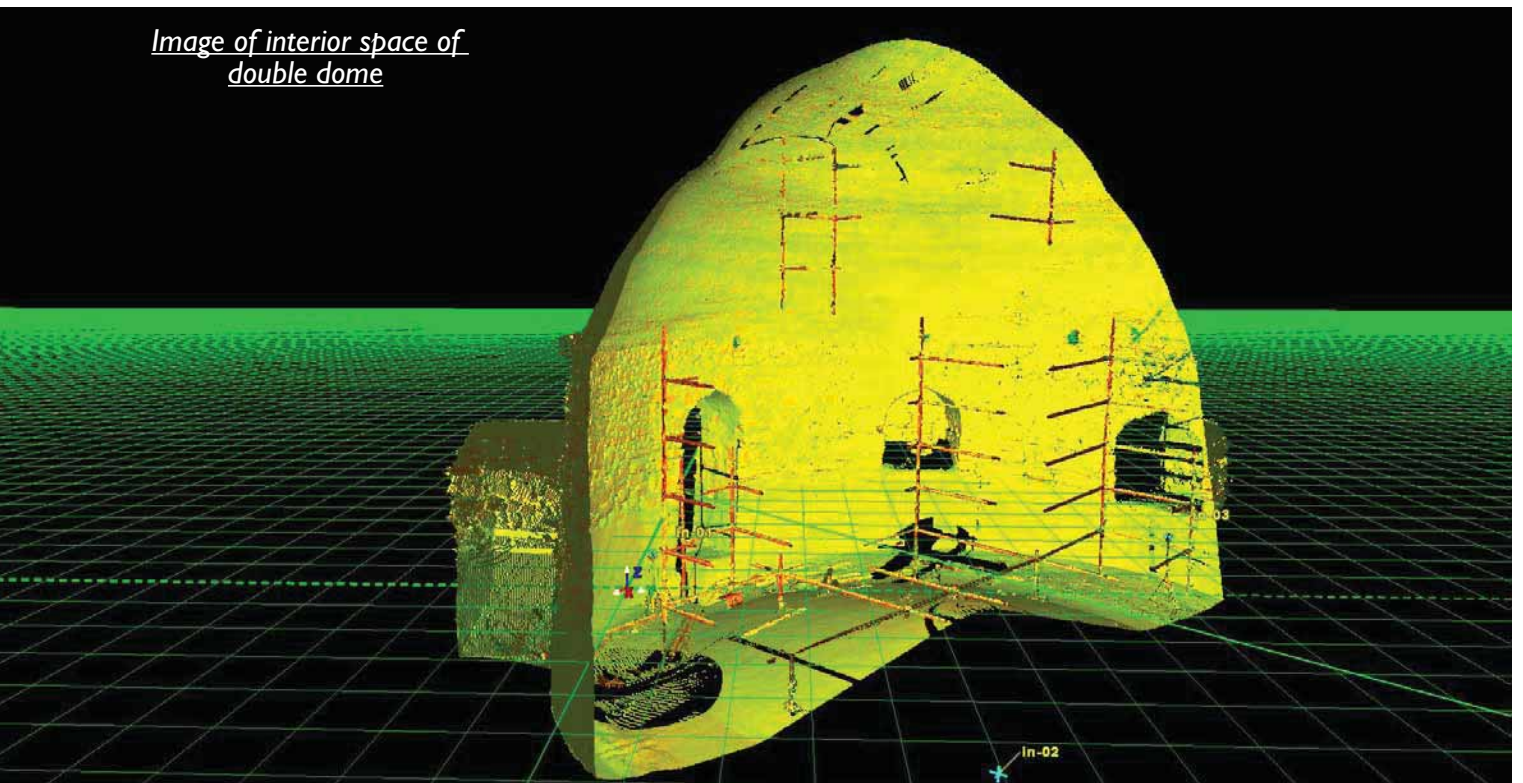
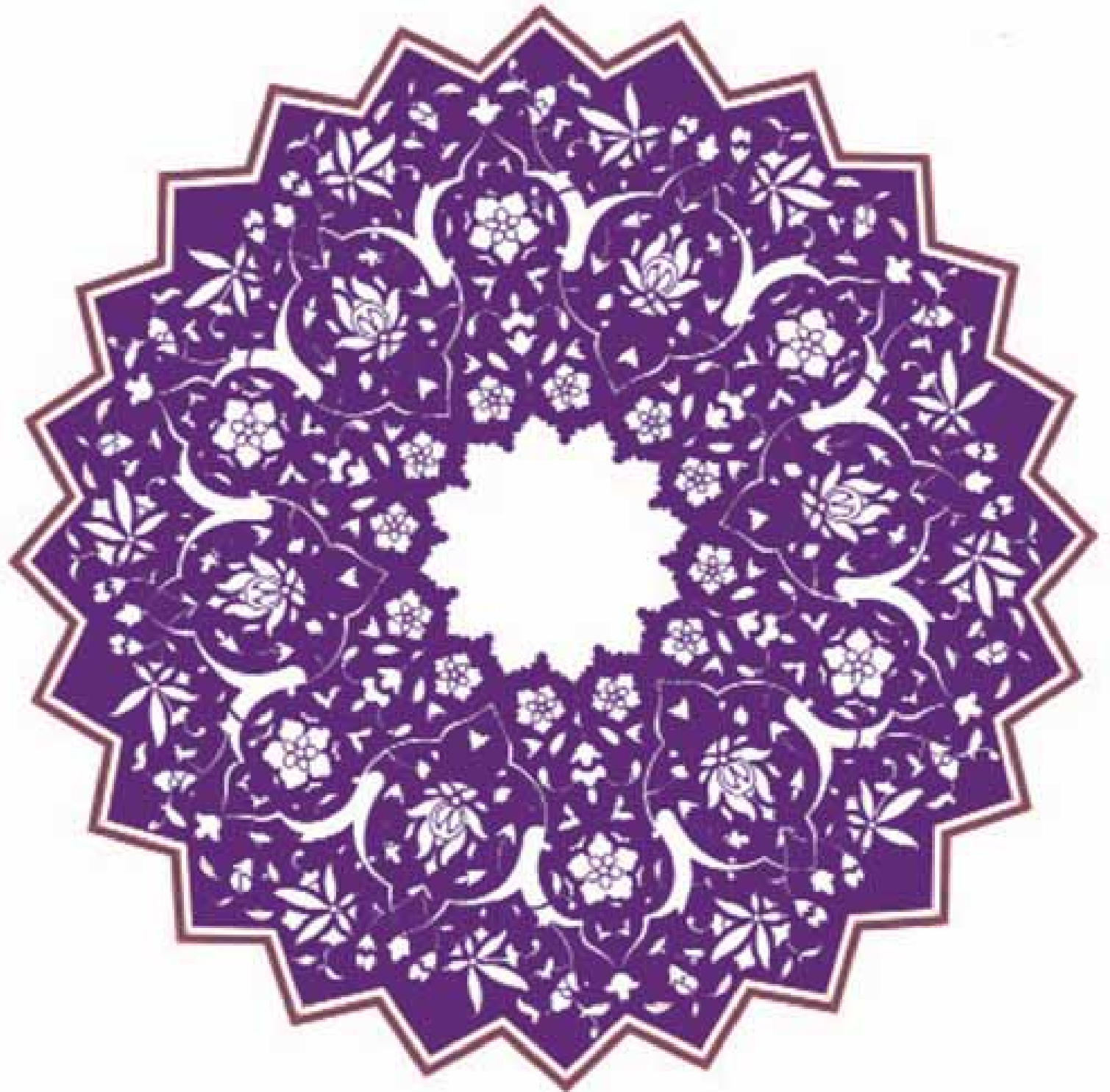


Image of interior space of double dome



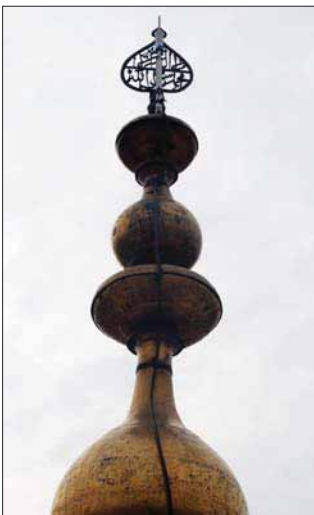


Ornamental ceiling pattern at Humayun's Tomb entrance



Architectural drawing of the ornamental ceiling at Humayun's Tomb entrance prepared using 3-D Laser scanning technology

LIGHTNING CONDUCTOR



A state-of-art lightning conductor with a 100 m range and only 20 cm high and thus not visible from ground level has now replaced the thirteen lightning conductors that were installed at Humayun's Tomb

TASK:

Fixing a state-of-art lightning conductor at Humayun's Tomb

PURPOSE:

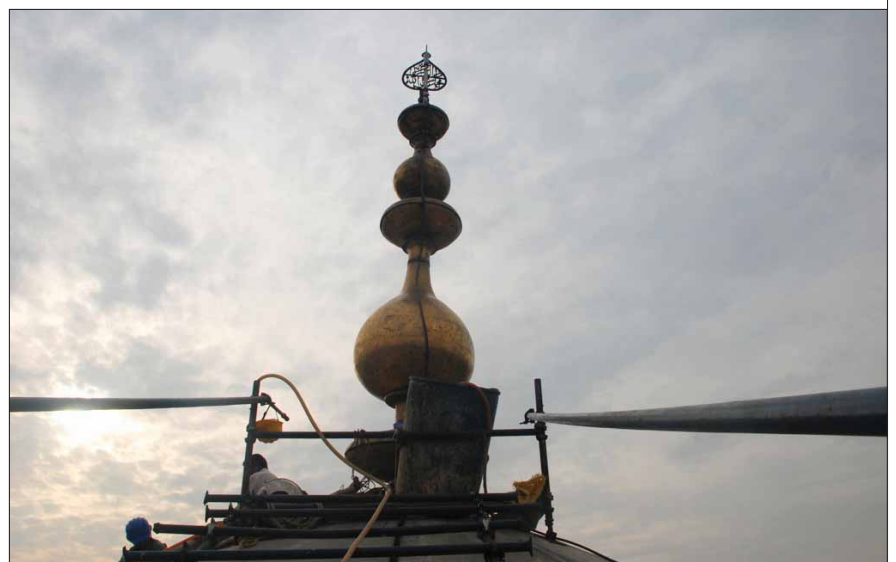
- To provide a new system which will provide advanced security against lightning.
- Minimize aesthetic damage from multiple lightning conductors/ strips
- Minimize irreversible damage caused by the over 10,000 iron nails fixed on to the stone work by the earlier system.

ACTION TAKEN:

- Archival research determined that a lightning conductor was first installed at Humayun's Tomb in 1905.
- In recent years thirteen lightning conductors were installed at Humayun's Tomb; one each on the canopies and one on the marble dome. These were Conventional Franklin style lightning conductors with thin aluminum strips. Their installation required over 10,000 iron nails.
- A study on identifying appropriate lightning conductors for the site was conducted and specifications prepared for the conductor to be installed on site.
- It was agreed that a lightning conductor with a 100 m range would be most effective for the Humayun's Tomb site.
- Visual/aesthetic effects of installing the terminal were carefully studied prior to finalizing design and installation process.
- New lightning conductors has been fixed with the finial of the dome. This is not visible from ground level and does not in any way disfigure the character. In fact removal of the 20th century conductor allows the finial to be seen as it was originally.
- Copper cables of adequate thickness, proven to be more effective have been used rather than the thin aluminum strips.
- The clamps holding the copper cable and pipes have been fixed on the holes in stonework that were made to fix the conductor in 1905.
- All thirteen of the recently fixed lightning conductors and their aluminium strips will be removed and handed over to the ASI Delhi Circle.

NEXT STAGE:

Task Completed.



HUMAYUN'S TOMB - FINIAL

TASK:

Conservation of Humayun's Tomb finial

PURPOSE:

- Preservation of the 6 m finial standing at a height of 27.5 m is a very significant building element and at heavy risk of deterioration due to exposure to the elements.
- Carrying out required routine repairs to the finial which is generally inaccessible for repair works.

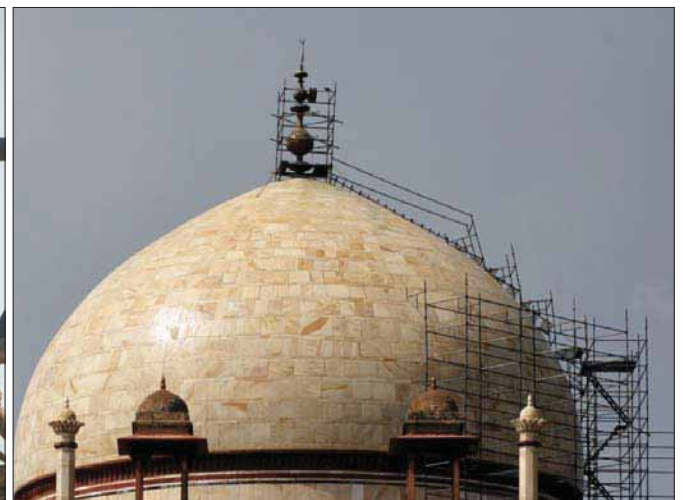
ACTION TAKEN:

- Repair works to the finial were commenced together with the fixing of the lightening conductor when the inaccessible finial was discovered to be in a poor state of preservation with portions coming loose.
- Detailed condition assessment was carried out to establish required conservation works
- Joints in the metalwork that had opened up were sealed and any openings that would allow water to permeate were repaired.
- Metal surfaces was cleaned to expose the original gold plated finish of the finial.

NEXT STAGE:

Task Completed

The six meter high or two floor high finial with gold finishing had come loose and the copper elements required refixing and their joints sealed



NORTH WELL

TASK:

- Conservation of North well, Humayun's Tomb.
- To de-silt the principal historic well at Humayun's Tomb.

PURPOSE:

Ensure structural stability and continued use Consolidation of the well which was the main source of water to the Mughal garden.

ACTION TAKEN:

- The cement layer of the internal wall is removed and re-pointed with lime mortar
- The wall surfaces was consolidated using lime grout wherever cavities were found
- The ground surrounding the well, on its north-western side caved in during heavy summer rains thereby creating a 30 foot cavity.
- This collapse of ground threatened to lead to a collapse of the well itself and in the hours following the collapse consultations were held with all concerned officers and engineers.
- The caved-in area was filled with a mix of lime concrete and earth to provide immediate support to the outer well walls, the foundations of which were exposed.

NEXT STAGE:

De-silting works and conservation works are to be completed in 2010.



Conservation works on the great north well of Humayun's Tomb were very risky owing to the caving-in of the surrounding ground. Emergency conservation works carried out will need to be followed by a lengthy conservation process that would include stitching of cracks and repairing the wooden piling in the foundations of the well



BARADARI

TASK:

Conservation of Baradari (East pavilion), Humayun's Tomb enclosure

PURPOSE:

- To restore the architectural character and historical significance of the pavilion.
- To carry out works to reverse the deterioration process caused by water penetration from the roof and damp rise.

ACTION TAKEN:

- Documentation and condition assessment of the building has been carried out.
- The red sandstone band at plinth level had deteriorated beyond repair and is being replaced by new stones.
- Scaffolding to clean original plasterwork and remove cement plaster has now been erected
- Layers of soot and pollutants have been cleaned from the façade.

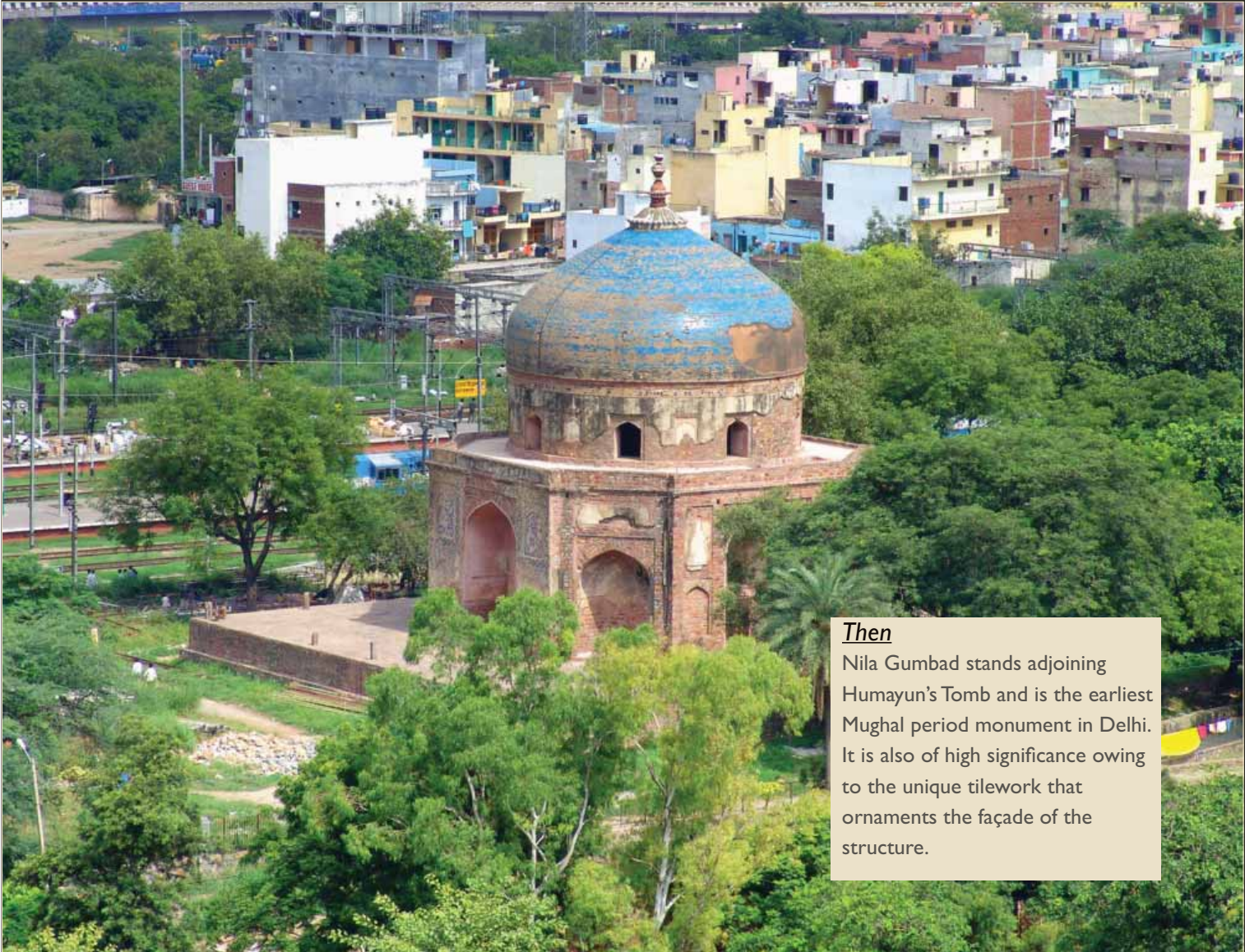
NEXT STAGE:

- Exposed loose stone masonry of the pavilion and the underground passage leading to the river will be consolidated and repaired as a precursor to re-plastering.
- Decayed lime concrete on the terrace will be replaced with new lime concrete with adequate slopes to ensure quick disposal of rain water.
- Red sandstone water spouts will be provided.
- Decayed stone slabs will be replaced with new stone to ensure long term structural stability.
- Internal and external wall surfaces will be cleaned to removed algae, lime wash layers, graffiti and dust deposits
- Kangura pattern on the external wall and internal wall will be repaired and restored where missing.
- Lime plaster and lime punning will be carried out in external and internal wall surfaces
- Red sand stone frames will be provided in openings of the pavilion.



