
Case Study Paper

The Road Of Rebirth— —Place making in Bidur from the Perspective of Cultural Landscape

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Abstract

Bidur is located in north-central Nepal, which used to be the royal capital of Nepal in 18th century and is now working as the capital city of Nuwakot. In 200 years, the urban development has moved from the mountain to the valley at both sides of the Trishuli River, developed from north to south and gradually formed Bidur, Battar and other groups, which constituted the ancient and modern development axis. As the capital of history, The city boasts prosperous historical and cultural resources, endowed with superior landscape and features. However, due to the limitation of natural conditions and the level of economic development, the level of urbanization is still in its infancy. The city has been in a fix of various problems such as scattered urban space distribution, backward living and service facilities, insufficient economic power in the city, serious damage to historical sites and so on .So how to protect historical and cultural resources and understand cultural values in the process of urbanization, how to use the unique resources of the city to improve the vitality of the city and how to prevent and predict the earthquake, flood and other natural disasters and ensure the safety of cities are the three most important aspects in place making for such poor cities like bidur.

Basing on the culture, ecology, landscape and value as the breakthrough point, and taking the protection and construction as double means into consideration, this paper aims to put forward some ideas to improve space environment, living standard, while enhance city vitality and create more vigorous living place for such underdeveloped cities. Firstly ,the new three major development concepts:organic growth, elastic cluster and coexistence of the old and new have been put forward from the SWOT analysis, the paper also identified the urban spatial structure and clarifying the urban functional zoning. Secondly ,the paper put forward from the aspect of cultural protection, public services, ecotourism and urban design four aspects we put forward respectively strategies such as building up classified and level-by-level culture protection system with orderly guidance and control, hence to build an equally shared and easily accessible public service system, Developing a Management—Usage Combined and Ordered Tourism System and Forming a distinctive landscape system with both ancient and modern attractions. Finally, we point out the two paths to realize place making . The first one is to explore the urban context a and continue the urban pattern on the basis of historical protection, while the second is to implant the tourism project, activating the urban economy; the third is to improve life as the goal, in which the life quality will be promoted in the process of respecting cultural differences, improving the quality of the site.

Keywords

Nepal Place-making Culture Ecology

1. Project background and overview

1.1. Project background

Nepal is one of the developing countries in the world, which suffers from unstable political situation and lacks of complete urban planning system. The earthquake in Nepal in 2015 caused the demolition of Zhangmu Port at the border between China and Nepal and led to rise of Gyirong Port in the north of Bidur. Therefore, as a bridge connecting Gyirong and Kathmandu, the capital of Nepal, while the rising Bidur will usher brand new development opportunities.

China has launched the "Belt and Road Initiative" to join hands with the countries along the belt and road to develop together. In this context, invited by UN-HABITAT, Wuhan Land Use and Urban Spatial Planning Research Center (WLSR) and Wuhan Planning & Design Institute (WPGI) formed a joint design team of one and a half years to prepare the Integrated Development Planning of Bidur in Nepal, a country along the belt and road. This project is not only an action guide for the post-earthquake reconstruction of Bidur, but also a strategic blueprint to highlight the location of Bidur and the characteristics under the superposition of multiple opportunities.

1.2. Bidur Introduction

Bidur lies in Central Nepal and is the capital of Nuwakot, which is some 30 km northwest of the Kathmandu Valley and 60 km away from Gyirong. Since ancient times, it has been a major economic and cultural exchange hub and traditional border trade market between China and Nepal. Now this city falls into 13 districts (across the city proper and five rural development committees) and comes up to 130 km².

In 2017, the city's had a total population of 54,351, with about 20.14% of them were urban residents and enjoyed a 2.35% annual growth rate. From 2001 to 2011, the urban population rose from 21,193 to 26,750, up 2.35 YoY. And the local economy is still based on agriculture and grows about 2% YoY, being left behind in the national economy.

