

Investigating the improvement of the tourism situation in the valleys (Darka, Darband and Darabad) with the approach of environmental protection

Ehsan Mir Hosseini: senior expert in project and construction management; Ministry of Roads and Urban Development

Ali Yousefi Amiri: Master of Architecture; Ministry of Roads and Urban Development

Abstract

Tourism is referred to as a passage of development and many countries that are now known as important tourism destinations in the world have planned and made necessary infrastructure investments after the Second World War by using the huge capacities of this industry. The main goal of this research is to investigate the capabilities and limitations of the rivers and valleys in the north of Tehran in order to achieve the sustainable development of tourism. In such a way that while protecting the environmental values, it can be economically beneficial for the urban management complex. Based on the goal, this project is part of applied research, and in terms of nature, it is part of descriptive-analytical research project and based on the survey method. Qualitative and quantitative methods have been used to collect information according to the nature of the research topic. In order to analyze and analyze the information collected from qualitative methods, two methods of preparing and producing cognitive and analytical maps using SWOT tables have been used to analyze weaknesses, strengths, opportunities and threats and to quantify the strategies, the quantification matrix of SWAT factors is used to determine the strategic position of the studied area.

Keywords: urban tourism, river valleys, sustainable development, district 1.

Introduction

Tourism is considered one of the most promising activities in the urban and regional economy in today's world, to the extent that it is referred to as a development gateway (WTO, 2016)[1]. Today, the positive and comprehensive consequences of tourism are such that it has become the number one strategy for urban and rural economic transformation in many countries. The tourism industry has become the largest and most diverse industry in the world with 230 million jobs (11% of the world's total employment) and an annual turnover of about 6.4 trillion dollars, So that in more than 150 countries, tourism is one of the five most important sources of foreign currency acquisition, and in 60 countries, it has taken the first place. The total number of tourists has increased from 25 million people in 1950 to 1 billion people in 2012 and it is predicted to reach 86.1 billion people in 2022. In 2012, the tourism industry saw the movement of about one billion tourists, an income of more than one thousand billion dollars, and 260 million jobs created (WTO, 2018)[2]. Therefore, this area is one of the most profitable economic areas, which is known as the trade of the third millennium, and international tourism flows create the most dynamic economic exchanges that can happen between countries. Nevertheless, based on international experiences, if tourism does not take place with a sustainable approach, which means a balance between its economic, environmental, social and cultural dimensions, its disadvantages will exceed its benefits, and in the long run, we will witness a decline in environmental quality and subsequently a decrease in the volume of tourism. Therefore, as confirmed by Das Weil, tourism should have multiple and coordinated goals of improving the quality of life of the host community, respecting equality between generations and within a generation, To maintain the quality of the environment through the maintenance of the environmental system, to maintain the integrity and cultural cohesion and social solidarity between communities and to create facilities and facilities.

Today, urban tourism is considered one of the most important fields of tourism, this concept has entered the list of researches related to this field since the 1980s. which is the most profitable type of tourism in advanced countries (Taqvai and Akbari, 2019:125)[3].

In the metropolises, the heights and mountainous areas around especially the rivers and valleys are considered as the most important natural capitals, which with a variety of environmental functions, tourism and leisure, aesthetics and identity of the space (Dirie. 2005) [4]. In order to improve the quality of urban life in various environmental, economic, social and cultural dimensions, it has always been the focus and emphasis of urban planners (Karimi, 2013)[5].

In the metropolis of Tehran, along with the unbridled growth of urbanization in the last few decades, which has subjected all the natural and socio-economic structures of this city to untimely changes, as the natural heritage of the city, the river valleys are among the first victims of illegal economic and recreational activities since decades ago which, due to suitable climatic conditions and attractive spaces, have attracted a large amount of attention in terms of economic benefits. In the three Valley Rivers under study, Darkah, Darband and Darabad valleys, due to the multi-functionality of these valleys in terms of recreational, sports and commercial activities, activity and environmental disturbances are increasing. In addition to violations in the development of catering spaces, visual and functional disturbance, the establishment of these numerous units cause numerous environmental pollutions in the quality of drinking water and agriculture in the downstream areas. In order to solve this problem, although Tehran Municipality has made many efforts in recent years to organize such developments in the form of detailed plans and thematic and topical plans, the use of legal levers, such as the Article 100 Commission, has sometimes prevented construction. But due to the fact that many of these units are located in the city limits and sometimes within the scope of the rural leader plans and many institutions and organizations are involved in the management of the lands of these areas The owners of these businesses take full advantage of the existing legal vacuum and especially the institutional inconsistency between different institutions in charge of urban management and develop their illegal activities (Negin Shahr Aindeh, 2008)[6]. According to the issues and problems affecting the studied three valleys river, the aim of this research is to list the environmental, activity and management problems of these river valleys, Identifying the institutions involved in the issue along with their overlapping duties and powers in the areas of the rivers and valleys, analyzing the financial and human costs of Tehran Municipality in these areas and its economic and environmental evaluation and also presenting an operational plan for the development of the valleys river with a balance approach in the economic-environmental development of the valleys river.

