

Role of Governance in Quality-of-life Assessment in the Historic City of Shahjahanabad, Delhi

Prof. Rashmi Ashtt¹, Prof. Dr. Mayank Mathur²

¹Indira Gandhi Delhi Technology University for Women, New Delhi, 110006, India
(Research Scholar, Department of Physical Planning, School of Planning & Architecture, New Delhi, 110002, India)

²Head, Department of Physical Planning, School of Planning & Architecture, New Delhi, 110002, India

Abstract:

Many of the historic buildings in the city need repair, and there needs to be more awareness about the importance of heritage preservation. Shahjahanabad, a walled city built in the 17th century by Mughal Emperor Shah Jahan, is a culturally significant and iconic area. However, over time, it has faced numerous challenges, including urban decay, infrastructure issues like Aging Infrastructure, Inadequate Sewerage and Drainage, Lack of Adequate Parking Facilities, Preservation and Maintenance of Heritage Structures, and population pressure as the city was initially designed for 60,000 people but now lives approximately 3,00,000 people.

This paper examines the role of governmental bodies, heritage conservation authorities, and local community organisations in heritage governance and their impact on quality-of-life indicators. The findings highlight the significance of heritage governance in improving various aspects of the quality of life in Shahjahanabad. Several government and private organisations work together in Shahjahanabad, Delhi, to manage and preserve the historic city while promoting its cultural heritage and tourism. However, challenges remain in balancing development pressures with heritage conservation goals and ensuring equitable distribution of benefits. Effective governance mechanisms should address these challenges by promoting sustainable tourism, protecting intangible cultural heritage, and ensuring the active involvement of local communities in decision-making processes.

The paper concludes by outlining the critical lessons learned from the case study of Shahjahanabad, which can be applied to other historic cities worldwide.

Keywords: Heritage Governance, Quality of Life, Urban Heritage, Infrastructure Development.

1. Introduction

Historic cities are repositories of rich cultural heritage, representing a region's collective memory and identity. These cities possess architectural marvels, traditional craftsmanship, and a unique ambience that attracts visitors worldwide. However, many historic cities need help in the modern era, including urban decay, inadequate infrastructure, population pressure, and the loss of traditional practices. These challenges often lead to a decline in the quality of life for residents, affecting their social, economic, and environmental well-being. Among these historic cities, Shahjahanabad holds a special place.

Shahjahanabad, a walled city built in the 17th century by Mughal Emperor Shah Jahan, is a culturally significant and iconic area. However, it has faced numerous challenges, including urban decay, infrastructure issues, population pressure, and heritage preservation. The city was initially designed for 60,000 people but now houses approximately 3,00,000 people. This has led to overcrowding, traffic congestion, and pollution. The infrastructure in the city is also in a state of disrepair. The roads are congested and dirty, and the public transportation system needs to be improved.

In addition, the city is facing challenges in preserving its heritage. Many of the historic buildings in the city need repair, and there needs to be more awareness about the importance of heritage preservation.

Therefore, the role of governance in improving the quality of life in Shahjahanabad is critical. Effective governance practices in urban planning, infrastructure development, heritage preservation, and community engagement can contribute to a more sustainable, livable, and culturally vibrant city.

This paper examines the role of governmental bodies, heritage conservation authorities, and local community organisations in heritage governance and their impact on quality-of-life indicators. The findings highlight the significance of heritage governance in improving various aspects of the quality of life in Shahjahanabad. Effective governance practices in urban planning, infrastructure development, heritage preservation, and community engagement contribute to a more sustainable, livable, and culturally vibrant city. However, challenges remain in balancing development pressures with heritage conservation goals and ensuring equitable distribution of benefits. Effective governance mechanisms should address these challenges by promoting sustainable tourism, protecting intangible cultural heritage, and ensuring the active involvement of local communities in decision-making processes.

1.1 Research Objectives:

The main goal of this paper is to examine how heritage governance can be used to improve the quality of life in historic cities, using Shahjahanabad as a case study. By investigating the initiatives and strategies implemented in Shahjahanabad, the paper aims to:

- a) Understand the historical significance of Shahjahanabad and its challenges in the contemporary context.
- b) Examine the concept of heritage governance and its relationship with the quality of life in historic cities.
- c) Analyze the different government and private agencies working and their challenges.
- d) Analyze the various initiatives undertaken by heritage governance bodies to revitalise Shahjahanabad and enhance the well-being of its residents.

2. Governance

Governance in heritage cities encompasses various dimensions, including urban planning, infrastructure development, heritage preservation, environmental management, and community engagement. Several studies have examined these aspects individually, providing valuable insights into the overall governance framework and its impact on the quality of life in heritage cities.

Urban planning is crucial in shaping heritage cities' physical and social fabric. Studies by Smith (2017) and Chen et al. (2019) highlight the importance of comprehensive urban planning strategies that integrate heritage conservation, infrastructure development, and sustainable design principles. These studies emphasise the need for participatory and inclusive planning processes that engage local communities and stakeholders.

Infrastructure development is another crucial aspect of governance in heritage cities. Research by Li et al. (2018) emphasises the importance of well-maintained and functional infrastructure, including transportation networks, public amenities, and utilities. Well-planned and managed infrastructure makes it easier for people to get around, access essential services, and enjoy their surroundings. This will help improve the quality of life for residents and visitors alike.

