

A Soft Computing Framework for Destination Prioritization in Kanpur

Varsha Singh¹, Dr. Mukesh Kumar Singh², Dr. Saurabh Srivastav³

^{1,2}Armapur Post Graduate College, Kanpur, Uttar Pradesh, India-208009.

³Department of Mathematics, IILM University, Greater Noida, Uttar Pradesh, India-201306

Emails: ¹varshasingh4039@gmail.com, ²mksinghuptti@gmail.com and

Corresponding Author: *srbh.srvstv9999@gmail.com

Abstract

Kanpur, one of India's historically rich cities, holds significant potential as a tourist destination, yet policymakers and stakeholders face challenges in deciding which attractions to prioritize. Existing studies have rarely provided systematic evaluations of Kanpur's sites, and most overlook uncertainties in tourist preferences, infrastructure, accessibility, and cultural value. To address this gap, the present study applies soft computing techniques to evaluate and rank major tourist destinations in Kanpur. By incorporating factors such as visitor preferences, cultural significance, infrastructure, accessibility, and environmental impact within a fuzzy decision-making framework, the methodology effectively handles subjectivity and imprecision in expert judgments. The results highlight destinations that balance heritage, accessibility, and sustainability, offering valuable insights into sites with the greatest potential to attract diverse visitors. These findings provide a practical decision-support tool for policymakers and tourism planners, demonstrating the effectiveness of soft computing in guiding sustainable tourism development and strategic resource allocation in Uttar Pradesh.

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1 INTRODUCTION

Kanpur, a prosperous city in the Indian state of Uttar Pradesh, is known for its diverse culture, historical sites, and ever-growing urban infrastructure, posing opportunities and challenges for city planners and tourism officials. But as a city it can play the tourism game, it is more important to choose which attractions to promote and develop based on 'what visitors want' and the story archaeology should tell about how the city could grow.

Tourism planning is a gentle balance of cultural, environmental, social, and economic factors, making decision-making more complex. In recent years, techniques like Fuzzy Multi-Criteria Decision-Making (MCDM) have emerged as a valuable tool in soft computing and helping stakeholders to navigate these challenges [4, 9, 13, 15]. This decision-making complexity has prompted researchers and practitioners to investigate fuzzy set-based extensions of soft computing, that offer a more flexible way to model subjective judgments and manage uncertain data. Soft computing techniques have shown great effectiveness in selecting tourism sites, as they can handle vague, imprecise, or ambiguous information. In place of traditional numerical solutions, these methods utilize "fuzzy" values articulated in linguistic terms, like "high attractiveness" or "low accessibility," enabling a better evaluation of ambiguous cases.

Many of the recent studies [4, 5, 12] have proved the effectiveness of soft computing across various contexts for evaluating and prioritizing tourism destinations. For example, research in community-based tourism [17, 18] has shown that this approach can handle the various needs of different stakeholders, including local communities and tourists' therefore, it is necessary to promote tourism development that is both inclusive and sustainable.

Tourism potential requires a flexible framework to address the matrix of factors that determine destination choice in Kanpur. With the use of the framework based on soft computing, stakeholders will be able to integrate qualitative information from experts, tourist operators, tourists and stakeholders of local communities. By converting these perspectives into fuzzy values, decision-makers can easily find out the important criteria such as accessibility to the destination, historical significance, environmental impact, as well as visitor facilities, ensuring a well-rounded and data-driven assessment of tourism sites [15].

The accommodation of this incorporation is vital for Kanpur, as the sites of cultural and historical importance do not always line up with the infrastructural readiness or required accommodation for tourists. Soft computing techniques, such as the Fuzzy Analytic Hierarchy Process (FAHP) or the Fuzzy

Technique for Order Preference by Similarity to Ideal Solution (FTOPSIS), are some of the most used methods for tourism site evaluation [9]. FAHP allows decision-makers to structure in hierarchy, and break the complex criteria into simpler sub-criteria. This method enables to assign weights to each criterion based on perceived importance and establishes a preferable structure for decision-making [1, 2, 23, 27, 28]. In fuzzy environment this technique, demonstrates substantial utility in tourism field, where selection of destination must be made under uncertain or subjective situations. On the other hand, F-TOPSIS also facilitates ranking alternatives by measuring their relative closeness to an “ideal” solution, this makes it easier to differentiate among options when multiple criteria are being taken.

