



Investigation of equestrian club in order to benefit from indigenous and sustainable architecture (Case study: Kordan region)

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Abstract.

Today, with the development and advancement of technology, the need to pay attention to sustainable development and construction in accordance with the principles of indigenous architecture in order to make optimal use of available natural resources is of particular importance. This issue, which has important consequences such as saving energy consumption and increasing human harmony with nature and approaching sustainable architecture, is of concern around the world. In the process of this article, we have tried to address the role of architecture in improving the quality of breeding and maintenance of horses and provide suggestions on how to design based on standards and according to the principles of indigenous and sustainable architecture. Because by using local design and considering the climate of buildings and the body of cities and villages, we can play a significant and decisive role in reducing fuel consumption and preserving it for future generations. Therefore, in today's world, due to the deterioration of existing energies, it seems necessary to implement sustainable architecture.

The purpose of this article is to make maximum use of environmental potentials in order to save energy and improve the quality of comfort through the correct forms in the design. For this purpose, the present study investigates equestrian clubs with a descriptive-theoretical method according to indigenous and sustainable architectural patterns.

Keywords: Sustainable architecture, Indigenous architecture, Equestrian complex.

1. Introduction

The theory of sustainable development and subsequent sustainable architecture is one of the most controversial issues in contemporary architecture. So that it can be said that sustainable design is a type of architecture that uses the maximum environmental talents for the comfort

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of consumers and uses smart tools and solutions in this way to minimize the unfavorable conditions of construction. (Shahi et al., 2006) This issue of sustainable development has been raised for decades in various sciences and professions, including architecture and urban planning, and its roots are in environmental crises and the excessive consumption of fossil fuels in the world. Issues such as global warming, the growing growth of greenhouse gases in the Earth's atmosphere, which itself the cause of global warming. Climate and soil pollution, have all intensified atmospheric activity against the increasing defradation of the environment and the indiscriminate use of limited fossil fuels. (Shaghayeghi & Mofidi, 2008) Utilizing natural potentials to meet needs such as heat, Cold and air conditioning to create human comfort in the environment has been considered by architects for many years and the most important principles of sustainable architecture are based on these principles. A brief look at the old buildings in which the harmony between nature and architecture is considered, we find that valuable architecture left over from the past due to the lack of up to date thechnology has overcome factors such as climate and climate- friendly buildings. And it has created the special culture of the region and has created creativity in the face of limitations. But today, all the vaccums that have been used for beautification and heating of buildings due to beautification and access to various mechanical and electrical equipment, this important issue has been forgotten. Therefore, sustainable architecture is to create a healthy environment based on climate principles and its goal is to reduce the adverse effects of construction on the environment. (Sadeghiravesh & Tabatabai, 2009) Based on this commitment, addressing indigenouse architecture and using climatic principles and solutions and the requirements of its formation in architectural designs, is necessary to achieve sustainability.

In the native Iranian architecture, valuable strategies and methods have always been proposed in order to provide suitable living condition in buildings. Different climatic and geographical conditions in the region have caused architects to provide the best and most appropriate methods of adapting to the climate and proper use of climatic conditions with their innovative principles. These principles and patterns today can create stability by properly integrating with new thechnology in the architectural structure. A look at the valuable works of Iranian native architecture everywhere in this vast land and at different scales, shows a comperhensive and purposeful thinking in using climatic condition in different buildings. A thought that its recognition along with proper use and proper combination with the principles of contemporary architecture, can lead to the promotion of this architecture. (Mahmodi, 2008) Paying attention to natural and indestructible forces such as the sun and wind to improve the thermal conditions of living spaces has long been common in Iran. The use of these forces in the building has saved fuel consumption and, more importantly, has improved the quality, comfort and health of the environment. (Mirlotfi et al., 2012) However, many types of new technologies related to the construction and architecture industry in the contemporary period are considered as the most important elements of environmental pollution and have caused great damage to people's health. Therefore, mere emphasis on the use of new technology, regardless of the old patterns, will not have a good result in the architectural structure in all fields. Therefore, it is necessary to have a proper connection between previous patterns in architecture with today's need and the new architectural structure is felt. (Mulanae & Soleimani, 2016)