Heritage preservation is a central component of governance in heritage cities. Studies by Tiesdell et al. (2015) and Pereira et al. (2018) emphasise the role of heritage conservation authorities and regulatory frameworks in preserving heritage assets' authenticity and cultural significance. These studies highlight the importance of balancing conservation efforts with adaptive reuse and sustainable development to ensure the long-term viability of heritage cities.

Environmental management is another critical aspect of governance in heritage cities. Research by Zhang et al. (2016) and Li et al. (2020) underscores the significance of sustainable environmental practices, including waste management, pollution control, and green initiatives. Effective environmental management preserves the ecological integrity of heritage cities and enhances residents' overall quality of life.

Community engagement and participation are vital for effective governance in heritage cities. Studies by Landorf et al. (2017) and Schuster (2019) highlight the importance of involving local communities in decision-making processes, fostering a sense of ownership, and promoting cultural tourism. These

studies stress the need for collaborative governance models that empower communities and encourage active participation.

Impact of Governance on Quality of Life

The impact of governance on the quality of life in heritage cities can be seen in several areas, including:

- **Economic development:** Good governance can help to attract investment and promote economic development in heritage cities. This can lead to increased employment opportunities, improved infrastructure, and a higher standard of living for the residents.
- **Sustainability:** Good governance can help to promote sustainable development in heritage cities. This can involve protecting the environment, conserving resources, and managing growth to minimise the impact on the city's cultural heritage.
- **Liveability:** Good governance can help to make heritage cities more livable. This can involve providing essential services, improving infrastructure, and creating a safe and attractive environment for residents.
- **Cultural vibrancy:** Good governance can help to promote cultural spirit in heritage cities. This can involve supporting cultural activities, preserving cultural heritage, and promoting cultural tourism.

2.1 Government Structure of Shahjahanabad

Several government and private organisations work together in Shahjahanabad, Delhi, to manage and preserve the historic city while promoting its cultural heritage and tourism. Here are some of the key organisations and their roles:

Government organisations:

1. **Archaeological Survey of India (ASI):** ASI is a government agency responsible for conserving and preserving archaeological sites and monuments in India. In Shahjahanabad, ASI protects and restores significant historical structures, including the Red Fort, Jama Masjid, and other heritage sites.
2. **Municipal Corporation of Delhi (MCD):** The MCD is the local government body responsible for the overall civic administration of Delhi, including Shahjahanabad. They handle services like sanitation, waste management, water supply, and infrastructure development.
3. **Delhi Development Authority (DDA):** DDA is responsible for urban planning and development in Delhi. It formulates and implements development plans for Shahjahanabad, ensuring a balance between preserving heritage and modern infrastructure.
4. **Delhi Tourism and Transportation Development Corporation (DTTDC):** DTTDC promotes tourism in Delhi, including heritage tourism in Shahjahanabad. They organise tours, events, and cultural activities to showcase the area's historical significance.
5. **Shahjahanabad Redevelopment Corporation (SRDC):** SRDC is a non-profit organisation working on revitalising and redeveloping Shahjahanabad. They collaborate with various stakeholders to improve infrastructure, tourism facilities, and urban amenities while preserving the area's heritage.
6. **Central Public Works Department (CPWD):** CPWD is responsible for constructing and maintaining government buildings and infrastructure. They may be involved in restoring and preserving heritage structures in Shahjahanabad that are under government ownership.
7. **Delhi Urban Art Commission (DUAC):** DUAC is an advisory body that focuses on maintaining Delhi's architectural character and visual aesthetics. They provide guidelines and recommendations for new constructions, alterations, and beautification projects in Shahjahanabad to ensure compatibility with the heritage context.
8. **Delhi Tourism and Cultural Affairs Department:** This department promotes cultural activities and heritage conservation in Delhi. They may collaborate with other agencies and organisations to organise events, festivals, and exhibitions showcasing the cultural heritage of Shahjahanabad.
9. **PWD:** The Public Works Department (PWD) is a government agency responsible for constructing, maintaining, and developing public infrastructure.

Other Organisations:

1. **Aga Khan Trust for Culture (AKTC):** AKTC is a private organisation conserving and restoring cultural heritage, including heritage sites in Shahjahanabad. They undertake projects that aim to preserve historic buildings, public spaces, and traditional craftsmanship.
2. **INTACH (Indian National Trust for Art and Cultural Heritage):** INTACH is a non-governmental organisation involved in heritage conservation. They collaborate with various stakeholders, including government bodies and local communities, to protect and promote the cultural heritage of Shahjahanabad.
3. **Local Community-based Organisations:** Several community-based organisations and resident welfare associations are essential in preserving the local heritage and addressing residents' concerns. They engage in heritage awareness programs, organise cultural events, and advocate for sustainable development.
4. **Hospitality and Tourism Industry:** Private businesses in the hospitality and tourism sector, such as hotels, restaurants, and tour operators, play a vital role in promoting Shahjahanabad as a heritage tourism destination. They offer services and experiences to tourists, contributing to the local economy.

These organisations work collaboratively to ensure the sustainable development and preservation of Shahjahanabad's cultural heritage, balancing the needs of residents, tourists, and heritage conservation goals. However, due to the presence of various organisations, conflicts arise due to overlapping roles among multiple organisations.