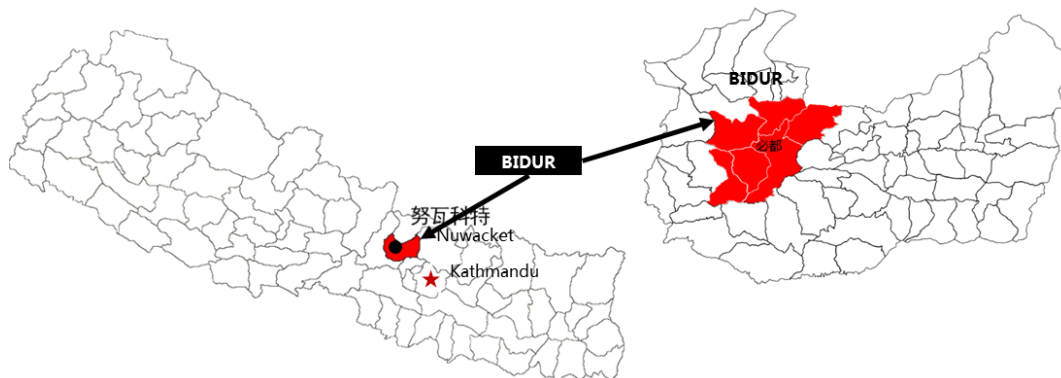


Figure1 The Location of Bidur

2. Core characteristics and Key issues

2.1. Core Characteristics

Mountain- based origin and Profound cultural heritage.The city is originated from the mountains. Since the construction of the Imperial Palace and the Sutta Tula Durbar Square along the Eastern mountain of Bidur in 18th centuries, the city has developed into a chain of clusters including Trishuli, Bidur, Battar scattered along the valley from north to south as we see today. Nowadays, The Hindu and Buddhist temples and characteristic buildings are scattered throughout the city. And the scenic spots and historical sites are mainly concentrated in TRISHULI and the Palace area where many Palace complex and many important temples are preserved.

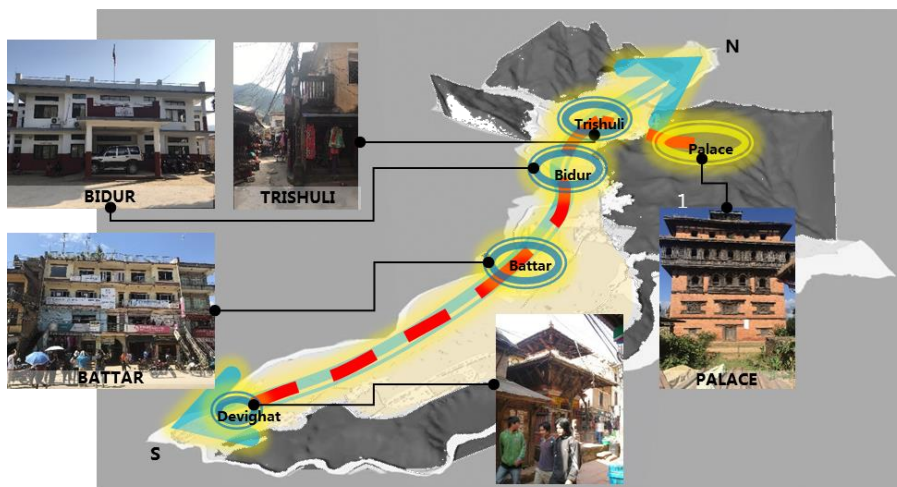


Figure2 Bidur's Historical Evolution

Alternating landscape with mountain and river, superior ecological environment. Located in valley area surrounded by two rivers and three mountains, Bidur is adjoined with Nepal Langtang national park, and China's Tibet Everest national nature protection zone, and there are abundant natural ecological resources and biodiversity diversity. The city's average elevation is about 690 meters ,with the characteristics of "low south and high north, low east and high west". Limited by natural conditions, the city centralization area where people live along the river shapes like ribbon scatters along the river from south to north.

Mixed landscape, public space endowed with significant religious characteristics.As urbanization and industrialization have advanced continuously, modern urban functions have emerged and disrupted the old agricultural way of life. New buildings of urban areas are intertwined with old dwellings of rural areas while the traditional public spaces are venues of various activities such as communication, entertainment, fetching water and others which makes it takes more unique local characteristics.

