

RESEARCH ARTICLE

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# Assessing the acceptance of cultural policies among heritage homeowners: a study of Ahmedabad's heritage TDR implementation, capacity building, and satisfaction

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## Abstract

This paper examines the influence of the Heritage Transfer of Development Rights (HTDR) among heritage property owners and explores how its successful implementation has been hampered based on the study of two indicators—policy awareness and implementation efficiency—which are vital for generating initial interest among stakeholders and leading them to use the policy.

The HTDR policy at Ahmedabad, introduced in 2015 as an incentive program supporting the conservation of privately owned properties within the old city of Ahmedabad, has failed to generate much interest among the local community. As per the documents available online on the website of Ahmedabad Municipal Corporation, in the last 9 years, only 81 properties with TDR certificates. It is thus very pertinent to identify the reasons for its lack of influence and acceptance. In this study, a mixed method was adopted involving a closed-ended survey and semi structured interviews. The inferences are based on the responses gathered from heritage property owners currently living in heritage properties and those living elsewhere. The heritage properties were identified based on a random sampling method from the listed heritage properties spread across the 13 wards of the walled city. Based on the research findings, although most property owners are aware of the HTDR policy and find it an essential tool for conserving heritage in Ahmedabad, awareness of the whole mechanism and application process is significantly limited.

The implementation of the HTDR policy is highly inefficient, and more awareness must be generated among owners. Moreover, more training or technical assistance needs to be provided to them to help them access the incentive program. The lack of a proper and comprehensible policy brief or document further hinders the situation. Overall, property owners are not completely satisfied with the HTDR policy and suggest critical revisions, such as reducing the file clearance time, calculating a new TDR amount, and modifying the stages of fund disbursement.

**Keywords** Cultural policy, Policy implementation, Tradable development rights, Heritage management, Ahmedabad, World heritage city

## 1 Introduction

In 2017, the historic core of Ahmedabad was designated as India's first city to be made a World Heritage Site for exhibiting an 'important interchange of human values' throughout the period and providing an outstanding example of urban settlement and building typology (UNESCO 2017). One of the largest cities in the Indian state of Gujarat, Ahmedabad has a centuries-old rich

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cultural and historical legacy. Under British administration, the city saw the rise and fall of several dynasties, notably the Mughals and Marathas, before emerging as a significant hub for trade and commerce. Ahmedabad is a dynamic representation of its rich history, fusing traditional customs with contemporary advancements. True to its inscription, Ahmedabad is home to numerous historic buildings that highlight the evolution of architecture and construction, the most important being the pol houses, which provide the distinctive character of the old city of Ahmedabad.

Ahmedabad's architectural landscape is characterised by its pol homes, which are traditional dwellings that contribute significantly to the city's cultural legacy. These homes are a part of the pols, which are neighbourhoods made up of a maze of little alleys dotted with beautifully constructed homes that combine old and new styles. The distinctive wooden facades of the pol homes, which are embellished with fine carvings that capture the dexterity and artistry of bygone people, are what define them. The vivid hues that frequently adorn these homes enhance their aesthetic appeal and produce an arresting, culturally diverse ambiance. The pol houses of Ahmedabad exhibit a remarkable and expert design at the levels of the neighbourhood and the individual home, a tradition that has endured for 300–400 years.

These houses showcase unique security features through their gates and have a distinctive social system that should be revitalised to meet the needs of present and future generations. The courtyard, considered the soul of pol houses, provides thermal comfort and serves as a hub for activities throughout the year. The construction system and earthquake-resistant building materials used in pol houses make them resilient structures. With the current demand for rainwater harvesting due to water scarcity, the traditional systems in pol houses should be reinstated. Beyond functionality, pol houses exhibit excellent form and aesthetics, emphasising their role as both functional and visually appealing structures. In conclusion, pol houses possess a unique design heritage, and there is a need to analyse their functionality in the modern context (Lambe and Dongre 2016; Gangwar and Kaur 2020).

The legacy of Ahmedabad has great cultural, historical, and architectural significance, making its preservation essential. As visible links to the past, the city's historical monuments, finely crafted temples, and distinctive pols are essential to its character. Understanding the historical development of the city and appreciating traditional craftsmanship and design depend heavily on the preservation of these buildings. Additionally, by promoting community pride, generating employment possibilities, and drawing tourists,

historical protection boosts the local economy. In addition to providing financial advantages, preserving Ahmedabad's legacy supports sustainable development strategies and acts as a resource for scholars and students. It raises the city's profile internationally and draws interest and partnerships from other countries. Based on these intentions, the Walled City of Ahmedabad was designated a UNESCO World Heritage Site and officially christened in 2017.

However, since its inscription in 2017, the historic core of Ahmedabad has lost many of the 2236 listed heritage buildings. A 2019 survey revealed that 30% of heritage properties are either 'compromised or vulnerable'. A study of 489 heritage properties undertaken by the heritage department showed that 38 heritage homes had been pulled down, 11 listed properties had vacant plots, and 50 had new constructions merged with them (Sonaiya 2021). This loss could be attributed to several factors, with a lack of restoration funds as one of the main reasons. The issue is compounded by the fact that owners cannot afford even the fundamental restoration of their properties. This is why many of the listed heritage properties have been either turned into commercial establishments or pulled down.

In 2015, the civic authorities at Ahmedabad created an incentive program to help support the restoration of private heritage properties. This incentive program, the Heritage Transfer of Development Rights (HTDR), allows the owners of private heritage properties within the walled city of Ahmedabad to 'sell a part of their utilised floor space index to developers at all locations within the city' (UDUHD 2019). The funds from this sale are to be used to restore the heritage property. However, despite these efforts, the HTDR still needs to gather steam, as based on the most recent public data available, only a few heritage homes have been issued an HTDR certificate (Times News Network 2019). This lack of impact creates a need to understand the implementation of the HTDR process and the local community's perception of its efficiency.