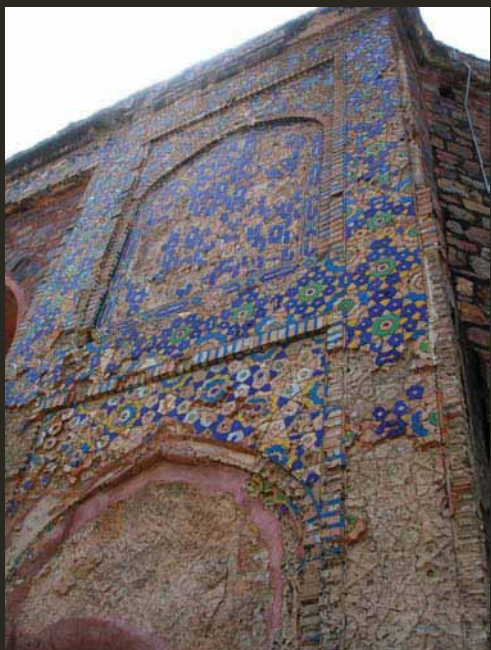
The East pavilion of Humayun's Tomb requires careful and painstaking conservation works to restore the dignity and architectural integrity of the structure. Works include replastering the structure, restoring missing stonework, especially at the plinth and re-installing the wooden doors. The concrete on the terrace will also need to be replaced as has been done on the Humayun's Tomb roof

Nila Gumbad



Then

Nila Gumbad stands adjoining Humayun's Tomb and is the earliest Mughal period monument in Delhi. It is also of high significance owing to the unique tilework that ornaments the façade of the structure.



NILA GUMBAD

TASK:

Conservation and Landscape development of Nila Gumbad

PURPOSE:

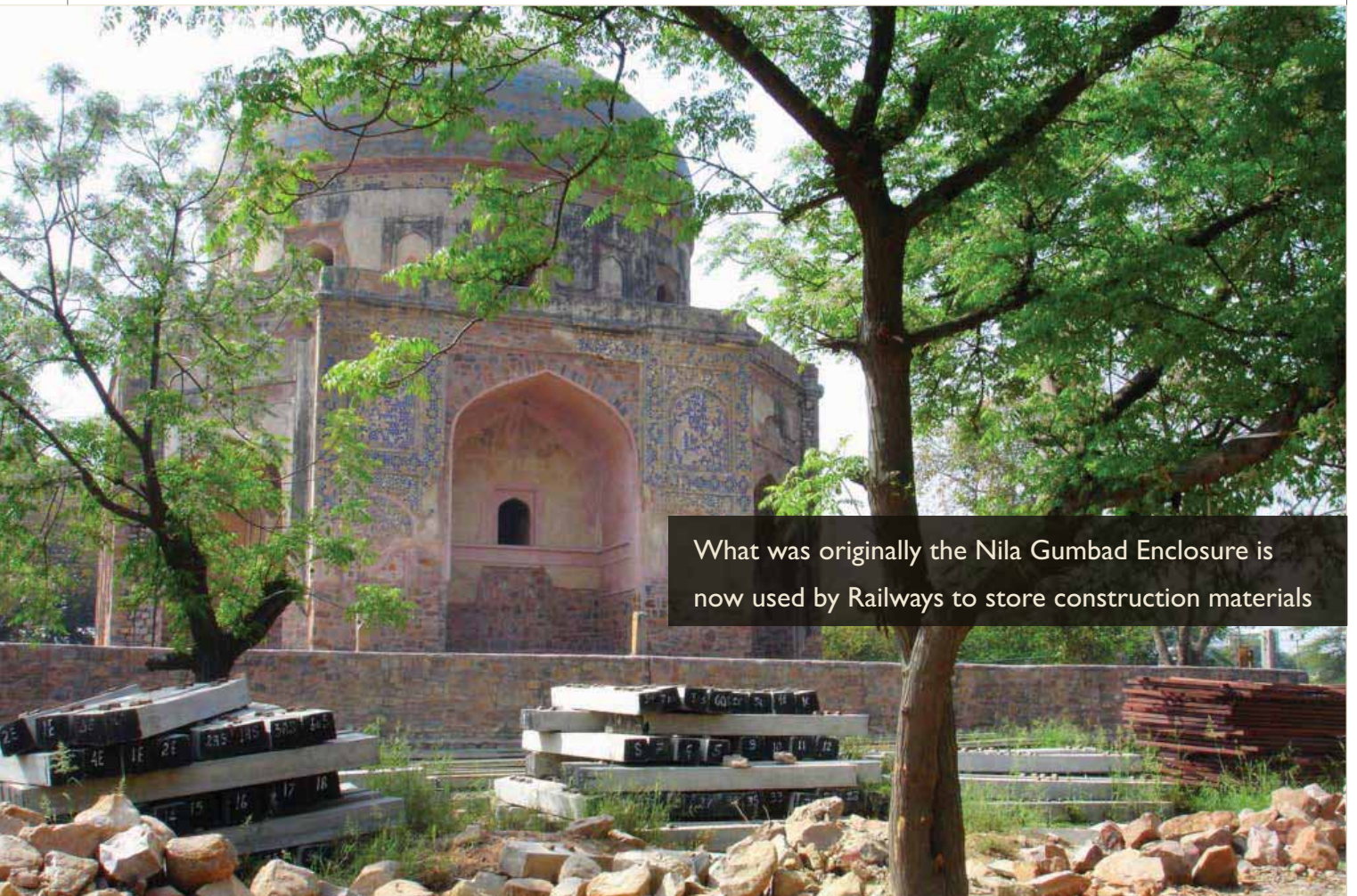
- Nila Gumbad is one of the earliest Mughal period monuments in Delhi. Originally accessed through Humayun's Tomb it is proposed to restore access for visitors to Humayun's Tomb.
- Implement a sensitively designed landscape scheme in the World Heritage Site buffer zone.

ACTION TAKEN:

- Landscape proposal for the area was submitted by ASI to Northern Railways in 2007 for approval.
- The proposal includes relocating the road presently bifurcating the Nila Gumbad Humayun's Tomb sites to east of Nila Gumbad. This will also allow vehicular access to Nizamuddin station – necessary for goods movement.
- The original arcade of Nila Gumbad was discovered in 2008 and carefully conserved.
- Railway permission to implement the landscape scheme is still pending. The monument is used by the railways for dumping railway sleepers.

NEXT STAGE:

- Following permission from the railways, implement the landscape scheme, that in keeping with UNESCO regulations will allow the creation of an adequate buffer zone around the World Heritage Site.





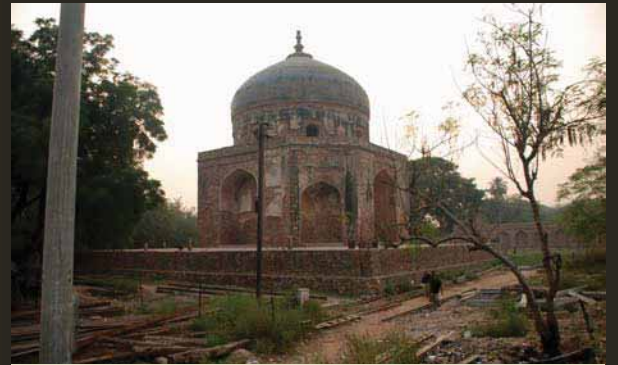
Now:

Unfortunately, after being segregated from the Humayun's Tomb complex in the 1980's by the construction of a road, on ASI land, the monument has suffered much neglect and vandalism. ASI's efforts to relocate several hundred squatters from the monument in 2003-4, at considerable expense, have given some relief. In order to carry out conservation works aimed at restoring the dignity of this extremely significant building and to allow an extension of the Humayun's Tomb World Heritage Site to include the Nila Gumbad, it is necessary to include adjoining areas within the protected limits of Nila Gumbad

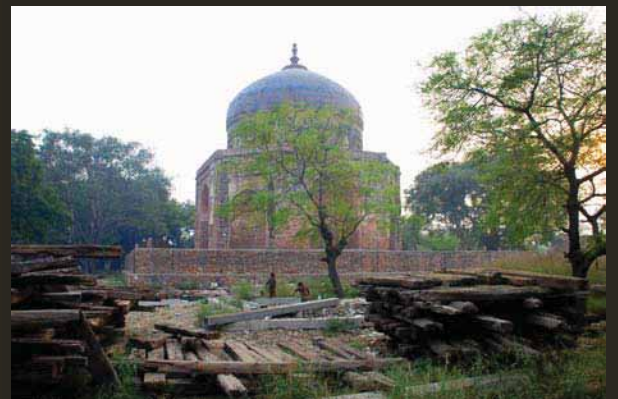
Nila Gumbad environs



Existing road segregates NilaGumbad from Humayun's Tomb



Monument area using as dump yard by Railways



Nila Gumbad originally stood within a char-bagh, remnant of which have been recently discovered and stand beneath area used for storage by railways





As an integral part of the ongoing conservation initiative, several training programmes and workshops have been jointly organised by ASI and AKTC. Over 100 officers of the ASI, from all parts of India, have attended training in the preparation and use of lime mortar and high definition survey of historic buildings using 3-D Laser scanning technology. These workshops also give an opportunity to participants to understand mutual problems and concerns and learn from solutions used in varying context. The project has also been used as a platform for training of conservation professionals and craftsmen.

CONSERVATION TRAININGS



■ Tile workshop

■ Lime workshops

■ Stone craftsmanship



TILE WORKSHOP

TASK:

International workshop sessions on 'Conservation of Humayun's Tomb tilework' as part of the UNESCO-ASI workshop on "Conservation and Management of Persian, Timurid and Mughal Architecture"

PURPOSE:

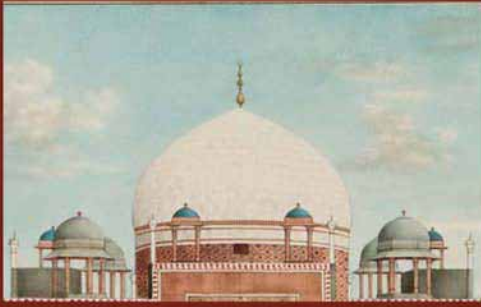
To discuss and debate, in a wide international forum, possible solutions for conservation of tiles on Humayun's Tomb canopies, including restoration of missing tilework.

ACTION TAKEN:

- Two days of interaction at the Humayun's Tomb and Sanskriti Kendra was hosted by AKTC, for participants to the week long UNESCO – ASI workshop.
- 40 participants from nine tile producing countries of (Afghanistan, Bangladesh, India, Iran, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan and Uzbekistan) participated in the workshop.
- Discussions and presentations for these sessions were focused on the following themes:
 - a) Causes for deterioration of glazed tiles
 - b) Contemporary methodologies for producing glazed tiles and comparison with historic recipes.
 - c) Results of scientific testing (carried out at Oxford, Roorkee, Barcelona for the tiles from Humayun's Tomb) and analysis of historic tiles and their contribution to the revival of the craft, where applicable
 - d) Conservation philosophy for the conservation of glazed tiles.
- Participants also shared films and samples of tilework from their own region.
- A special session was organised on site to focus on the challenges of conserving/restoring glazed tiles found in many monuments of the Mughal period.
- After presentations on the project, on analysis of tile work by Mr. Manager Singh, Documentation of tile work (AKTC), presentations by Iranian, Uzbek and Afghan participants, the following recommendations were made:
 - On some buildings ornamental tile work is a significant architectural element, the loss of which disfigures historic architectural character/ integrity.
 - Conservation of existing tile work should be a priority at all sites and efforts should be made to minimize any further loss of tiles. At Humayun's Tomb the later layers of cement plaster, lightning conductors fixed on to tile work will be carefully removed.
 - Scientific testing of historic tiles will be carried out with recourse to all available technology. Tests would help in understanding the composition and possibly firing temperatures etc – required to reproduce tiles to match the original.
 - Historic tile work should not be removed, even if the glaze has disappeared. The body of the tile is equally significant.
 - Any new tile work that will be used to replace missing tile work should match the original in colour, texture, composition and other physical and chemical properties. However, if with minor modifications, longer lasting glazes and tiles can be produced, this is acceptable.
 - Any new tile work should respect the original patterns and no conjecture should be employed in any restoration of tile work.

NEXT STAGE:

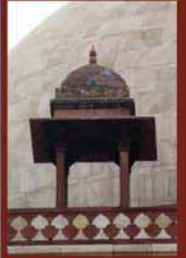
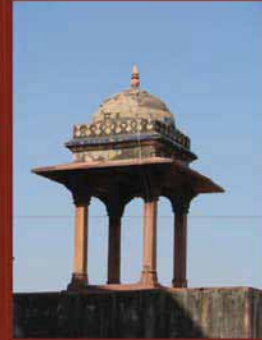
- To set up a tile kiln at Humayun's tomb complex and start to produce tiles that match the original in physical and chemical properties.
- To fix tilework on two canopies on an experimental basis.



Archival painting of Humayun's Tomb showing the blue glazed tile on the chattris.

CONSERVATION OF ISLAMIC GLAZED TILES OF HUMAYUN'S TOMB

Glazed tiles, were used to cover the small canopies that stand in front of the grand white marble dome of Humayun's Tomb. This dash of blue (though yellow, green and white were also used in small quantities) against a white background was obviously a significant design element of the original builders. Though these tiles have mostly been lost the present conservation initiative will use available information and advanced scientific technology to restore these tiles and in turn the original design intention



Remnants of glazed tiles on the chattris of Humayun's tomb is still visible

Archival research

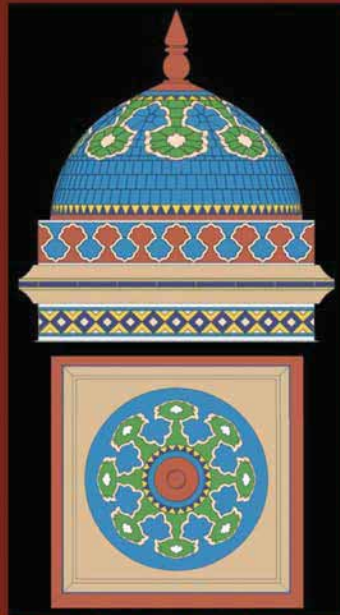
Archival research was carried out to collect relevant published and unpublished historical and scientific data on Islamic glazed tiles from books, journals, articles, past studies etc.



Humayun's Tomb
Hazarat Nizamuddin Basti
Sundar Nursery

Urban renewal initiative

A Public-Private Partnership initiative of Archaeological Survey of India
Municipal Corporation of Delhi - Central Public Works Department
Aga Khan Foundation-Aga Khan Trust For Culture



Documentation and condition mapping

Precise documentation of the existing tile work was carried out on eight of the chattris of Humayun's tomb. The colors, patterns and fixing details of the existing tiles were recorded on the drawings. Existing remains of tiles provide enough proof to ascertain the original design and colour combinations of individual chattris. Condition assessment of individual tiles were carried out to identify possible causes of deterioration/loss through *in situ* examination. Manufacturing defects, physical damage and surface alterations were noted.