2.2. Key issues

Preserve the Historical and Cultural Resources and Recognize their Values. The history of the city culture is the soul of the city as well as the important wealth in the process of urban history.The city faces many problems such as badly damaged historical relics, lack of mining of historical resources because of lacking of the protection system and the historical

resources protection and utilization standards. According to the international principal of the protection of cultural relics buildings such as the Venice charter international principles, historical relics construction is valuable and plays an important role. Hence, the realization of sustainable development involves in several aspects, including the relationship between the modernized and the traditional, heritage protection and utilization, and the relationship between city function and traditional landscape to develop the historical and cultural value, activate the city function and improve the quality of the city.

Boost Urban Vigor with its unique urban Resources. Subject to the natural conditions and economic development level, the development of urbanization is still in its infancy. The present situation of Bidur is given priority to agriculture while second and third industry development is relatively lagging behind. The absence of motivation in industry development makes the city hardly provides large-scale jobs and attracts enough population. Natural ecological resources and human resources are the important advantages in the development of the Bidur. The lessons that gained from others countries have tole the truth that historical and cultural tourism helps to improve the city's economic vitality, realize the protection of cultural heritage, and promote the harmonious atmosphere and national spirit. Basing on the identification of local cultural resources value, the Integration of various kinds of tourism resources, and the Development of multi-types, multi-level, multi-experience of tourism activities help to achieve cultural revitalization of the city.

Take Actions against Natural Disasters and ensure a Safe city. The city's safety is the basic requirements of urban development and the residents' life and work. From the point of elevation, 70% of the city's land is 600 meters. With the terrain fluctuates greatly, the urban construction space is limited greatly. When the city's rising water situation is simulated through the water sea level rise 20 meters, the area below the altitude of 520 meters will be I flooded. From the point of slope, In addition to the central valley, the whole city is all around mountain steep, a maximum gradient of up to 67 °. So the high ecological sensitivity and high natural disaster risk make the area in the city unsuitable for the urban construction. Meanwhile, the terrace of soil and water loss caused by the mountain vegetation destruction have threatened the ecological environment of the city.

3. Concept and framework

3.1. Concept

The international charter on cultural tourism launched by ICOMO in 1999 mentioned that "Domestic and international tourism which continue to be the most important tool of cultural exchange can be a positive force of natural and cultural protection, create economic benefits for the cultural heritage. The management with the purpose of protection can be fulfilled by collecting money, educating the community and influencing policy. The new urban agenda promoted by the The United Nations "habitat 3"2016 also put forward the declaration of human for the purpose of social inclusion and poverty eradication of sustainable urban development. So based on the local urbanization characteristics, we put forward the place making strategy of "Promotion with Protecting ,Form with Function" to explore the developing country or region urbanization development path. The "P+P,F+F" means first ,protect the historical context to continue the current urban spatial layout;

Second, Introduce tourist projects to invigorate the local economy; Third, Reverse cultural differences to improve the quality of public spaces.

3.2. Integral Development Framework

Identify the four development positioning. Based on SWOT analysis, we proposed Prosperous and Vibrant City, where people Lives in the Natural Environment and enjoys Equal and Shared Services. The Harmonious and Inclusive Atmosphere includes four major visions for future development "finding the motivation, respecting the ecology, improving the people's livelihood and highlighting the culture" to guide place making. We hope to build Bidur into a prosperous and dynamic city with thriving industry and population, a friendly homeland that can resist natural disasters and a society that every people can have convenient access to the equally shared service and people of different cultural background and class can live in harmony and respect each other.