As an example of this application is when selecting tourism development sites in Azerbaijan [13], where researchers used soft computing methods. This approach was instrumented in identifying the tourist places with high tourism options, while addressing environmental and social considerations, by adopting soft computing techniques [9, 10, 13], the tourism authorities of Uttar Pradesh, can effectively prioritize sites that align with the city’s cultural and economic goals while addressing potential uncertainties related to visitor preferences and site conditions.

The objective of this study is to implement soft computing approaches to assess and rank tourism attractions in Kanpur, with the emphasis on cultural, environmental, infrastructural and satisfaction criteria measures. The study will produce a ranked set of tourist attractions because of applying soft computing tools within a fuzzy framework [16], these results will allow local authorities and other interested parties to make better decisions. These results will serve to expose Kanpur's valuable cultural and historical resources and develop a sustainable tourist model which is beneficial for both tourists and local people.

In addition, it aids in the understanding of soft computing approaches to tourism planning [17] within the context of cities with high political and decision-making complexities, and thus adds to the broader scope of urban development. Given the growth of the urban population in different parts of the world, there is surely a need for more sophisticated models that make use of the data available.

2 MATERIALS AND METHOD

This study employs the Soft Computing technique **Fuzzy Analytic Hierarchy Process (Fuzzy AHP)** to prioritize tourism sites in Kanpur for development, focusing on the five alternatives (Bithoor, Nana Rao Park, Phool Bagh, Massacre Ghat (Satti Chaura Ghat) and Bhattargaon Temple):

2.1 MATERIALS:

The materials we used in the current study are described below:

Alternatives: In this study five tourist spots that hold a historical and cultural values in Kanpur (Bithoor, Nana Rao Park, Phool Bagh, Massacre Ghat (Satti Chaura Ghat) and Bhattargaon Temple) were selected for study.

Criteria: We have applied four evaluation criteria including—Historical and Cultural Importance, Visitor Experience and Accessibility, Revenue Generation Possibility, and Development and Maintenance Cost.

Data Sources: We used linguistic terms for expert opinions, those were taken for the rating.

Fuzzy Scale: A linguistic scale (e.g., low, medium, high) was used to represent uncertainties in the evaluation process.

2.2 Important Definitions:

Fuzzy Sets-

A fuzzy set in a universe of discourse R is defined by a membership function, which assigns each element a degree of belonging. Values closer to 1 indicate stronger membership, while values near 0 denote weaker or no membership, capturing the inherent fuzziness of the set.

2.3 Methods:

Data Collection: Information on each site’s significance, visitor statistics, potential revenue, and development costs is gathered through literature, and expert consultations.

Criteria Weighting: Experts assign fuzzy weights to the four criteria based on their importance, using triangular fuzzy numbers (e.g., (2,3,4) for moderate importance).

Pairwise Comparison: A pairwise comparison matrix is constructed for the alternatives under each criterion, using fuzzy numbers to express subjective preferences.

Fuzzy Aggregation: The pairwise comparison results are aggregated using fuzzy arithmetic to obtain fuzzy scores for each site under each criterion.

Defuzzification: The fuzzy scores are defuzzified to obtain crisp values, enabling a final ranking of the tourism sites.

Ranking: The final rankings are determined by comparing the defuzzified scores and identifying the site with the highest potential for tourism development.

Fuzzy AHP-

The flowchart illustrates the structured process of Fuzzy AHP, beginning with the identification of relevant factors and sub-factors that influence the decision problem. These elements are then organized into a hierarchical structure, establishing clear relationships between overall goals, criteria, and sub-criteria. Linguistic variables are determined to capture expert judgments in qualitative terms, which are subsequently converted into triangular fuzzy numbers to represent uncertainty and imprecision mathematically. Finally, the importance weights of factors and sub-factors are computed, enabling the prioritization of alternatives in a systematic and scientifically grounded manner. This approach effectively integrates qualitative assessments with quantitative analysis, making it highly suitable for complex decision-making in uncertain environments.