Tiles are used to ornament and protect several buildings within the project area and it is now proposed to set up a kiln to produce tiles for conservation works



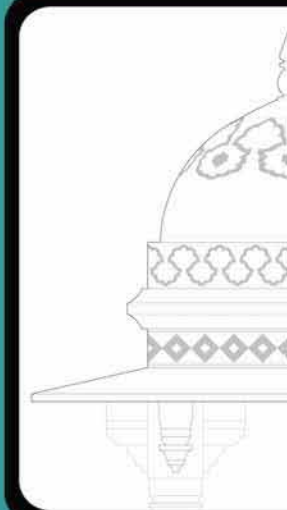
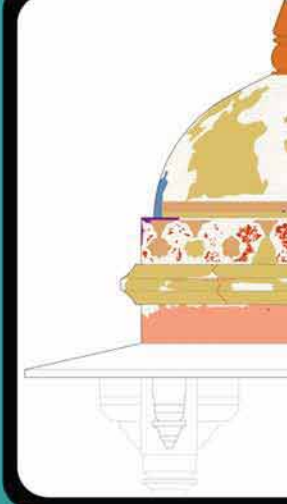
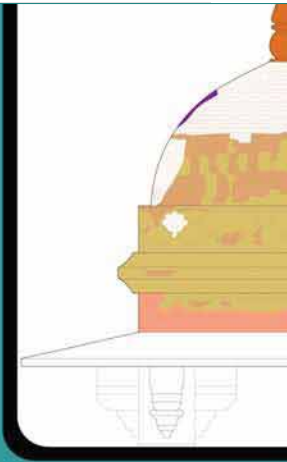
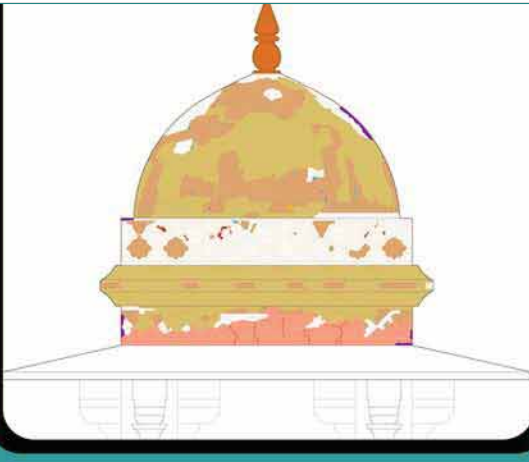
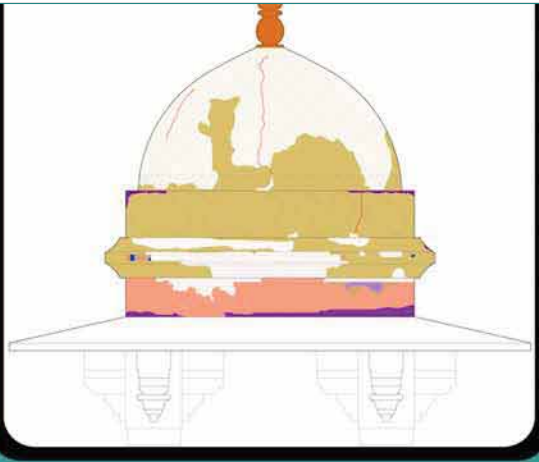
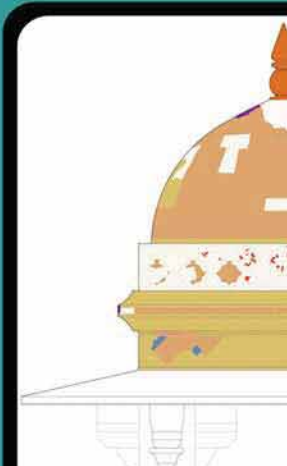
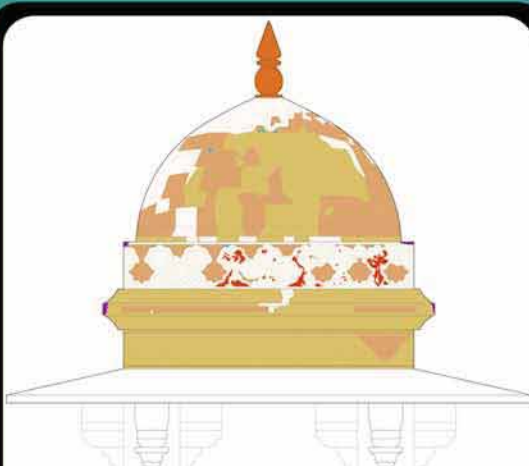
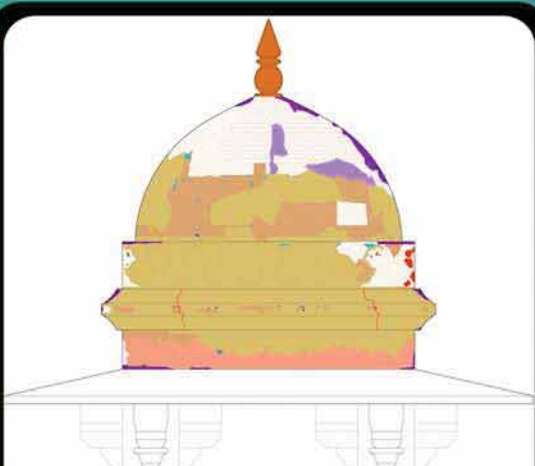
Forty participants from seven tile producing countries spent two days at Humayun's Tomb inspecting the tilework and debating the most appropriate conservation strategy for this significant architectural element.

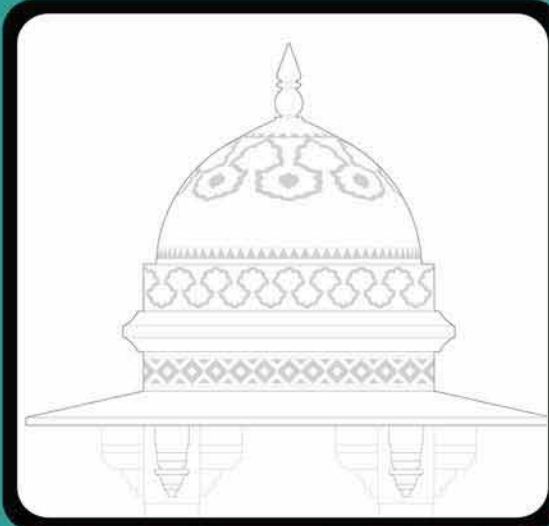
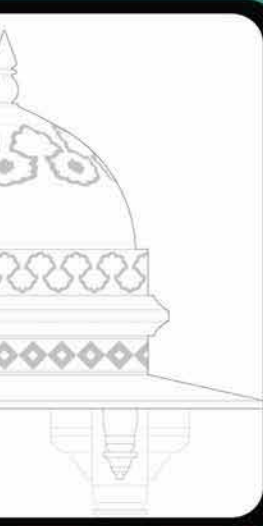
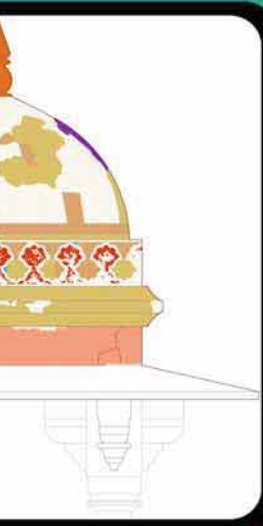
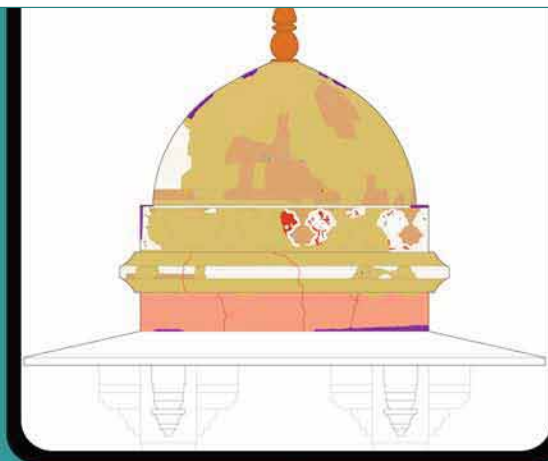
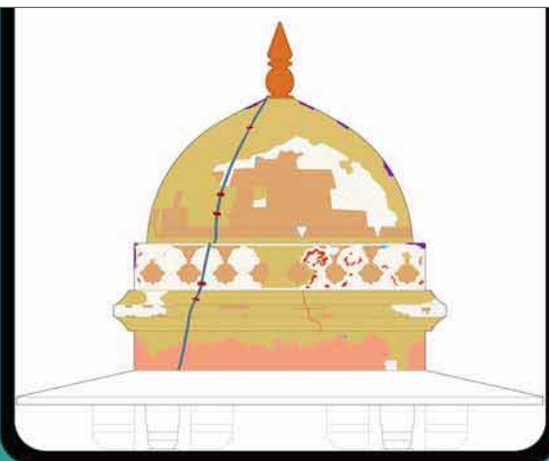
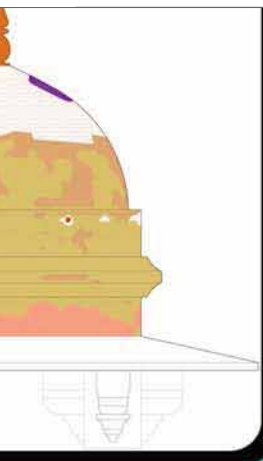
It is important to preserve tile making traditions and if local communities can be engaged in the production of Mughal style tiles for the tourism market such endeavours should be supported.

Tilework Humayun's Tomb

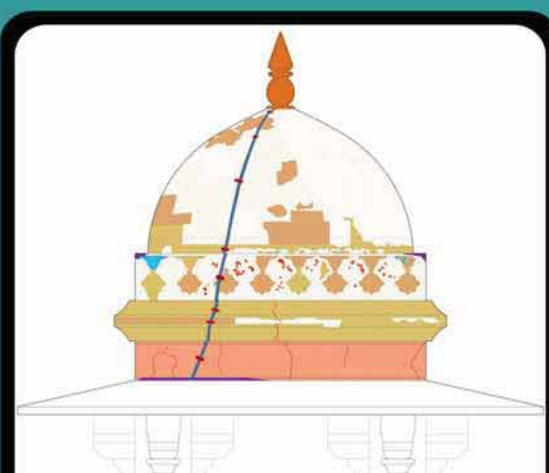
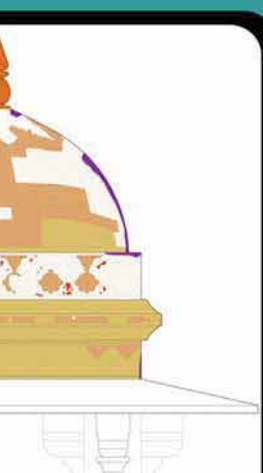


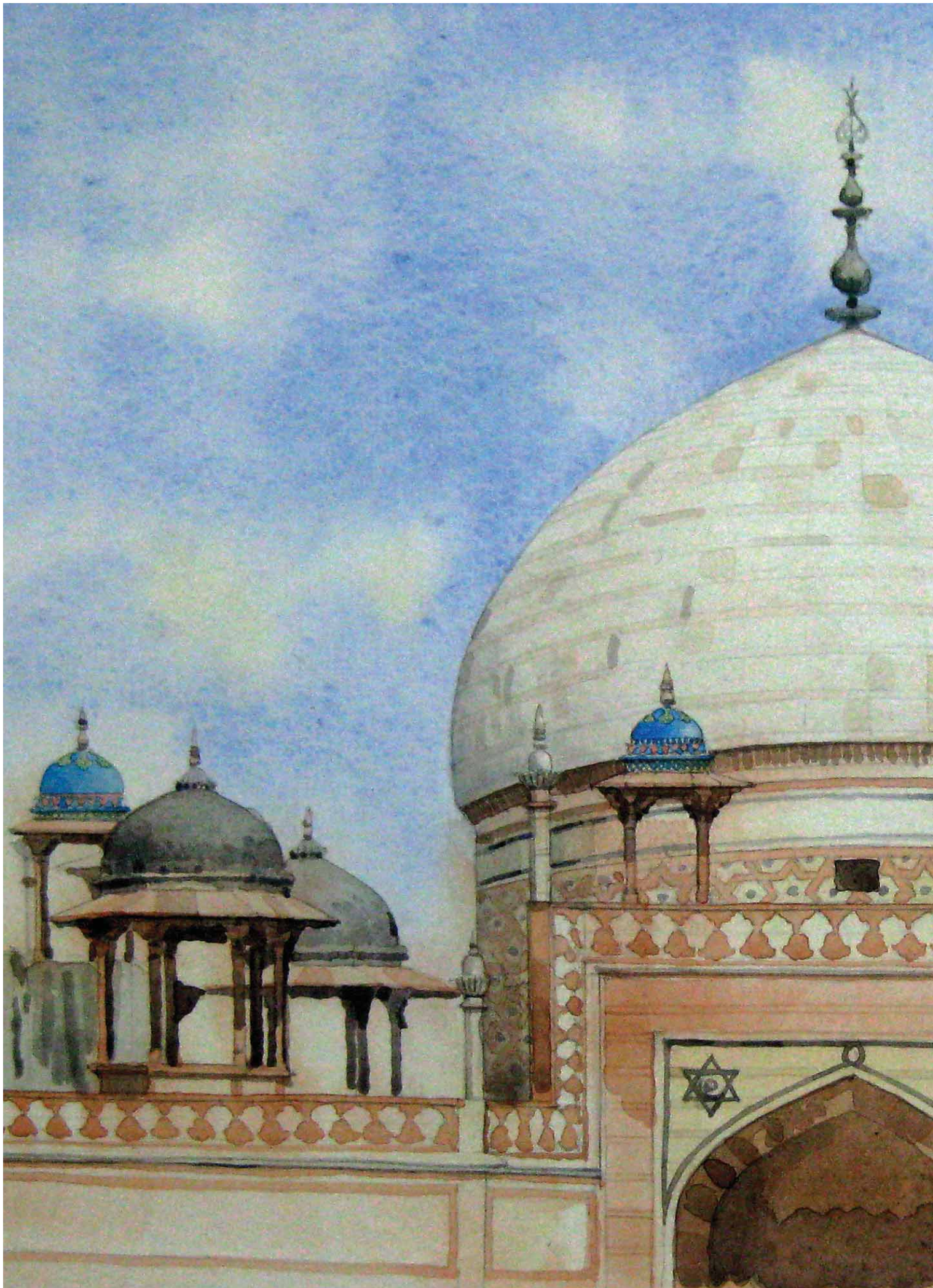
The smaller canopies on the roof of the Tomb were originally decorated ceramic tiles in lapis blue, turquoise blue, green, white and yellow as was the tradition in Timurid Persia. These striking colours were highlighted by the milky whiteness of the marble dome in the background. As a precursor to determining the most appropriate conservation strategy for the tilework on the canopies, a detailed microscopic documentation of the existing tilework was carried out. This was also coupled with archival research and a detailed scientific analysis of the physical and chemical properties of the Mughal period tiles carried out at the ASI labs and at Roorkee, Oxford (UK) and Barcelona (Spain).





	Tile Body & Glaze Extant-Cobalt Blue
	Tile Body & Glaze Extant-Turquoise
	Tile Body & Glaze Extant-Yellow
	Tile Body & Glaze Extant-White
	Tile Body & Glaze Extant-Green
	Tile Body Extant-Glaze Loss
	Plaster Extant-Complete Tile Loss
	Exposed Masonry-Complete Tile & Plaster Loss
	Carrier Loss
	Structural Crack
	Lime Plaster Pointing-Recent Intervention
	Overfill- Intervention
	Fill-Intervention
	Lime Plaster-Intervention in Antiquity



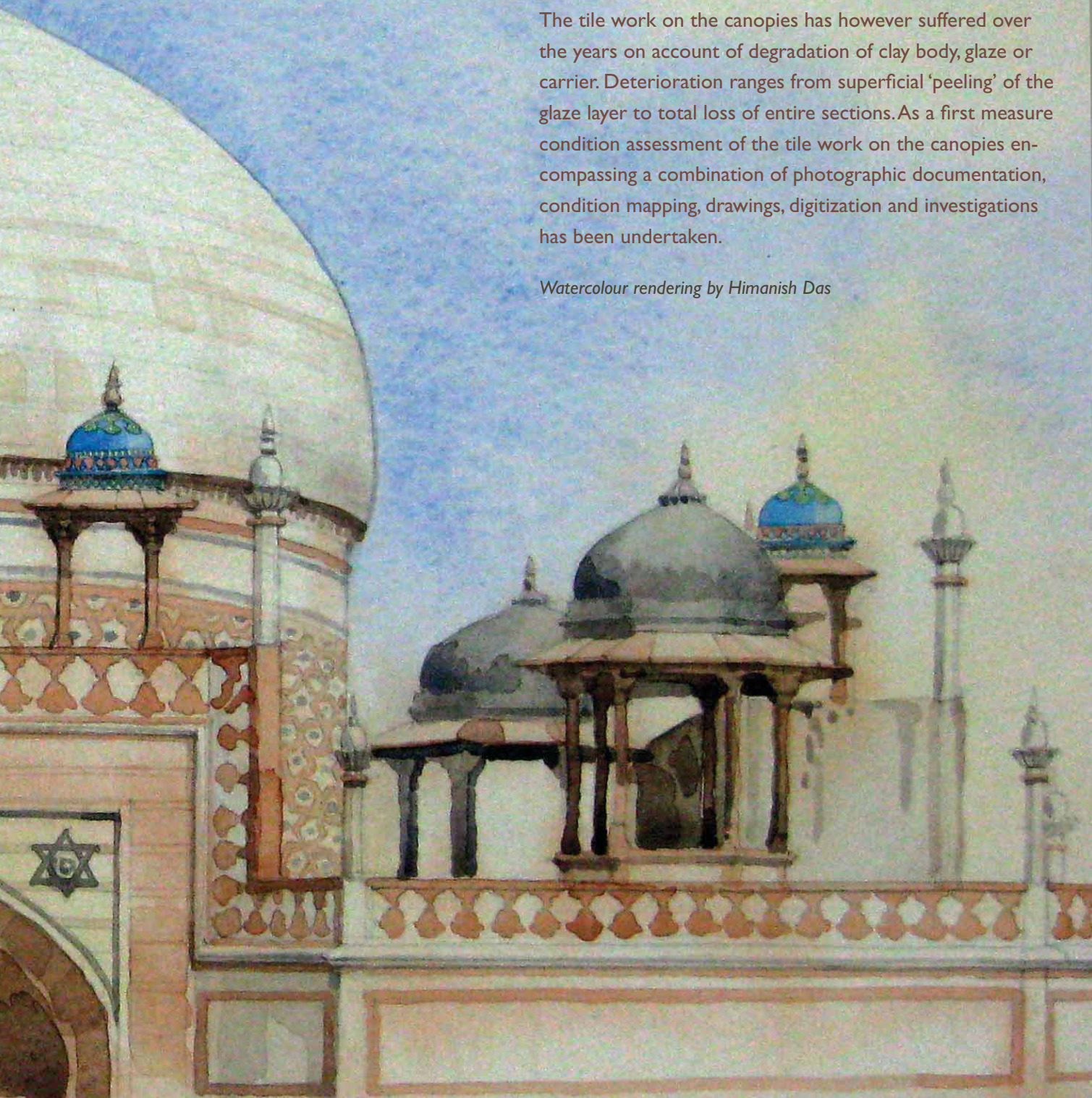


Humayun's Tomb | tilework

The tradition of use of glazed tiles as a decorative element of building architecture by the Mughals can be traced to the crafts of Iran, which governed the tastes of the eastern Islamic world. In Humayun's's tomb, eight stately canopies on the roof are decorated with tile work, similar in palette and nature to those found on other buildings of a contemporary period.