Build the protection framework. Following the urban space development logic that the historical growth pattern a city should be develop from the mountains towards the plain and along the river from north to south to extend. Respecting the natural and ecological background of the city, arranging the functional clusters, and promoting the harmonious coexistence and elastic growth of the city and the nature; Protecting distinctive historical resources, developing new functions, and planning old and new cities and tradition and modernity in an integrated manner, so as to create a city picture in which both old and new city areas can co-existed. Based on three Value orientations of the thrive Organic growth, Elastic cluster and Joint thriving of old and new city areas, a general spatial structure with two level, namely the river valley "concentrated construction area" + "large-scale agricultural community" in the mountains, and "network of one belt, double T expansion, two zones, seven sub-area and five communities will eventually formed" .Also, Combined with the whole city function layout, Planning will be in accordance with the "over the mountain water, farmland fragrant" natural ecological landscape as the base, the palace, old business district and the administrative as region spatial carrier, Injection of cultural tourism, public services, trade business, and other functions, make traditional culture golden triangle to realize double revival of urban morphology and function.

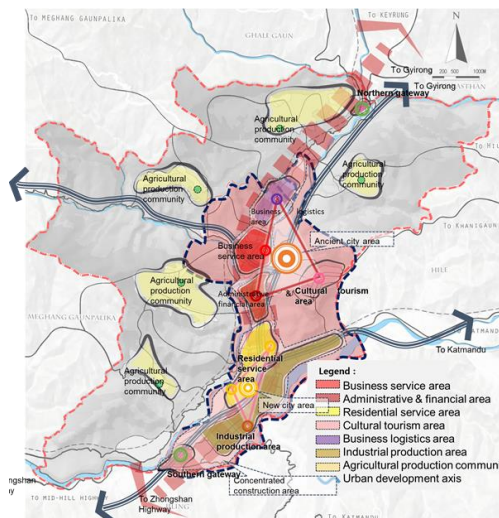


Figure3 Spatial Structure Planning

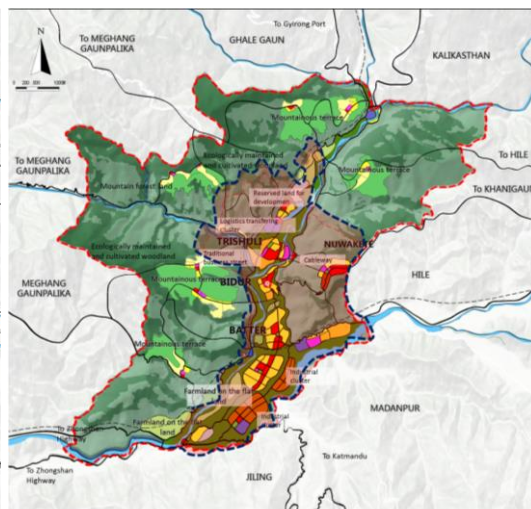


Figure4 Layout of Land Use in Bidur

4. Development Strategy

4.1. Strategy1: Establish a system for classification and cultural preservation with "the central old city density, north and south portal agglomeration, scattering peripheral villages". As we know, historical cultural heritages need different methods of protection and protection requirements vary because of Various types , different carrier, diversified saving and pluralistic value. therefore, according to the spirit of traditional features of blocks and streets landscape protection requirements in Venice Charter, Charter ON THE BUILT VERNACULAR HERITAGE(1999), International Cultural Tourism Charter and other Charters, we should Establish a system for cultural preservation which adheres to the principle of the authenticity, authenticity and sustainability.

Define Major Historical Architectural Complex, Traditional Streets and Major Historical Facilities. According to dating, shape design, protection, characteristics and values, the historic heritages of Bidur can be divided into the following three types: historical and cultural buildings, traditional cultural blocks, important historical and cultural facilities.