For any public policy to succeed, highly efficient implementation is critical. Many scholars have argued that policy evaluation can help correct inefficiency and maladministration during execution. Moreover, more public participation during implementation is needed to put further pressure on administrators to produce the desired results (IGNOU 2017). The study and evaluation of policy implementation can be conducted through various parameters. The results can help identify issues at an early stage for necessary course correction or highlight the need for further in-depth evaluation of the process (Weyrauch et al. 2010).

## 2 Research methodology

### 2.1 Research methodology and aims

This research is part of a two-phased study focused on understanding the low acceptance of the HTDR policy within the walled city of Ahmedabad, India. The first phase of the study, covered by Routh and Bhavsar (2023), focuses on governance by studying the existence of good governance parameters, such as public participation, transparency, accountability, rule of law and equity, within the HTDR policy and how much their presence, or absence, has impacted the acceptance of the policy. This analysis serves as a crucial foundation, emphasising the pivotal role these governance elements play in shaping policy reception. Complementarily, Paper 2 delves into the efficiency of HTDR policy implementation, focusing on strategies and recommendations to overcome the identified challenges and enhance the overall effectiveness of the program. Together, the two papers present a comprehensive evaluation of the HTDR policy, covering both the governance framework and the pragmatic aspects of execution and ultimately contributing valuable insights for policymakers and stakeholders aiming to foster successful public policy acceptance and implementation.

This part of the research is based on a quantitative survey of 119 of the 143 heritage homeowners who are aware of and familiar with the HTDR policy (Routh and Bhavsar 2023). The study was conducted using a mixed method involving a closed-ended quantitative survey and semi structured interviews for qualitative data with selected heritage homeowners to gain insights into the reasons behind the quantitative results.

#### Aim:

To understand the reason for the low acceptance of the HTDR, we studied its implementation based on awareness and efficiency indicators.

#### Objectives:

1. To evaluate perceptions of the effectiveness of the HTDR.
2. To evaluate the ease of heritage property owners' participation in HTDR projects.
3. To identify satisfaction with the current form of the HTDR.

### 2.2 Research site

The heritage properties were identified based on a random sampling method from the listed heritage properties spread across the 13 wards of the walled city. These wards were further segregated into five clusters: Shahpur,

Kalupur, Jamalpur, Khadia, and Dariapur. Heritage properties were randomly sampled from the 2236 listed heritage properties at Ahmedabad (Ahmedabad Municipal Corporation 2016).

## 3 HTDR at Ahmedabad

### 3.1 The idea of Transferable Development Rights (TDRs)

The Ministry of Housing and Urban Affairs in India defines TDR as a 'technique of land development, which separates the development potential of a particular parcel of land from it and allows its use elsewhere within the defined zones of the city' (MoHUA 2014). The development rights are obtained as an addition to the usual FSI and allow the buyer to construct a built-up area in addition to that provided by the FSI. The TDR mechanism is used to safeguard specially designated areas and allows the property owners of these areas to compensate for the loss in property revenue. The TDR is a very market-driven mechanism; however, participation is voluntary (NITI Aayog 2020). According to this mechanism, the unutilised FSI within the sending areas can be sold for development in the receiving areas, and the funds received in the transaction can be utilised for the maintenance of the special zones.

In a typical flow, a landowner in the sending area is deterred by the local authorities from using the land/plot in a particular manner that may damage the existing characteristic that needs to be preserved. Such a scenario usually stops legitimate landowners from obtaining economic profit from their property. Under such conditions, the government must compensate landowners for the financial losses incurred due to local regulations. However, instead of paying from its coffers, the government issues a 'TDR certificate' to owners that can be sold to any third-party buyer owning land for development in receiving areas. Thus, using the certificate, the landowner in the sending area sells development rights to another owner in the receiving areas, who can utilise these extra development rights along with the allowed FSI (NITI Aayog 2020).

Globally, innovative TDR mechanisms have been employed to address urban development challenges. Several best practices of TDR implementation exist, with notable examples including New York City and São Paulo and Curitiba in Brazil. The TDR in New York has evolved over time, with a shift towards more sophisticated and comprehensive programs (Been and Infranca 2012). Originally intended to soften the impact of zoning restrictions, TDRs are currently used as a tool to direct location and density and as a component of comprehensive rezoning initiatives (ibid). TDRs are increasingly being used as tools by land use decision makers, particularly in the context of urban redevelopment (Weber

2002). However, this evolution has led to the financialisation of TDRs, with their use facilitating intense real estate development and the private appropriation of socially created site values (Sclar 2021). Despite these concerns, TDRs continue to be seen as a creative and innovative technique for balancing growth and preservation (Pruetz and Pruetz 2007).

In São Paulo, Brazil, TDR has been a key tool in efforts to address urban development and land tenure issues. The city's municipal government has implemented a policy framework that emphasises improving housing for low-income groups, including the upgrading and legalisation of land tenure in informal settlements (Budds and Teixeira 2005). This approach aligns with the new land tenure paradigms in Brazil, which prioritise legitimacy over legality (Macedo 2008). The TDR system, which allows landowners to sell development rights to buyers in designated growth areas, has been proposed as a way to reconcile community and landowner interests (Downs 2007). This approach has been successful in other cities, including in Italy, where TDR has been used to requalify illegal settlements and improve quality of life (Calavita et al. 2014).