The tile work on the canopies has however suffered over the years on account of degradation of clay body, glaze or carrier. Deterioration ranges from superficial 'peeling' of the glaze layer to total loss of entire sections. As a first measure condition assessment of the tile work on the canopies encompassing a combination of photographic documentation, condition mapping, drawings, digitization and investigations has been undertaken.

Watercolour rendering by Himanish Das



LIME WORKSHOP

TASK

Training Workshops in the preparation and use of lime mortar.

PURPOSE

- To generate the awareness as well as sharing 'best practice' in using lime mortar/ plaster for conservation of historic buildings
- Establishing a platform for sharing existing knowledge about lime techniques used in various regions of India.

ACTION TAKEN:

- Eight workshops conducted to date have been attended by 105 officers of the ASI/ Institute of Archaeology .
- Each week long workshop comprises by lectures, presentations, site visits, demonstrations and practical exercise for the participants, illustrating various lime techniques.
- Practical work including lime slaking, preparing lime mortar, applying lime plaster and lime concrete, stone masonry construction using lime mortar, cleaning, grouting and lab work.
- At each workshop participants are explained ongoing conservation works at Humayun's Tomb and other sites in the project area in detail.
- All the participants take an exam at the culmination of the workshop.

NEXT STAGE:

- Lime Training Workshops will continue through the course of the project.
- A Manual will be prepared at the end of the workshops which would compile information generated during the lime workshops.

“Such type of workshops are very useful for the officers, engineers, CAs, archaeologists, scholars, foremen etc of ASI and should be conducted twice in every year and at each circle.”

R.S. Bhadoria,
SR.CA,
Raipur

“It was a very good experience to participate in this workshop, which enabled us to interact with colleagues from all parts of India and allowed sharing of technology, views, etc.”

A.Bhanu Prakash
Varma CA,
Goa Circle

A week long lime training workshop in the use of lime mortar has been devised; eight workshops have been held and ten more are planned in 2010 and 2011

Presentation Sessions



Lab-Testing Sessions



On-Site Training Sessions



On-Site Training Sessions



TASK

Nizamuddin Landscape Heritage Conservation Workshop, **Aga Khan Program for Islamic Architecture**, Massachusetts Institute of Technology (MIT), USA, School of Architecture and Planning.

PURPOSE

To establish academic linkages with the project and benefit from scholarship.

ACTION TAKEN:

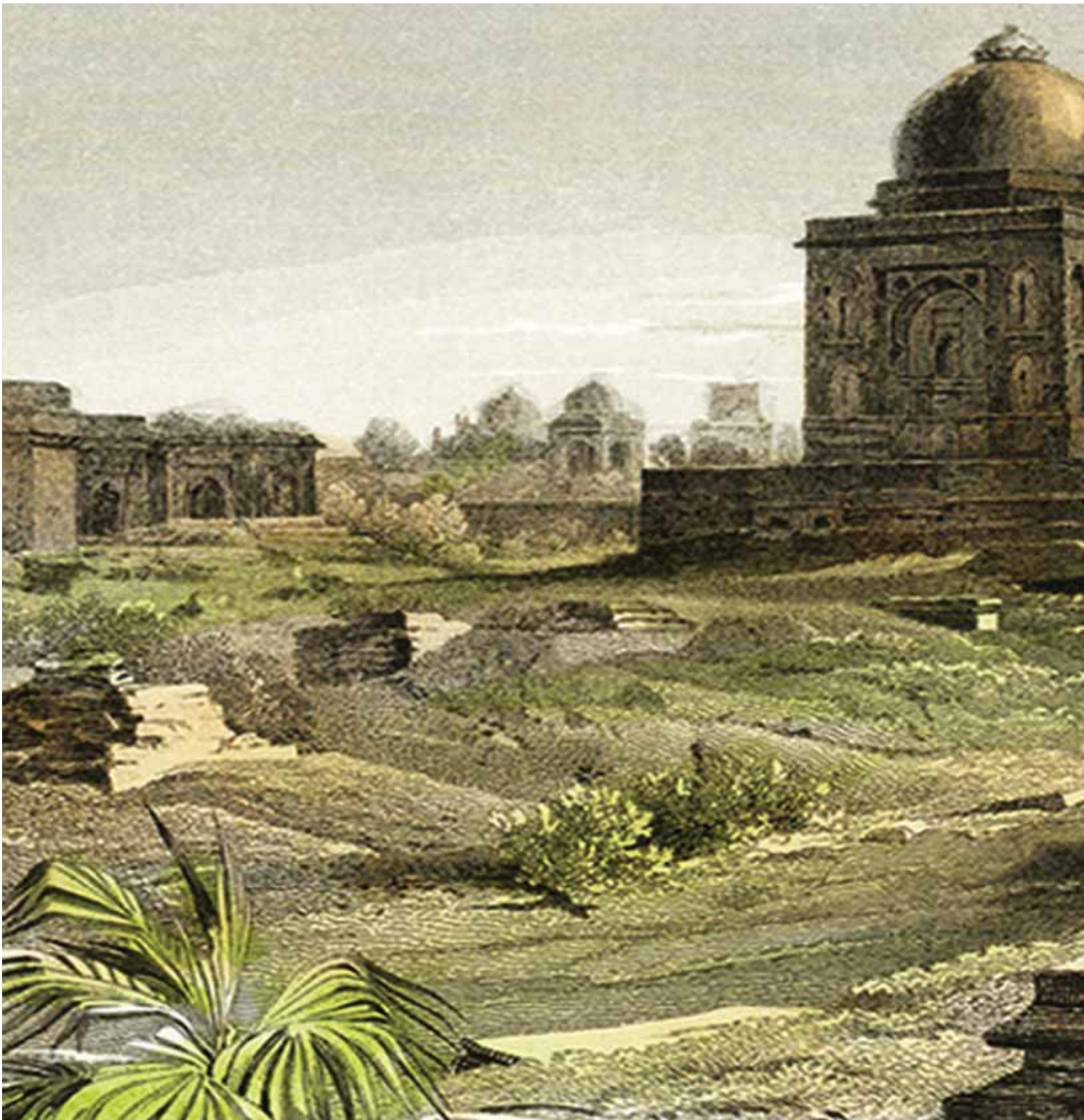
- The first annual workshop was held under the supervision of Prof James Wescoat in 2009.
- A multi-disciplinary team of post-graduate students from MIT carried out their semester project on various components of the Humayun's Tomb – Sunder Nursery – Nizamuddin Basti Urban Renewal project.
- An exhaustive report on the results of the semester workshop was compiled.

NEXT STAGE:

- The 2010 workshop is planned to commence in Delhi in early January 2010.
- The 2010 workshop will focus on the Bara Batashewala complex (earlier known as Bharat Scouts), including determining original layout and related historical research.



The group of students interacting with the AKTC, Delhi team on understanding the various components of the project.

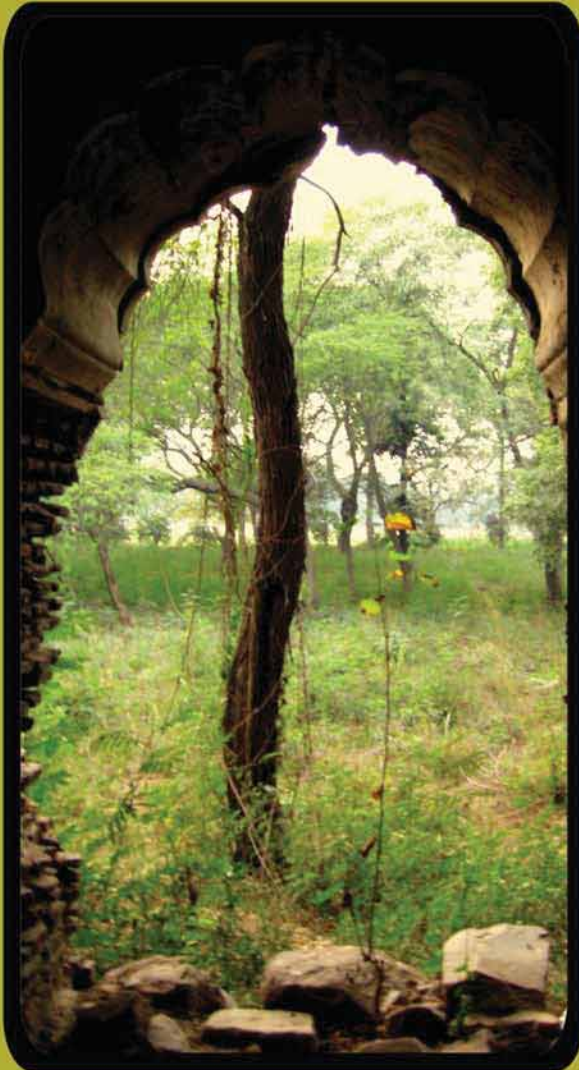


- Sunder Nursery sits on the historical Grand Trunk Road that once connected Calcutta to Lahore
- Spread over 27 hectares, the Nursery is dotted with historical monuments
- It was established in 1913 by the British
- Located along the Mathura Road axis that leads directly to India Gate
- Shares a common entrance zone with the Humayun's Tomb
- Close proximity to the National Zoo and the famed Lodhi Gardens
- Significant bird habitat
- Home to more than 150 tree species
- Designated district park in Delhi Masterplan 2021



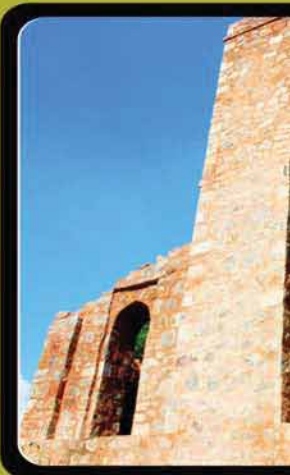
SUNDAR nursery

Abutting the Humayun's Tomb stands the 70 acre Government Sunder nursery. The project aims to upgrade the nursery into a significant ecological resource for the people of Delhi.

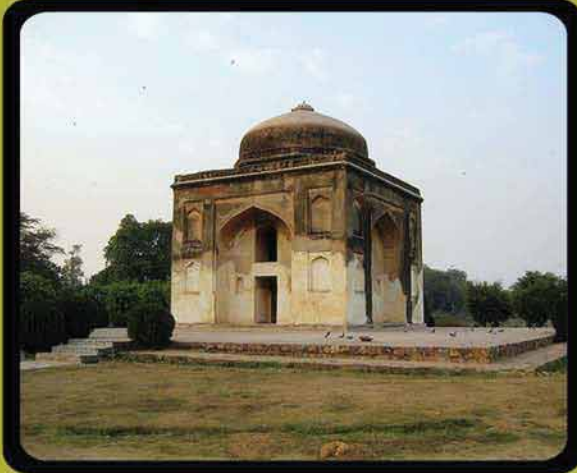
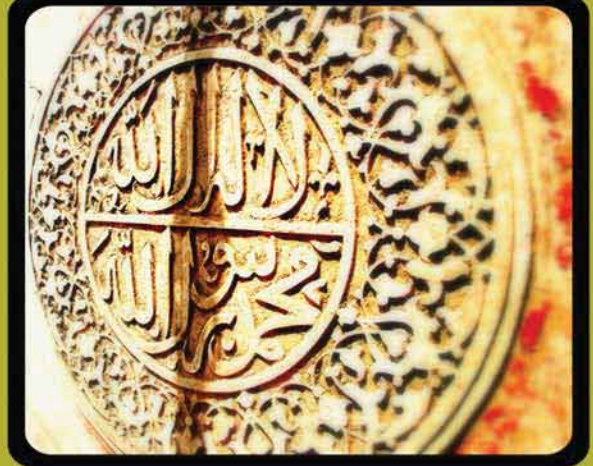


This multi-disciplinary project blends history, archaeology, landscape, architecture, social and economic development. The proposed design includes creating an additional nine acres of nursery beds to propagate different plant varieties; a glass house and a tissue culture lab.

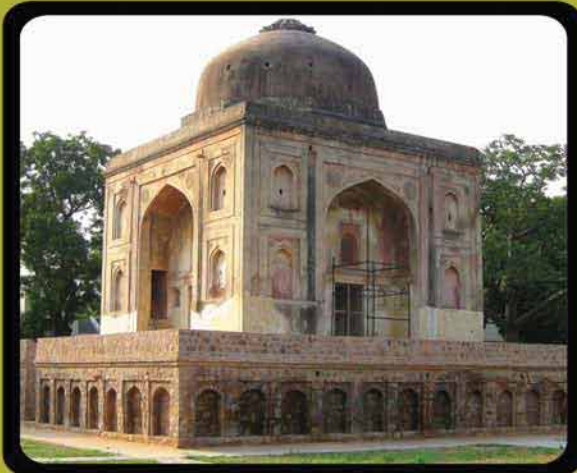
More than just a green space in the heart of the city, the Sunder Nursery literally in the midst of history. Located on the 16th century Grand Trunk Road the nursery is within the buffer zone of the Humayun's Tomb World Heritage Site. The monuments that stand here, mostly dating from the Akbari-era are being carefully conserved using traditional materials and building crafts.



heritage conservation



SUNDER NURSERY



LAKKARWALA BURJ

TASK:

Conservation of Lakkarwala Burj

PURPOSE:

Enhancing the architectural character and the cultural significance.

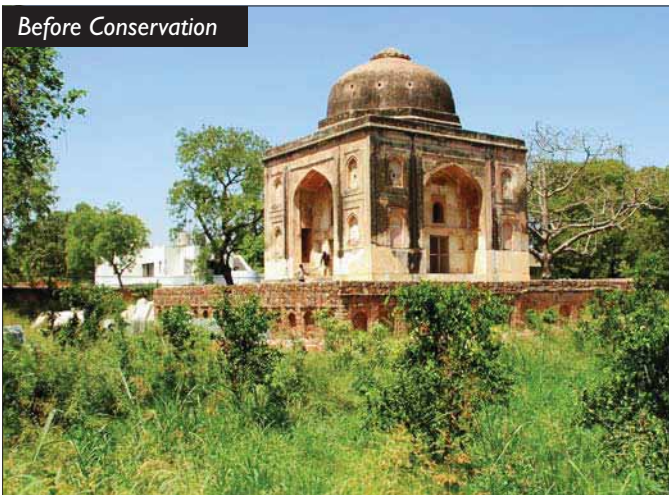
ACTION TAKEN:

- The high plinth of the monument has been repaired in-appropriately in the past, thus disfiguring its original architectural character. Though none of the arches were dismantled, the upper portion of the plinth wall has been dismantled and reconstructed on the original design. This has included remaking the moulding, raking and re-pointing of the external stone masonry.
- External wall and dome surfaces have been cleaned to removed thick algae and dust deposits in advance of conservation works.
- Internal ornamental surfaces have been carefully cleaned and red sandstone lattice screens once again installed in the arched openings. These will also prevent entry of birds into the monument and prevent any further decay to the highly ornamental interior surfaces due to bird droppings and nesting.
- The cracks in dome and over the arched openings have been carefully stitched.
- The setting of the tomb has been sensitively landscaped and will be planted with 50 varieties of rose.

NEXT STAGE:

- Conservation works on the external façade will be carried out – including restoration of missing geometric patterns in plasterwork.
- Red sand stone flooring would be provided on the platform and the internal chamber of the monument.
- Metal doors will be replaced with red sand stone door frames and wooden doors
- Modern inappropriate plaster will be dismantled and replaced with new lime plaster
- The vaulted chamber on the western side of the tomb will need significant structural conservation works.