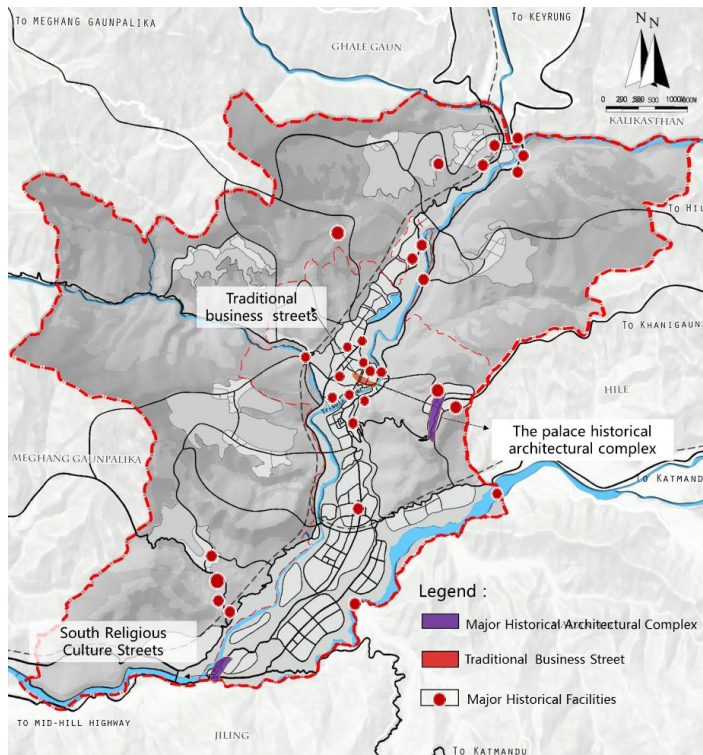


Figure5 Historical and Cultural Resources Distribution and Evaluation of Bidur

Table 1 Bidur Historical Resources Evaluation and Grading

Grade	Name	Value
Major Historical Architectural Complex	Palace Historical Architectural Complex	In the past, the building complex included palace, chamber and other annexes.
Traditional Streets	TUISULI Traditional Business Street	It represented the glorious success of TUISULI.

Grade	Name	Value
	South Religious Culture Street	The southern block involves temples, monasteries, and underlying history and culture.
Major Historical Facilities	Tibet-Nepal Friendship Monument	Monument to Marriage between Tibet and Nepal
	BATTER Central Facilities	The Toothache Tree, the Well, the Temple, the Site, etc.
	Hindu Temples and Other Temples	Nepalese religious culture and major sights alongside the route

Establish a three-grade protection system with Historic core conservation area, Construction control zone and cultural preservation area. The core protected zone will be established to cover all historic buildings, and any new building of the zone should be strictly controlled to have a similar style as the palace complex. A construction controlled belt will be established 100-200 m outside the core protected area and either residential or commercial building of the belt should not be higher than four stories and also have the same style as the palace complex. A coordination zone will be established 200-500 m outside the controlled belt and any building of the zone should not be higher than 4 stories and also have the same style as the palace complex.

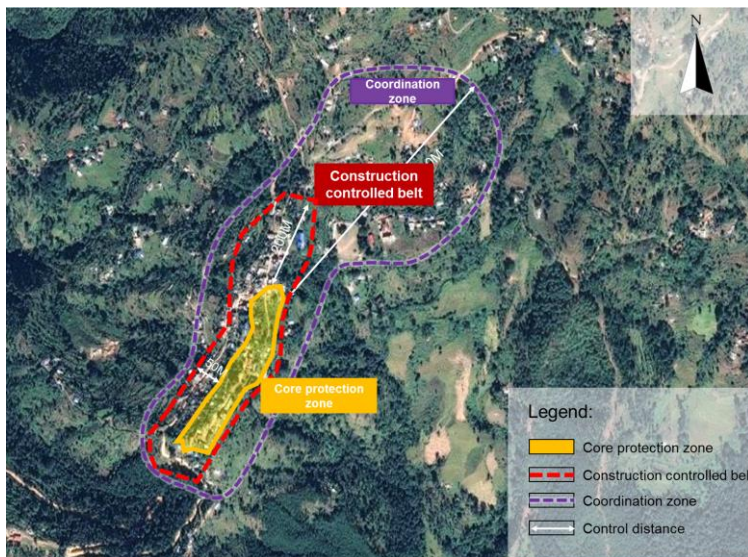


Figure6 Historical and cultural resources distribution and evaluation of Bidur

Promote the protection and utilization of intangible cultural heritage. On the premise of maintaining the authenticity of traditional festivals and other intangible culture, it should be combined with urban parks and public activity centers. tourism and trade activities should be carried out in public places during festivals, which aim to explore the potential economic value of local traditional festivals, spread and display intangible cultural heritage, promote vitality through culture and improve the quality of urban public space.