Here is the algorithm of Fuzzy AHP-

“Input:

- K experts
- Criteria fuzzy pairwise $A_c[k][i][j]$, $i=1..N_c$
- Subcriteria per criterion c: $A_s[c][k][p][q]$, $p=1..N_s[c]$
- Alternatives per leaf (c,s): $A_a[c][s][k][a][b]$, $a=1..N_a$

Proc BUCKLEY($A_c[k][i][j]$, n, K):

$$A_{agg}[i][j] = (\prod_{k=1..K} A_c[k][i][j])^{1/K}$$

$$P[i] = (\prod_{j=1..n} A_{agg}[i][j])^{1/n}$$

$$S = \sum_{i=1..n} P[i]$$

$$W[i] = P[i] / S$$

$$w[i] = \text{centroid}(W[i])$$

$$w = w / \text{sum}(w)$$

return W, w

$$(W_c, w_c) = \text{BUCKLEY}(A_c, N_c, K)$$

For each criterion c:

$$(W_s[c], w_s[c]) = \text{BUCKLEY}(A_s[c], N_s[c], K)$$

For each leaf (c,s):

$$(W_a[c][s], w_a[c][s]) = \text{BUCKLEY}(A_a[c][s], N_a, K)$$

For each alternative a:

$$\text{score}[a] = \sum_{c=1..N_c} w_c[c] * \sum_{s=1..N_s[c]} w_s[c][s] * w_a[c][s][a]$$

Normalize score[a]

Ranking = argsort_desc(score)

Output: Ranking, score”

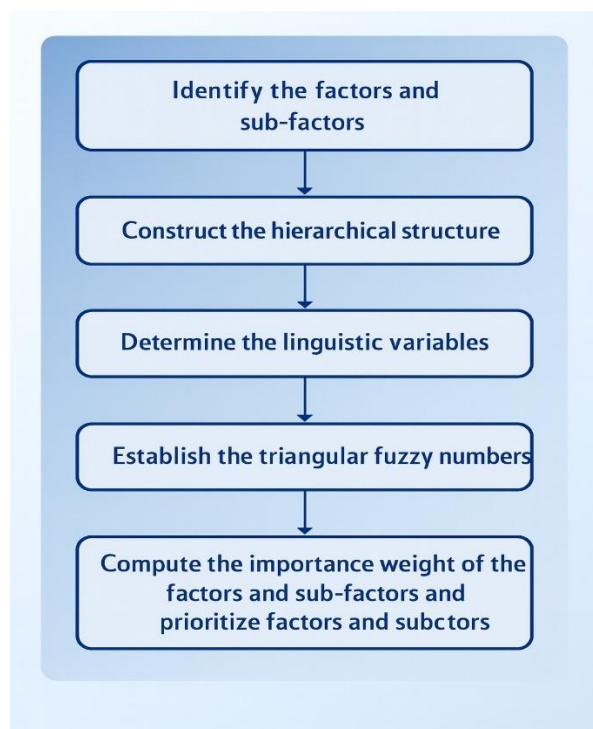


Figure 1. Flowchart of Fuzzy AHP

To develop the system, the Execute the methodology for each criterion and for each alternative, resulting in a set of normalized weights associated with the criteria are $w^c = (w_1^c, w_2^c, w_3^c \dots w_p^c)^T$ where w_i^c is the normalized weight for i^{th} criteria and normalized weight[2] matrix for q alternatives is $W^a = [a_{ij}]$, for $1(i)q, 1(j) p$, where a_{ij} is normalized weight[2] for i^{th} alternative and the regarding j^{th} criteria, each a_{ij} and w_i^c are assessed using th following equation which is given below-

$$W^a = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1p} \\ a_{21} & a_{22} & \dots & a_{2p} \\ \dots & \dots & \dots & \dots \\ a_{q1} & a_{q2} & \dots & a_{qp} \end{bmatrix}$$