Before Conservation



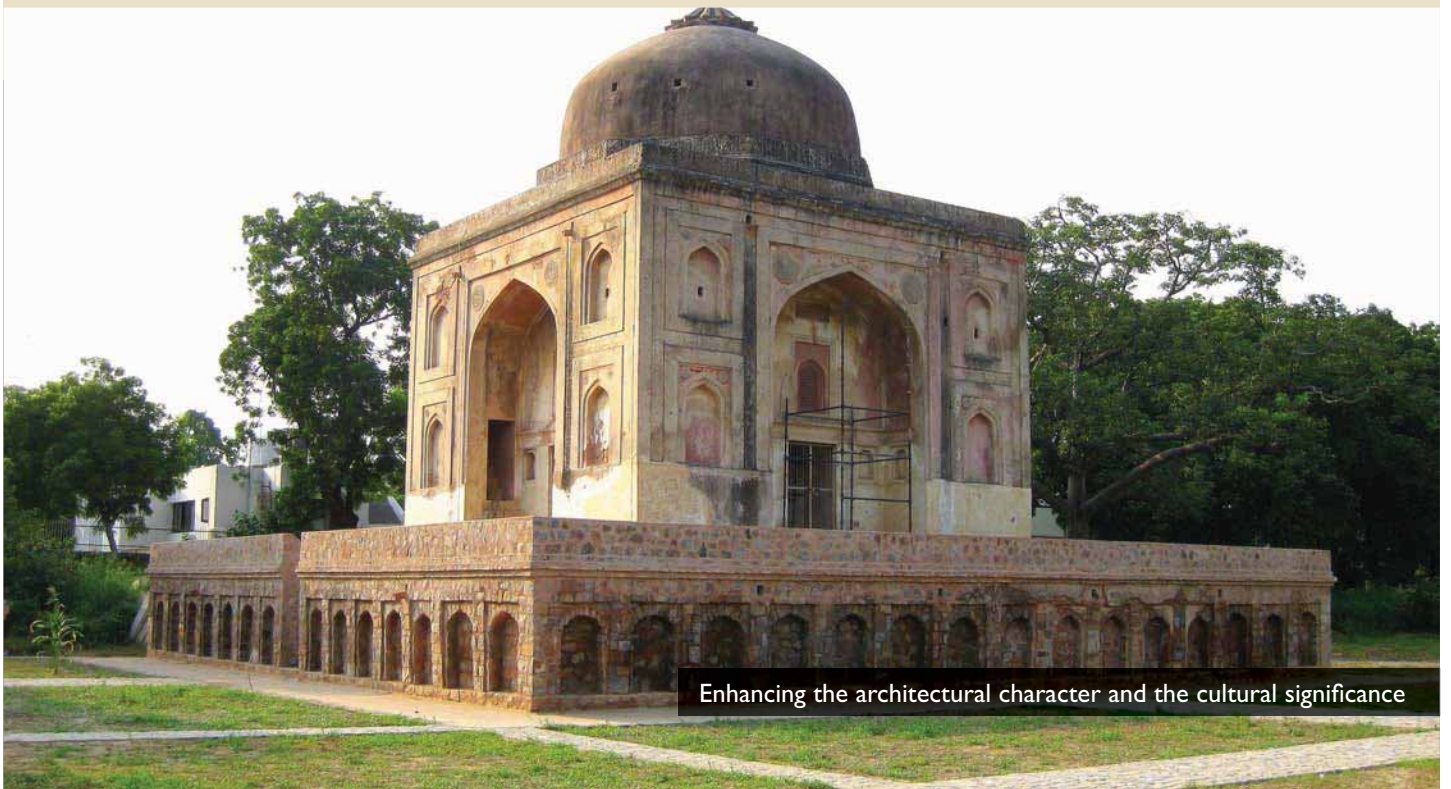
During Conservation



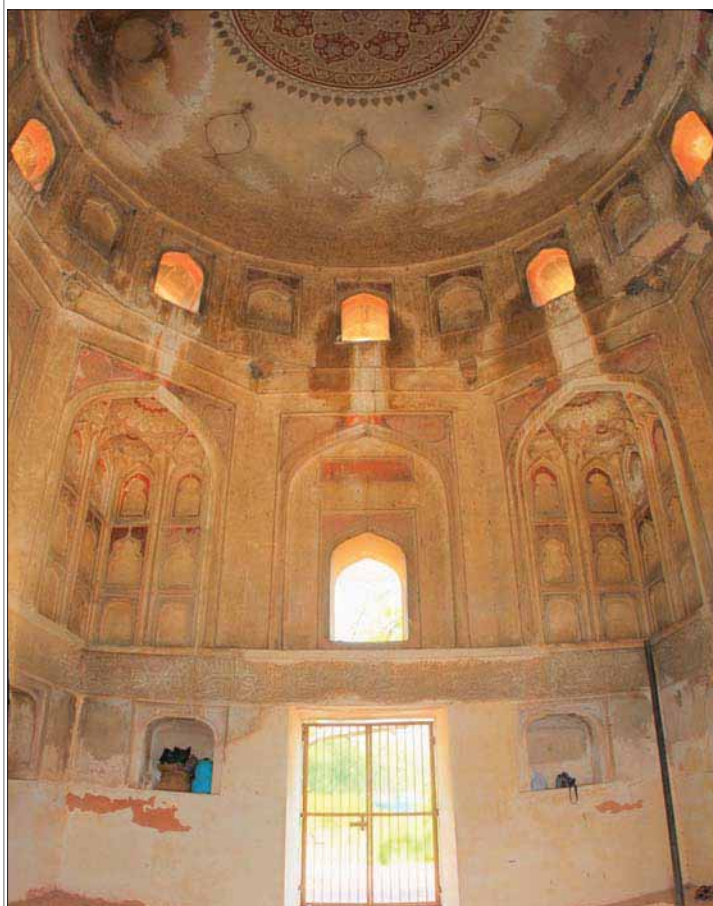
Lakkarwala Burj

The domed, rubble built, and externally plastered building occupies the centre of a platform some eight feet high. The monument, with arched openings in each of its four sides has profusely ornamental interiors with Quranic verses in incised plasterwork encircling the room.

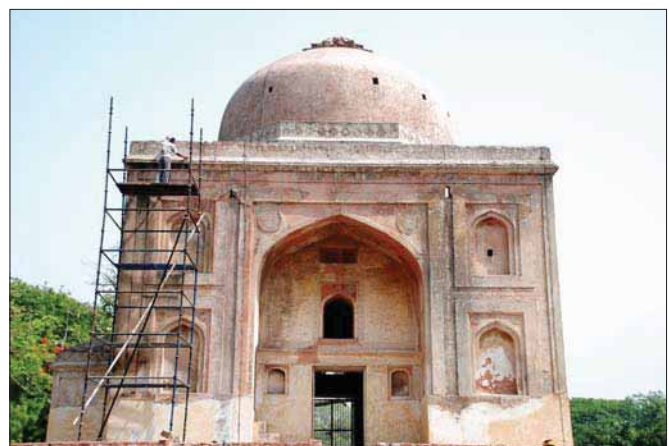
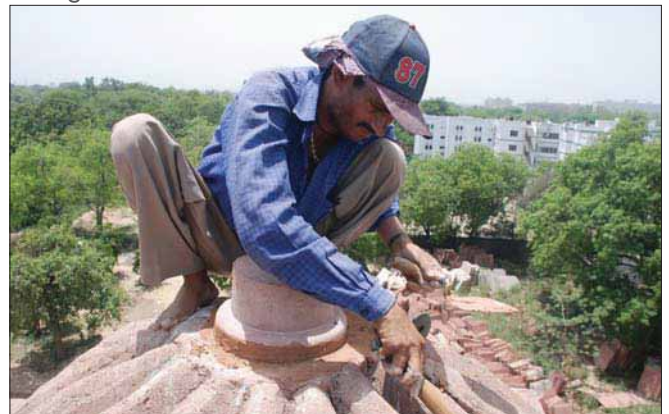
The building requires conservation work to both structure and to restore plasterwork with traditional craftsmanship.



Enhancing the architectural character and the cultural significance



During Conservation



condition assesment

**NIZAMUDDIN AREA
DEVELOPMENT PROJECT:
A PUBLIC-PRIVATE
PARTNERSHIP**

**Documentation of Lakkarwala
Burj, Sundar Nursery, New Delhi,
India**

MONUMENT PROTECTED BY:
Archaeological Survey of India, GoI

CLIENT:
Aga Khan Foundation, India
6, Bhagwan Dass Road,
New Delhi 110001, India

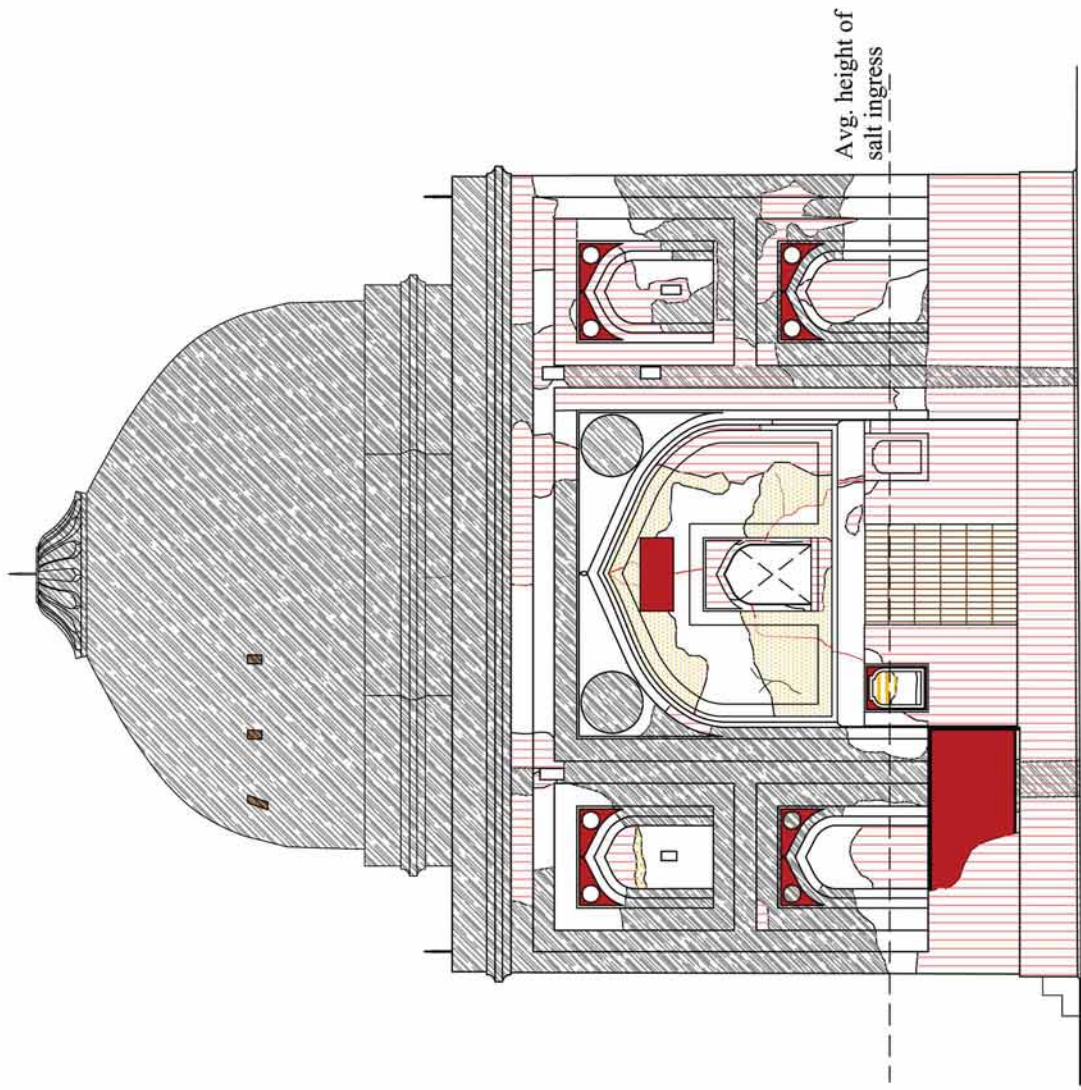
CONSULTANT:
Shubhru Gupta
B. Arch., M. Arch. (Arch. Cons.)
A-1, Sector 35, NOIDA (UP)201301, India

KEY	Description
	Cracks - structural
	Cracks - non-structural/ shrinkage
	Masonry - Missing
	Plaster - Missing/ Damaged surface
	New works - Surface finish/ Replastering
	Flaking of original plaster due to salt ingress
	Flaking of new works due to salt ingress
	Surface discolouration
	Surface discolouration - water seepage
	Ornamentation in plaster - missing
	Blackened weathered surface
	Debris, pigeon droppings and others
	New works - Gates for openings

NOTE: OBSERVATIONS RECORDED AS PER
VISUAL ASSESSMENT ONLY.

CONDITION MAPPING:
External Elevation - East (28/29)

SCALE IN METRES:



condition assesment

**NIZAMUDDIN AREA
DEVELOPMENT PROJECT:
A PUBLIC-PRIVATE
PARTNERSHIP**

**Documentation of Lakkarwala
Burj, Sundar Nursery, New Delhi,
India**

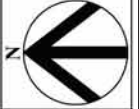
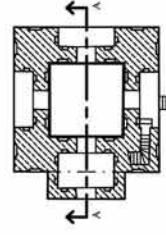
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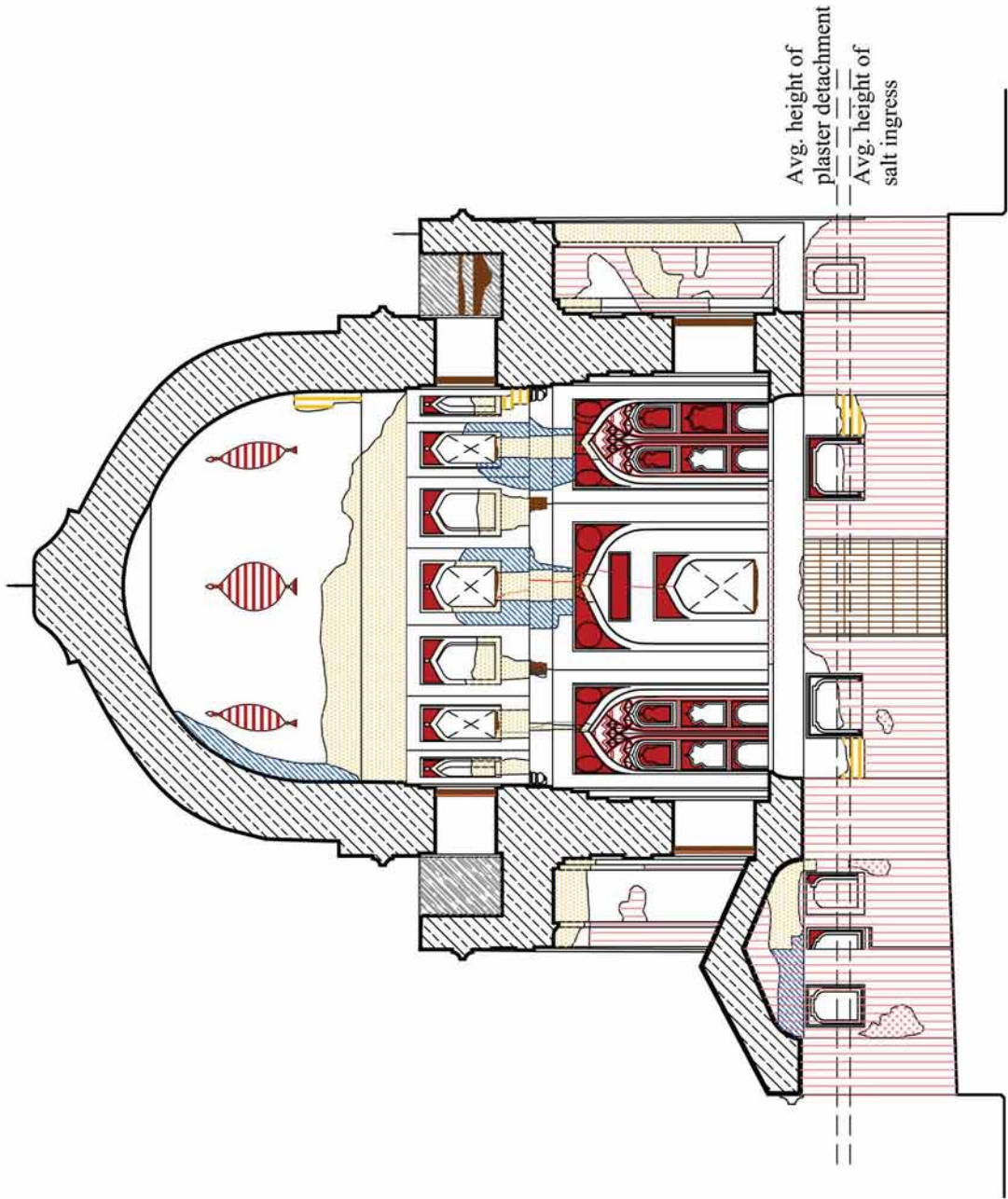
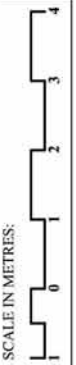
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KEY

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	Surface discolouration
	Surface discolouration - water seepage
	Ornamentation in plaster - missing
	Blackened weathered surface
	New works - Surface finish/ Replastering
	Debris, pigeon droppings and others
	New works - Gates for openings



CONDITION MAPPING:
Sectional Elevation AA (21/29)



NOTE: OBSERVATIONS RECORDED AS PER VISUAL ASSESSMENT ONLY.

SUNDERWALA MAHAL

TASK:

Sunderwala Mahal Conservation and Landscaping

PURPOSE:

To restore the architectural character and enhance the cultural significance of this early 16th century monument

ACTION TAKEN:

- Conservation works, including reconstructing collapsed vaults and arches on the façade were carried out in 2008.
- Brick shuttering used was dismantled in 2009
- Some portions of the interior were replastered in 2009.

NEXT STEPS:

- The plasterwork on the façade needs to be restored including the Muqarnas.
- The arched vaults on the west façade need to be reconstructed.
- Interior plasterwork and flooring need to be completed.