TDR was introduced in India in the 1980s (Routh and Shah 2013), and progress in urban management has been made in recent decades using the TDR mechanism. Cities such as Mumbai, Hyderabad, Chennai, and Ahmedabad have applied it for various urban projects, such as slum development, low-cost housing, road development, and conservation of heritage and water bodies. Mumbai, which has minimal opportunities for horizontal urban expansion, utilised TDR to generate vertical development by compensating for the land reserved for public spaces, heritage buildings, roads, etc. (Urban Development Department 1991). According to the NITI Aayog report (2020), the Municipal Corporation of Greater Mumbai (MCGM) issued 3178 TDR certificates, yielding an area of 12.93 million m<sup>2</sup>. Hyderabad's TDR policy, initiated in 2006 and subsequently modified, focuses on infrastructural development and the conservation of lakes, water bodies, and heritage buildings. More than 600 TDR certificates have been voluntarily issued in Hyderabad since 2006, facilitated by an online TDR bank enhancing the transparency of the process (NITI Aayog 2020).

This strategy has also been inventively used to conserve cultural assets. The use of TDR for heritage conservation purposes has been observed in various cities in the Asia-Pacific region, such as Chongqing, China (Li and Gan 2013); Ha Noi; Jakarta; Manila (Steinberg 2008); Taiwan (Sho et al. 2023); and Sydney (Thompson and Maginn 2012), as well as in global cities, such as New York (Ghoshal 2020), Athens (Perperidou et al. 2021) and Curitiba (Suzuki et al. 2009).

The use of TDR for heritage protection is a modern trend in India, most prominently in Mumbai. Mumbai initiated the TDR policy in 1995, making it a pioneer in embracing TDR for heritage conservation. Through intelligent application and well-managed inventories, the policy was planned to generate substantial funds for dilapidated buildings. The TDR system provides an innovative and mutually beneficial approach to urban development and preservation (NIUA 2015). Hyderabad, with its rich cultural heritage, has likewise explored innovative ways to conserve its historic buildings and sites. TDR has emerged as a promising tool in this endeavour, offering a win-win solution for both property owners and the city. The initiative specifically targets designated heritage zones and certain categories of heritage buildings (NITI Aayog 2020).

However, the successful implementation of TDR programs in heritage conservation faces numerous challenges, as highlighted by Bruening (2008) and Aken et al. (2008). Bruening identifies market-based obstacles, such as difficulties in allocating supply and demand, inconsistent zoning regulations, high transaction costs, and the need for effective public outreach and education. On the other hand, Aken et al. emphasise five significant obstacles, including inadequate receiving areas, a lack of infrastructure to support increased density, insufficient demand for development or density, weak financing conditions for buyers and sellers, and a dearth of program leadership and transaction support. These challenges underscore the complexity of TDR programs. The issues range from market dynamics and regulatory flexibility to the practicalities of infrastructure and the crucial role of leadership and support in guiding successful implementation. Addressing these multifaceted challenges is imperative to ensure the smooth functioning and effectiveness of TDR initiatives.

In Hong Kong, the application of TDR for built heritage conservation faces challenges, including legislative amendments, land scarcity issues, the absence of consistent official procedures, private property owner expectations, and a lack of financial incentives (Chan and Hou 2015). Another challenge in Hong Kong is the high transaction costs, which negatively affect the success of TDR programs. The transaction costs of informal TDR programs result mainly from institutional barriers, such as policy design and implementation (Hou et al. 2019). In Jakarta, the plan formulated for Kota Tua in 2007 faced criticism due to its significant dependence on TDR, particularly in areas where multiple land ownership claims were prevalent. The utilisation of TDR in the plan to establish an optimal land use pattern for Kota Tua was viewed as potentially exacerbating land ownership



disputes in regions already marked by competing land uses. The study noted that as yet, none of the three development plans for Kota Tua had received official endorsement (Steinberg 2008).

Chongqing has incorporated essential factors for the development of TDR, but improvements are needed. These include a more robust legal framework for effective property rights protection, an empowered planning system for enforcing zoning policies, and a mature land market to determine prices independently of authority guidelines. Without these enhancements, the city risks reverting to relying solely on unreliable public finance for conservation efforts. In New York, Ghoshal (2020) notes that early legal debates surround the role of TDR in preservation and planning. While TDRs can ease financial burdens for landmark property owners, questions arise about their ability to ensure 'just compensation.' Some scholars argue that the TDR value is linked to government overregulation, while others consider TDR to spread losses into smaller, less contested areas. Historically, courts have typically deferred to municipalities and preservation authorities, especially in aesthetic regulation, where the burden of proof for social goals beyond visual beauty remains relatively low, according to Costonis.

### 3.2 HTDR at Ahmedabad

With over 600 years of history, Ahmedabad has amassed a vast collection of both tangible and intangible aspects of heritage. A prominent aspect of the historic core is the widely varied architectural legacy, from elaborately carved wooden facades on residential buildings to complex ecclesiastical structures. The residential architecture imparts a distinctive character to the city and holds prominence. However, much of this built heritage remains under private ownership, and if owners lack the financial means for upkeep, the buildings deteriorate and are lost over time. With this objective in mind, the Ahmedabad Urban Development Authority (AUDA) has introduced the TDR policy for listed structures within the historic core of Ahmedabad.