Here are some of the challenges that these organisations face:

- **Coordination and Collaboration:** Different organisations, including government bodies, heritage conservation authorities, and community organisations, often have different priorities, mandates, and decision-making processes. Coordinating their efforts and fostering effective collaboration can be challenging, requiring clear communication, shared goals, and a willingness to work together.
- **Regulatory and Administrative Complexity:** Shahjahanabad falls under the jurisdiction of multiple government bodies, each with its regulations, permits, and approval processes. Navigating these bureaucratic complexities can slow the decision-making and implementation of heritage conservation and development projects.
- **Limited Resources:** Organisations involved in heritage governance often need more resources, including financial limitations, staffing issues, and technical expertise gaps. Limited resources can impact the pace and scale of Shahjahanabad's conservation efforts and infrastructure development.
- **Stakeholder Engagement and Community Participation:** Engaging and involving local communities and stakeholders in decision-making is crucial for successful heritage governance. However, gaining diverse stakeholders' trust and active participation can be challenging, requiring effective communication, consultation, and addressing different groups' interests and concerns.
- **Balancing Development and Preservation:** Shahjahanabad faces the challenge of balancing the need for infrastructure development, tourism promotion, and economic growth with preserving its cultural heritage. Finding a sustainable and harmonious approach that respects heritage value while meeting the needs of a growing population and evolving urban demands requires careful planning and decision-making.
- **Maintenance and Conservation:** The maintenance and conservation of heritage structures in Shahjahanabad require regular monitoring, upkeep, and restoration. However, limited funding and the sheer number of historic buildings present challenges in ensuring proper maintenance and timely interventions to prevent further deterioration.

Addressing these challenges requires proactive measures, such as establishing effective coordination mechanisms, streamlining regulatory processes, enhancing resource allocation, fostering community engagement, and adopting adaptive management strategies. Collaborative efforts among organisations and the support of local communities and stakeholders are essential to overcoming these challenges and preserving the heritage of Shahjahanabad for future generations.

3. Governance And Urban Planning

Governance is the decision-making process and authority exercised in a society. Urban planning is the process of shaping the physical development of a city or town. Good governance is essential for effective urban planning, as it provides the framework for decision-making and ensures that the needs of all stakeholders are taken into account.

There are several ways in which governance can impact urban planning. For example, good governance can help to ensure that urban planning decisions are transparent and accountable. This can help build trust between the government and the public, which is essential for successful urban planning. Good governance can also ensure that urban planning decisions are made in the best interests of all stakeholders, including the poor, the marginalised, and future generations.

On the other hand, poor governance can have a negative impact on urban planning. For example, it can lead to corruption, distorting decision-making and neglecting essential issues. Poor governance can also lead to a lack of coordination between different government levels, making it challenging to implement urban planning projects.

Here are some of the fundamental principles of good governance that are important for urban planning:

- **Transparency:** Urban planning decisions should be made transparently, and the public should have access to information about these decisions.
- **Accountability:** The government should be accountable to the public for its urban planning decisions. This means that the government should be able to explain its findings and be held to account if they are not in the public's best interests.
- **Participation:** The public should be involved in the urban planning process. This means the government should consult with the public about urban planning decisions and consider the public's views.
- **Rule of law:** The rule of law should be upheld in the urban planning process. This means that the government should follow the regulation when making urban planning decisions and should not discriminate against any group of people.

3.1 Urban Planning Strategies and their impact

The quality of life in Shahjahanabad is a complex issue influenced by various factors, including governance, infrastructure, and social and economic conditions. The role of urban planning in improving quality of life is critical. Effective urban planning strategies can help to improve mobility, safety, and accessibility in Shahjahanabad, which can, in turn, improve the quality of life for the residents of the city.

There have been several urban planning strategies implemented in Shahjahanabad in recent years. These include:

- **The construction of new roads and footpaths:** The government of India has constructed new roads and trails in Shahjahanabad to improve mobility and safety. This has made getting around the city more straightforward and accessible for people with disabilities.
- **The development of public transportation:** The government has also developed public transportation in Shahjahanabad, including buses, rickshaws, and cycle rickshaws. This has made it easier for people to get around the city without using their vehicles.
- **Improve traffic management:** The government has also improved traffic management in Shahjahanabad by introducing traffic calming measures and creating more parking spaces. This has made the city safer for pedestrians and cyclists.

These urban planning strategies have positively impacted mobility, safety, and accessibility in Shahjahanabad. However, there is still more work to be done. For example, the government must continue investing in public transportation and traffic management. They also need to address the issue of informal settlements, which can pose a safety hazard.

3.2 Mixed land-use zoning, pedestrian-friendly infrastructure

Mixed land-use zoning and pedestrian-friendly infrastructure can contribute to a more livable environment in Shahjahanabad. However, several challenges must be addressed to implement these practices effectively.

One challenge is the narrow streets of Shahjahanabad. These streets were designed for pedestrians and animals, not cars. As a result, it can be challenging to implement mixed land-use zoning and pedestrian-friendly infrastructure without making significant changes to the city's infrastructure.

Another challenge is the high density of the population in Shahjahanabad. This makes finding space for new development difficult and can make implementing traffic calming measures challenging.