Before Conservation



During Conservation



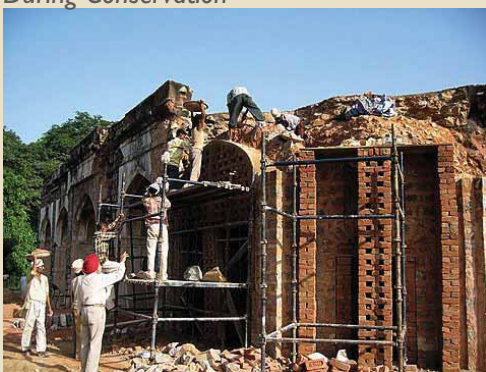
Sunderwala Mahal

The domed, rubble built, and externally plastered building occupies the centre of a platform some eight feet high. The monument, with arched openings in each of its four sides has profusely ornamental interiors with Quranic verses in incised plasterwork encircling the room.

The building requires conservation work to both structure and to restore plasterwork with traditional craftsmanship.



During Conservation



GARDEN PAVILION

TASK:

Garden Pavilion conservation and Landscaping

PURPOSE:

Carry out urgent conservation works and enhance the setting of this unique garden pavilion.

ACTION TAKEN:

- Conservation works on the pavilion were nearly completed in 2009.
- The area around the pavilion has been landscaped by creating a formal garden in the centre of which stands the pavilion.
- The southern retaining wall uncovered during clearance works was also carefully conserved.
- Stone lattice screens on the pattern of a single fragment discovered at the location were re-installed in the pavilion.

NEXT STEPS:

A protective layer of lime punning to be applied on the internal and external wall surfaces of the monument.

Before Conservation



During Conservation



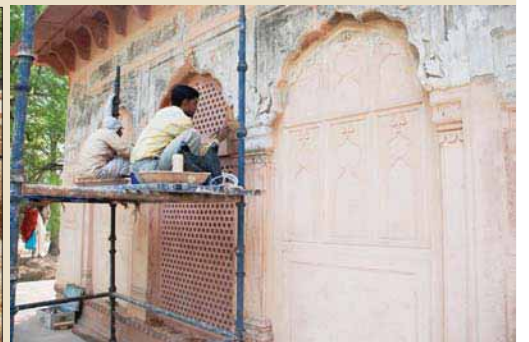
Garden Pavilion

This garden pavilion possibly dating back to late 17th and 18th century was in a ruinous condition. The pavilion is unique in Delhi on account of its architectural style, scale and ornamental plasterwork. Remarkably, the building has survived despite heavy vegetation having taken root on the building and neglect to an extent that several snakeskin's were found in the structure during clearance works.

After clearing the vegetation growth the cracks were stitched. Underpinning was done in all internal wall surfaces. The ornamental plasterwork was consolidated and the entire wall surface was carefully replastered. The sandstone elements re-installed as per the design found in-situ.



During Conservation



NURSERY DEVELOPMENT



CIVIL WORKS |

LANDSCAPE DEVELOPMENT |

HORTICULTURE |

SERVICES



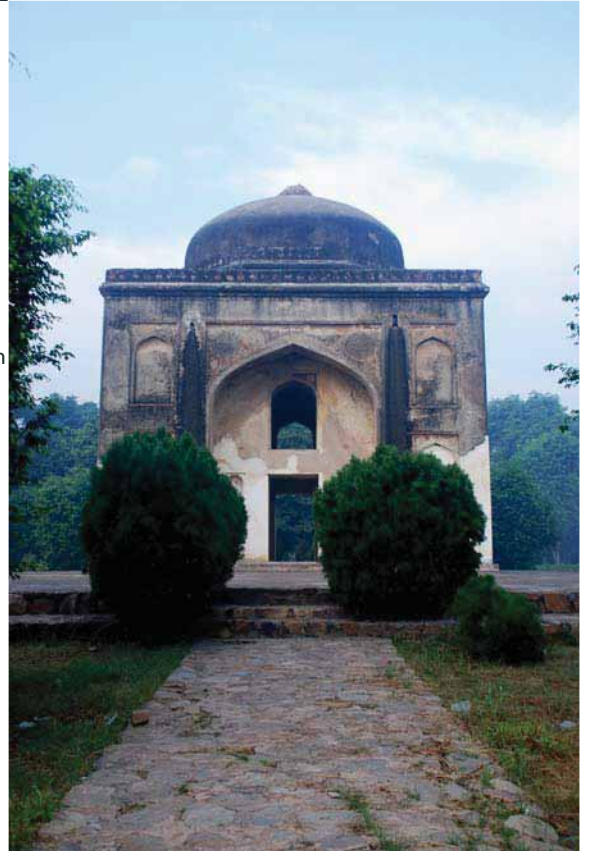


A large Arboretum and micro habitat zone – which will showcase 300 varieties of tree species and the different habitats (ridge/river/flood plain and a lake for water borne plants) of the city respectively, will be created. Apart from being a walk-in-open-air museum of trees of Delhi, a significant bird habitat will be created to bring back birds—some of which are rapidly disappearing from the city.

environment DEVELOPMENT

CONSERVATION

- Standing in close proximity to the Dargah of Hazrat Nizamuddin Auliya, several mausolea were built in this zone in the Mughal era.
- Three ASI protected monuments and several unprotected monuments stand within Sunder Nursery and in its immediate surroundings.
- As part of the nursery development project all these historic structures are undergoing conservation to enhance their historical significance and restore their architectural integrity.
- Landscaping the setting of the monuments is a significant element of the conservation works and the landscape master plan for the nursery.



AMMENITIES

- Nature and heritage walks
- Parking for 200 cars on-site
- Pedestrian access aligned with Humayun Tomb's entrance
- Nursery shop
- Educational programmes for school children on the topics of heritage and environment
- Amphitheater for musical performances with the monuments in the backdrop
- Spaces to hold regular plant and flower shows

Sunder NURSERY

landscape master plan

After detailed discussions through 2008, the Sunder Nursery Master plan was formally approved by Central Public Works Department, Archaeological Survey of India and Municipal Corporation of Delhi in December 2008 and subsequently approved by Delhi Urban Art Commission on being forwarded by the local authority.



TASK:

Implement the landscape Master plan in specific zones within Sunder Nursery

PURPOSE:

Redevelop different landscape components in the nursery in context of its historical significance and overall MasterPlan.

ACTION TAKEN:

- Following the restoration of the Garden Pavilion building, Delhi quartzite paving and planting around the pavilion is now complete.
- Plant varieties are carefully selected to suit the tranquil ambience of the space and match traditional gardens of Mughal India.
- Lakkarwala Burj landscaping posed a challenge with the discovery of archaeological remains during the implementation of landscape works.
- At Lakkarwala Burj, landscape design was changed to ensure the archaeological remains were not damaged in any manner whatsoever. These were documented and back-filled. The archaeological footprint of an octagonal structure that once existed has been retained and framed with Delhi quartzite paving.
- Delhi quartzite paving has also been completed around the mughal period Arched Platform .
- Two plant nurseries have been established at Sunder Nursery and Humayun's Tomb as part of the project. These collectively now have a collection of almost 10,000 plants – all being prepared for eventual planting in Sunder Nursery.
- 120 Bougainvillea, planted in 2007, were successfully transplanted from the proposed lake area into cement pots.
- Excavation for the lake has now commenced.
- Plant and seed collection has been carried out in the Delhi 'ridge' area to source plants for the micro-habitat zone.
- Construction of minor pathways connecting monuments to parking areas is also underway.

NEXT STAGE:

- A variety of pond lining material is presently being tested for lining the proposed lake and waterbodies.
- Construction of the Central Axis is to begin in early 2010.
- With major civil and infrastructure work complete on site, intensive planting will be carried out in the appropriate season.
- A rose garden hosting close to 50 varieties of roses will dot the area east of Lakkarwala Burj.
- Local rose plants from the northern end of Sunder Nursery will be transplanted into the garden where the Central Axis terminates.

Sunder NURSERY
completed works



Sunder NURSERY

completed works



COMPLETION OF PERIPHERAL ROAD

TASK:

Construction of 2.2 km Concrete Road

PURPOSE:

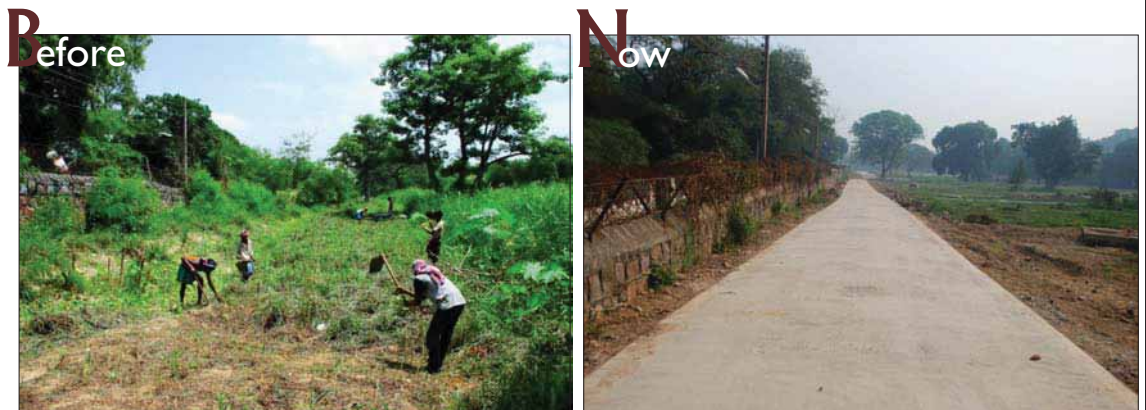
To limit vehicular access within Sunder Nursery to the periphery and allow safe pedestrian movement within the nursery.

ACTION TAKEN:

- High grade concrete roadwork completed for a stretch of 2.2 km along the periphery of Sunder Nursery.
- Road is of 5.5 m width; with sandstone strips used to create a regular pattern and ensuring concrete is cast in no larger than 2 m stretches.
- Road layout has been carried out to ensure that not a single tree in Sunder Nursery is cut or damaged.
- Expansion joints in Mild Steel have been used at every 30 m
- Concrete kerbs line the road edges.
- Parking areas have been clearly designated and will eventually be paved with grass pavers which allow grass and percolation of water for groundwater recharge.
- Entrance area to Sunder Nursery is paved with cobble stones.

NEXT STAGE:

- Parking area to be filled with appropriate paving blocks.
- Drop-off areas to be developed as mini plazas to facilitate congregation and ticketing.
- Service area pockets to be developed in the nursery to allow maintenance activities.



The densely vegetated site periphery had to be cleared to make way for the 2.2 km concrete road. Utmost care was taken to ensure that no trees were cut in the process.

Road compacting



Sandstone strips used to divide panels



Concreting



Final road finish



NURSERY BEDS

TASK

Prepare nine Acres of beds for nursery operations along northern edge of Sunder Nursery.

PURPOSE

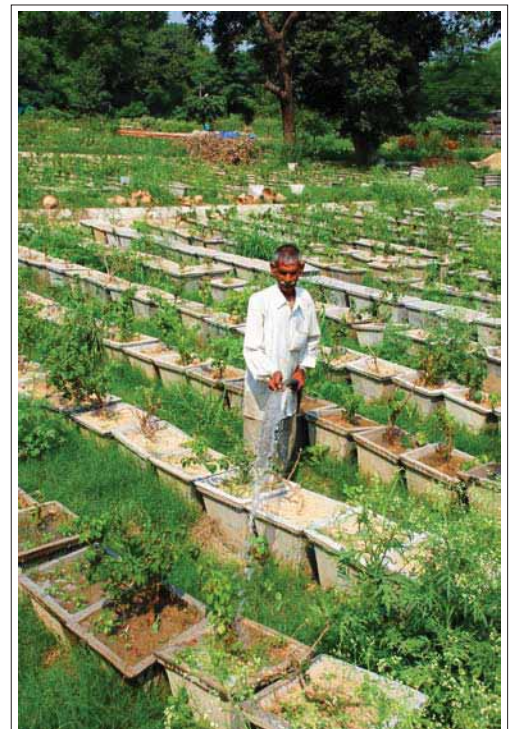
To transfer nursery activities such as storage of plants and propagation to this area to allow landscaping work as per landscape Master plan in the southern section.

ACTION TAKEN:

- Nine acres of nursery beds have been prepared to the north of Sunder Nursery site.
- This has required leveling of earth, importing of good earth and over 20,000 man days of work.
- These beds have vehicular road access for easy maintenance and transfer of plant material.
- Three Garden Hydrants are to be provided within each bed to facilitate irrigation.
- Beds are flanked with over 3 km concrete kerbs that hold rammed earth pathways to allow gardener's handcarts.

NEXT STAGE:

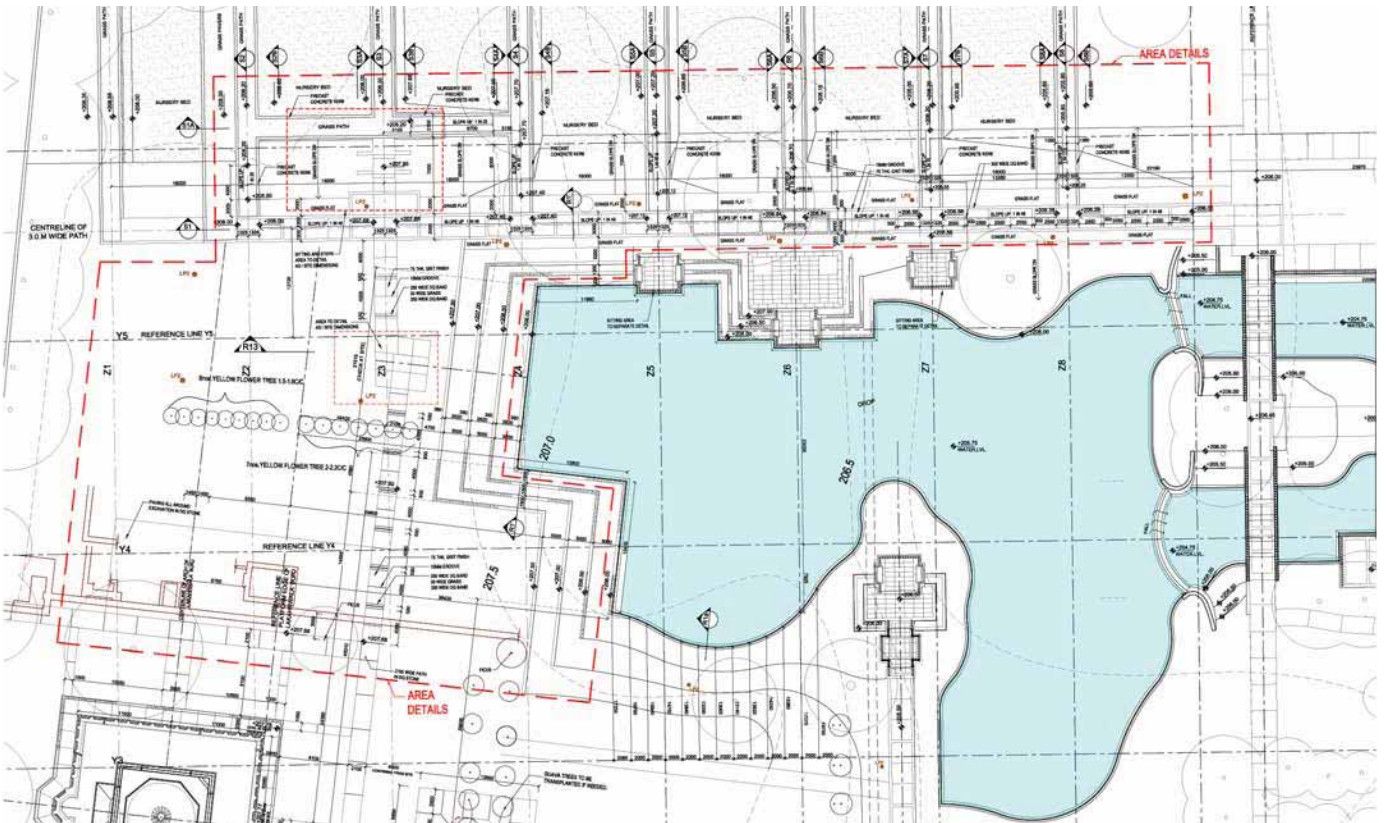
- Water supply system, including an efficient filtration and pumping station is being installed to provide all these nursery beds with piped water.
- CPWD will begin transferring their nursery functions to the new beds and initiate plant propagation.



Site clearing & preparation of nursery beds



Prepared nursery beds in the northern end of Sunder Nursery have also been provided with garden hydrants enabling the CPWD to carry out their nursery functions more systematically



Development of lake and landscape alongside nursery beds

PREPERATION OF MOUNDS

TASK:

Create a Micro-habitat zone stimulating a microcosm of Delhi's landscape, including Kohi (hilly) tracts.

PURPOSE:

- To provide visitors an interesting and educational experience on Delhi's ecology.
- To provide a zone to grow the diverse vegetation, especially trees that were originally found in Delhi.
- To create a significant bird-habitat.

ACTION TAKEN:

- Stone and earth mounds are being prepared and are 50% complete.
- Some of the created mounds have also been planted with plant cuttings collected from Central India and Delhi's ridge area.
- Boulders and rocks carefully collected from various sites across Delhi and surrounding regions are being carefully arranged on the mounds to recreate a 'kohi' or ridge-like appearance.
- Trees within the mounds have swales around them to facilitate surface run-off.

NEXT STAGE:

- Completion of mounds
- Planting on mounds once these have been completed.
- Creation of other micro-habitat zones, i.e., Khadar (riverine), Bangar (alluvial) and Dabar (marshy) zones.

Preparation of mounds on site will help enhance the rich biodiversity existing in Sunder Nursery.