Tourist and sports centers are one of the most important and most widely used centers in the world, so that it can be said that most segments of society are somehow related to these spaces and these centers have a significant level of urban spaces. One of the tourist attractions is sports tourism; Especially ecotourism-based sports tourism. In addition to enjoying nature, people engage in their favorite sports activities. Equestrian is a sport that is not separate from nature; People away from the worries of life relieve their fatigue by riding. Horse riding is known as one of the most popular sports that many people turn to. In any case, it can be said that a lot of attention and interest in horseback riding and horse racing has made it necessary to design places such as equestrian tracks like other spaces.

With the development of new perspectives in urban planning such as sustainable development, improving the quality of urban life, improving urban management, etc., the issue of locating and organizing of sports spaces and recreational tourist services has also undergone a qualitative change. Currently, one of the most important problems in the cities of our country is the inappropriate placement of sports spaces among other uses and solving them requires planning and management in the field of locating and organization of sports spaces. Therefore, the design and construction of an equestrian complex in Kordan is welcomed according to the tourism potential and considering to the indigenous architecture of the region and the use of renewable energies and causes the protection of the environment.

2. Sustainable architecture and its goals

The application of the concept of sustainability and sustainable development goals in order to reduce energy waste and environmental pollution in architecture has created a topic called sustainable architecture. (Rezae et al., 2014) In this type of architecture, the building not only adapts to the climatic conditions of its area, but also interacts with it. According to Richard Rogers, buildings are like birds that cover their feathers in winter and adapt to new environmental conditions and adjust their metabolism accordingly. Sustainable architecture has broad definitions and the scope of sustainable design and its issues is very wide. These range from issues related to human habitat, environment and land to socio-cultural issues. Therefore, it is possible to provide a definition that has sufficient flexibility and comprehensiveness; But a brief definition based on research can be that sustainable architecture is an architecture in which the designer, the user of the architecture and the beta resident to use few of the earth's non-renewable resources and climate adaptation lead to the greatest benefit, with minimal damage to the environment and the earth. (Mulanae & Soleimani, 2016)

At the heart of all issues related to sustainability has been the focus on future generations, the future of the environment, and the protection of the global environment. The most important definition of sustainable development so far is related to the Rio Summit, which states: A development that meets the current human needs without compromising the needs of future generations, and in which the environment and future generations are considered. Principles of sustainable development related to environmental sustainability in short include attention to the use of renewable resources, less use of non-renewable and polluting energy, meeting the basic needs of humans and society and creating a healthy environment for future generations, attention to the environment Biology and pollution reduction as well as attention to environmental cycles. (Biranvand, 2011) The manifestation of sustainable development in



the field of built environment is called sustainable architecture. According to Richard Rogers, sustainable design aims to meet future needs without destroying the remaining natural resources for the next generation. In the case of buildings, sustainable design refers to resource efficiency, minimal energy, flexibility and long life. According to Jung Jin Kim, the three principles of resource conservation, life cycle design, and human design include sustainable architecture topics. (Gorjimahlabani, 2010)

The purpose of this architecture is to create a stable and organized balance between nature, living beings and the artificial environment, and in this way the whole process of architecture, it means thinking and studying, designing, building, exploiting and destroying the building is considered. (Ahmadi, 2014)

The purpose of designing sustainable buildings is to reduce the damage to the environment and energy resources and nature, which includes the following rules:

1. Reduce consumption of non-renewable resources
2. Development of natural environment
3. Eliminate or reduce the consumption of toxic substances or damage to nature in the construction industry (Bahadori & Kashanijoo, 2013)

Therefore, in short, a sustainable building can be defined as follows: a building that has the least incompatibility and contradiction with the natural environment around it and in a wider area with the region and the world. Green design, design based on environmental sensitivities, ecological design, design with nature, etc. are the titles that have emerged today as a result of revisions related to common construction patterns. In short, it is a design method based on the laws of nature. (Sayadi & Madahi, 2011)