4.2. Strategy2: Establish a public service system for all

Bidur has weak public service facilities and health care system education and other basic living facilities service level is low, and lack of movie theater, entertainment facility and so on from the current situation. The focus should be the establishment of a public service system and inclusive religious activity place where all citizens have access to an equal and convenient medical treatment, education, cultural entertainment, social welfare and other services.

Establish municipal and community public service facilities. Build the "municipality-community" two level public service system based on Planning Norms and Standards 2013, with reference to experiences of China and India and other developing countries and according to requirements on equal access to public service facilities. The system shall involve "one center and multiple facilities", consisting of medical care, education, social welfare, culture, religion, sports, food market, and public space and services to the whole city. Community comprehensive service centers will be arranged with 1,000 meters as the service radius, and 6,000 people (2 Neighborhood) as the standard of population served, to provide community services such as medical treatment, social welfare, culture, religion, and sports for residents in the neighborhood. Each community comprehensive service center will have a footprint area of no less than 0.2 hectares and a construction area of no less than 350m².

Build characteristic religious cultural facilities. From the experience of Lishui in China, we should construct a variety of religious activity space to meet different ethnic and religious belief of citizens and tourists demands cultural habits and religious activities and fulfill the space modern culture function to suit time life needs at the same time. Bhairabi Temple, Jalapa Devi Temple and Sugatpur Temple will be selected as municipal-level key religious culture space for holding major congregations; and a religious funeral home covering an area of over 0.5 hectares will be arranged in Devighat cluster, to meet religious funeral demands. To enrich the citizens' spiritual life, a municipal-level library covering an area of over 0.5 hectares will be arranged in Bidur cluster; and a municipal-level museum/art gallery/exhibition center covering an area of over four hectares will also be arranged; one hall will be arranged in each cluster of the river valley concentrated construction area to provide citizens with multiple functions like congregation. There will be seven halls in total, each covering an area of over 0.2 hectares.

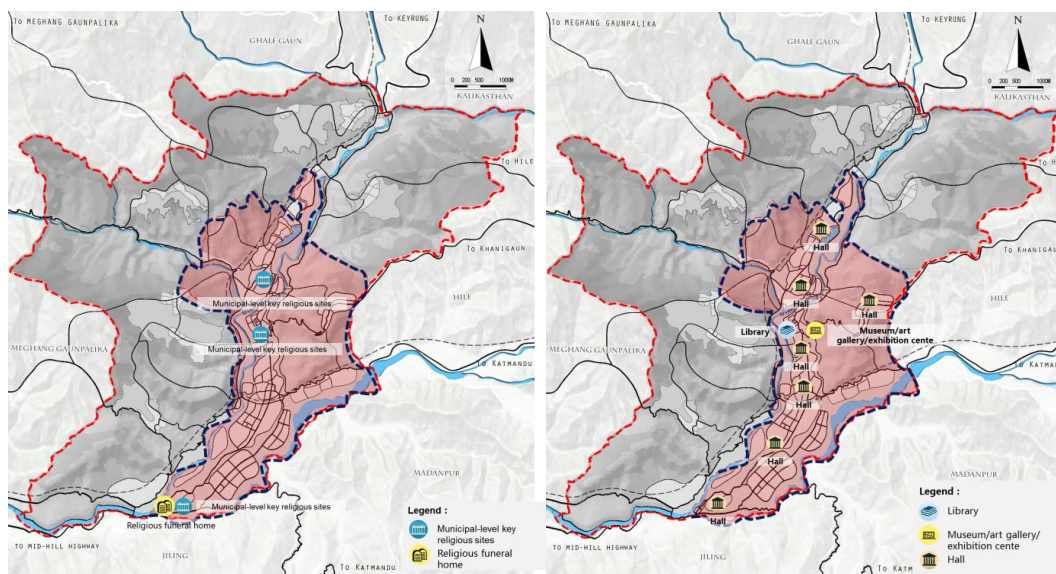


Figure7 Layout of Religious Sites of Bidur Figure8 Layout of Cultural Sites of Bidur