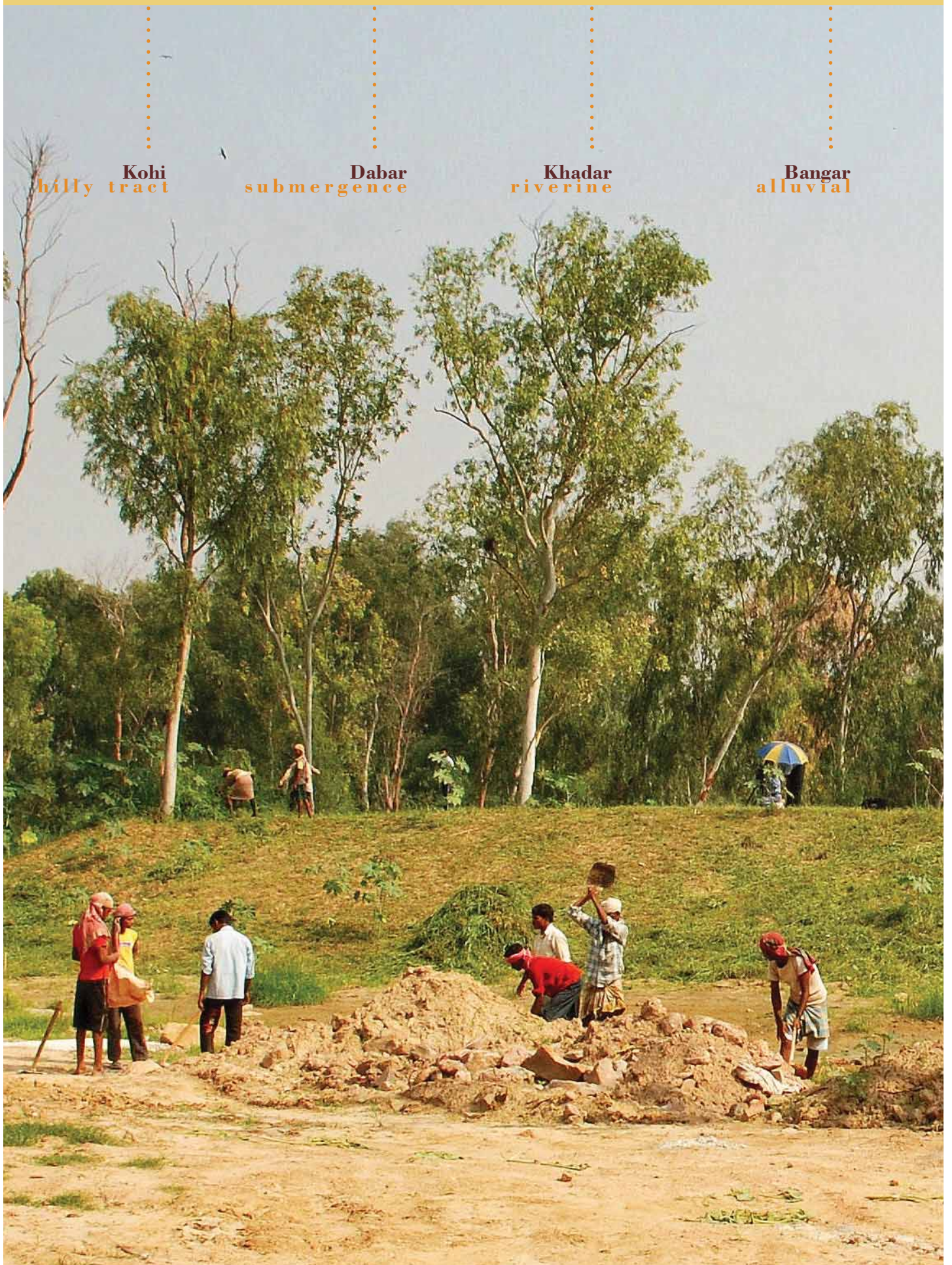
DELHI'S FIRST ARBORETUM

Kohi
hilly tract

Dabar
submergence

Khadar
riverine

Bangar
alluvial



Nursery Development

DEVELOPMENT OF THE CENTRAL AXIS

Watercolour rendering by Himanish Das



The Central Axis will draw visitors from the Humayun's tomb entrance plaza into the lush environs of Sunder Nursery, culminating at Azimganj Serai. This pedestrian spine will host specialised gardens on either side along with water bodies to complement its tranquil surroundings and historic setting.



HYDRAULIC WORKS

TASK

Laying an efficient irrigation infrastructure

PURPOSE

To ensure all portions of Sunder nursery can be effectively irrigated using treated waste water mixed with required quantities of ground water.

ACTION TAKEN:

- Hydraulic Engineering consultants were appointed in early 2009 to assess water requirements, water availability and to design an effective water supply system for Sunder Nursery.
- Following several months of studies, consultations with CPWD officers, designs for the northern section were finalized in October 2009.
- Tenders were awarded in early October with the understanding that the priority was to irrigate the northern section where the new nursery beds have been developed.
- Peripheral network of pipes is presently being laid.
- In addition, defunct tube-wells within Sunder Nursery are being revived
- Construction of the first underground plant room is now underway at the north-eastern edge of the nursery. Water treatment equipment such as filtration systems will also be located in this plant room, along with pumping stations.

NEXT STAGE:

- Ensure adequate water supply to northern section of the nursery in advance of the planting season.
- Design pipe layout for entire Sunder nursery, prioritizing the northern section in the first instance.

Dr.R B Verma, Deputy Director General (Horticulture) with AKTC team on the site during the peripheral plumbing works being carried out in Sunder Nursery. Besides the northern nursery beds, pipes laid will facilitate irrigation on the micro-habitat mounds, the garden pavilion, Lakkarwala burj and surrounding lake areas.



ELECTRICAL WORKS

TASK

To put in place an electric cable grid for Sunder Nursery.

PURPOSE

- With expected visitor movement, portions of Sunder Nursery would require illumination as would the buildings, nursery structures, etc.
- Electricity would also be required for pump rooms/ filter plants and other nursery related functions.

ACTION TAKEN:

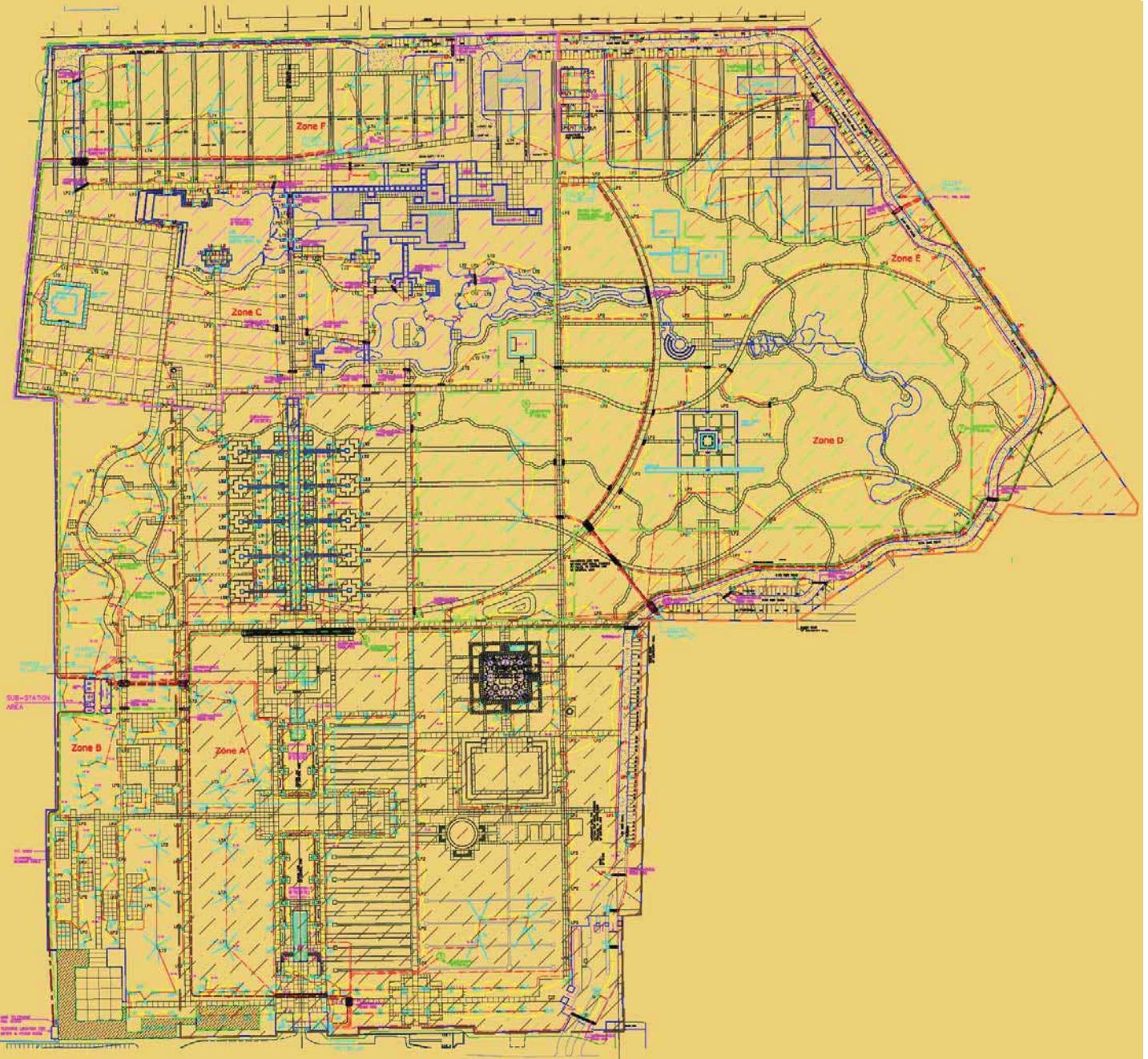
- Electrical consultants for the Sunder Nursery project were appointed in early 2009.
- Following finalization of the landscape master-plan and use zones in the nursery and following adequate consultation with CPWD officers, it was agreed to have six distinct zones for electrical functions within the nursery.
- In early October, tenders were awarded to contractors to begin laying electrical cables to the six zones from the proposed location of the electrical sub station.
- Electric cables and equipment are now being installed to facilitate for the site's electrical requirements.

NEXT STAGE:

Simultaneously, options for solar energy and other energy efficient installations are being considered for illumination of landscaped areas.

electrical system

SUNDER NURSERY



A variety of lighting works are to be carried out at Sunder Nursery: from flood lighting for monuments and ambient lighting for the central axis to street lighting for the road and underwater lighting for the lake - the lighting scheme aims to complement Sunder Nursery's enchanting offerings.

TASK

Building nursery structures

PURPOSE

To build well designed modern structures to house potted plants for sale and display that require shade.

ACTION TAKEN:

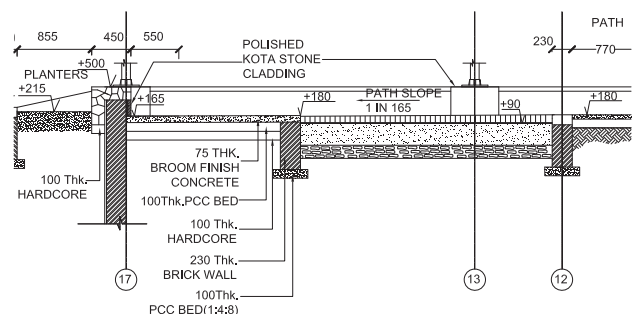
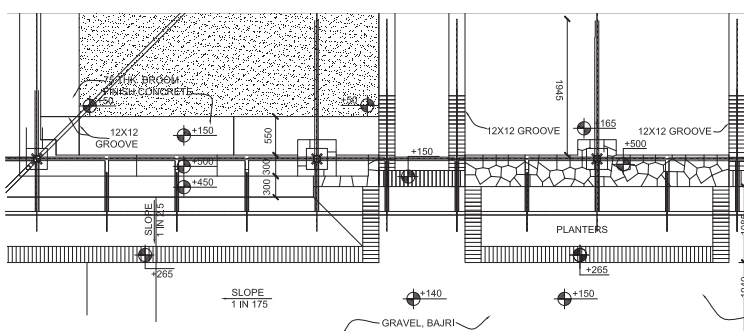
- Two steel frame structures of identical design enclosing an area of 16 m x 16 m each have been built in the northern portion of the nursery.
- All portions of each structure are easily accessible.
- Nursery beds have sweet earth and are provided with appropriate irrigation and drainage facilities with four hydrants in each enclosure for upkeep of plants.
- The pathways are made of bajri and lined with brick tiles to allow handcarts over them.
- Vertical faces of external walls are clad with Delhi quartzite stone whereas the vertical and inner faces of the walls are clad with Kota stone.
- The metal frame has been covered in epoxy paint to ensure durability and minimum maintenance of the structures.

NEXT STAGE:

At present, an intricate lattice pattern is being designed to cover the metal frame in the future. This is expected to provide the necessary shade for the plants displayed.



Details of the plant shed include cladding in Delhi quartzite and Kota stone. Brick tiled bajri pathways make the structure accessible for viewing displayed plants and easy maintenance.





The elegantly designed nursery structures are now ready. An intricate lattice will soon roof the truss following which the structure is planned to host unique plant species.



Cladding of Delhi Quartzite on the external walls



Brick tile edging for pathways

Developing world-class nursery



MARKET RESEARCH STUDY

TASK

Market research and financial feasibility report for Sunder Nursery Redevelopment.

PURPOSE

To evaluate the feasibility of post project management and maintenance of Sunder Nursery and project its potential increase in revenue generation to ensure financial sustainability of the redevelopment project.

ACTION TAKEN:

- The market research agency Ernst & Young was selected from a group of shortlisted agencies to conduct the study.
- Terms of reference were shared with EY and project orientation given to the EY group to help them understand project objectives for redeveloping Sunder Nursery and in the context of the larger project including Humayun's Tomb and Nizamuddin Basti zones.
- Similar studies carried out by AKTC in other countries were also presented to the agency.
- Orientation sessions conducted for field agents of the EY team who later carried out interviews on the SN site among other 15 locations.
- Interviews were conducted for a total of 2500 people in more than 15 destinations to reflect public opinion to the proposed development at Sunder Nursery. Besides residents of Delhi, informed feedback was also sought from schools, tour operators, restaurant owners and nursery operators.

NEXT STAGE:

Final Report from Ernst and Young is awaited.



Market research field team briefing session

ARCHITECTURAL COMPETITION

TASK

SUNDER NURSERY BUILDINGS ARCHITECTURAL COMPETITION

PURPOSE

- To hold a limited architectural competition with noted architects participating to design the key buildings proposed in the Humayun's Tomb – Sunder Nursery areas.
- Interpretation centres for visitors are required in both Humayun's Tomb and Sunder Nursery.
- Garden structures such as mist chambers, glass houses, are required in Sunder Nursery.
- A restaurant is also proposed in the Sunder Nursery area.

ACTION TAKEN:

- Keeping in mind the significance of Sunder Nursery and the probable impact of its buildings and facilities, a Competition Brief has been prepared in close consultation with ASI and CPWD officers.
- Standards for building program have been derived from Delhi bye-laws, MasterPlan 2021 and international building standards.
- The brief has been approved by officers responsible at Central Public Works Department & the Archaeological Survey of India.
- Selected architects will be invited to design schemes and the eminent jury will include officers of all partner agencies.

NEXT STAGE:

Competition will be announced in January 2010.



Education

Socio Economic Survey Report, AKDN Project Team

Education Baseline Report, Dr. Namita Ranganathan & Dr. Gaysu Arvind

English Language Teacher Training, British Council

Cultural Revival

Feasibility Study for the Qawaali music centre, Soumitra Ranjan

Cultural Mapping of Hazrat Nizamuddin Basti, AKDN Project Team

Historical Research compilation, Syed Ehsan Reyaz and Prof. Tazeem

Urban Renewal

Nizamuddin Landscape Heritage Conservation Workshop, Massachusetts Institute of Technology, School of Architecture and Planning, Aga Khan Program for Islamic Architecture

Environmental Study on the Barapullah drain, Shriram Institute of Industrial Research

Nizamuddin Basti Urban Study, AKDN Project Team

Water test of biological parameters for the Baoli water, The Energy Resources Institute (TERI)

Water Tests of Sources of water of the baoli, The Energy Resources Institute (TERI)

Nursery Development

Sunder Nursery Report, Shaheer Associates, Landscape Architects

Sunder Nursery Studies and Proposals, Shaheer Associates, Landscape Architects

Report on Kohi, Dabar, Khadar and Bangar, Pradip Krishen

Tree survey report of Sunder Nursery, Pradip Krishen

Sanitary Engineering and Hydraulics, Sunder Nursery, MKG Consultants

Market Research and Feasibility Study Report for Sunder Nursery, Ernst & Young

Conservation

- Humayun's Tomb Conservation Plan and Proposals, AKDN Project Team*
- Structural analysis of Humayun's tomb, Stuart Tappin*
- Geological study of sandstone at Humayun's tomb, AKDN Project Team.*
- Sunder Nursery Conservation Plan and Proposals, AKDN Project Team*
- GPRS study of Sunder Nursery, Indian Institute of Technology (IIT) Kharagpur*
- Structural analysis of Sunderwala Mahal, Stuart Tappin*
- Documentation and condition mapping of Sunderwala Mahal, Sangeeta. S.Bais*
- Structural analysis of Sunderwala Burj, Stuart Tappin*
- Documentation and condition mapping of Lakkarwala Burj, Shubhru Gupta*
- Documentation and condition mapping of Mughal Pavilion, Prashant Banerjee & Alok Srivastav*
- Structural analysis of Nizamuddin Baoli, Stuart Tappin*
- Mortar Analysis of Baoli, AECS Engineering & Consultings Pvt. Ltd.*
- Impact Echo test analysis of Baoli, AECS Engineering & Consultings Pvt. Ltd.*
- Geo-technical study of Baoli, AECS Engineering & Consultings Pvt. Ltd.*
- GPRS study of Baoli, AECS Engineering & Consultings Pvt. Ltd.*
- Documentation and condition mapping of Atgah Khan Tomb, Monali Wankar*
- Documentation and condition mapping of glazed tile work of Humayun's tomb, Maninder Singh Gill*
- Documentation and condition mapping of glazed tile work of Nila Gumbad, Maninder Singh Gill*
- Structural analysis of Nila Gumbad, Stuart Tappin*
- Scientific investigation of Tiles, Eduardo Porta, University of Barcelona*
- Scientific investigation of Tiles, Chris Doherty, RLAHA, Oxford University*
- Scientific investigation of tiles, India Institute of Technology (IIT), Roorkee*
- Scientific investigation of tiles, Wadia Institute of Himalyan Geology, Dehradun*

Miscellaneous

- Annual Progress Report, 2008*
- Annual Progress Report, 2009*

Partner Agencies:



ARCHAEOLOGICAL SURVEY OF INDIA

Archaeological Survey of India (ASI), under the Ministry of Culture, is the premier organization for the archaeological researches and protection of the cultural heritage of India. Maintenance of ancient monuments and archaeological sites and remains of national importance is the prime concern of the ASI.