2-1. the necessity of sustainable architecture

The energy crisis and the depletion of fossil resources, environmental pollution and the increase in greenhouse gas emissions are among the factors that have led humans to clean and renewable sources and prevent many problems. The use of renewable energy such as solar heating and cooling systems, rainwater collection system and the use of biomass energy and biogas resulting from it due to the availability of resources, is necessary to reduce the consumption of non-renewable energy. Today, crises of climate change, resource depletion and environmental pollution caused by lifestyle and human activities are the most important global challenges in today's world. Abnormal architectural activities, construction methods and lifestyles in common buildings have played a major role in the occurrence of these crises. Therefore, inventing ideas and adopting effective strategies to improve the current situation, is at the top of the goals of architectural development programs, and the set of ideas and actions related to this type of architecture is known as "sustainable architecture".

Humans have always taken initiatives to organize the environment around them to meet their basic needs. He sought to create a livable environment to meet his physical and mental needs. Iran has many sources of renewable energy due to its convenient geographical location. Today, with the use of new materials and all technological facilities that are economically expensive and environmentally polluting, it is observed that in some cases, it is not provided comfort and tranquility, which today with the advent of sustainable architecture try to Solve these problems.



Accordingly, the use of renewable energy sources is not only a choice, but also a necessity. Because if these resources are not used and released on the planet, while losing a large amount of extractable energy, these materials are able to produce greenhouse gases and destroy the environment. (Boghlandashti, 2004) In general, sustainable design is a kind of intrusion and occupation in the environment and tries to invent solutions that achieve a balance with environmental, social and economic goals in a holistic and intertwined view in order to improve the quality of life for the current generation and Provide a good legacy for the future.

Therefore, with careful thinking, design and planning, buildings can be built that have the least negative impact on the environment. Sustainable architecture is one of the planning and design ideas for the construction of such buildings. (Zandieh & Parvarinejad, 2010)

3. Indigenous architecture

Native architecture can be any type of architecture that belongs to a particular place. According to Rapaport, indigenous architecture is an architecture that is against with formal, well-known and monumental architecture. In other words, simpler, more popular and in general, architecture that meets the needs of the general public. He also argues that monumental architecture can be rooted in indigenous architecture. Since localism is a valid identity card of the people of a land, it reflects their customs, spirit and feelings, thoughts and beliefs, tastes and their art. (Ahmadi & mahdaviadeli, 2014) Therefore, indigenous architecture can be considered as a type of architecture whose aspects are derived from canvas or regional features. In the formation of indigenous architecture, some social and economic relations in the natural environment and cultural symbols are skillfully reflected, in a way that at the same time, simplicity and arrangement are manifested in them. (Abarghoie, 2011)

Indigenous architecture, which is realized far from specialties, is responsible for meeting the needs of a society in relation to natural factors and the spiritual desires of human beings, because with their participation, it is born in contemplation and execution, and from everyday life and is inspired by their daily lives and settled away from self-image and extraversion. (Falamaki & Dadkhah, 2005) Hence, indigenous architecture, without having a style and far from a specific form and model, has retained the characteristic of being self-evident. In this sense, we find indigenous artifacts and architecture in the face of unknown lands, are found in a mysterious, familiar and understandable connection. (Ahmadi & mahdaviadeli, 2014) Therefore, in creating his creations, which is the building, the architect has accepted two key elements of people and nature as an integral part of the design problem. Architecture has been a function of various man-made and natural factors that the architect accepts a specific style and method according to the attitude towards the element of people and nature and how to combine the factors related to these two elements and creates the building according to this attitude. (Abarghoie, 2011)

In general, 3 features can be mentioned for indigenous architecture:

1. Indigenous materials and knowledge are easily used.
2. Indigenous forces are used with their participation and according to their tastes.