Methodology

The research method provides the researcher with the tool through which he tests his hypotheses and collects the information he needs for analysis. In this research, two methods of documentary study and field study using descriptive and analytical methods have been used, by using the method of field studies, collaborative methods and document mining, the basics and required information are extracted and also by examining and studying numerous and library sources in documentary studies, the required materials and sources are inferred. This research is of applied type; applied researches are researches that use theories, laws, principles and techniques developed in basic researches to solve practical and real problems. Based on the objective, this project is part of applied research, and in terms of

nature, it is part of descriptive-analytical research project and based on survey type method. In this research, the description and interpretation of the existing organizational, managerial and economic conditions and relationships of the municipality with the studied valleys are discussed. Qualitative and quantitative method tools are used to collect information according to the nature of the research subject. The data collection method in this research is documentary and survey, and the data collection tool is interview, observation, document review and questionnaire in a specialized form, which is organized based on the Likert scale. The sampling method in this project is cluster based on the statistical population, the information needed to conduct this research is collected from library and field methods. The statistical information of this research is obtained through interviews, questionnaires and field observations of the researcher and will be analyzed using SPSS statistical software. In order to analyze the information collected from qualitative methods, two methods of preparing and producing cognitive and analytical maps using SWOT tables are used to analyze weaknesses, strengths, opportunities and threats. Then, using the results of the SWAT tables and using the capability-activity analysis, based on those strategies, and finally, the operational plan (project/activities) corresponding to the strategies will be designed and placed on the map.

Theoretical Principles

The concept of tourism can be examined from different perspectives. Papili Yazdi in his book *Tourism (Nature and Concepts)* emphasizes the issue that the definition of tourism considering different dimensions such as distance, geographical, social, economic, etc., will not be able to describe all dimensions of this phenomenon; As a result, having a holistic approach to it can cover all aspects of this interdisciplinary phenomenon and lead to the division of tourists. Meanwhile, in the 1990s, the World Tourism Organization has provided definitions in the field of tourism industry, which is the only reliable and documented source and approved by the United Nations Statistics Commission. In the latest definition update in 1994, according to this source, "tourism" is: "The set of activities of a person or persons who travel to a place other than their normal place of residence and stay there for at least one night and at most one year" And the purpose of their travel is to spend leisure time. Of course, goals such as employment and earning money are not included in it".

One of the most important destinations that has influenced the world tourism trends in the past decades is urban tourism. The growth of short-term trips has turned these destinations into one of the main tourist centers (Pregil, 1999: 24)[7]. This problem has shown itself in reducing the average travel time of tourists in most of the world's destinations. This discussion can be explained to some extent by the change of lifestyle in recent years, which is placed in the diagram below this section and the ratio of time type and type of travel is specified (Swarbrok, 1999: 84)[8]. Today, people work harder than in the past despite job insecurity. These destinations are attractive for the market of tourists who have limited time and provide travel conditions for them throughout the year (The Scottish Parliament, 2002)[9]. Meanwhile, the activism of tourists in urban spaces is around attractions, city fabric, shopping, accommodation and side activities, which is crystallized in the approach to museums, theaters, exhibitions, entertainment centers and the like.

The concept of tourism capacity

One of the basic concepts in tourism planning and management is how and how much tourism resources and spaces are used, which is usually called carrying capacity. In short, the carrying capacity of tourism represents the general limits of the amount of use of a tourist attraction at a certain time and its increase to a certain level, without harming the natural and physical environment or the quality of the tourist experience (Kamble & Bouchon, 2014:38)[10]. The range capacity of tourism is not only the ecological capacity; it also has different social, cultural, physical and managerial dimensions. According to these considerations, determining the capacity of the tourist range is a complex, dynamic and relative issue, and various factors are involved in it. The most important effective factors in measuring tourism range capacity are functional factors, ecological factors and economic-social factors (Bovy, 1998)[11].

