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Revitalizing (Ain Tawargha): Integrating landscape Architecture for Cultural Heritage Preservation and Sustainable Development

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Abstract
This research focuses on the revitalization of Ain Tawargha through landscape architecture, aiming to integrate cultural heritage preservation with sustainable urban development. Ain Tawargha, renowned for its natural springs and traditional handicrafts like (Dees) mats, faces challenges including urban decay and neglect of cultural assets. Employing a comprehensive approach, the study conducts site analysis, reviews previous studies, and gathers empirical data through surveys to propose practical interventions. Recommendations emphasize enhancing public spaces, promoting eco-friendly tourism, and revitalizing local crafts to stimulate economic growth and community engagement. By synergizing landscape design with cultural preservation, this research advocates for a balanced approach that respects local identity while fostering environmental sustainability and economic prosperity in Ain Tawargha.

إحياء عين تاورغاء دمج الهندسة المعمارية للمناظر الطبيعية للحفاظ على التراث الثقافي والتنمية المستدامة

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الكلمات المفتاحية
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الملخص
يركز هذا البحث على إحياء عين تاورغاء من خلال هندسة المناظر الطبيعية، بهدف دمج الحفاظ على التراث الثقافي مع التنمية الحضرية المستدامة .وتواجه عين تاورغاء، المعروفة بينابيعها الطبيعية وحرفها اليدوية التقليدية مثل حصر الديس، تحدياتٍ تشمل التدهور العمراني وإهمال الأصول الثقافية .باتباع نهج شامل، تُجري الدراسة تحليلاً للموقع، وتُراجع الدراسات السابقة، وتجمع بياناتٍ تجريبية من خلال مسوحاتٍ لاقتراح تدخلاتٍ عملية .وتُركز التوصيات على تحسين المساحات العامة، وتشجيع السياحة الصديقة للبيئة، وإحياء الحرف المحلية لتحفيز النمو الاقتصادي والمشاركة المجتمعية .ومن خلال تضافر تصميم المناظر الطبيعية مع الحفاظ على التراث الثقافي، يدعو هذا البحث إلى نهجٍ متوازن يحترم الهوية المحلية ويعزز الاستدامة البيئية والازدهار الاقتصادي في عين تاورغاء.

I. INTRODUCTION

Landscape architecture involves much more than just planting a tree around the building after finishing construction. The main purpose of landscape architecture would be about the beauty and use the out-door space as the most beneficial way. It needs to concern with the man made construction and natural, the problems from these. So, the architect needs to know the idea of construction too, not only the design part. There are many parts and elements for architects to explore and consider more on. For the elements such as, the circulation, layout plan, surrounding, ventilation, etc. It also covers the part of the environment that would affect our site landscape such as, wind, light, water, smell, and other like animals that we cannot control.

As landscape is a big part of the architecture. Architects have a task to make landscape be the most aesthetic, functional, and meaningful to the building and surrounding. Whatever how the design be, the landscape needs to be in the scope of the surrounding environment.

It needs to be a part of the area. Meaning in both the boundary and the design. It could be outstanding in the design but it does not mean it needs to be different from the existing surrounding. It needs to be considered to the flows between building and surrounding too.
Sittipunt, P., 2014 stated that the landscape of the building needs to be planned when the building is being planned. That would make the building belong to the site, and the site is blending to the building and surrounding.

A landscape is a repository of cultural values and documents past civilizations. Thus, a landscape can be viewed as a specific type of heritage, landscape and its natural and cultural value have been of interest to researchers and have figured prominently among the considerations shaping planning policies (Agnoletti, 2014; Kučera et al., 2008).

Landscape itself is considered a specific type of heritage (Kučera et al. 2008a; Kučera et al. 2008b; Lowenthal 2005). Cultural landscapes provide an interface between nature and culture, the tangible and intangible, and biological and cultural diversity. They represent a closely woven network of relationship and the essence of cultural and personal identity (Rossler 2006). The World Heritage Committee (UNESCO) established three categories of cultural landscapes, one of which was clearly defined landscapes designed and created intentionally by humans. This category includes garden and parkland landscapes constructed for aesthetic reasons. Such landscapes are often (but not always) associated with monumental buildings and ensembles (Rossler 2006). However, most studies of landscape value generally refer to an integrity criterion that encompasses coherence, harmony, visual balance, undisturbed functional entities, continuity over time, and the fit of land use to the landscape's natural characteristics (Gullino, Larcher 2013).