We will obtain the scores for each alternative to find the order of preference by using the equation -

$$A = W^a w^c \tag{2.1}$$

$$A = \begin{bmatrix} A_1 \\ A_2 \\ \dots \\ A_q \end{bmatrix} = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1p} \\ a_{21} & a_{22} & \dots & a_{2p} \\ \dots & \dots & \dots & \dots \\ a_{q1} & a_{q2} & \dots & a_{qp} \end{bmatrix} \begin{bmatrix} w_1^c \\ w_2^c \\ \dots \\ w_p^c \end{bmatrix} \tag{2.2}$$

We will establish a preference ranking based on the scores obtained in the preceding process. In this ranking, the alternative with the highest score will be recommended as the top preference, while the alternative with the lowest score will be recommended as the least preferred option.

3 Design of the Model

Application of FAHP-

We have discussed a case study that was carried out to identify and obtain the order of preference for the rankings of the tourist places in Kanpur, which are detailed below:

3.1 Bithoor: This place [8] is famous for the birthplace of Lord Ram's sons Lava and Kusha, and is steeped in history. It played a central role in uprising during the revolt of 1857 as landmarks associated to that period such as Valmiki Ashram, Nana Sahib Fort, and Brahmavart Ghat add to its richness.

3.2 Massacre Ghat (Satti Chaura Ghat): This ghat is a reminiscence of the 1857 revolt[8, 12] when Indian insurgents attacked hundreds of British soldiers and civilians. The site also offers a reflective experience within the fast-paced, ever-changing city, symbolizing the sacrifices of those who fought for independence in India.

3.3 Phool Bagh (Ganesh Udyan): A peaceful garden [12] that was a rendezvous point for freedom fighters in the colonial period. In addition to the secularity it stands for, the Ganesh Shankar Vidyarthi Memorial Hall provides a historical and peaceful ambience to the place.

3.4 Nana Rao Park: This sprawling green space, now named after Nana Sahib [8, 12] who was one of the most recognized leaders of the revolt of 1857, is located on the very spot of the Bibighar tragedy. The statues, the fountains and the memorials here combine with the calmness of the locations while at the same time honoring the sacrifice made by the freedom fighters.

3.5 Bhattargaon Temple: This ancient temple[6, 21] from the Gupta period[22] is renowned for its intricate brickwork and architectural finesse. As one of the oldest surviving Hindu temples, it offers a glimpse into early North Indian temple architecture and religious practices.

The Fuzzy AHP method is selected for its ability to handle uncertainties and subjective judgments in multi-criteria decision-making.

The following criteria are used for the study:

1. **Historical and Cultural significance (HCS)-** It refers to people's opinions and feelings about Locally Focused Tourism. It includes whether they support or oppose it, how they perceive its impact on culture, economics, and the environment, and their views on community involvement in tourism.
2. **Revenue generation potential (RGP)-** It refers to efforts to enhance the knowledge, skills, and capabilities of community members involved in tourism activities. It includes training, education, and capacity building to empower locals to actively participate in and manage tourism initiatives, ultimately improving their economic prospects and the quality of tourism services.
3. **Visitor experience and Accessibility (VEA)-** It entails local communities taking an active role in the creation, planning, and management of local tourism. While interacting with tourists, it places a strong emphasis on sustainability, cultural preservation, and fair economic advantages for the community.
4. **Development and Maintenance cost (DMC)-** It often involves the integration of technology, new activities, marketing strategies, or eco-friendly practices to improve the overall tourism experience while preserving local culture and benefiting the community.

The hierarchy structure with criteria and alternatives are given below:

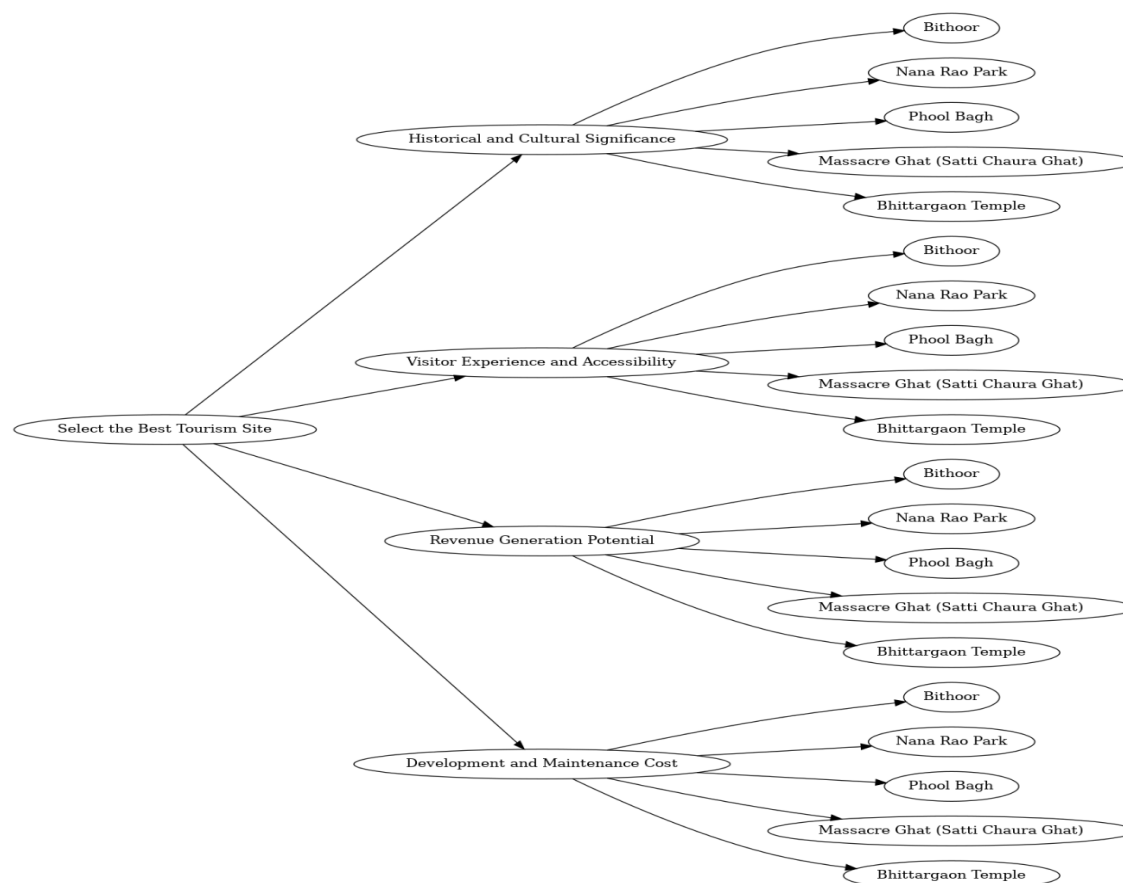


Figure 2. Hierarchy diagram for criteria and sub-criteria

Regarding the fuzzification scale, the pairwise comparison of all alternatives corresponding to the criterion “Historical and Cultural Significance” is given in Table (3.1);

Table 3.1. Pairwise comparison table for the main criteria[16]

Sites	Bithoor	Nana Rao Park	Phool Bagh	Massacre Ghat	Bhittargaon Temple
Bithoor	(1,1,1)	(2,3,4)	(2,3,4)	(3,4,5)	(3,4,5)
Nana Rao Park	(1/4,1/3,1/2)	(1,1,1)	(2,3,4)	(2,3,4)	(3,4,5)
Phool Bagh	(1/4,1/3,1/2)	(1/4,1/3,1/2)	(1,1,1)	(2,3,4)	(3,4,5)
Massacre Ghat	(1/5,1/4,1/3)	(1/4,1/3,1/2)	(1/4,1/3,1/2)	(1,1,1)	(2,3,4)
Bhittargaon Temple	(1/5,1/4,1/3)	(1/4,1/3,1/2)	(1/4,1/3,1/2)	(1/4,1/3,1/2)	(1,1,1)