The role of urban management in urban tourism

In most countries, municipalities play the biggest role in the development of urban tourism, because the municipality is the most important institution in organizing and shaping the city. And in most of the successful countries in terms of tourism, in fact, it is the coherent and coordinated management of the city that causes activities in the same direction. Municipalities in different parts of the world take serious measures to attract tourists in the light of their powers and

strong management and coordination, the reconstruction of apparently abandoned and dead spaces aims to revive the old aspects of the pre-industrial society, they use old factory buildings to welcome tourists.

Sustainable development of tourist destinations

Sustainable tourism is a form of tourism that meets the needs of tourists, the tourism industry and the host community without harming the interests of future generations.

The three basic principles of sustainability are:

- Environmental sustainability, which means that the development is compatible with the preservation of environmental, biological processes and related resources.
- The stability of cultural and social factors, which means that development increases human control over their lives, and development does not conflict with cultural and value factors that are affected in this way, and strengthens the identity of society.
- Economic sustainability, which means that when the development is done economically with high efficiency, it is in such a way that the necessary monitoring and control is applied to the resources and it can be preserved for future generations. Sustainable development in tourism destinations means ensuring the future success of existing destinations and planning new destinations according to their long-term development.

Investigating the tourism situation in the river valleys of the district

The main and major tourism product in the studied valleys in the current conditions is nature tourism, including mountain climbing and mass nature tourism. Nature tourism, popularly known as ecotourism, is a newly reengineered phenomenon that represents only one part of the entire tourism industry. Ecotourism refers to that type of tourism that is based on purposeful travel to natural and relatively natural areas for study, enjoyment, spiritual use of landscapes, plants and animals and any kind of contemporary or past cultural aspects existing in these areas. This model includes the approach of tourists to the natural environment with different motivations that the tourist has in mind from traveling to the natural environment or nature. Therefore, the spatial extent of this pattern includes the natural environment (Lindsey, 2003: 74)[12]. In between, the important point is the distinction between nature tourism as a spatial model and ecotourism as a type of tourism. This is despite the fact that most of the time these two are considered synonyms and sometimes they are even considered as one. Tourism in nature is a spatial model of tourism and it is a spatial text shaper, which is read around travel to natural places with different motivations by tourists, this itself is based on a deconstructive approach based on different structures of intra-textual or extra-textual attitudes that appear in line with different types of tourism. Also, in the global tourism market, tourism in nature is considered a general part of which ecotourism is a part of it, along with adventure tourism. In fact, ecotourism is an expanding part of the nature tourism market. According to the estimate of "Ecotourism Association" in 1999, tourism in nature or nature tourism has 20% and ecotourism has 7% of the global travel market.

Due to its privileged natural location at the foot of the Alborz mountain range, the metropolis of Tehran is considered one of the few capitals in the world that has access to mountainous areas and heights at a close distance (Negin Shahr Aindeh Consulting Engineers, 2013: 54)[13]. From the point of view of urban and social planners, the emergence of countless problems, especially in social and environmental fields, caused by rapid and exogenous urbanization, has given the mountainous areas of northern Tehran a special importance and position in order to moderate environmental and social pollution. In the meantime, the Darband, Derkeh and Darabad valleys have many advantages with features such as a relatively gentle slope and favorable weather, convenient access, low-slope routes and the possibility of use by families, elderly people and children, etc. Faced with the problems of Tehran on the one hand and the capabilities of the valleys and heights of its north on the other hand, the role and function of the mountainous areas north of Tehran can be examined in the form of environmental, economic and social functions. Heights with a mass of vegetation with its potential have a wide protective effect against pollution and continuous purification of polluted urban and industrial air (Salehi, 2008: 34)[14]. According to Keller and Berger's estimates, vegetation plays an important role in reducing air pollutants by consuming carbon dioxide. Currently, due to the lack of planning and development plans with a destructive trend, the valleys and heights of northern Tehran are used in a crude, inappropriate way and with a large volume of tourists. Developing and implementing plans for the protection and development of tree cover in the mentioned heights, from the environmental point of view, in addition to continuous air purification in Tehran, it can play an important role in controlling the biological and physical erosion process of valleys and slopes, To preserve

biodiversity and restore the life of plant and animal species, reduce the threat of flooding, prevent chaotic and unauthorized constructions, and cultivate medicinal plants (Patrick et al, 1996)[15].