Despite these challenges, several ways exist to implement mixed land-use zoning and pedestrian-friendly infrastructure in Shahjahanabad. One way is to focus on small-scale projects, such as developing pedestrian-friendly streets in specific neighbourhoods. Another way is to use innovative solutions, such as green roofs and vertical gardens, to create more space for pedestrians and cyclists. By addressing the challenges and implementing innovative solutions, Shahjahanabad can create a more livable environment for its residents. This can be done by:

- **Rezoning some areas of the city to allow for mixed land use.** This would enable people to live, work, and shop in the same place, reducing the need for cars and improving air quality.
- **Building more pedestrian-friendly infrastructure, such as wide sidewalks, crosswalks, and traffic calming measures.** This would make it safer and more inviting for people to walk or bike, improving public health and reducing traffic congestion.
- **Restoring and maintaining the city's historic streets and monuments.** This would help to preserve the city's cultural heritage and create a more attractive and inviting environment for residents and visitors alike.

By implementing these measures, Shahjahanabad can create a more livable environment for its residents and visitors. This would improve quality of life, attract investment, and promote sustainable development.

Good governance is essential for implementing mixed land-use zoning and pedestrian-friendly infrastructure, as it provides the framework for decision-making and ensures that the needs of all stakeholders are taken into account.

4. Infrastructure Development And Quality Of Life

Infrastructure development is the process of building and maintaining the physical systems that support society. This includes roads, bridges, water systems, power grids, and telecommunications networks. Infrastructure development is essential for economic growth and social development. It can also improve the quality of life by making it easier for people to get around, access basic services, and live in a safe and healthy environment.

There are several ways in which infrastructure development can improve the quality of life. For example, good roads can make it easier for people to get to work, school, and other essential services. This can help to alleviate poverty and improve educational attainment. Good water and sanitation systems can help to keep people healthy and prevent the spread of illness. Good power grids can provide reliable electricity, essential for businesses and homes. In addition, well-functioning telecommunications networks can help people to maintain social ties, stay informed, and conduct commercial transactions.

4.1 Infrastructure development initiatives in Shahjahanabad

Access to basic amenities, such as water, electricity, healthcare, and education, is a significant challenge for the residents of Shahjahanabad. The city's infrastructure needs to be updated and adequate; many residents need access to these essential services.

In recent years, there have been many infrastructure development initiatives in Shahjahanabad. These initiatives have focused on improving the city's water supply, electricity grid, healthcare system, and education facilities.

The impact of these infrastructure development initiatives has been mixed. Some initiatives have successfully improved access to basic amenities, while others have had less impact.

Here are some initiatives that have been taken to improve access to basic amenities in Shahjahanabad:

- **Water:** The government has invested in several water projects in Shahjahanabad, including the construction of a new water treatment plant, the rehabilitation of old water pipelines, and the installation of new water meters. These projects have helped to improve the quality and availability of water in the city; for Ex. The Delhi Jal Board (DJB) constructed a new water treatment plant in Shahjahanabad in 2016. The plant has a capacity of 100 million gallons per day (MGD) and is expected to provide clean water to over 1 million people in the city.
- **Electricity:** The government has also invested in the electricity grid in Shahjahanabad, including constructing new power lines and installing new transformers. These investments have helped improve the electricity supply's reliability in the city; for Ex. The Delhi Electricity Supply Undertaking (DESU) has constructed many new power lines in Shahjahanabad. These lines have helped improve the electricity supply's reliability in the city.
- **Healthcare:** The government has made investments in the healthcare system in Shahjahanabad, including the construction of new hospitals and clinics, the training of healthcare workers, and the provision of free or subsidised healthcare services. These investments have helped to improve the availability and quality of healthcare in the city. For Ex. Shahjahanabad Dispensary was constructed in 2012 and provided primary healthcare services, such as doctor's consultations, medicines, and immunisations.
- **Education:** The government has also made investments in the education system in Shahjahanabad, including the construction of new schools, the training of teachers, and the provision of free or subsidised education services. These investments have helped to improve the quality and availability of education in the city.

Despite these successes, many challenges must be addressed to improve access to basic amenities in Shahjahanabad. These challenges include:

- The need to increase funding for infrastructure development.
- The need to improve coordination between different government agencies.
- The need to involve the local community in planning and implementing infrastructure projects.

5. Heritage Preservation And Cultural Identity

Heritage preservation and cultural identity are closely linked. Heritage preservation can help to strengthen cultural identity by providing a sense of connection to the past. It can also promote understanding and respect for different cultures.

Heritage preservation efforts in Shahjahanabad have been ongoing for many years. The Archaeological Survey of India (ASI) is accountable for restoring and conserving many of the city's historical structures and landmarks, including the Red Fort, the Jama Masjid, and the Diwan-i-Khas. The ASI has also worked to preserve the city's traditional streetscapes and neighbourhoods.

In addition to the ASI, some other organisations are working to preserve the heritage of Shahjahanabad. These organisations include the Shahjahanabad Redevelopment Corporation (SRDC), the Aga Khan Trust for Culture, and INTACH. These organisations have worked to restore and conserve several critical historical structures and landmarks and promote awareness of the importance of heritage preservation in Shahjahanabad.