The ASI is the nodal public agency for the project. Several protected monuments and heritage buildings stand within the project area where conservation works are now being undertaken or are proposed to be undertaken as part of the project. All conservation works are guided by prevalent International and Indian Charters/Philosophy and be carried out with prior consultation with the ASI. A ASI Core Committee reviews conservation components of the project on a monthly basis.

www.asi.nic.in



MUNICIPAL CORPORATION OF DELHI

Municipal Corporation of Delhi is among the largest municipal bodies in the world providing civic services to more than estimated population of 14 million citizens in India's capital city. MCD came into existence in 1958 under an Act of Parliament. Within its jurisdiction are some of the most densely populated areas in the world, such as Hazrat Nizamuddin Basti. Social development initiatives, in consultation with MCD, are being implemented in the Nizamuddin Basti area. A synergistic, community centred and collaborative approach will be adopted to strengthen urban basic services through interventions in three core areas of health, education and environmental sanitation. Mr Farhad Suri, MCD Councillor, for Nizamuddin Basti is actively involved and provides leadership to the on-going project components for Nizamuddin Basti.

www.mcdonline.gov.in



CENTRAL PUBLIC WORKS DEPARTMENT

Central Public Works Department (CPWD), is the principal agency of the Government of India for creation and maintenance of most Central Government assets. CPWD was created in July 1854, however, the present form of CPWD was created in 1930. Sunder Nursery, designated as 'District Park' under Master plan 2021, is owned and operated by the CPWD. The project hopes to address the landscape development and conservation-development plan of the area and transform Sunder Nursery into a World Class nursery with the support of and in consultation with CPWD.

www.cpwd.gov.in

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, promotion of private-sector enterprise and the revitalisation of historic cities. AKDN agencies conduct their programmes without regard to faith, origin or gender.



AGA KHAN TRUST FOR CULTURE

Aga Khan Trust for Culture (AKTC) focuses on the physical, social, cultural and economic revitalisation of communities in the Muslim world. It includes the Aga Khan Award for Architecture, the Aga Khan Historic Cities Programme (AKHCP), the Music Initiative in Central Asia, the on-line resource ArchNet and the Aga Khan Program for Islamic Architecture at Harvard University and MIT, USA. AKHCP was established in 1992 to undertake the restoration of historic structures, the improvement of public spaces and the rehabilitation of urban areas in ways that spark social, economic and cultural development within communities. Through this integrated approach, the Programme seeks to demonstrate that strengthening cultural identity can go hand-in-hand with socio-economic progress.



AGA KHAN FOUNDATION

Aga Khan Foundation (AKF) another agency of the Aga Khan Development Network, focuses on a small number of specific development problems by forming intellectual and financial partnerships with organisations sharing its objectives. Most Foundation grants are made to grassroots organisations testing innovative approaches in the field. With a small staff, a host of cooperating agencies and thousands of volunteers, the Foundation reaches out to vulnerable populations on four continents, irrespective of their race, religion, political persuasion or gender.

www.akdn.org

Co-funded by:

Sir Dorabji Tata Trust

Sir Dorabji Tata Trust (SDTT), one of the oldest, non-sectarian philanthropic organisations in India, was established in 1932 by Sir Dorabji Tata with the prime purpose of encouraging learning and research in the country, of meeting costs of relief during crises and calamities and of carrying out worthwhile charitable activities. The Trust's vision of constructive philanthropy has been sensitive to the fast-growing needs of a developing nation, while the work initiated by it holds contemporary relevance as it continues to support innovative enterprises in development.

SDTT is co-funding the conservation works being undertaken on the Humayun's Tomb World Heritage Site and other buildings within the Garden enclosure. The SDTT grant also supports significant training programmes like the tile workshop, Lime training, 3D documentation training.

www.dorabjitatatrust.org

Sir Ratan Tata Trust

Sir Ratan Tata Trust, established in 1918, is one of the oldest philanthropic institutions in India, and has played a pioneering role in changing the traditional ideas of charity. The trust focuses on the advancement of education, learning and industry in all its branches.

For the project, SRTT is supporting the education interventions being implemented in Nizamuddin Basti including project initiatives for Early Childhood Care and Development (ECCD), school improvement, complementary access strategies for out of school children and vocational education and training since April 2008.

www.srtt.org

Ford Foundation

Ford Foundation, over the decades, has taken on enduring problems, amongst others including expansion of educational opportunity and artistic creativity that require sustained effort and resolve. The Foundation works with visionary leaders and organizations around the world and was founded to advance social justice.

Ford Foundation is supporting the cultural revival programme in the Nizamuddin Basti, which aims at revitalizing the historic neighbourhood through cultural activities centred around the tangible and intangible heritage elements in the basti, such as the music programme.

www.fordfound.org

Supported by:

British Council

British Council is implementing, on a cost sharing basis, an English Language Teacher Training programme aimed at youth from Nizamuddin Basti aged 16-18.

U S Embassy, India

The U.S. Embassy is funding the implementation of a two year English Access Microscholarship programme for 100 students from Nizamuddin Basti, in the age group of 14-16; the programme includes leadership skills.

PROJECT TEAM



Mr.KN Shrivastava, Director General, ASI addressing a press conference at Hazrat Nizamuddin Baoli

Archaeological Survey of India

Mr. K.N.Shrivastava, Director General
Mr Praveen Srivastava, Additional Director General, ASI
Dr. K.P.Poonacha, Joint Director General
Dr. B.R. Mani, Joint Director General
Mr.D.R.Gehlot, Joint Director General, Institute of Archeology
Dr. P.B.S.Sengar, Regional Director, North
Mr.A.K. Sinha, Director (Monuments)
Mr. Janhwij Sharma, Director (Conservation & World Heritage)
Dr. KK Muhammad, Superintending Archaeologist, Delhi Circle
Mr. Basant Kumar, Dy.SA, Delhi Circle
Mr. R.K.Jhingan, Sr Conservation Assistant, Humayun's Tomb
Dr. H.B Singh, Chief Horticulturist
Mr. N K Ahier, Dy Suptd Horticulturist
Mr. Naresh Kumar, Sr. Horticulture Assistant
Mr. Dilip Singh, Foreman, Humayun's Tomb

Central Public Works Department

Mr. B.K.Chugh, Director General (W)
Mr. D.S.Sachdev, Former Director General (W)

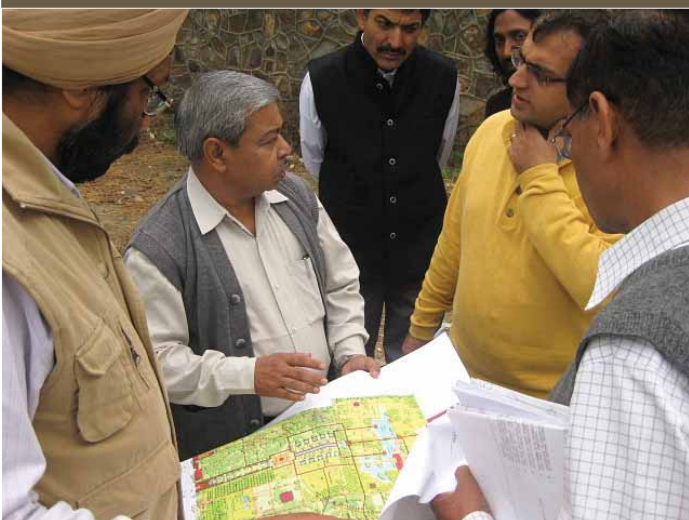
Mr. P.K.Gupta, ADG (TD)
Dr. R.B.Verma, Deputy Director General, Horticulture
Mr. Gajender Singh, Deputy Director Horticulture
Mr.A.K. Saksena, Asst Director, Horticulture
Mr. Manveer Singh, SO, Horticulture
Mr. S.L.Meena, SO, Horticulture

Public Works Department

Mr.Sarvagya Srivastava, Project Manager,
Commonwealth Project Circle
Mr.Priyank Mittal, EE
Mr.Akhilesh, Asst. Engineer

Delhi Jal Board

Mr.Tariq, Executive Engineer



Dr.R B Verma, Deputy Director General (Horticulture), CPWD with AKTC team on Sunder Nursery



Mr. Farhad Suri, Councillor, MCD, during the Independence day function organized at the MCD Primary school in Hazrat Nizamuddin Basti

Municipal Corporation of Delhi

Mr. K.S. Mehra, Commissioner

Mr. Farhad Suri, Councillor

Mr. R.D. Srivastava, Additional Commissioner, Slum Wing

Mr. Ravi Dass, Chief Engineer, MCD

Mr. Kishan Kumar, Deputy Commissioner, City Zone

Mr. Vijay Singh, Former Dy Commissioner, City Zone

Mr. Anil Prakash, Director, Sanitation

Mr. Devendra Kumar, Chief Engineer, MCD

Mr. Naurang Singh, Superintending Engineer, MCD

Mr. Anil Tyagi, EE, MCD

Mr. Mangla, EE, City Zone

Mr. Manish Kumar, JE, MCD

Ms. Premlata Kataria, Director (Education)

Ms. Swatantra Bala, Additional Director (Education)

Ms. S. Rani, District Education Officer, City Zone

Mr. C. Meena, School Inspector, City Zone

Ms. Sunita Rao, School Inspector, City Zone

Mr. Syed Ali Akhtar, Headmaster, MCD School, Nizamuddin West

All Teachers of MCD School Nizamuddin West

Dr. Basu, Chief Medical Officer

Dr. Pramila Srivastava, Resident Superintendent, MCD Polyclinic

All Doctors and Visiting Specialists at the MCD Polyclinic

Mr. Manish Huria, JE, MCD

Mr. Satbir Singh, Asst Engineer, MCD

Mr. Deepak Khosla, Asst Engineer

Mr. Sunder Lal Sharma, Sanitary Inspector



Janab Ahmed Pir Nizami, Sajaada Nashin, Dargah Hazrat Nizamuddin Auliya, being explained the proposed landscape plan for the parks in the Basti.

Aga Khan Development Network

Mr. Ratish Nanda, Project Director
Mr. Rajpal Singh, Chief Engineer
Ms. Meena Narula, Senior Programme Officer
Ms. Tara Sharma, Consultant, Cultural Revival Programme
Ms. Shveta Mathur, Programme Officer, Urban Development
Ms. Sangeeta Bais, Conservation Architect
Mr. Guntej Bhushan, Project Manager
Mr. Aftab Jalia, Project Architect, Sunder Nursery
Ms. Archana Saad Akhtar, Design Consultant
Mr. Somak Ghosh, Finance Officer

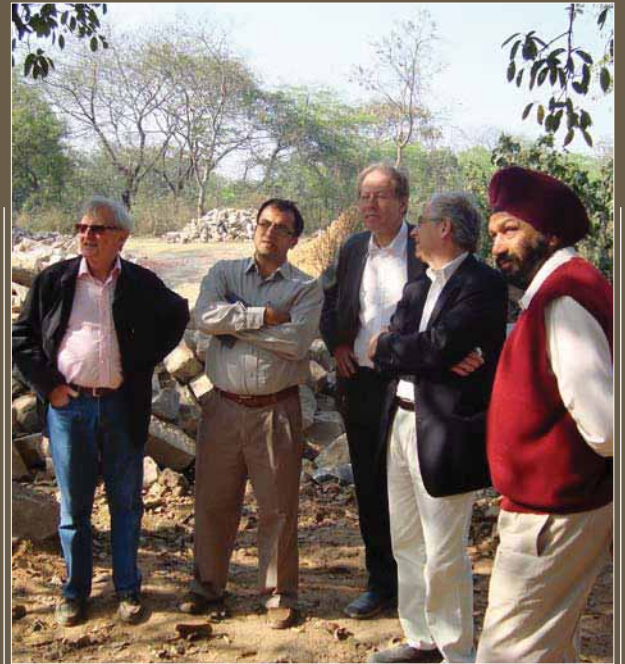
Mr. Balbir Singh, Sr. Conservation Engineer/ Trainer
Mr. NK Agarwal, Project Engineer, Sunder Nursery
Mr. NC Thapliyal, Project Engineer, Humayun's Tomb
Mr. M.P.Mishra, Project Engineer, Nizamuddin Basti
Mr. Bikramjit Chakraborty, Conservation Architect
Mr. Mohit Dhingra, Architect

Mr. Yashwant Purohit, Architect
Mr. Saurabh Surana, Site Architect, Sunder Nursery
Mr. Prashant Banerjee, Architect
Mr. Iqtedar Alam, Architect

Mr. Sanjeev Rai, Programme Officer (Education)*
Mr. Pravind Kumar Praveen, Programme Officer (Health)*
Mr. Ganesh Reddy, Project Manager (Education and Health Initiatives)
Mr. Deepak Padhi, Programme Officer, Monitoring & Evaluation
Mr. Kishwar Khan, Coordinator Field Implementation and Vocational Education
Mr. Hyder Rizvi, School Coordinator

Dr. Nuzhat Ali, Consultant (ECCD) *
Ms. Sanyukta Saha, Consultant (Art Education)
Mr. Vijay Dhasmana, Co-ordinator, Micro-Habitats
Ms. Deeti Ray, Deputy to Project Director
Ms. Priya Gangadharan, Admin officer
Ms. Rukhsana, Field Supervisor
Mr. M.C. Gautam, Draftsman

Dr. Meena Metre, Consulting Pathologist
Dr. Upasana Gupta, Consultant Gynaecologist
Mr. Gurmeet Singh, Engineer
Mr. Vishal Kakkar, Engineer
Mr. Mahender Kumar, Engineer*
Mr. Vinod Kumar, Field Supervisor
Mr. Bijender Malik, Field Supervisor
Mr. Ahsan Farooqui, Field Supervisor
Mr. Ramesh Singh, Field Supervisor



Mr Luis Monreal, Director General, AKTC, Mr. Cameron Rashti, Director, Historic Cities Programme, AKTC and Mr Jurjen van der Taas, Deputy Director, Historic Cities Programme with AKTC Delhi team

Ms. Seema Bohat, Auxiliary Nurse Midwife (ANM)
Mr. Tilak Raj Chauhan, Laboratory Technician
Mr. Syeed Moeed, Teacher, Maths
Mr. Khalid Parvez, Teacher, English

Mr. Mohammad Zeeshan Khan, Field Co-ordinator,
Mr. Ram Krishna, Coordinator, Heritage Walks
Mr. Dhana, Field Supervisor
Mr. Babu Lal, Field Supervisor
Mr. Attar Singh, Chief Stone craftsmen
Mr. Wasim, Site Supervisor

Mr. Irfan Zuberi, Consultant, Qawaali Music Programme
Mr. Saumitra Ranjan, Consultant, Music documentation
Mr. Nishant Vajpeyi, Assistant, Finance and Admin
Mr. Harish Kumar, Finance Assistant
Mr. Narender Swain, Photographer



James Wescoat, M.Shaheer, Pradip Krishen in discussion with N K Ahier and Naresh Kumar of the ASI horticulture department on the additional planting being proposed at Humayun's Tomb complex.

Principal Consultants

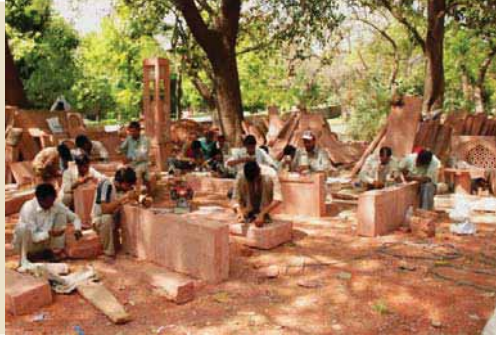
Shaheer Associates, Landscape Architects
 Shakeel Hossain, Urban Design
 Mr Pradip Krishen, Native Tree Specialist
 MKG Consultants, Sanitary and Plumbing Consultants
 Avik Sarkar, Ethos, School Furniture Design
 Mr Mayank Mehta, Infodesign, Documentation
 G.P. Gupta, Engineering Consultants, Electrical

ANANT Theatre group (Arts and Education)
 Sri Sambandh SRF Foundation
 ANANT Theatre Group
 Ms. Rashmi Malhotra (Life Skills Education)
 Dr.Amita Govinda (ECCD)
 Ms. Savitri Singh (ECCD)
 Ms. Moti Karn (Education Learning Kits)

Community Outreach team (Health/Education/Culture/Sanitation)

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Ms. Aliya Sahab	Mr. Mohammad Arif
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Mr. Mohammed Moinuddin	Mr. Abdul Rahim
Ms. Raiyeesa	Mr. Ayaz
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* Has left during the course of the year



Socio-Economic Initiatives

Conservation

Environment Development

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