It also emphasizes the proximity of the river valleys to the Alborz mountain range and the existence of mountain bases and climbing routes and facilities such as mountain shelters, cable cars and cable cars, and the importance of mountain climbing routes in the province and the need to pay for tourism and leisure activities in this area. This vision can lead to the location and construction of uses that are compatible with habitation and respond to the coherence and balance of the city body and the formation of service uses that are appropriate to the existing needs by strengthening the unique natural features in the district. Also, by shifting investment from the housing sector to service and tourism activities, it is possible to stop the growing trend of converting the district's lands into residential use, and reducing the construction of residential units can act as an effective factor in interacting with the population, considering that in order to transform District 1 as a tourist district in Tehran, the necessary infrastructure must be provided to attract tourists. These sentences will lead to appropriate structures such as the traffic system and transportation network, and in other words, the main platform of this vision and strengthening of infrastructure is located. Also, the strengthening of the role of tourism and recreation in District 1 is derived from the major goal presented by all the above plans based on the historical natural role of the district as a holiday and tourism district. In general, the functions of tourism in the studied areas can be examined from two dimensions:

A: Domestic tourism and entertainment demand market

B: Foreign tourism demand market.

In the current situation, the dominant pattern of tourism in the studied valleys is the pattern of mass tourism, which both in terms of the world's experiences in this field and in terms of theoretical approaches, It is considered the most destructive model of tourism for the rivers and valleys in the absence of programs to guide and manage the flow of tourism. In the following, the final priority matrices of each SWAT factor will be presented separately and then the graphic interpretation of period and inter-group factors is presented, and also in order to understand the strategic position of the valleys, a diagram is drawn to determine the status of the valleys (table 1).

Table 1: The final priority matrix of SWOT factors in the direction of the development of tourism in the valleys by group (AHP-SWOT)

SWOT factors	The ultimate priority
Strengths	
-S1: Proximity to Tehran and easy access to it	0.152
- S2 The presence of permanent rivers and positive environmental, social and visual functions	0.110
- S3 relatively positive attitude of the local community towards tourism	0.046
- S4 being suitable for sports activities such as mountaineering, mountain biking, climbing to the peak, rock climbing, as well as being suitable for walking and tourism for the elderly.	0.007
- S5 having an attractive nature for major social groups due to the change in slope and height and as a result creating different attractive views	0.034
- S6 animal and plant biodiversity in the area with its own attractions	0.108
- S7 Wide popularity at the national level as nature tourism and mountain climbing destinations	0.011
- S8: keeping the high parts of the rivers and valleys intact and not encroaching on non-original constructions, especially in Dar Abad.	0.017
- S9 The presence of a suitable mountainous climate with various sub-climates	0.015
- S10 unique views from the mountain to the city in the heights of the valleys	0.029
Weaknesses	
- W1, the continuous process of destruction of natural resources due to lack of proper use	0.043
- W2 Lack of proper system for waste disposal	0.021
- W3 Lack of provision of suitable spaces for the climbers to stop	0.005
- W4 unauthorized and hazardous constructions for natural disaster management	0.007
- W5 lack of health infrastructure, services and facilities (electricity, water and gas) in the area	0.020
- W6 The low capacity of tourism management in the municipality in the current situation	0.002
- W7 lack of a comprehensive tourism development plan for the valleys by the municipality	0.011
- W8 Limited financial resources for the development of tourism infrastructure	0.003
- W9 Lack of suitable facilities and equipment for various welfare and accommodation for tourists and mountaineers	0.017