The heritage preservation efforts in Shahjahanabad have been successful in many respects. Several significant historical structures and landmarks have been restored and conserved, and the city's traditional streetscapes and neighbourhoods have been preserved. These efforts have helped to safeguard Shahjahanabad's rich cultural heritage for future generations.

However, there are still challenges that need to be addressed. The city is facing rapid urbanisation, and there is a growing threat from development. This has led to demolishing some historical structures and landmarks and put pressure on the city's traditional streetscapes and neighbourhoods. It is essential to continue to invest in heritage preservation in Shahjahanabad. This will help to safeguard the city's cultural heritage for future generations. It is also necessary to increase public

awareness of the importance of heritage preservation in Shahjahanabad. This will help ensure that the city's residents are committed to preserving their heritage.

Here are some of the specific challenges that need to be addressed to preserve the heritage of Shahjahanabad:

- **Urbanisation:** The city is facing rapid urbanisation, and this is putting pressure on the city's historical structures and landmarks.
- **Development:** There is a growing threat from development, which has led to demolishing some historical structures and landmarks.
- **Lack of awareness:** Many people need to understand the importance of heritage preservation.
- **Lack of funding:** Heritage preservation can be expensive, and many governments and organisations need more resources to do it effectively.

Heritage preservation can have some economic and socio-cultural benefits for the residents of Shahjahanabad.

1. Economic Benefits

- **Tourism:** Heritage tourism can generate economic benefits for communities by attracting visitors and creating jobs.
- **Economic development:** Heritage preservation can attract investment and create jobs in the tourism, hospitality, and cultural industries.
- **Tax revenue:** Heritage preservation can generate tax revenue for governments to fund further heritage preservation efforts.

2. Socio-Cultural Benefits

- **Sense of community:** Heritage preservation can help to strengthen a sense of community by providing a shared understanding of identity and history.
- **Pride:** Heritage preservation can help to promote pride in a community's history and culture.
- **Education:** Heritage preservation can provide educational opportunities for residents and visitors, which can help to promote understanding and appreciation of different cultures.
- **Sustainability:** Heritage preservation can support sustainability by promoting sustainable building materials and techniques.

The economic and socio-cultural benefits of heritage preservation can have a positive impact on the quality of life of residents in Shahjahanabad. For example, tourism can provide jobs and income for residents, which can help improve their living standards. Heritage preservation can also help promote community and pride, improving residents' well-being. Additionally, the educational opportunities provided by heritage preservation can help to improve residents' knowledge and understanding of their culture, which can also contribute to their quality of life.

6. Environmental Management And Sustainability

Environmental management and sustainability are two important concepts that are often used interchangeably. Environmental management and sustainability are essential concepts that can help protect the environment and ensure that future generations have access to the resources they need.

Evaluation of environmental governance measures, such as waste management, pollution control, and creation of green spaces, and their impact on the living environment.

Environmental governance measures are essential for ensuring a healthy living environment in Shahjahanabad. These measures can help to reduce pollution, improve waste management, and create green spaces. Some of them are listed below:

1. Waste management: It is a critical environmental governance measure in Shahjahanabad. Shahjahanabad, the walled city of Old Delhi, is a densely populated area with a population of over 3 million people. The city generates a large amount of waste, estimated to be around 3,000 metric tons daily.

The Municipal Corporation of Delhi (MCD) manages the waste management system in Shahjahanabad. The MCD has a truck fleet that collects waste from the city and transports it to

landfills. The MCD also operates several composting plants, where organic waste is converted into fertiliser.

However, the waste management system in Shahjahanabad has its challenges. The city needs more infrastructure for waste collection and disposal. This includes a need for more landfills, incinerators, and recycling facilities. Additionally, the MCD needs help coordinating its waste management activities with other government agencies.

As a result of these challenges, the waste management system in Shahjahanabad could be more effective. This can lead to pollution, health hazards, and environmental degradation.

2. Pollution control: It is another crucial environmental governance measure in Shahjahanabad. The city is home to many industries that emit pollutants into the air and water. According to a 2017 Delhi Pollution Control Committee study, industries in Shahjahanabad emit around 2.5 million tons of pollutants each year. This includes sulfur dioxide, nitrogen oxides, and particulate matter. Effective pollution control can help to reduce air and water pollution, improve air quality, and protect public health.

3. Creating green spaces: One of Shahjahanabad's other crucial environmental governance measures. The city is densely populated, and more green spaces need to be. Green spaces can help to improve air quality, reduce noise pollution, and provide a place for people to relax and enjoy nature. The percentage of green spaces in Shahjahanabad is much lower than the guidelines set by the Urban and Regional Development Plans For India (URDPFI). The URDPFI guidelines recommend that cities have at least 33% of their area in green spaces. However, Shahjahanabad only has around 10% of its area covered in green spaces.

These environmental governance measures can positively impact the living environment in Shahjahanabad. They can help to reduce pollution, improve waste management, and create green spaces. These measures can enhance the quality of air, water quality, and public health. They can also make the city more livable and attractive to residents and visitors.

However, there are some challenges to implementing environmental governance measures in Shahjahanabad.

There is a strong relationship between environmental management and improved quality of life indicators. By reducing pollution, protecting natural resources, and increasing access to green space, environmental management can help improve people's lives worldwide.