In the landscape architecture and its related disciplines, spatial design is a core activity oriented toward generating solutions for urban and rural areas and project sites such as parks, gardens, and squares, or exploiting potentials by creating conditions for spatial, ecological, and social developments Nijhuis, S. and de Vries, J., 2019.
A spring or well is defined as the point where the water table intersects the surface of the Earth. This occurs due to several geological and hydrological phenomena such as erosion, fracturing, faults, etc. Springs are typically classified into three main types based on their origin: depression springs, natural springs, and fault springs.

Depression springs form in low-lying areas and valleys where groundwater intersects the surface due to rainfall. Conversely, artesian springs occur when free-flowing groundwater encounters an impermeable layer, with this barrier intersecting the Earth's surface. Groundwater often deviates from the hanging water level, forming several springs along the boundary between the water-conducting and impervious layers. Lastly, supercritical springs form when confined groundwater encounters a fault, causing it to ascend to the highest point of this fault opening.
Saleem, S.M., 2007 pointed that extreme aridity conditions، natural springs hold high ecological importance, representing oases of life and boasting remarkable productivity and biodiversity, springs are recognized globally as biodiversity hotspots.
Natural springs are sites in which aquifer water discharges aboveground or relatively close to the surface, within reach of vegetation roots. Springs provide water and food resources، as well as vegetated areas, for various animals. They are a known habitat for many endemic fauna and flora species. Springs in arid environments are equivalent to terrestrial islands, and their ecological contribution is often far beyond their regional context.
Springs contribute not only to the natural systems but also to human welfare. By supplying natural resources for agricultural uses, they mitigate harsh climatic conditions.
Although their importance has been proven, they often lose the competition between nature conservation and the exploitation of natural resources for human benefit Worldwide.

Provide base flow for many of the streams and rivers that are used for boating, fishing, swimming, scuba diving, and snorkeling.
The nearly constant temperature of spring water creates an ideal habitat for many plants and animals; one example is the manatee, which seeks out the warmer waters of spring "runs" during cooler winter months.
The word Tawergha stems originally from a word of the Amazigh language, pronounced "Tamort Taoragt or Taorgat" which means the green island or green land, this is because of the lakes and the many canals branching off in different directions for over ten miles from its source Stephen, A.R., 2017.

II. Previous Studies

The first study was conducted by Italy in 1926 on the Ain (spring), measuring a constant flow rate of 2 cubic meters per second, with a total dissolved solids (TDS) of 3 millimoles per liter.
Several experiments were conducted on the abundant Ain Taourgha in 1936, where Italy established an experimental farm using Ain Taourgha water to grow barley, wheat, sugar cane, carrots, turnips, clover, and various other vegetables, which proved successful.
Another study titled "The Environmental Importance of Ain Taourgha in the Taourgha Region, Libya" was published in the International Journal of Development, Volume 2, Issue 1, in 2013.

III. Theoretical Framework

In this theoretical part, the research was discussed and written to be suitable for publication in a peer-reviewed academic journal, focusing on the role of landscape architecture in improving urban life and reviving cultural

heritage in the Ain Tawargha region. The literature and previous studies related to the topic were reviewed, with a focus on theories and concepts related to public space design, urban planning, and sustainable urban development. The research also analyzed the social, cultural, and environmental context of the Ain Tawargha region, identifying potential challenges and opportunities in the revitalization and development process.

IV. PRACTICAL PART

In this section, the concepts and theories presented in the theoretical part will be applied to the practical reality in the Ain Tawargha region through the preparation of drawings and designs illustrating how landscape architecture principles can be applied in practice. A set of proposed designs will be prepared to reflect a concept for the proposed improvements in the area, such as developing public spaces, organizing urban infrastructure, and supporting traditional handicraft industries. Each design will be explained in terms of concept, materials used, and the expected impact on the environment and society. Additionally, similar projects and successful models in the field of landscape architecture will be analyzed as a reference for design and implementation.
This research will include a site analysis for the project, in addition to incorporating the design concept (concept) and the preliminary proposal for the project (proposal) to complete this study and simultaneously serve as a theoretical reference for all project designs and drawings.