Scheming of the geometric mean of the Alternative ‘Bithoor’ corresponding to the criterion “Historical and Cultural Significance” with the help of (step-4) is given below-

$$\tilde{r}_1 = \left(\prod_{j=1}^p \tilde{c}_{ij} \right)^{\left(\frac{1}{p}\right)} = \left[(1 * 2 * 2 * 3 * 3)^{1/5}, (1 * 3 * 3 * 4 * 4)^{1/5}, (1 * 4 * 4 * 5 * 5)^{1/5} \right]$$

$$= (2.047672511, 2.701920077, 3.314454017) \tag{3.1}$$

In the same way, we have evaluated other values and their normalized weights[18] are found using step (4), step (5) and step (6) and are mentioned in the table given below-

Table 3.2. Evaluation of \tilde{r}_j

Bithoor	(2.047673,2.70192,3.314454)
Nana Rao Park	(1.245731,1.643752,2.091279)
Phool Bagh	(0.821876,1.059224,1.37973)
Massacre Ghat	(0.478176,0.608364,0.802742)
Bhittargaon Temple	(0.315479,0.392026,0.529612)

Then we obtain the normalized weights of alternatives corresponding to each criterion and each “criteria,” which are shown in the tables below-

Table 3.3. Normalized weights[16, 18]of each alternative corresponding to each criterion.

Alternatives\Criteria	HCS	VEA	DMC	RGP
Bithoor	0.414087208	0.412365616	0.476488009	0.08512928
Nana Rao Park	0.256597502	0.266715632	0.226274775	0.148051273
Phool Bagh	0.1680815	0.167372041	0.148194217	0.212877499
Massacre Ghat	0.097412941	0.097001277	0.09180675	0.246901826
Bhittargaon Temple	0.063820849	0.056545433	0.057236249	0.307040122

The fuzzy weights and normalized weight for all criteria are shown below -

Table 3.4. Normalized weights of each alternative corresponding to each criterion

HCS	VEA	DMC	RGP
0.581446329	0.234720507	0.12120266	0.062630505

Now, we found the final scores, which are given below-

$$A = \begin{bmatrix} A_1 \\ A_2 \\ A_3 \\ A_4 \\ A_5 \end{bmatrix} = \begin{bmatrix} 0.414087208 & 0.412365616 & 0.476488009 & 0.08512928 \\ 0.256597502 & 0.266715632 & 0.226274775 & 0.148051273 \\ 0.1680815 & 0.167372041 & 0.148194217 & 0.212877499 \\ 0.097412941 & 0.097001277 & 0.09180675 & 0.246901826 \\ 0.063820849 & 0.056545433 & 0.057236249 & 0.307040122 \end{bmatrix} \begin{bmatrix} 0.581446329 \\ 0.234720507 \\ 0.12120266 \\ 0.062630505 \end{bmatrix}$$

$$\begin{bmatrix} A_1 \\ A_2 \\ A_3 \\ A_4 \\ A_5 \end{bmatrix} = \begin{bmatrix} 0.400643457 \\ 0.248498934 \\ 0.1683101 \\ 0.10599939 \\ 0.07654803 \end{bmatrix}$$

In the final output, Alternative (A₁) has the highest score; hence, in the preference order.

Table 3.5 The final ranking of tourist places in Kanpur[15].

Alternatives	Score	Rank
Bithoor	0.400643457	1
Nana Rao Park	0.248498934	2
Phool Bagh	0.16831018	3
Massacre Ghat	0.105999394	4
Bhittargaon Temple	0.076548034	5

