INTRODUCTION: STEPWELL

What is a Step-well?

Why do we need them?

What are their types?

How can we revive them functionally and culturally?

CHAND BAORI

WORLD RESOURCES FORUM

STEPWELL

- Subterranean water-related monument.
- A descending stairwell leading downward from the ground level to the water level.
54% of India Faces High to Extremely High Water Stress
## METHODOLOGY

### Literature Case Study: Stepwells of Western India

| Sr No. | Location                  | Name                        | Image          | Dynasty             | Period                        | Function                                                                                   | Remarks                                                                                     |
|-------|---------------------------|-----------------------------|----------------|---------------------|-------------------------------|--------------------------------------------------------------------------------------------|                                                                                            |
| 1     | Patan, Gujarat            | Rani-ki-Vav                 |                | Bhimdev I (1022 - 1063) CE | 11th century                  | Stepwell built in honour of deceased husband by Queen Udayamati                              |                                                                                            |
| 2     | Satara, Maharashtra       | Baramoti                    |                | Not Available       | 17th century                  | Accommodates the throne of the king that opens to two galleries to hold council meetings    | Looks like a dug-out shivling                                                              |
| 3     | Abhaneri, Rajasthan       | Chand Baori                  |                | Nikumbha Dynasty    | 860 AD (9th century)          | Opposite to temple of Harsha Mata, goddess of joy and happiness                              | Jharokhas (windows) meant to house the royal family are present on one side of the stepwell |
| 4     | Mehrauli, Delhi           | Gandhak-ki-Baoli            |                | NA                  | NA                            | Water is known to contain sulphur (Gandhak in Hindi)                                        | Stepwell built in honour of deceased husband by Queen Udayamati                            |
| 5     | Khandagiri and Udaygiri,  | Rock-cut Step-well          |                | Available           | 10th century AD               | Probably used as a resting place by Buddhist and Jain monks.                                 |                                                                                            |
| 6     | Vidisha, Madhya Pradesh   | Bijamandal Temple           |                | NA                  | 8th century AD                | Probably used as a resting place by Buddhist and Jain monks.                                 |                                                                                            |
## Materials and Methods

### Primary Case Study:

<table>
<thead>
<tr>
<th>Sn No.</th>
<th>Location</th>
<th>Name</th>
<th>Image</th>
<th>Dynasty</th>
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<th>Function</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hampi, Karnataka</td>
<td>Octagonal Bath</td>
<td><img src="octagonal_bath.jpg" alt="Image" /></td>
<td>Vijayanagara Empire</td>
<td>14th century</td>
<td>Colonnade circumventing the bath; made of indigenous granite stone; no mortar used</td>
<td></td>
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<td>2.</td>
<td>Hampi, Karnataka</td>
<td>Stepped Tank adjacent to Hazara Rama temple</td>
<td><img src="stepped_tank.jpg" alt="Image" /></td>
<td>Vijayanagara Empire</td>
<td>14th century</td>
<td>Water present at the bottom; has become polluted with garbage accumulation</td>
<td></td>
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<td>3.</td>
<td>Hampi, Karnataka</td>
<td>Public Bath Stepwell adjacent to Krishna Temple</td>
<td><img src="public_bath.jpg" alt="Image" /></td>
<td>Vijayanagara Empire</td>
<td>14th century</td>
<td>Bath made up on approx. 5m. Raised platform; made of indigenous granite stone with</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Madurai, Tamil Nadu</td>
<td>Meenakshi Amman Temple</td>
<td><img src="meenakshi_temple.jpg" alt="Image" /></td>
<td>Naya Nayaka Dynasty</td>
<td>16th century</td>
<td>Water present in the stepwell in the temple enclosure; maybe used for washing hands and feet</td>
<td></td>
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<td>5.</td>
<td>Hampi, Karnataka</td>
<td>Stepwell adjacent to Krishna Temple</td>
<td><img src="stepwell.jpg" alt="Image" /></td>
<td>Vijayanagara Empire</td>
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<td>Made of Black schist stone; in-situ construction</td>
<td></td>
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<td>6.</td>
<td>Hampi, Karnataka</td>
<td>Stepwell Bath</td>
<td><img src="stepwell_bath.jpg" alt="Image" /></td>
<td>Vijayanagara Empire</td>
<td>14th century</td>
<td>Made of indigenously available stone</td>
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</table>
RESULTS: TYPES OF STEPWELLS

Typical South Indian Stepwell
- Often found adjacent to temples
- Clean, bold patterns; shallow wells

Typical North Indian Stepwell
- Exquisite carvings of Hindu Deities
- Several stories deep to reach groundwater reserves
- A destination of rest for travellers of all genders, religions and classes
- Function: Drinking water obtained from accessing groundwater aquifers by steps

Bathing

Buddhist and Jain Monks

Function: Used for Bathing, washing before religious rituals

Source of Water: Water supplied using advanced channels from nearby tanks etc.
### Typologies | Strengths | Weaknesses | Opportunities | Threats
--- | --- | --- | --- | ---
**Parks** | • Will act as the highlighted water feature | • Will cause water-run-off from park to accumulate in the stepwell | • Can host forest retreats and park retreats with Indian cultural element | • Lack of initial seed fund to establish landscape around the stepwell

<table>
<thead>
<tr>
<th><strong>Additional Information</strong></th>
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<tbody>
<tr>
<td><strong>1.</strong> Riggs G (2009) Intangible heritage embodied. Springer</td>
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<td><strong>16.</strong> Reports in Hydrology No. 23.</td>
</tr>
<tr>
<td><strong>20.</strong> <a href="https://www.flickr.com/photos/9702460@N00/104518173">https://www.flickr.com/photos/9702460@N00/104518173</a> commons.wikimedia.org</td>
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**STRATEGIES**

- **Religious**
  - Enhance income from sale of local handicrafts
  - Will ensure maintenance
  - Will cool down temperature of its surroundings
  - Will act as the highlighted water feature
  - Will act as the highlighted water feature

- **Centers**
  - Enhance income from sale of local handicrafts
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- **Centres**
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- **Plazas**
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- **Parks**
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- **Seafront**
  - Enhance income from sale of local handicrafts
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- **Haat Bazaars**
  - Enhance income from sale of local handicrafts
  - Will ensure maintenance
  - Will cool down temperature of its surroundings
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- **A gathering place for listening to sermons**
  - Enhance income from sale of local handicrafts
  - Will ensure maintenance
  - Will cool down temperature of its surroundings
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- **Improve communal harmony in India**
  - Enhance income from sale of local handicrafts
  - Will ensure maintenance
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**Lack of incorporation of landscape design**

- **Lack of initial seed fund to establish landscape**
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