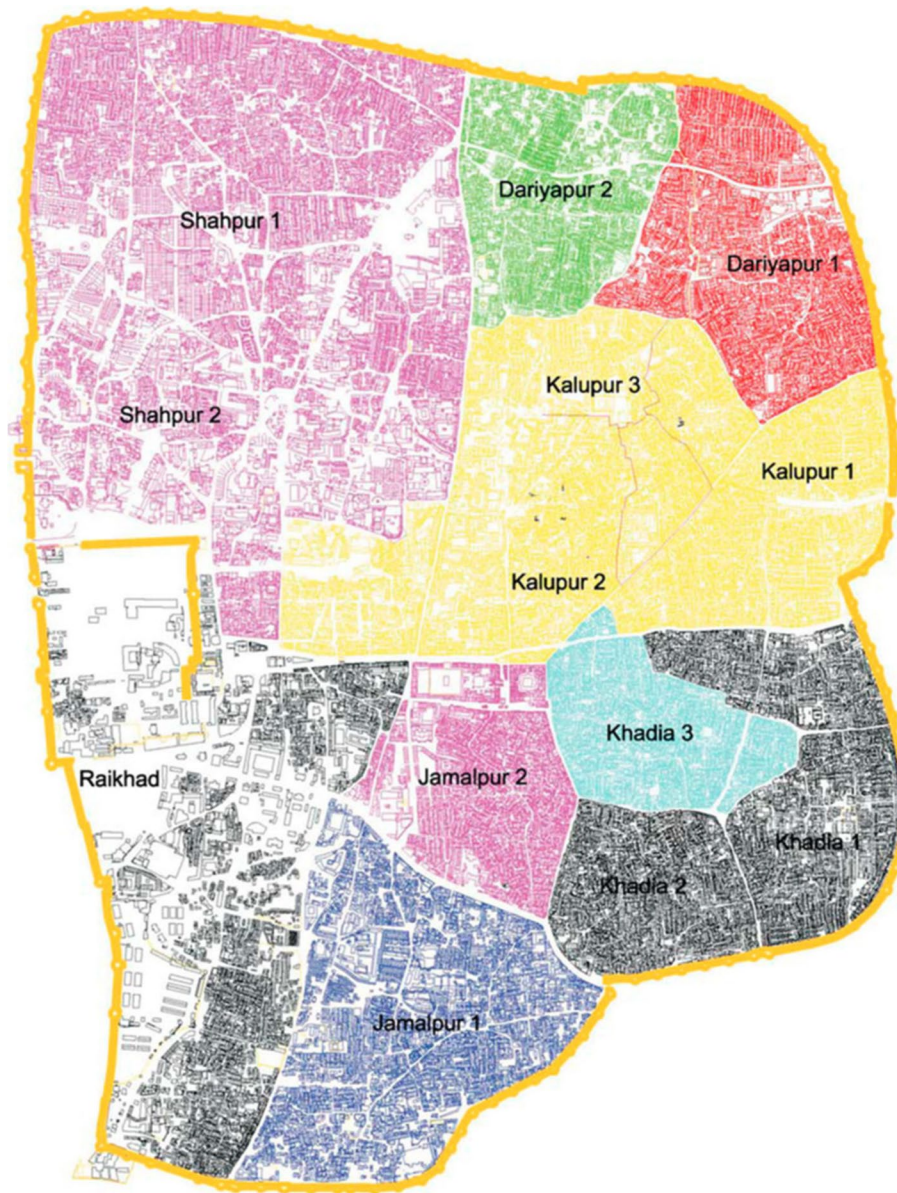
The HTDR program in Ahmedabad was initiated to conserve and restore privately owned heritage properties. The Gujarat Town Planning Act of 1976 was amended in 2014 to enable the implementation of TDR mechanisms for various purposes, including slum rehabilitation, public housing schemes, and heritage conservation. The AUDA introduced the HTDR in 2013 as an incentive for private heritage property owners to restore their properties. This made Ahmedabad one of the first cities in India to use the TDR mechanism for conserving privately owned heritage houses in a historic core. The program compensates owners for the loss of development rights

and financial benefits in heritage plots by granting HTDR certificates. Owners can sell these certificates to real estate developers for use within AUDA limits. According to the Comprehensive General Development Control Regulations (UDUHD 2019), tradable floor space is provided for building units with heritage structures. The HTDR aims to restore heritage properties, but certificates are also issued to owners who have already restored their properties, with the amount serving as reimbursement for restoration costs.

In Ahmedabad, the allocation of HTDR is determined based on the grade assigned to the heritage property. In 2016, the AMC designated 2236 residential buildings as heritage buildings. These listed buildings are spread across the 13 wards of the walled city of Ahmedabad (Fig. 1) and are categorised into three grades: Grade IIA, IIB, and III (Ahmedabad Municipal Corporation 2016). Based on their heritage significance, the listed properties are given tradable FSIs (Table 1). A maximum transferable FSI of 0.5 is awarded to properties with the highest heritage value; 0.3 is awarded to other properties (UDUHD 2019).

However, as mentioned in various reports, the implementation of HTDR has been inadequate for various reasons (refer to TNN 2019; Sen 2019; Makdani 2020; TNN 2023; Routh and Bhavsar 2023). Since the initiation of the HTDR program, a mere 57 out of the total 2236 listed heritage buildings in Ahmedabad's walled city have been granted the HTDR certificate. Notably, the distribution of these certificates is concentrated in specific heritage-rich localities, with Khadia (24 certificates) and Kalupur (18 certificates) emerging as the primary beneficiaries (Table 2). This distribution pattern suggests that the HTDR program's implementation has been relatively limited, and there may be factors influencing its uptake that vary across different areas within the walled city.