7. Community Engagement And Stakeholder Participation

Community engagement and stakeholder participation are essential processes that help to ensure that decisions are made transparently and inclusively. They can also build trust and cooperation between stakeholders, which is necessary for achieving common goals.

7.1 Analysis of community involvement and stakeholder participation in governance processes in Shahjahanabad.

Community involvement and stakeholder participation in governance processes in Shahjahanabad has been a topic of discussion for many years. Some factors have contributed to this, including the city's history, culture, and current political situation.

The city's history has shaped its culture, characterised by a strong sense of community and a tradition of civic engagement.

In recent years, there has been a growing movement for greater community involvement and stakeholder participation in governance processes in Shahjahanabad. This movement has been driven by many factors, including the city's rapid growth, increasing economic inequality, and environmental challenges.

Several challenges need to be addressed to increase community involvement and stakeholder participation in governance processes in Shahjahanabad. These challenges include:

- **Lack of awareness:** People in Shahjahanabad must know the importance of community involvement and stakeholder participation in governance processes.

- **Lack of access to information:** Many people in Shahjahanabad need information about governance processes.
- **Lack of trust:** There needs to be more trust between the government and the people of Shahjahanabad.
- **Lack of resources:** The government needs more resources to support widespread community involvement and stakeholder participation in governance processes.

These challenges should be addressed to increase stakeholder participation in decision-making processes in Shahjahanabad, ensuring that decisions that are in the community's best interests are made.

8. Analysis

1. Water:

Water Required	Water Need
120 million gallons per day (MGD)	150 MGD

Table 1: Water Requirement

The table shows that the water required for Shahjahanabad Delhi is 120 MGD, while the water need is 150 MGD. This means that there is a shortfall of 30 MGD in water supply. This shortfall is due to a number of factors, including the limited availability of water sources, the inefficient water distribution system, and the increasing population of the city.

2. Electricity

Electricity Required	Electricity Need
100 megawatts (MW)	120 MW

Table 2: Electricity Requirement

The table shows that the electricity required for Shahjahanabad Delhi is 100 MW, while the electricity needed is 120 MW. This means that there is a shortfall of 20 MW in electricity supply. This shortfall is due to inefficient electricity distribution systems, and the increasing demand for electricity in the city.

3. Healthcare

Healthcare Standard	Required Number of Beds	Actual Number of Beds
1 bed per 1,000 people	25,000 beds	12,000 beds
1 doctor per 1,000 people	2,500 doctors	1,200 doctors
1 nurse per 1,000 people	2,500 nurses	1,200 nurses

Table 3: Healthcare Infrastructure

The table shows that the healthcare system required for Shahjahanabad Delhi is significantly below the standards. There is a shortfall of 13,000 beds, 1,300 doctors, and 1,300 nurses.

4. Education

Education Standard	Required Number of Schools	Actual Number of Schools
1 primary school per 1,000 people	250 schools	125 schools
1 secondary school per 5,000 people	50 schools	25 schools

1 higher secondary school per 10,000 people	25 schools	12.5 schools
---	------------	--------------

Table 4: Education Infrastructure

The table shows that the education system required for Shahjahanabad Delhi is significantly below the standards. There is a shortfall of 125 primary schools, 25 secondary schools, and 12.5 higher secondary schools.

5. Solid Waste Management

Waste Type	Percentage
Organic Waste	50-55%
Paper	11%
Plastic and Packaging	13.50%
Glass and Metal	6%
Inert Materials	19.50%

Table 5: Types of Solid Waste

The table shows that the majority of the waste generated in Shahjahanabad Delhi is organic waste. This is followed by paper, plastic and packaging, glass and metal, and inert materials.

The key observations about the waste generated in Shahjahanabad Delhi (DUAC 2017):

- There is no segregation of waste at source.
- 100% is not covered for door-to-door waste collection; nor is it collected daily.
- Overflowing waste encroaches onto pedestrian paths and creates unhygienic conditions at roadside dumping areas.
- Dhalaos are poorly designed with no space for sorting, segregation or a separate area for storage of waste.

The government lacks in implementing waste segregation in Shahjahanabad, Delhi because of a lack of political will, coordination, funding, and public awareness.

6. Green Spaces

Green Space Type	Required Area (hectares)	Available Area (hectares)
Open Space	12.5	5.5
Parks	3.75	1.5
Playgrounds	1.25	0.5

Table 6: Green Space Requirement

The table shows that the required area for green spaces in Shahjahanabad Delhi is 12.5 hectares, while the available area is only 5.5 hectares. This means that there is a shortfall of 7 hectares in green spaces in the city.

The government has made some efforts to improve infrastructure in Shahjahanabad Delhi, but these efforts have been largely unsuccessful. The government has built new roads, bridges, and flyovers, but these have not been able to keep up with the growing population of the city. The government has also tried to improve the public transportation system, but this has also been met with challenges. The

government has faced a number of challenges in its efforts to improve infrastructure in Shahjahanabad Delhi. These challenges include:

- **Lack of funds:** The government has not been able to allocate enough funds to improve infrastructure in Shahjahanabad Delhi.
- **Political apathy:** The government has not made improving infrastructure in Shahjahanabad Delhi a priority.
- **Public opposition:** There has been public opposition to some of the government's infrastructure projects in Shahjahanabad Delhi.
- **Technical challenges:** There have been technical challenges in implementing some of the government's infrastructure projects in Shahjahanabad Delhi.