3. Material and immaterial costs are reduced while maintaining quality and benefits. (Saaduni, 2009)

3-1. the necessity to address indigenous architecture as a factor of sustainable architecture

Although indigenous architecture has undergone transformational phenomena throughout history, it has been able to maintain its own special identity. In dealing with architectural complexes and units, the effects of the natural and cultural environment are manifested in such a way that they can be a good example of sustainability in their own time and place. (Armaghan & Gorjimahtlabani, 2009) The sustainable architecture approach has emerged in response to the sustainable survival of human and the human environment, which depends on maintaining the balance of the biological world. Sustainable environment from an ecological point of view is an environment in which the main biological systems of the environment are used and maintained. (Asadi, 2007) In the meantime, it should be noted that the fields of growth and development in any system are structural, physical, cultural and social characteristics, unique to that system and only through the discovery of the mechanisms of these structures can be found a way to build a sustainable environment. The common misconception is that traditional design is considered instead of native design, while native design is not a visual repetition of what has been in the past. But it is possible to follow traditional architectural processes. Therefore, understanding the traditional and previous architectural solutions can be the first step towards realizing the concepts and demands of sustainable architecture in contemporary regional and indigenous architecture. (Mulanae & Soleimani, 2016)

Therefore, as mentioned, indigenous architecture is a subset of sustainable architecture, while due to the importance of proper location for tourism and sports use, the importance of using indigenous architecture is doubled.

3-2. Sustainability approach in the principles of Iranian indigenous architecture

The existence of principles in Iranian architecture allows everyone to use the common language between them. The principles of traditional Iranian building emerge through the standard measurement unit, modular design and fit in design. (HaghighatNaeni, 2000) What the principles of Iranian architecture offer is based on paying attention to the steps and levels in design and construction management. The purpose of this discussion is not to recommend repeating the pattern and shape, but to identify the principles of indigenous architecture and to identify the problems that indigenous architecture was designed to solve. Traditional Iranian architecture is mainly focused on the following:

- Looking at nature and associating it with sanctity
- Stages of human design and design
- Reliability of the building (Hajiloo, 2015)

Indigenous approach in architecture requires knowledge of indigenous culture and environmental conditions. Because architecture in the native context is the result of adaptation to culture and climate. Thus, the localist approach leads to the formation of a form of architecture that is rooted in the human characteristics of the space as well as its environmental conditions. (Falamaki & Dadkhah, 2005) Therefore, the following patterns



can be presented in sustainable architecture, each of which can be identified in some way in the traditional architecture of this border and landscape:

- Minimize the utilization of non-renewable resources and the use of natural and renewable energy through proper building orientation
- Location in the city and proper placement of spaces inside the building for climatic use of spaces (summer and winter spaces)
- Improving the quality of the environment and expanding the natural environment through the proper use of green space according to the climate
- Eliminate or minimize the consumption of contaminated and toxic substances
- Preservation of cultural and ethnic identity
- Wise use of land and homogeneity of the building with the environment, sinking into the heart of the soil in order to use the heat capacity of the soil in summer and winter
- Economics of construction using alternative technologies, use of suitable materials and local materials adapted to the climate of each region
- Coordinating the building with the environment and using construction methods with local materials and efficient design and implementation of using appropriate materials and local materials compatible with the climate of each region (Biranvand, 2011)

Therefore, sustainable architecture strives to create a healthy environment based on resource efficiency and ecological principles, and with the rational use of natural resources and proper management of construction, to protect non-renewable resources, reduce the consumption of renewable energy and Improving the quality of life helps to examine the principles used in traditional architecture to conclude that the criteria used in sustainable architecture in a way in the architecture of this border and canvas used in a completely creative way and with the wisdom and intelligence of traditional architects Is. (Nikfitrat & Bitaraf, 2016)

4. Equestrian

Equestrian is one of the sports that has received a lot of attention in recent decades, however, it has a long history and can be considered one of the oldest sports. This sport is considered today not only as a healthy and useful competition, but also as a hobby and to spend leisure time, and although it seems expensive compared to many sports, it attracts more and more fans every year. <https://fa.wikipedia.org/wiki/سوارکاری>