Create riverside public spaces. Many public spaces will be built around the rivers of the city. First, the plan provides 50-150 m wide green belts on the Trisuli and Tadi Rivers as Riverside Park, and provides a more than two ha Civic Square at the center of the city. The primary protection areas are River and lake shorelines, natural mountain boundaries, ecological protection areas and animal channels. The plan also provides farmland eco-landscapes at the southern and northern waterfronts, and provides riverside trails and terraces at the mid waterfronts. During the construction process, river and lake shorelines, natural mountain borders, ecological reserves and animal routes should all be preserved as first-class protection zones. So, any act affecting the natural flow of a river or the natural border of a mountain, or violating any regulation involved should be prohibited; any act of massive construction should also be prohibited to preserve the ecosystem of the city.

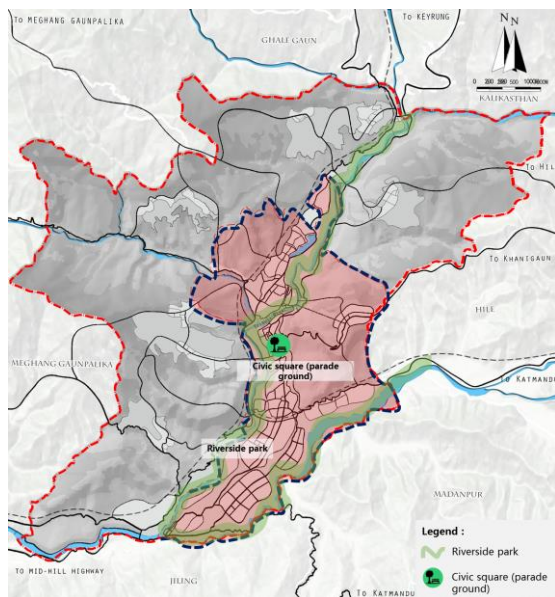


Figure9 Layout of Municipal-level Public Space of Bidur

4.3. Strategy3: Establish a civilized and orderly tourist system with utilization and management integrated

Bidur has similar historical and cultural and natural landscape resources as Bokhara's., We can integrate various ecological and cultural resources, and take agriculture as the root and tourism as the expansion to develop cultural tourism and logistics business with unique theme and route. In the process of this strategy Industrial development will provide a large number of jobs, promote the continuous growth of the population, and create a vibrant atmosphere of prosperity.

Build“Cultural Tourist Loop + Boutique Ropeway”. Various historical and cultural resources will be integrated. In the near future, the plan provides mountain highways and trails to connect Traditional Streets, Palace Historical Complex and the Administrative Service Center, and provides many tourist utilities of traditional cultural themes. In the long term, the plan provides one ropeway between the streets and the palace complex.

Build“Eco-Tourist Loop + Adventure Road”. Eco-tourist experience will be enriched. First, the plan provides river drifting, kayaking and other tourist activities on the TUI SHULI and TADI Rivers. And the plan also provides riverside tourist utilities, riverside greenways and mountain hiking routes.