In the first part of this study, when Routh and Bhavsar (2023) studied stakeholder perceptions of governance aspects in the HTDR implementation, a notable lack of good governance parameters was observed. Although the vast majority of heritage homeowners are aware of the HTDR, the reliance on informal channels rather than effective government systems suggests a considerable gap in awareness efforts. The implementation of good governance characteristics, such as accountability, inclusivity, and openness, is insufficient, with officials regarded as lacking accountability and neglecting to include stakeholders in decision-making. Transparency in operating systems has also been cited as a serious concern. Respondents are dissatisfied with the overall effectiveness of the HTDR program, noting problems such as complex laws, lengthy application procedures, and poor promotion and information sharing among heritage property



**Fig. 1** Map of Old City Ahmedabad highlighting the wards (Source: National Institute of Disaster Management, 2015)

**Table 1** Tradable FSI based on the heritage value (Source: UDUHD 2019)

No.	Heritage Structure	Tradable FSI
1	Highest Heritage Value (Grade: 1; IIA)	50% of the total utilised FSI
2	High and Moderate Heritage Value (Grade IIB; III)	30% of the total utilised FSI
3	Non -Listed	Nil

owners. This study underscores the need for substantial improvements in governance, transparency, and efficiency within the HTDR program in Ahmedabad.

The heritage authorities at Ahmedabad have noted the shortcomings of the HDTR program and taken measures to rectify them. They have introduced a single-window TDR clearance system for heritage homeowners (TNN 2021), and the AMC has proposed a higher TDR value by amending the existing General Development Control Regulations (TNN 2023). Despite these efforts, it is still very pertinent to know the views of the heritage homeowners, the ‘consumers’ of the program. This will help the authorities understand what the primary stakeholders of the program feel and enable them to chart the next course of action.

**Table 2** Distribution of issued TDR certificates among wards

Sr. No	Name of the ward	Total listed heritage buildings	TDR certificates Issued	Percentage of buildings with TDR certificates (in %)
1	Kalupur 1	180	01	0.56
2	Kalupur 2	357	14	3.92
3	Kalupur 3	81	03	3.70
4	Khadia 1	260	09	3.46
5	Khadia 2	255	06	2.35
6	Khadia 3	297	09	3.03
7	Jamalpur 1	48	00	0.00
8	Jamalpur 2	265	07	2.64
9	Raikhad	52	02	3.85
10	Shahpur 1	90	03	3.33
11	Shahpur 2	107	01	0.93
12	Dariapur 1	66	00	0.00
13	Dariapur 2	181	02	1.10
Total		2236	57	2.55

#### 4 Key findings and discussion

The survey provided a range of insights into the existing governance system of HTDR from the perspective of heritage property residents. The survey findings are categorised into the following categories:

1. Current perception of the HTDR among heritage homeowners
2. Effectiveness of the HTDR implementation process
  - a. Promotion of the HTDR policy
  - b. Stakeholders' training and capacity building
  - c. Postimplementation evaluation of the HTDR policy
  - d. Availability of policy documents
3. Satisfaction with the HTDR policy

##### 4.1 Perception of HTDR among heritage homeowners

Regarding the concept of HTDR and its efficiency, most homeowners believed that the policy is a beneficial idea and can help conserve heritage properties. Approximately 70% of the owners agreed with its effectiveness, while only 23% believed that the HTDR was not an efficient policy for conserving heritage in Ahmedabad (Table 3).

Based on the survey results, most heritage property owners were satisfied with the aims of the HTDR policy and with the way they could gain monetary benefits from it. Many property owners mentioned that they were willing to maintain/conservate their heritage homes and

**Table 3** Efficiency perception of the HTDR concept

**Q1. Is the concept of HTDR efficient in conserving cultural heritage in the Walled City of Ahmedabad?**

	No. of Respondents (119)
Extremely Efficient	50 (42%)
Efficient	33 (28%)
Undecided	8 (7%)
Inefficient	26 (22%)
Extremely Inefficient	2 (1%)

wished to pass on their heritage to the next generation. Given the major challenge of generating funds for restoration, the HTDR policy was a boon for them. However, the policy could be more convenient for heritage property owners. Most respondents were enthusiastic about the HTDR policy and the monetary gains they could obtain to restore their heritage properties.

##### 4.2 Efficiency of HTDR policy implementation

###### 4.2.1 Promotion of HTDR policy

The first step towards gauging the efficiency of a policy is understanding the level of awareness about the policy and its process. In addition to accepting the HTDR concept, heritage homeowners were familiar with how to make an HTDR application and the subsequent steps involved. The survey results clearly show that most property owners were only moderately aware of the HTDR application process, while only 10% and 7% were extremely or very familiar with the process, respectively. It is concerning to

observe that almost 1/5 of the respondents must be made aware of the process, thus hindering the policy’s wide-spread use (Table 4).

Regarding the promotion of the HTDR policy, 2/3 of the respondents said that no program for building awareness was implemented. Only 31% of the respondents mentioned that some HTDR policy promotion was performed (Table 5). Those who agreed that government authorities had promoted the policy mentioned that most awareness programs were conducted through community programs or meetings (26%) or local media (20%) (Table 6). However, a few informants mentioned that only a few selected property owners were invited to community meetings by heritage authorities to make them aware of the policy.

**Table 4** Familiarity with the HTDR application process

**Q2. How familiar are you with the HTDR application process?**

	No. of Respondents (119)
Extremely familiar	12 (10%)
Very familiar	8 (7%)
Moderately familiar	51 (43%)
Slightly familiar	25 (21%)
Not at all familiar	23 (19%)

**Table 5** HTDR promotion awareness

**Q3. Did the Heritage Department promote HTDR?**

	No. of Respondents (119)
Yes	37 (31%)
No	79 (66%)
Do not know	3 (3%)

**Table 6** Means of policy promotion

**Q3.1. What were the means of promoting the HTDR policy?**

	No. of Respondents (200)
Printed material/pamphlets	26 (22%)
Online	10 (8%)
Community meetings	31 (26%)
Pol notice boards	5 (4%)
Local newspapers/media	24 (20%)
Other	23 (19%)

Along with observing a low level of policy promotion, the survey respondents mentioned that the government’s efforts to inform the owners about the HTDR policy needed to be increased. More than half of the heritage homeowners surveyed (70%) felt that the promotion efforts could have been more efficient. Only 14% agreed with the steps taken by the government and said that the awareness generation programs were sufficient and efficient (Table 7).