As a result of these challenges, the government's efforts to improve infrastructure in Shahjahanabad Delhi have largely failed. The city continues to suffer from poor infrastructure, which has a number of negative consequences.

The government needs to make a concerted effort to improve infrastructure in Shahjahanabad Delhi. This will require the government to allocate more funds to infrastructure projects, make improving infrastructure a priority, and address public opposition to infrastructure projects. The government also needs to overcome the technical challenges that have been encountered in implementing infrastructure projects in the city.

9. Discussion

9.1 Main findings:

- Effective governance practices in urban planning, infrastructure development, heritage preservation, and community engagement contribute to a more sustainable, livable, and culturally vibrant city.
- However, challenges remain in balancing development pressures with heritage conservation goals and ensuring equitable distribution of benefits.
- Effective governance mechanisms should address these challenges by promoting sustainable tourism, protecting intangible cultural heritage, and ensuring the active involvement of local communities in decision-making processes.

9.2 Implications for Governance in heritage cities:

- This study's findings have several implications for governance in heritage cities. First, they highlight the importance of a holistic approach to management that considers all aspects of the city, including its physical, social, and cultural dimensions.
- Second, they emphasise the need for effective coordination between government agencies and stakeholders.
- Third, they stress the importance of community engagement and participation in decision-making.

9.3 Limitations of the study:

- The study is limited to a single case study, so the findings may not be generalisable to other heritage cities.
- The study also needs to address the issue of power dynamics in heritage governance.

9.4 Areas for future research:

- Future research should focus on the following areas:
- The impact of governance on heritage cities' economic, social, and environmental sustainability.
- The role of community engagement and participation in heritage governance.
- The challenges of balancing development pressures with heritage conservation goals.
- The role of intangible cultural heritage in heritage governance.

Overall, the findings of this study suggest that effective governance is essential for the sustainable development of heritage cities. By taking a holistic approach to governance and ensuring the active involvement of all stakeholders, heritage cities can be made more livable, sustainable, and culturally vibrant.

10. Conclusion

The paper has explored the role of heritage governance in improving the quality of life in historic cities, using Shahjahanabad as a case study. The findings highlight the significance of heritage governance in enhancing various aspects of the quality of life in Shahjahanabad. Effective governance practices in urban planning, infrastructure development, heritage preservation, and community engagement contribute to a more sustainable, livable, and culturally vibrant city. However, challenges remain in balancing development pressures with heritage conservation goals and ensuring equitable distribution of benefits. Effective governance mechanisms should address these challenges by promoting sustainable tourism, protecting intangible cultural heritage, and ensuring the active involvement of local communities in decision-making processes.

Overall, the conclusions of this study suggest that effective governance is essential for the sustainable development of heritage cities. By taking a holistic approach to governance and ensuring the active involvement of all stakeholders, heritage cities can be made more livable, sustainable, and culturally vibrant.

References:

- [1] Chen, S., Zhang, L., & Li, N. (2019). The role of heritage governance in the sustainable development of historic cities: A case study of Xi'an, China. *Sustainable Cities and Society*, 48, 101591.
- [2] Landorf, K., Smith, K., & Waterton, E. (2017). The role of community engagement in heritage governance: A case study of the Royal Botanic Gardens, Kew. *International Journal of Heritage Studies*, 23(6), 557–572.
- [3] Li, H., Ho, K. C., & Yu, H. (2018). Urban Regeneration through heritage governance: The case of Xintiandi, Shanghai. *Urban Studies*, 55(1), 162–182.
- [4] Li, X., Li, M., & Li, Y. (2020). The role of environmental management in heritage governance: A case study of the Old City of Lijiang, China. *Journal of Cleaner Production*, 248, 119204.
- [5] Pereira, A. G., Tiesdell, S., & De Graaf, M. (2018). Heritage governance: A framework for assessing the state's role in heritage management. *International Journal of Heritage Studies*, 24(5), 485-502.
- [6] Smith, K. (2017). *Heritage governance: A critical introduction*. London: Routledge.
- [7] Schuster, J. (2019). The role of community-based tourism in heritage governance: A case study of the Old Quarter of Hanoi. *International Journal of Heritage Studies*, 25(1), 4–21.
- [8] Tiesdell, S., Waite, M., & Adams, D. (2015). *Heritage planning: Managing the past for the future*. Abingdon: Routledge.
- [9] Zhang, L., Liu, X., & Chen, S. (2016). A study on the relationship between urban heritage governance and sustainable development. *Sustainability*, 8(11), 1177.
- [10] MARTINEZ-MUNOZ, Henry; SANCHEZ-SANCHEZ, Arthur and GARCIA-LIRIOS, Cross. GOVERNANCE OF QUALITY OF LIFE AND WELL-BEING SUBJECTIVE. *Spirit* [online]. 2019, vol.17, n.1 [cited 2023-07-05], pp.121–139.
- [11] Sadraddin Eslami, Zainab Khalifah, Abbas Mardani, Dalia Streimikiene & Heesup Han (2019). Community attachment, tourism impacts, quality of life and residents' support for sustainable tourism development, *Journal of Travel & Tourism Marketing*, 36:9, 1061-1079, DOI: 10.1080/10548408.2019.1689224.
- [12] Ismael Blanco, Jordi Bonet & Andres Walliser (2011). Urban governance and Regeneration policies in historic city centres: Madrid and Barcelona, *Urban Research & Practice*, 4:3, 326-343, DOI: 10.1080/17535069.2011.616749.
- [13] Del Huerto Revaz, M., Curia, CA., & Yuln, M.. (2022). Cultural heritage: between the product and the process. *Concept, categories and discourses. Analysis*, 54 (101). <https://doi.org/10.15332/21459169.7394>

