Challenges of Skill Development for Preservation of Built Heritages in India

Biswajit Som
Director EISPE
Visiting Faculty, Jadavpur University
Kolkata, India
A FEW TREASURES OF ANCIENT INDIA

"India is, the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend ” - Mark Twain
EARLY CIVILIZATION OF THE WORLD: STONE AGE

BHIMBETKA ROCK SHELTERS
7000 Years Old

EDAKKAL CAVE KERALA, INDIA 7000 BC

In Central India & South India!

Number of analyses suggests that at least some of these shelters were inhabited more than 10,000 years back in human history as some of the Stone Age rock paintings found are approximately 30,000 years old from (Paleolithic Age).
A.S.I recorded 3683, very important monuments in India.

If we take only 4 imp. Cities in India, there are 4585 monuments.

Chennai: 467
Kolkata: 1300
Delhi: 1317
Mumbai: 1500
Every year, we are taking more monuments for protection and an existing monument is getting one more year old, which means, it is subject to greater ageing. There is an increasing demand for conservation personnel. I am afraid, we have not been able to keep pace with this demand on the one side and on the other side, the theories and the techniques of conservation are actually evolving day by day. We may not be able to keep pace with the changing requirements “

Director General Arch. Survey of India. [Sixteenth report Estimates committee(2007-08), Ministry of Culture; Maintenance of monuments by Archeological Survey of India]

It can be estimated that for preservation & maintenance of the monuments, average in four major cities, minimum manpower required in Skills is around 18340 Man /Per day
Some Examples of Degradation of Heritage Structure in India

St. Augustine's Tower, Goa (1602)

Phuta Mosque, Murshidabad

Katra Mosque, Murshidabad

Town Hall, Kolkata
In India, the development, preservation and maintenance of heritage sites is based on the contributions of community based skill.

- Historically TCBS is an unique feature of India.
- TCBS was nurtured and developed over the past several generations.
- However, TCBS has been decaying over the years.
- TCBS typically falls under non formal sector.
- Reviving TCBS is crucial for preservation of heritage sites.
- Introducing a combined model between the formal and informal sector is the key to fast track the skill shortage in heritage preservation in India.
Examples of TCBS in the making of Burnt Clay & Terracotta Artifacts & Tiles
Importance of heritage sites preservation in the light of Nepal Earthquake

- Innovative approach to Restoration of Heritage sites.
- It demands Prior Preparedness Through Intensive Maintenance Technique & Specified Skill for this type of Extreme Consequences.
- Requires special Skill Development Program utilizing and upgrading TCBS to preserve heritage sites effectively.
Innovative Approach of Restoration Strategy of Heritage structure

1. Contemp. Histr. & Social Fabric
2. Local Exploration & Community Origin
3. Original Arch. Form & Material Historic Chronology

Fix the Need For Restoration

Adaptive Re-use only

SWS/RVS

Excellent /Bldg. Prop. Mntnd.

Bldg. Damaged TDD-No Maint.

Bldg. Damaged EQ-MMD

NAR

Bldg. Ruined

Historical Origin.

Yes

Pre-code Era

No

Bldg. Damaged


Destroyed Ruins ?

Detailed Investigation.

Doc. Search.

Qualitative.

Yes

Cond Good Durability Ensured

No

Quantitative.

DVI

NDT

Appraisal

Restore & Regenerate Original Arch. & Structural Form

Retention of Physical Fabric.

Ensure material Compatibility.

Ensure EQ risk reduction.

Ensure Life enhancement

Effective Maintenance Manual for Individual Historic building, Monument & site

Ensure Skilled Workforce in execution work with proper sensitivity towards Heritage Structure
Existing Knowledge Hub
IIT’s/NIT’s/Engg. Colleges/Universities
Direct Monitoring/Participation

Community Based Skill Preservation & Development
Tradition Skill Preservation & Development

Emphasis on New Skill Dev. Program.
Emphasis on Construction & Renovation Skill Development

Modern Scientific Knowledge
Prior Knowledge
Master Craftsman/Mason

TVET-Polytechnic/ITI

On-Site Fast Track Training Program

On-Site Fast Track Training Program

Community Based Local Training Facilities/Laboratory

Formalization of Informal/non-formal Skill Base

Skill for Preservation & Maintenance of Heritage

Large-scale Participation of NGO and Govt. industry bodies, other trades for Extensive Awareness Campaign & Mobilization for Heritage Skill Training
An innovative model of combining formal education and informal education in preserving heritage sites are the key for India and most of the developing countries to optimize the utilization of resources in a cost effective manner.

- Strengthen and upgrade the TCBS
- Prioritization of heritage skills development program in the formal education sector in particular in TVET
- Massive advocacy and awareness program for developing heritage cultures through community participations.