V. RESEARCH PROBLEM

The research identifies several critical issues in Ain Tawargha:

1- The area suffers from urban decay, inadequate infrastructure, and poorly planned public spaces, which negatively impact residents' quality of life.
2- There is a risk of cultural erosion due to neglect of local heritage and traditional crafts, exacerbated by rapid urbanization and modernization.
3- Challenges in balancing urban development with environmental sustainability, particularly regarding the preservation of natural resources like spring water and biodiversity.
4- Limited economic opportunities and underdeveloped tourism potential despite the region's historical and cultural significance, hindering local economic growth and prosperity.

VI. THE VISION

The project aims to foster a harmonious relationship between humans and nature in Tawargha by integrating sustainable tourism principles with landscape architecture, revitalizing cultural heritage, and promoting economic growth while preserving the region's natural resources.

VII. HYPOTHESIS OF THE RESEARCH

The research hypothesis proposes that implementing landscape architecture principles in Ain Tawargha will result in significant improvements in urban livability and functionality. By utilizing local resources such as spring water and the " Dees " plant, the study aims to revive cultural heritage and traditional crafts. It suggests that these efforts will promote sustainable development practices, balancing ecological conservation with economic growth. Additionally, the hypothesis posits that enhancing the region's attractiveness through landscape architecture will stimulate tourism and bring economic benefits to the community.

VIII. SIGNIFICANCE OF THE RESEARCH

1- This research underscores how landscape architecture can significantly enhance urban life in Ain Tawargha by improving infrastructure and public spaces, thereby creating more attractive and functional urban environments.
2- By utilizing local resources such as spring water and the "Dees" plant, the study aims to revive cultural heritage and traditional handicrafts, preserving local identity amidst modern developments.
3- The research provides practical recommendations for sustainable development practices that balance ecological conservation with economic growth, ensuring long-term environmental and cultural sustainability.
4- Exploring Ain Tawargha's potential as a tourism destination, the study seeks to attract visitors, stimulate local economies, and showcase the region's natural beauty and cultural richness.

IX. OBJECTIVES OF THE RESEARCH

1- Analyzing the role of landscape architecture in improving urban life and utilizing natural resources in the Ain Tawargha region.
2- Evaluating the effectiveness of utilizing local resources, such as the spring water and the Dees plant, in reviving cultural heritage and developing local handicraft industries.
3- Studying the impact of improving urban infrastructure and developing public spaces and parks surrounding Ain Tawargha on the quality of life and the attractiveness of the area for residents and visitors.
4- Providing practical recommendations and suggestions for optimal utilization of the natural and cultural resources available in the area, with the aim of promoting sustainable development and preserving the environment and cultural heritage.

X. CONCEPTUAL FRAMEWORK OF THE RESEARCH

The Conceptual Framework of the Research is to explore and analyze the relationship between humans and nature in the context of the city of Tawarga and its surroundings,

with a focus on the role of landscape architecture in promoting sustainable tourism and renewing the connection between humans and their surrounding environment. The research revolves around integrating two conceptual frameworks, the first focusing on the unity of humans with nature within the context of landscape architecture, while the second reviews the role of landscape architecture in supporting tourism and sustainable development.

The mutual relationship between the local population and the surrounding natural environment will be analyzed, along with how this interaction affects traditional handicrafts and the use of natural resources in the production of local products. Additionally, the research will explore how landscape development and preservation can enhance tourism appeal and contribute to achieving sustainable development in the region.
This research aims to provide a comprehensive view of how to integrate environmental, social, and economic aspects in the development of tourist areas, with a focus on the case study of the city of Tawarga and its surroundings.

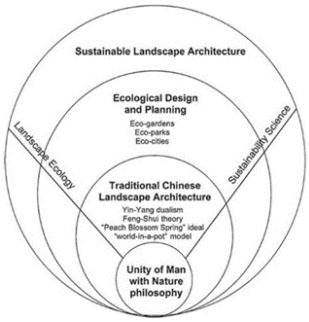
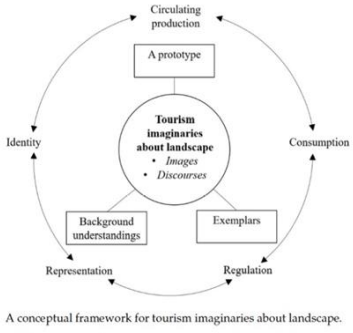


Figure 1. Note how the caption is centered in the column.