- W10 lack of effective advertising regarding the capabilities of the river valleys	0.001
Opportunities	
-O1 The growing trend of domestic tourism markets, including nature tourism and mountaineering	0.045
- O2 the trend of expanding the foreign tourism market, especially in Arab countries	0.078
- O3 lack of competitors with completely superior competitive advantages in Tehran	0.007
- O4 attention and emphasis on tourism as a partial development lever in the sixth development plan	0.005
-O5 The presence of the private sector's investment motivation in the field of tourism	0.096
-O6 Emphasis on landscape tourism as one of the main strategies of territorial development in the national land development document	0.013
- O7 Tehran's comprehensive plan emphasizes revitalization of the valleys as one of the main strategies for the future development of the city of Tehran	0.025
Threats	
T1 - Management difference in the tourism management process of River valleys	0.006
- T2 lack of coordinating mechanism for tourism development in the valleys	0.005
-T3 The presence and activity of some military organizations in the river valleys such as Darband	0.011
-T4 Unfavorable image of Iran in international tourism markets as a result of media propaganda	0.022
- T5 lack of priority in the field of tourism as an economic and social driving force for the country's general management	0.002
- T6 decrease in the satisfaction level of tourists (due to cost factors, environmental destruction in the valleys downstream and low quality of tourism facilities)	0.003
T7 - Lack of necessary infrastructure investments to attract investors in the field of tourism in Tehran in general and in the valleys in particular.	0.021

Based on the weighting and calculation of the geometric mean and final weight of each factor compared to the factors within and between groups, the rank and priority of each factor and finally four groups of factors can be obtained. Figures 1 and 2 show the graphical interpretation of the weights of the factors. This figure shows the position of each group of factors based on the assigned weight (figure 1 and 2).