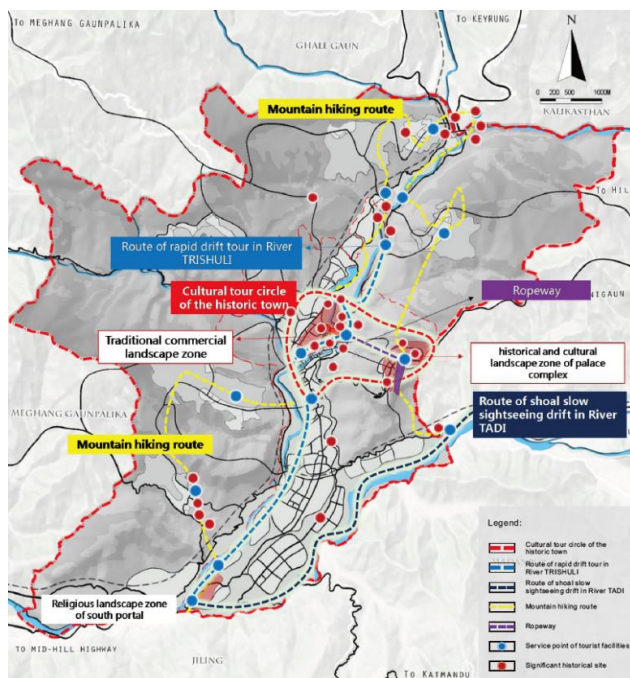


Figure10 Systematic Planning Map of Ecological and Cultural Tourism in Bidur

4.4. Strategy4: Create a characteristic traditional-modern landscape system

By comprehensive analysis of the regional characteristics, plan elements, the relationship between the surrounding landscape view and urban functions, the plan will construct a holistic mountain, water, street, city landscape features, while highlight the characteristics of a booming city built on hills and surface water.

First, Restructure the spatial layout. A new building layout should be created by rearranging the current buildings and roads. **Second, Establish public space paths .**Riverside landscape

nodes and public function centers should be created to increase the coverage of public spaces to 30% so that a neat-looking spatial structure can take form. **Last, Restore the traditional building layout.** In the Traditional Streets, the buildings should be partly preserved and reconstructed with a height of two or three stories so that courtyards and compounds will take form along the streets, and the streetscape, windowsills, balustrades, window supports and roofs should be repaired and redesigned as for the characteristics of the streets.

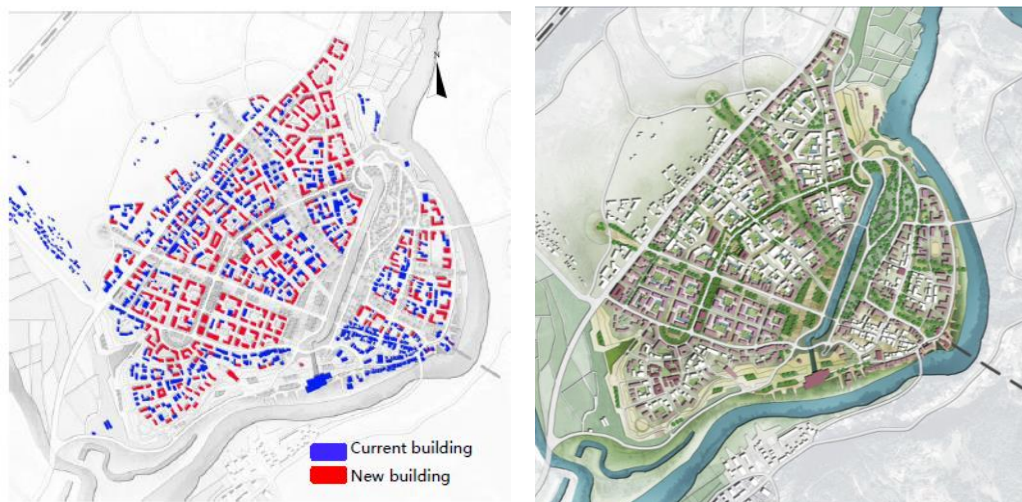


Figure11: New and Old Building Layout Map of TRISULI

Figure12: The Plan of TRUISHULI Traditional Commercial Landscape Zone

5. Summary

High quality of urbanization is the guarantee of sustainable development both for city and humans. So, the key of place making is not only to provide more green space and public space material for local residents, but also to provide more economic vitality and function for the city. The planning set the "Develop with Protecting ,Form with Function" as concept, use cultural preservation from the aspects of protection and construction, public service, ecological tourism, and urban design four paths, expecting a long-term effective on regional economic and ecological sustainable development, effectively creating multiple equal employment, providing fair and equal public service facilities and open beautiful living environment.

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