A conceptual framework for tourism imaginaries about landscape.

Figure 2. Conceptual framework for a sustainable Chinese landscape architecture. Source (Xu, et al., 2009).

XI. DESIGN AS EXPLORATORY ACTIVITY IN LANDSCAPE ARCHITECTURE

Steinitz (1995) and Glanville (2015) differentiate between “design” as a noun and “design” as a verb. As a noun, design is the outcome of the design process in which a product (that is, the design) is projected and sometimes also implemented. “Design” as a verb means the act of projecting future environments or objects, for instance, through drawings or other representations. In landscape architecture the verb “design” means giving four-dimensional form and function to landscapes at multiple geographic scales and developing landscapes in time. The scale, natural, and societal context and the resulting complexity of landscape architectural designs are different from other design disciplines, such as industrial design or interior design, Nijhuis, S. and de Vries, J., 2019.

XII. WATER QUALITY OF SPRINGS

The quality of water discharged by springs can vary greatly because of factors such as the quality of the water that recharges the aquifer and the type of rocks with which the ground water is in contact. The rate of flow and the length of the flow path through the aquifer affects the amount of time the water is in contact with the rock, and thus, the amount of minerals that the water can dissolve. The quality of the water also can be affected by the mixing of freshwater with pockets of ancient seawater in the aquifer or with modern seawater along the coast.

Water from springs usually is remarkably clear. Water from some springs, however, may be “tea-colored,” indicating the presence of tannic acid. If surface water enters the aquifer near a spring, the water can move quickly through the aquifer and discharge at the spring vent. The discharge of highly colored water from springs can indicate that water is flowing quickly through large channels within the aquifer without being filtered through the limestone.

The quality of spring water represents the general water quality of the ground-water system. Most spring water is of excellent quality. The specific conductance of spring water generally is less than 500 micro Siemens per centimeter, indicating that small amounts of minerals are dissolved in the water. Chloride and sulfate concentrations generally are less than 12 and 60 milligrams per liter, respectively. Spring-water temperatures range from 66 to 97 °F Stephen, A.R., 2017.
Spring water is considered suitable for human consumption when its quality is good and complies with the maximum permissible limits established by some standard of water for human use and consumption (e.g., WHO 2017; NOM-127-SSA1- 2021) Bikse, J. and Gavinolla, M.R., 2021.

XIII. SIGNIFICANCE OF NATURAL SPRINGS IN TOURISM: SPIRITUAL AND PHYSICAL HEALTH BENEFITS, CULTURAL AND ECONOMIC VALUE

Visiting the natural spring water for bathing and medical purpose to feel good and spiritual and physical health is in practice for the ages.
Owing to the potential benefits of the springs, several rulers gave immense importance to build tanks, gardens and creation of beautiful landscape for the visitors in the vicinity of the water springs.

Water springs are considered as one of the important natural resources for tourism due to their socio-economic, cultural, health and religious benefits.
It is widely understood that the tourist motivation is multi-faceted consist of several reasons and interest to visit the destination.
Nonetheless, the scientific production of literature to understand the usage of spring as a tourism resource is scarce.

There are few studies conducted on various aspects of water springs as a resource for the tourism and motivational factor of the tourists in general? However, the research in the context of tourism, particularly motivations and interest of tourist is very scant.
Over the centuries, spring water is considered an important element on Earth that has several benefits.
It is important to know the tourist motivations for the market segmentation of spring tourism products and also to the sustainable management of the destinations.
With increased interest to visit springs by the Europeans in the 18th and 19th century, several of them were converted to a commercial resource of recreational, medical and health tourism attractions, Wright J. Libya: a modern history, Routledge; 2022 Aug 30.