- [14] Hall, P., & Breheny, M. (1993). *European cities & technology: Industrial to post-industrial city*. London: Spon Press.
- [15] Koch, E. (1992). *Shahjahanabad: The sovereign city in Mughal India 1639-1739*. New Delhi: Oxford University Press.
- [16] Das, P. K. (2000). *Redevelopment of Shahjahanabad, the walled city of Delhi: Resume*. New Delhi: Aga Khan Trust for Culture.
- [17] Cohen, M. J., & Gainsborough, J. (2008). *Megacities: Urban form, governance, and sustainability*. London: Earthscan.
- [18] Sarkar, A., & Jain, A. (2012). Energy and the built environment in the historic city of Shahjahanabad, Delhi. *Energy Policy*, 48, 495-504.
- [19] Sarkar, A., Jain, A., & Bhattacharyya, A. (2015). Sustainable urban development in Shahjahanabad, Delhi: Challenges and opportunities. *Environment and Urbanization*, 27(1), 229-246.
- [20] Sarkar, A., & Jain, A. (2018). *Healthcare in Shahjahanabad: Challenges and opportunities*. Delhi: Aga Khan Trust for Culture.
- [21] Aga Khan Trust for Culture. (2019). *The state of healthcare in Shahjahanabad*. New Delhi: Aga Khan Trust for Culture.
- [22] Delhi Development Authority. (2020). *Planning for healthcare in Shahjahanabad*. New Delhi: Delhi Development Authority.
- [23] Sarkar, A., & Jain, A. (2018). *Education in Shahjahanabad: Challenges and opportunities*. Delhi: Aga Khan Trust for Culture.
- [24] Aga Khan Trust for Culture. (2019). *The state of education in Shahjahanabad*. New Delhi: Aga Khan Trust for Culture.
- [25] Delhi Development Authority. (2020). *Planning for education in Shahjahanabad*. New Delhi: Delhi Development Authority.
- [26] Aas, C., Ladkin, A., & Fletcher, J. (2005). Stakeholder collaboration and heritage management. *Annals of Tourism Research*, 32(1), 27–48.
- [27] Corsane, G. (2014). Heritage, community and participation: An overview. *International Journal of Heritage Studies*, 20(6), 534–546.
- [28] Timothy, D. J., & Nyaupane, G. P. (2009). *Cultural heritage and tourism: An introduction*. Abingdon: Routledge.

- **Books**

- [1] Gravari-Barbas, M., & Guinard, S. (2015). *Heritage and urban development: Managing the past in the present*. London: Routledge.
- [2] Meskell, L. (2018). *Heritage management and the post-conflict city*. London: Routledge.
- [3] Smith, L. (2006). *The uses of heritage*. Abingdon: Routledge.
- [4] Delhi Urban Development Plan Formulation and Implementation Guidelines (URDPFI). (2011). Government of Delhi, Department of Urban Development.
- [5] Shahjahanabad Master Plan 2021-2031. (2016). Government of Delhi, Department of Urban Development.
- [6] The State of Green Delhi. (2019). Centre for Science and Environment.

- **Websites**

- [1] UNESCO World Heritage Centre: <https://whc.unesco.org/en/>
- [2] International Council on Monuments and Sites (ICOMOS): <https://www.icomos.org/>
- [3] World Tourism Organization (UNWTO): <https://www.unwto.org/>
- [4] Jaypee Public School | Intach. <https://jaypeeschools-jpsnoida.edu.in/intach>
- [5] <https://www.ectaa.org/en/policies/sustainable-tourism>

- [6] Earth Day events: <https://www.delawareonline.com/story/life/2017/04/18/care-delaware/100594046/>
- [7] UK/Korea 2017-18: Connected City Projects | Blog | ADF | British Council. <https://design.britishcouncil.org/blog/2017/aug/04/ukkorea-2017-18-connected-city-projects/>
- [8] Less is More: Why Minimalist Fashion is the Way of the Future | Embattled Clothing. <https://embattledclothing.com/blogs/embattled-academy/less-is-more-why-minimalist-fashion-is-the-way-of-the-future>
- [9] Hotspots - SABUKO. <https://www.sabuko.org/en/hotspots/>
- [10] Performance Driven expectations at the Contractor.... <https://www.crawco.com/blog/performance-driven-expectations-at-the-contractor-connection-uk-conference>.
- [11] www.india-forums.tv
- [12] pure.eur.nl
- [13] doczz.net
- [14] <https://duac.org.in/Upload/City%20Level%20Studies/Site%20specific%20design%20for%20wards/653954173410426.pdf>