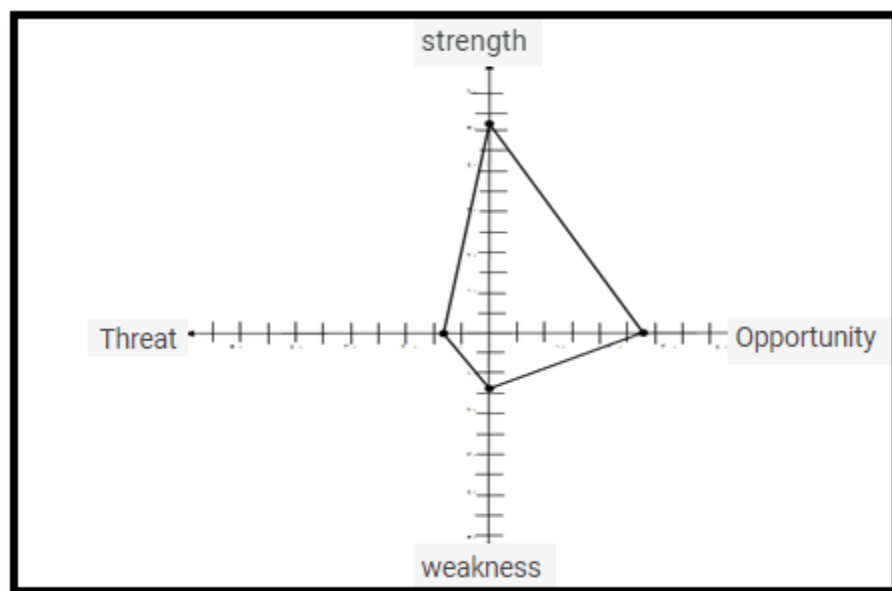


Figure 1: Graphic interpretation of SWOT-AHP analysis results

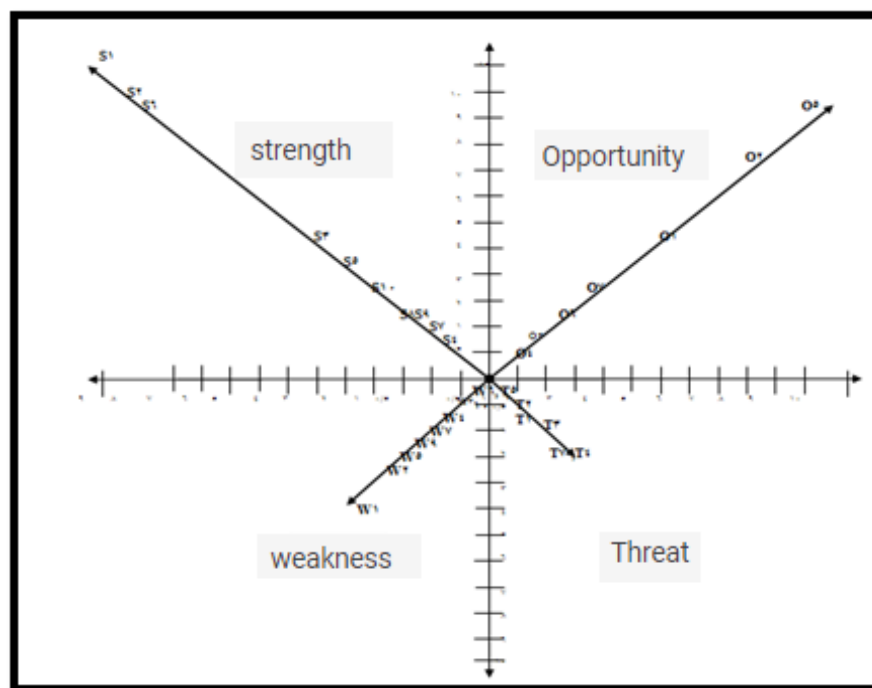


Figure 2: Graphical interpretation of the results of pairwise comparisons of SWOT groups and factors with AHP integration

As it can be recognized in these forms, the opportunities and strengths have occupied a larger area of the graph, which indicates their greater weight in the eyes of experts in the development process of river valley tourism. At the same time, the threat and weakness factors are concentrated in the lower area of the diagram by taking lower weights in a more limited area. Based on the results of weighting and prioritizing the factors affecting the development of tourism in the rivers and identifying the set of strengths and opportunities as driving and upstream factors of tourism development. In the three rivers of the studied valley, the following macro strategies can be designed by considering the analytical framework of the policy developed in the previous stage as well as the dimensions of economic sustainability, environmental protection and the integrity of the tourism development management system (table 2).

Table 2: Macro-strategies guiding the development process of river tourism in the studied valleys

Strategy oriented	Macro-strategies determining the direction of the development of river valleys tourism
1	Creating coordination and coherence between key stakeholders in the implementation of programs, including the government sector, municipality, private sector and local community.
2	Involving the local community in the process of planning the development of tourism activities
3	Strengthening the position of tourism in the decision-making and input government departments in the river valleys area
4	Facilitating private sector investment that also benefits the public sector, local community and the environment
5	Creation and sustainability of the municipality's revenue generation from the process of tourism development, focusing on the development of competitive products based on nature tourism
6	Sustainable exploitation of the attractive tourism resources of the area
7	Creating a policy framework supporting the tourism sector
8	Minimizing the negative effects of the development of tourism-related activities in the district
9	Long-term tourism, integrated and sensitive to the natural resources of rivers and valleys
10	Tourism development in connection with environmental protection policies
11	Providing guidelines for the consistent development of tourism infrastructure in the area

12	Organization and regularization of unauthorized and unstable constructions
13	Empowering the local community in social and economic fields as an active host community involved in tourism development
14	The transfer of tourism pressure from the slopes of the valleys to higher altitudes with the development of high-yield tourism products
15	Providing a clear framework of regulations for attracting tourism investment

Conclusion

In this research, tourism development capacities were investigated in the three rivers of Derkeh, Darabad and Darband based on capability-activity analysis and SWOT-AHP combined method. Analytical method of capability-activity is one of the efficient methods in investigating tourism capacities, which has been useful in this study regarding the studied rivers and valleys. With this methodology, the capabilities and limitations of the studied rivers and valleys in the field of natural tourism development (ecotourism) have been evaluated in the current research. And by quantifying SWAT factors using AHP method, suitable strategies were produced for the development of tourism in the studied areas. In fact, the innovation of this article is in the application of capability-activity analysis before quantifying SWAT factors, as well as the integration of SWOT-AHP methods in order to produce strategies in the field of tourism, especially in the valleys of North Tehran. The results of the research show that 15 key and main strategies can be identified to guide the development process of tourism in Derkah, Darband and Darabad rivers. These strategies have been produced based on the output of the capability-activity analysis of the valleys and with an integrated method and so these key strategies are reliable for formulating an operational plan including executive policies and proposed projects. Corresponding to these strategies, operational projects to realize the strategies were presented in the suggestions section. The main condition for the realization of strategies is the formation of joint committees to implement projects, because in the absence of integrated urban management, each of the projects may fall under the authority and duty of one agency or, on the contrary, a project may fall under the legal mandate of several agencies. Therefore, cross-sectoral coordination is necessary to implement this project, which is designed with the content of environmental protection and creating sustainable incomes for the city's economy.

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