XIV. TAWERGHA HISTORICAL AND GEOGRAPHIC OVERVIEW`

Tawargha is an ancient traditional Libyan Town, located halfway on the coastal road linking the eastern and western parts of Libya. The north boundary of the municipality is situated 38 km south of the city of Misurata (which is the third biggest city in Libya) and it is bordered to the east by the "the Gulf of Sirte", on the west by the administrative borders of the city of Bani Walid and on the south by the administrative borders of Sirte. Tawergha used to include 21 residential suburbs and had 44 to 48 thousand inhabitants, the total number depending on the different sources (Tawergha, 2014:4). Sam Damgher describes Tawergha as a Town inhabited mostly by blacks Libyans a legacy of 19 century origin as a Transit Town in slave trade era. (http://www.blacks starnews.com/news/135/ARTICLE/7627/2011-09-14, HTM/ Accessed on 12 April 2016) The area enclosed one of the most important strategic projects for agricultural production, (Agricultural Tawergha Project) with 3000 cultivated hectares. There used to be a compound for cattle poultry livestock production, which was built in the 1980s. This large project was based on the most prominent natural features in Libya, the famous water of Tawergha with a permanent underground flow which stretches all the way in a west direction towards the capital, Tripoli.

Source: Reference (2)

XV. DESCRIPTION

the palm trees and the flowing water of the spring, a scene of breathtaking natural beauty unfolds before us. Surrounding the spring are several landmarks, including the ancient reservoir known to the locals as "Al Shantarari," the shrine of Lady Aisha, the shrine of Sālih, the mosque (Al Ain Mosque), the Alsawiya Mosque, the civil mosque, and the Fartabah Primary School. There is also a water desalination station. Additionally, there is a plan to establish the largest project in this area, the "Nature Reserve Project.

Source: reference (6)

XVI. THE "DEIS": HERITAGE AND HANDCRAFT IN THE AIN TAWARGHA REGION

The " Dees," a grassy herbaceous plant scientifically known as Ampelodesma mauritanica, belongs to the Poaceae family. It is characterized by its long, rough leaves and flower stalks that grow to about two meters above the ground, with its flowers clustered into large spikes. The Dees thrives in clay-rich soils, marshes, and

water ponds, playing a significant role in soil conservation and erosion prevention.

The Dees is used in traditional handicrafts, particularly in the production of mats known as "tazir." The plant's stalks are dyed with various pigments to decorate the mats, which are used to cover floors and walls in homes, mosques, and other buildings. This type of mat and tazir is an integral part of the heritage of the town of Tawargha, where this industry has been renowned since ancient times to the present day. Additionally, the area of Zawiyat al-Dahmani in Tripoli was also known for the production of Dees and tazir, exporting large quantities of them to the island of Malta by sea using their boats.

Source: (11)

XVII. Preparing Sample Pictures for Visual Assessment

In preparation for visual assessment in the study of Ain Tawargha, sample pictures were meticulously selected to capture various aspects of the site's current condition and potential for revitalization through landscape architecture. Each photograph was chosen based on its ability to illustrate key elements relevant to the research objectives.
The selection process focused on capturing the existing urban decay and infrastructure challenges, as well as the natural beauty and historical landmarks of Ain Tawargha. These images were intended to provide a visual representation of the area's current state, serving as a baseline for evaluating proposed landscape designs.
Additionally, the sample pictures aimed to depict potential revitalization scenarios, showcasing how landscape architecture interventions could enhance urban functionality, preserve cultural heritage, and attract tourism. Emphasis was placed on presenting a balanced narrative through visuals, illustrating both the challenges and opportunities inherent in revitalizing Ain Tawargha.
By carefully curating these images, the study aimed to provide stakeholders and researchers with a comprehensive visual understanding of the site, facilitating informed discussions and decisions regarding future development and conservation efforts.

Source: Researchers on 04-05-2024

XVIII. Data Collection (Questionnaire Survey)

The research approach is to make several visits to the site and take the observation and collecting and registering data record, multiple visits were scheduled throughout various times of the day. The evaluation process included visual assessments and a self-administered questionnaire targeting visitors and area users. The survey questionnaire was designed to gather essential data, focusing on several key aspects of the revitalization project.
The questionnaires were conducted on site as a reference to support the observation. As well as qualitative data was collected through open discussion with the residents on site. All the data are addressed reasons for the historical neglect of the area, perceptions on revitalizing Ain Tawargha through landscape designs, and feedback on proposed revitalization strategies, emphasizing diverse uses such as tourism and traditional handicraft revival. Furthermore, it aimed to gauge community interest in promoting hiking as a cultural activity, aiming to transform the region into a tourist destination.
The data collection methodology ensured comprehensive insights into stakeholder perspectives and preferences, contributing valuable insights into the potential success and sustainability of revitalization efforts in Ain Tawargha.