**4.2.2 Training and capacity building of stakeholders**

Regarding capacity building or training programs conducted to encourage participation in the program, 76% of the respondents mentioned that there were no such programs, and 1% mentioned that such programs were rare. Only 7% said that programs were conducted always or very often (Table 8). Eighty-two percent of the homeowners noted that the government needed to provide more technical support for them to understand the file preparation and application process (Table 9). In addition, 76% mentioned that no dedicated help desk or support was provided to address stakeholder queries (Table 10). Furthermore, 71% agreed that there needed to be a dedicated website to facilitate the process (Table 11).

**Table 7** Efficiency perceptions of HTDR promotion

**Q3.2. Was the promotion efficient in increasing awareness about the HTDR policy?**

	No. of Respondents (119)
Extremely Efficient	11 (10%)
Efficient	5 (4%)
Undecided	19 (17%)
Inefficient	18 (16%)
Extremely Inefficient	61 (54%)

**Table 8** Stakeholder training and capacity building

**Q4. Are there any training or capacity-building programs conducted about the HTDR policy?**

	No. of Respondents (119)
Always	2 (2%)
Very Often	6 (5%)
Do not know	19 (16%)
Rarely	1 (1%)
Never	91 (76%)



**Table 9** Provision of technical support

**Q4.1. Does the government provide any technical support for file development and application for HTDR?**

	No. of Respondents (119)
Always	1 (1%)
Very Often	8 (7%)
Do not know	10 (8%)
Rarely	2 (2%)
Never	98 (82%)

**Table 10** Availability of helpdesks

**Q4.2. Is there any help desk to solve your queries about HTDR?**

	No. of Respondents (119)
Yes	5 (4%)
No	90 (76%)
Do not know	24 (20%)

**Table 11** Availability of an official HTDR website

**Q4.3. Is there any official website for learning about the HTDR policy?**

	No. of Respondents (119)
Yes	26 (22%)
No	83 (70%)
Do not know	10 (8%)

Although most of those surveyed mentioned the absence of a dedicated help desk, most said that government officials were very responsive whenever they were approached. Many informants mentioned that they had been to the heritage department office, and even senior officials took the time to explain the procedures and details of the HTDR. However, they mentioned that it would be helpful if there were a dedicated channel for solving queries so that they would not have to rely on whoever is free to guide them.

**4.2.3 Availability and quality of policy documents**

Along with indicating the lack of a capacity-building program, the survey shows that although definite policy briefs or documents are available in the public domain, they need to be more technical or better facilitate

understanding. Opinions about the availability of a policy document are divided, as 45% of those surveyed mentioned that there were policy documents available to them, while 38% stated that no documents were available (Table 12). However, 60% of those who mentioned that related documents were available said that the documents were not easy for a layperson to understand because they were too technical in their composition (Table 13). Although the documents were intended for the public, 49% of the respondents needed help understanding the intended outputs (Table 14). A total of 71% of the respondents said that the documents did not inform them about the application process (Table 15).

**4.2.4 Postimplementation evaluation of the HTDR policy**

Many administrative and public policy scholars identify the significance of a postimplementation evaluation of public policy for improving it. However, according to the survey results, after its implementation, no such

**Table 12** Availability of policy briefs/documents

**Q5. Are there any policy briefs available regarding the HTDR policy?**

	No. of Respondents (119)
Yes	53 (45%)
No	45 (38%)
Do not know	21 (18%)

**Table 13** Legibility of policy briefs/documents

**Q5.1. If Yes, is the policy brief/document clear enough for understanding the HTDR policy?**

	No. of Respondents (53)
Yes	11 (21%)
No	32 (60%)
Do not know	10 (19%)

**Table 14** Ease of understanding policy outputs

**Q5.2. If Yes, is the policy brief/document clear enough for understanding the intended outputs?**

	No. of Respondents (53)
Yes	14 (26%)
No	26 (49%)
Do not know	13 (25%)

**Table 15** Ease of understanding the application process

*Q5.3. If Yes, is the policy brief/document clear enough for understanding the application process?*

	No. of Respondents (53)
Yes	10 (19%)
No	38 (72%)
Do not know	5 (1%)

opportunity was offered to the stakeholders of the HTDR policy. Seventy-six percent of the heritage property owners said that no opinions or suggestions were sought from them after the policy implementation (Table 16). Furthermore, 73% of respondents mentioned the lack of any mechanism, offline or online, for sharing their grievances with matters of the policy and its application (Table 17). However, the survey shows that the fault lies with both parties, with 76% of those stating the absence of postimplementation evaluation having never tried to share their opinions or suggestions with the authorities (Table 18).