Equestrian is a very old sport that has long been taught to fight or message people. The history of the horse dates back to the time when humans became aware of the existence of animals on earth. Early horses have been shown to be shorter in stature, an animal that has always assisted humans in hunting and carrying cargo, and has always been with humans throughout history. (Ghaior, 2017)

Today, equestrian in Iran has been considered for more than a few decades and various clubs have been established quickly and are in the process of development. Horse riding and equestrian competitions have long been common in Iran. (Pirnia, 1952)

In general, horseback riding is a sport, an art and a method related to riding and guiding a horse. The characteristic of this sport is that it unites man and compound (usually the horse), so the success of the horse and the rider depends on the connection, trust and respect that the



two have for each other. (Neshati, 2011) There are perhaps more than ten equestrian disciplines in which humans compete with horses in sports such as horse racing, horse jumping, polo, dressage, chariot racing, rodeo, three-day races, endurance, and beauty pageants.

5. Understanding the design context

Given the impact of climate on architecture, especially in Iran, where climatic conditions are quite evident, the need for comprehensive studies and research in this field is quite obvious. Knowing the climatic conditions in each region is one of the most important factors in creating comfort and well-being of building users in that region. Because architecture and climate have a direct relationship and impact on each other. The impact of climate on architecture is something that is not hidden from anyone and the design will be incomplete and costly regardless of the climate of the region and will not have favorable conditions in terms of quality and quantity of life and thermal comfort. Therefore, paying attention to climatic factors in the design makes the environmental conditions of the building healthier and safer, and causes energy savings and optimal consumption, resulting in less damage to the environment. For this purpose, before designing, we know the design context, geography and climate so that we can adapt the architecture to the climatic conditions of the project site.

Due to the rapid growth of sports tourism in various dimensions, the existence of youth and sports enthusiasts in Kordan, the role of sports tourism in creating permanent employment, seasonal and foreign exchange earnings obtained in this way, the impact of natural resources on growth and Development of sports tourism and that according to the geographical location of different regions, each of the natural attractions have different priorities, so proposing Kordan as a case study for the construction of equestrian clubs and the use of indigenous and sustainable architecture due to high potential in sports tourism it becomes quite obvious in this article.

Kordan village is located in Savojbolagh city, Alborz province and has two types of general and regional climate at the same time:

1. Cold and temperate climate of the mountainous region
2. Warm and temperate climate of plain and desert region

In other words, Kordan village has a climatic diversity; That is, in a season of simultaneous length, it has at least two types of local climate in both mountainous and plain regions. (Khalaj, 2013)

Kordan is a region with national functions centered on cultural, social, economic and political affairs at various levels and due to its proximity to the city of Tehran, has received more attention in recent years. For this reason, it is necessary to review the type of architecture of the region and compensate for the shortcomings to the growth of recreational and sports centers.

5-1. General features of temperate and mountainous climate

The climatic characteristics of these areas are as follows:

- Severe cold in winter, mild in summer



- Heavy snowfall in the northern and northwestern parts of the country
- Low humidity
- Extreme difference in temperature between night and day

Due to the extreme cold in most parts of the year in these areas, it is necessary to make maximum use of sunlight, take advantage of daily temperature fluctuations, maintain heat and prevent cold winter winds in residential environments. Like urban texture, The form of the building is designed and executed based on the climate of the region and to deal with severe cold. In these areas, small and enclosed urban and rural spaces, dense urban and rural textures and interconnected buildings, for the sun and land features, the determining factor in the establishment, expansion and overall appearance of the city and village, main alleys and passages parallel to the line Earth level and often narrow due to extreme cold for most of the year. It should be noted that urban spaces are enclosed and small as much as possible so that the cold wind flow does not penetrate into these spaces. In addition, heat radiation from the outer surfaces of the warm walls of buildings, to a certain extent, leads to the moderation of cold air of urban spaces, and the smallness of urban spaces has the advantage. In cold climates, especially in mountainous areas, sometimes the body of the walls were made of stone, which is not logical due to the high heat transfer properties of the stone. And in most buildings, the walls of the walls are made of clay and mud, which has a high thermal capacity, and the use of carcass stone at the foot of brick walls is a good solution, but these traditional monuments are weak against earthquakes. (Shoa'i & Arabesmaili, 2013)