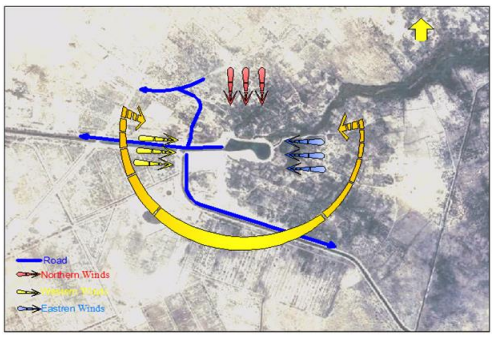
XIX. Site Analysis

Site analysis forms the bedrock of landscape architecture, involving an exhaustive exploration of environmental and physical factors critical to the design process for Ain Tawargha. This multifaceted approach includes meticulous examinations such as wind analysis, which elucidates prevailing patterns influencing microclimates. Similarly, solar analysis reveals sun exposure variations throughout the day and across seasons, guiding optimal placement of elements and vegetation. Topographic analysis is indispensable, offering insights into elevation

changes that inform drainage strategies and spatial organization.

Vegetation analysis is pivotal in identifying existing flora and potential opportunities for biodiversity enhancement, crucial for integrating green infrastructure sustainably. Socio-cultural analysis delves into the historical significance and community dynamics of Ain Tawargha, ensuring that the design respects local identity and fosters social cohesion.

By harmonizing these analyses, landscape architects can craft comprehensive design strategies that not only uphold natural systems but also elevate user experience and celebrate the rich cultural heritage of Ain Tawargha. This integrated approach aims to cultivate landscapes that are both sustainable and resilient, poised to endure and thrive into the future.



Site analysis (sun and wind direction in the study area)
Source: Researchers work

XX. PRACTICAL CONCEPT FOR REVIVING AIN TAWARGHA

The practical concept for revitalizing Ain Tawargha focuses on leveraging its cultural heritage and traditional handicrafts to foster sustainable development and community engagement. At its core, this initiative aims to integrate landscape architecture principles with cultural preservation strategies, thereby transforming Ain Tawargha into a vibrant hub that celebrates its historical significance while promoting economic opportunities through traditional craftsmanship.

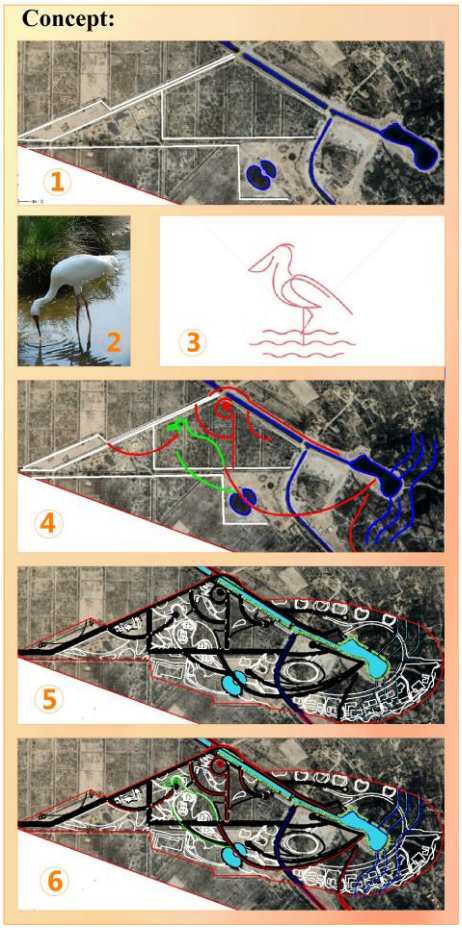
Central to this concept is the preservation and promotion of local crafts such as the production of mats (tazir) from the indigenous Dees plant. These crafts not only embody the cultural identity of Ain Tawargha but also hold potential economic value as unique, locally made products. By revitalizing traditional handicraft industries, the community can benefit from job creation, skills development, and cultural pride.