**4.3 Ease of HTDR application**

Regarding the ease of making an HTDR application, a maximum of 38% of respondents felt that the process was complex, followed by 27% who found it exceedingly difficult to apply. In contrast, only 12% of the respondents stated that the HTDR application and file clearance process was straightforward (Table 19). This shows

**Table 16** Postimplementation evaluation

*Q6. Were there any postimplementation evaluations/suggestions sought from you by the AMC Heritage Dept.?*

	No. of Respondents (119)
Yes	6 (5%)
No	90 (76%)
Do not know	23 (19%)

**Table 17** Sharing of policy evaluation with the government

*Q6.1. If No, have you tried to share evaluations/suggestions with the AMC Heritage Dept.?*

	No. of Respondents (90)
Yes	17 (5%)
No	73 (76%)

**Table 18** Availability of policy briefs/documents

*Q6.2. Is there any process/mobile or web application for citizen grievances?*

	No. of Respondents (119)
Yes	12 (10%)
No	87 (73%)
Do not know	20 (17%)

**Table 19** Ease of HTDR application

*Q7. How easy is the HTDR application?*

	No. of Respondents (119)
Very Easy	5 (4%)
Easy	9 (8%)
Undecided	28 (24%)
Difficult	45 (38%)
Very Difficult	32 (27%)

a considerable gap in the responses regarding satisfaction with the current HTDR policy and its application processes.

**5 Discussion**

The study results show that the current efficiency of HTDR policy implementation still needs to be improved to achieve sufficient impact. As a top-down approach, without sufficient citizen voice and awareness, people are very sceptical about how they can benefit from the policy. Furthermore, the lack of understanding leads to assumptions and misinformation about policy benefits and corruption in the process. A few informants mentioned that many property owners currently rely on word-of-mouth promotion through fellow property owners. The information passed on must be complete and accurate, but it is usually biased from the perspective of the informant. This is a significant gap, indicating that the authorities and heritage homeowners need a common platform to discuss queries and grievances.

The property owners are informed about the HTDR policy and benefits, but the policy document on the AMC website needs to be more detailed. A few of the informants mentioned that this gap could be overcome by the active involvement of the community, at least in the implementation stage. However, as noted by another respondent, this active involvement is currently confined to only a few well-connected property owners, who

must be relied on to gain more knowledge of the policy and how to apply for it. However, these homeowners also mention that the community's efforts have helped in negotiating many matters and discrepancies in the policy, such as the FSI amount calculation and lengthy process. The officials have noticed these efforts and have recently launched a single-window file clearance process to address the previously long application time. However, more awareness needs to be created about the policy, as many owners still need to be made aware of how, how much and when money will be disbursed.

Regarding the promotion of the policy, the respondents mentioned that the government used mass information systems, such as newspapers or pamphlets. When enquired, most needed clarification on how the TDR calculation was made, and different people produced different versions. Another matter of concern is the disbursing of funds in various stages. People need to be made aware of the stages of the release of money. A few respondents mentioned the 20% – 50% – 30% model of disbursing the funds, while others said that 20% would be disbursed at the start and 80% at the end of the restoration work. The third matter of confusion concerns the receiver of the restoration funds. A few mentioned that funds would be given to the government-designated contractor, while others mentioned that the funds would be deposited in a particular HTDR account in their name, and the government would continue to release the funds when the bills of work were presented and cleared. The fourth point is the use of the HTDR certificate. Many informants need help understanding whether the funds will come once the certificate is issued or when the HTDR FSI is sold. They need to become more knowledgeable about when and to whom the FSI is sold. It is also generally unknown how homeowners are informed when their FSI is sold and when the work can be initiated. The complete process of HTDR is ambiguous and non-transparent.

The survey results reveal that government authorities still need to contact stakeholders. There is high information asymmetry, with a few owners having more accurate information than the broader group. This asymmetric information adversely affects heritage homeowners when choosing whether to apply for the HTDR because they are still seeking to determine whether the policy is good for them. They need the proper capacity and information to make an informed decision. The lack of clarity about the policy process has also led to complaints of corruption in certain instances, as a few informants mentioned that officials asked for bribes to clear their files. In a few cases, the property owners were also approached by real estate members, coaxing them to sell the FSI at a lower amount so that their conservation work could start quickly. Moreover, there is no platform where heritage

homeowners can raise their issues regarding the process or other aspects. Such problems create an imperative need for help desk or grievance redressal systems to help stakeholders become more aware of the process and stay safe from ill-intentioned individuals. The more they know and the more clarity they have about the policy, the more they can trust the system and its operation.

The government needs to quickly reach out to the stakeholders of the HTDR policy at the ground level. They must devise meaningful approaches to help the HTDR policy target a more sizeable number of heritage property owners. They need to garner more public support for the policy via public meetings, community workshops with groups of owners, and dialogues to communicate more about the incentive mechanism. Recently, heritage officials and the Ahmedabad World Heritage City Trust (AWHCT) initiated HTDR awareness camps to inform the community about the policy. Through the camps, the AWHCT can guide people regarding the HTDR file processing, build awareness about the HTDR certificate, and explain other formalities about the process. However, these camps are few and infrequent and are held for minimal durations. A recent camp in November was organised at the municipal corporation's premises during the working hours of many property owners. Such organisation of camps makes it difficult for many individuals to avail themselves of the potential benefits.

In contrast, camps could be held on Sundays or other nonworking days and during post work evening hours to allow maximum attendance. There could be a permanent official from the local ward office trained in heritage rules and regulations, who could act as the direct point of contact for owners at a help desk in their vicinity. Furthermore, many property owners are old and unable to visit these camps or are currently not residing in the walled city area. These owners could be contacted individually by the authorities or by coalitions developed with local self-help groups, many of which are already active in the walled city.

It is reasonable for the heritage authorities to seek to bring clarity to some owners at an individual level, given the scale of the historic core and the government involvement in various other aspects of managing heritage at Ahmedabad. Thus, they can start reaching out to the public through television or radio and encourage community leaders and civil society groups to spread the information to more individuals.