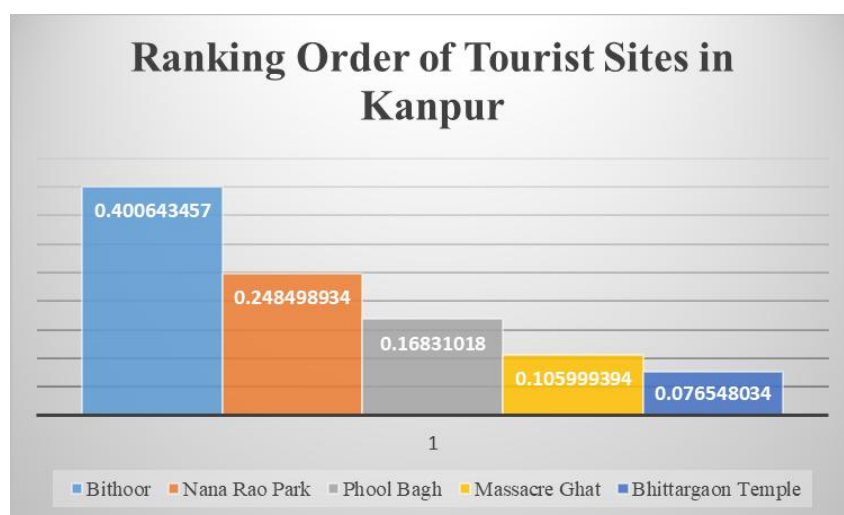


Figure 3.2: Rankings of tourist destinations of Kanpur.

4 RESULTS AND DISCUSSION:

The analysis of results establishes a distinct preference hierarchy among the selected tourist destinations of Kanpur, offering valuable insights into decision-making for tourism development. Bithoor, attaining the highest priority score of 0.4006, clearly emerges as the most influential site. Its superior performance demonstrates strong alignment with key evaluation criteria such as cultural and historical significance, accessibility, infrastructural adequacy, and public recognition. The magnitude of this score, which is almost double that of the second-ranked alternative, signifies Bithoor's potential as a central hub for tourism promotion and strategic investment in the region.

Nana Rao Park, with a score of 0.2485, occupies the second rank, reflecting moderate appeal and recreational value. However, the wide gap between its score and that of Bithoor suggests limitations in heritage importance and supporting facilities that restrict its overall competitiveness. Phool Bagh, ranked third with a score of 0.1683, indicates mid-level attractiveness. This result demonstrates partial strength but also highlights the need for policy attention to unlock its latent tourism potential.

In contrast, Massacre Ghat and Bhittargaon Temple are placed fourth and fifth with scores of 0.1060 and 0.0765, respectively. Their comparatively low rankings highlight deficiencies in visibility, connectivity, and visitor amenities despite their intrinsic historical and cultural value. These findings indicate that while such destinations possess latent potential, they require targeted interventions in infrastructure

development, marketing strategies, and accessibility enhancement to elevate their status in future assessments.

From a methodological perspective, the soft computing framework successfully handled the uncertainties and subjective judgments inherent in evaluating tourism sites, thereby producing reliable rankings. This evidence-based prioritization underscores that Bithoor should be the foremost focus for immediate development initiatives, while Nana Rao Park and Phool Bagh may be advanced as complementary sites to diversify Kanpur's tourism portfolio. Meanwhile, Massacre Ghat and Bhattargaon Temple require long-term strategic investments to enhance their competitiveness. Overall, the results validate the effectiveness of soft computing in resolving complex decision-making problems in urban tourism planning and provide policymakers with a structured roadmap for sustainable resource allocation.

5 CONCLUSION

The alternatives were carefully scored in the study, and the analysis clearly reveals that Bithoor emerges as the most favorable option, standing out as the undisputed leader among the evaluated tourist destinations. Its significantly higher score emphasizes its strong position as the best alternative to prioritize for tourism development. This outcome reflects Bithoor's unique advantages in terms of cultural and historical importance, accessibility, supporting infrastructure, and popularity among visitors, which collectively make it a central attraction with the highest potential for sustainable growth.

The next set of alternatives includes Nana Rao Park and Phool Bagh, which occupy middle-tier rankings. Their scores demonstrate that these destinations possess moderate worth, offering recreational and cultural value, but they do not achieve the same level of influence as Bithoor. Despite these limitations, they are still integral components of the overall tourism network of Kanpur, and their enhancement could provide complementary benefits to the leading site by diversifying the visitor experience and expanding the tourism portfolio.

At the same time, the lower rankings of Massacre Ghat and Bhattargaon Temple highlight critical challenges that hinder their ability to attract visitors on a competitive scale. These challenges include inadequate visibility, limited infrastructure, and weaker accessibility compared to the higher-ranked destinations. Their current position in the ranking underlines the necessity of implementing targeted strategies focused on improving promotion, accessibility, and visitor facilities. Such interventions would not only raise their appeal but also ensure that their cultural and historical significance is preserved and promoted effectively.