Furthermore, the project proposes the development of public spaces and tourist attractions that highlight Ain Tawergha's historical landmarks and natural beauty. Enhancing accessibility to these sites through thoughtful design and infrastructure improvements aims to attract visitors while preserving the area's ecological integrity.

The integration of sustainable tourism principles plays a crucial role in this endeavor, promoting responsible travel practices that minimize environmental impact and maximize socio-economic benefits for the local population. Educational initiatives and cultural programs will also be implemented to raise awareness about the historical significance of Ain Tawargha and its traditional crafts among residents and visitors alike.

Ultimately, by synergizing landscape architecture with cultural heritage preservation and sustainable tourism, Ain Tawargha can emerge as a model of integrated development that honors its past, enriches its present community, and secures a prosperous future for generations to come. This holistic approach not only revitalizes the physical landscape but also revitalizes the spirit of Ain Tawargha, positioning it as a cultural beacon in the region.

XXI. INITIAL CONCEPT OF THE PROJECT



Source: Researchers work

XXII. INITIAL PROJECT PROPOSAL

Source: Researchers work

XXIII. RESULTS

1- The integration of landscape architecture with cultural heritage preservation in Ain Tawargha has demonstrated significant potential to revive traditional crafts like the production of Dees mats. This revitalization not only preserves cultural identity but also enhances community pride and engagement.
2- The revitalization efforts have identified substantial economic opportunities through sustainable tourism and local handicraft industries. Initiatives focusing on traditional crafts have the potential to generate income, create jobs, and support economic diversification in the region.
3- The project will succeed in engaging the local community in preserving and promoting Ain Tawargha's cultural heritage. Educational programs and cultural events will increase awareness among residents about the historical significance of their surroundings, fostering a sense of ownership and pride.
4- Through promoting sustainable tourism practices and enhancing public spaces, this study aims to achieve environmental sustainability while improving the quality of life for residents and attracting visitors. This study integrates eco-friendly design principles to preserve natural resources and ecosystems in Ain Tawargha These results underscore the transformative impact of integrating landscape architecture with cultural preservation strategies, highlighting Ain Tawargha's potential as a sustainable and culturally rich destination in Libya.

XXIV. RECOMMENDATIONS

1- Develop an integrated planning approach that combines landscape architecture principles with cultural heritage preservation strategies. This approach should prioritize sustainable development, ensuring that urban revitalization projects in Ain Tawargha harmoniously blend environmental conservation with economic growth and cultural identity preservation.
2- Implement robust community engagement programs that involve local residents in the planning, execution, and maintenance of revitalization projects. Education initiatives should emphasize the historical significance of Ain Tawargha and its traditional crafts, fostering a sense of pride and ownership among the community members.
3- Promote Ain Tawargha as a sustainable tourism destination by highlighting its unique cultural heritage and natural beauty. Develop tourist attractions that showcase local craftsmanship, such as the production of Dees mats, and ensure that tourism activities are conducted in a manner that respects and preserves the ecological integrity of the region.
4- Establish a framework for continuous monitoring and evaluation of revitalization efforts in Ain Tawargha. This includes assessing the socio-economic impacts of tourism development, tracking environmental changes

XXV. CONCLUSION

In conclusion, the revitalization of Ain Tawargha through landscape architecture presents a transformative opportunity to integrate ecological sustainability with cultural heritage preservation. By leveraging local resources such as spring water and traditional handicrafts like the Dees mats, this study underscores the potential to rejuvenate the region's economy while fostering community pride and engagement. The findings highlight the importance of adopting integrative design principles that harmonize urban development with environmental conservation, ensuring long-term viability and resilience. Moreover, the emphasis on sustainable tourism initiatives and capacity building among local residents underscores a commitment to inclusive growth and cultural stewardship. Ultimately, the holistic approach proposed in this research not only aims to enhance Ain Tawargha's attractiveness as a tourist destination but also strives to secure a prosperous future that honors its rich heritage and natural landscapes.

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