## 6 Conclusion

Based on the survey responses, the current implementation could have reached the stakeholders more efficiently. The majority of those surveyed expressed low awareness about the process of obtaining benefits and, in a few

cases, how and where to apply for them. It is clear from the survey results that although the policy has benefits, it could have been implemented better. The current form of the HTDR policy is not well accepted, as it was not well promoted within the community and thus has low awareness and impact. Even for those who are aware of the policy, there need to be more tools or opportunities to learn more about the rules and regulations and more support provided by the authorities to offer clarification in case of questions.

There is a clear need for officials to return to the drawing board and reframe the implementation program for the policy. While the efficient implementation of any public policy always presents many challenges, there are numerous ways to overcome most of the current challenges regarding policy acceptability and improve implementation to promote positive outcomes. The authorities can initiate the process by engaging in a dialogue with stakeholders instead of blindly attempting to enhance the impact and acceptance of the HTDR. Collecting information from the target audience supports sound judgements about how to increase the policy impact, based on which meaningful activities can be proposed. Several widely accepted tools, such as surveys and focus group discussions, could be used to collect relevant information.

The lessons learned from the Heritage Transferable Development Rights (HTDR) policy in Ahmedabad bear considerable relevance for other cases in India and worldwide, offering valuable insights that can be applied to enhance heritage conservation policies in diverse contexts. First, the emphasis on community involvement and proactive public awareness campaigns addresses a common challenge faced by many regions globally. Cities with rich cultural heritage can draw inspiration from Ahmedabad's experiences to develop strategies that empower local communities and ensure their active participation in the preservation process. The need for clear communication and accessible information, as highlighted in the study, serves as a universal principle applicable to various cultural landscapes.

Second, the study underscores the importance of anti-corruption measures in heritage conservation initiatives. This lesson resonates with many regions in India and beyond, where corruption can undermine the integrity of preservation efforts. Implementing transparent and accountable processes, as suggested by the study, becomes a crucial aspect for policymakers seeking to establish robust heritage conservation frameworks.

Furthermore, study of the HTDR policy provides insights into the effective use of technology and community-driven approaches. The integration of interactive maps and online platforms for grievance redressal aligns with the global trend of leveraging technology for

inclusive urban planning. This model can be adapted and customised to suit the specific needs of different cities, fostering a sense of ownership and transparency in heritage conservation initiatives.

However, the HTDR policy at Ahmedabad can be improved based on not only the inferences from this study but also the positive and negative implementation experiences in other places.

The evolution of TDRs across diverse urban landscapes, including New York, São Paulo, India, and various cities in the Asia-Pacific region, reflects the adaptability of this planning tool in addressing complex urban development and conservation challenges. While TDRs have been successfully employed to guide location and density, address housing issues, and conserve cultural heritage, concerns have emerged regarding their financialisation and facilitation of intense real estate development and private appropriation of socially created values. The multifaceted challenges identified in the implementation of TDR programs, such as market dynamics, regulatory flexibility, infrastructure requirements, and the need for effective leadership, underscore the complexity inherent in balancing growth and preservation goals.

The effectiveness of TDR programs is contingent upon context-specific considerations, as demonstrated by the varying challenges faced in different cities. For instance, Hong Kong encounters hurdles related to legislative amendments, land scarcity, and high transaction costs in built heritage conservation. Jakarta's reliance on TDR in urban planning has faced criticism due to the potential exacerbation of land ownership disputes. Chongqing requires improvements in its legal frameworks, planning systems, and land markets to ensure sustainable TDR development.

In India, notable urban centres, such as Mumbai and Hyderabad, have implemented TDR successfully in a variety of urban projects, demonstrating its flexibility in addressing diverse challenges. These include slum development, low-cost housing initiatives, infrastructure development, and the conservation of cultural heritage. The adoption of TDR in these cities has not only provided solutions to pressing urban issues but also demonstrated potential as a catalyst for positive change in different aspects of urban life. Despite its laudable goals, the implementation of TDR has encountered challenges. Initial bureaucratic hurdles and a lack of awareness among stakeholders have posed obstacles to the seamless execution of the policy. Additionally, the fluctuating market value of TDR has added a layer of complexity to conservation efforts, requiring ongoing adjustments to ensure the effectiveness of the policy in preserving the rich cultural and historical heritage of a city.



Thus, the lessons gleaned from Ahmedabad's HTDR policy offer a roadmap for refining heritage conservation efforts not only locally but also globally. These insights, including prioritising community engagement, ensuring transparent communication, and leveraging technology, pave the way for more effective and inclusive heritage preservation strategies worldwide.

#### Abbreviations

AMC	Ahmedabad Municipal Corporation
AUDA	Ahmedabad Urban Development Authority
AWHCT	Ahmedabad World Heritage City Trust
CGDCR	Comprehensive General Development Control Regulations
CIPPEC	Center for the Implementation of Public Policies for Equity and Growth
DCR	Development Control Regulations
FSI	Floor Space Index
HDTR	Heritage Transfer of Development Rights
MCGM	Municipal Corporation of Greater Mumbai
MoHUA	Ministry of Housing and Urban Affairs
UNESCO	United Nations Educational, Scientific and Cultural Organization
UDUHD	Urban Development and Urban Housing Department, Government of Gujarat
NIUA	National Institute of Urban Affairs
TNN	Times News Network

#### Acknowledgements

Not applicable.

#### Authors' contributions

All authors read and approved the final manuscript.

#### Funding

Not applicable.

#### Availability of data and materials

Not applicable.

#### Declarations

#### Competing interests

The authors declare that they have no competing interests.

Received: 30 October 2023 Accepted: 24 June 2024

Published online: 01 August 2024

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