Overall, the findings indicate a clear prioritization pathway, where Bithoor should receive immediate attention as the leading tourism site, while Nana Rao Park and Phool Bagh can be developed as secondary attractions, and Massacre Ghat and Bhattargaon Temple require long-term, focused efforts to enhance their competitiveness in future assessments.

Data Availability Statement: The data supporting this study's findings were collected through interviews with tourists, tourist guides, and experts in the tourism field. Due to the participants' privacy, the data is not publicly available.

Conflicts of Interest: There is no conflict of interest among the authors.

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Questionnaire for Site Analysis Using Linguistic Variables

Section 1: Site Significance

1. Historical and Cultural Importance:

○ How would you rate the historical significance of the site?

Options: Very Low, Low, Moderate, High, Very High

○ How significant is the cultural or spiritual value of this site?

Options: Insignificant, Low, Medium, Significant, Very Significant

○ How unique are the features or attributes of the site?

Options: Not Unique, Slightly Unique, Moderately Unique, Highly Unique, Exceptionally Unique

2. Recognition and Preservation:

○ What is the site's recognition level (e.g., UNESCO, national heritage)?

Options: None, Minimal, Moderate, Considerable, Exceptional

○ How effective are the preservation measures at the site?

Options: Ineffective, Somewhat Effective, Moderately Effective, Effective, Highly Effective

Section 2: Visitor Statistics

3. Visitor Demographics:

○ What is the level of visitor turnout at the site?

Options: Very Low, Low, Moderate, High, Very High

- How diverse are the visitor demographics (e.g., age, origin)?
Options: Not Diverse, Slightly Diverse, Moderately Diverse, Diverse, Very Diverse

4. Visitor Experience:

- How attractive are the site's features to visitors?
Options: Not Attractive, Slightly Attractive, Moderately Attractive, Attractive, Very Attractive

- How satisfactory are the facilities provided for visitors?
Options: Very Poor, Poor, Average, Good, Excellent

5. Trends and Seasonality:

- How significant are seasonal variations in visitor numbers?
Options: None, Slight, Moderate, High, Very High

- How has visitor turnout changed in recent years?
Options: Decreased Significantly, Decreased, Stable, Increased, Increased Significantly

Section 3: Potential Revenue

6. Revenue Sources:

- How diverse are the current revenue streams of the site?
Options: Not Diverse, Slightly Diverse, Moderately Diverse, Diverse, Very Diverse

- What is the potential for exploring new revenue streams?
Options: Very Low, Low, Moderate, High, Very High

7. Revenue Patterns:

- How consistent is the revenue generated by the site?
Options: Very Inconsistent, Inconsistent, Neutral, Consistent, Very Consistent

- How much do visitors typically spend during their visit?
Options: Very Low, Low, Moderate, High, Very High

Section 4: Development Costs

8. Existing Infrastructure:

- How adequate is the current infrastructure at the site?
Options: Very Inadequate, Inadequate, Neutral, Adequate, Very Adequate

- How costly is the site's annual maintenance?
Options: Negligible, Low, Moderate, High, Very High

9. Planned Developments:

- How feasible are the planned developments for the site?
Options: Very Unfeasible, Unfeasible, Neutral, Feasible, Very Feasible

- What is the estimated financial requirement for future developments?
Options: Very Low, Low, Moderate, High, Very High

10. Sustainability:

- How sustainable are the current development practices?
Options: Not Sustainable, Slightly Sustainable, Moderately Sustainable, Sustainable, Highly Sustainable

Section 5: Stakeholder Opinions

11. Community and Stakeholder Involvement:

- How supportive is the local community of the site's development?
Options: Not Supportive, Slightly Supportive, Moderately Supportive, Supportive, Highly Supportive

- How significant are stakeholder contributions to site development?
Options: Insignificant, Slightly Significant, Moderately Significant, Significant, Very Significant

12. Expert Insights:

- How practical are the recommendations provided by experts?
Options: Very Impractical, Impractical, Neutral, Practical, Very Practical

- What is the level of risk identified by experts regarding site development?
Options: None, Low, Moderate, High, Very High