5-2. Criteria for architectural design in temperate and mountainous climates

1. Buildings with central and introverted courtyard
2. The ratio of the outer shell surface to the volume of the building is low
3. The height of the rooms is low
4. Roofs are often flat and bumpless to make snow removal easier and allow more sunlight.
5. The shape of the building is close to the shape of a cube and a rectangular cube
6. The buildings have an east-west stretch
7. By constructing a part of the house spaces in the basement, it is possible to significantly help to adjust the air of these spaces.
8. Due to the high thermal capacity of the soil, basements are warmer in winters and cooler in summers than outside. (Shoa'i & Arabesmaili, 2013)

5-3. Design proposals for cold climate in line with sustainable design

In order to use solar energy in cold weather, it is necessary for the main part of the building to be stretched on the east and west axes. In most cases, a slight rotation of the building to the southeast is better (15 degrees) this orientation causes the building to use more sunlight than afternoon light and the heat absorption by the building begin earlier. The rotation of the building to the southwest makes the building retain the cold air of the morning for a longer time and on the other hand retains the heat of the afternoon until sunset. Therefore, the best front in this climate is south and southeast. It is better to place the main walls and windows of the building on the south front. (Passive use of solar energy).

- The cubic plan of the two-story building is an optimal shape, because with the joint of the roof and the floor of the buildings, the external surface is reduced and as a result, the



waste of energy is reduced (use of dense and compact plans). It is worth mentioning that the low-importance spaces should be placed on the side where the winter wind often blows. Doors and windows should be located in a part where there is minimal air pressure. The design of buildings in the basement meets many of the needs and climatic problems, including thermal control and wind protection.

- It is more appropriate to build multi-storey buildings with a limited plan level than single-storey and large buildings, in this case, cold wind-blown facades should be controlled by wind breaker.
- Many protrusions in the facade act like a windbreak and prevents uniform air flow and it disturbs the wind flow. Therefore, a smooth and integrated facade is more appropriate.
- It is recommended to create a greenhouse attached to the building in south-facing views with thermal insulation on the glass at night.
- Open and transparent walls in this area should be exposed to sunlight on the one hand and protected from cold winds on the other hand, opening should be made on the eastern, western and northern fronts small and in small numbers as much as possible, They should be protected by insulation and the south and southwest windows should have horizontal canopies.
- Increasing the ratio of window to wall area due to the proper orientation of the window has a significant impact on energy consumption. (The thermal conductivity of double glazed windows is almost twice the thermal conductivity of single glazed windows).
- The material of the outer shell of the building should have the highest thermal resistance. These include lightweight concrete (insole concrete - aerated concrete – non-fine concrete).
- Since the outer shell of the building must be well insulated against heat conduction in cold climates, the absorption of solar energy by opaque surfaces of the building is not correct. The better solution is to use solar windows and collectors.
- Due to the cold conditions prevailing in this area, the wall of the building is responsible for reducing heat exchange, i.e. the spaces must have capacitor walls with high thermal delay or have thermal insulation on the outside of the building. The walls should be made of materials with thickness that are $U < 1$ and for ceilings $U = 1$. It is recommended to use materials with high thermal capacity in the floor and walls facing the sun.
- All external surfaces of the building should be covered with dark colored materials and smooth and polished texture, unless the heat exchange inside and outside has been stopped by arrangements such as thermal insulation.
- Reflective materials should be used in the design of the area and surfaces adjacent to the windows to increase the reflection of the sun's rays, and the reflecting surfaces should be designed on the floors overlooking the sunroof windows, porches and greenhouses attached to the empty spaces.
- Static solar systems (equipment collection without equipment intervention) and passive solar systems can be used in building design. As:
 1. Solar window
 2. Vented thrombus wall
 3. Aquatic roof and wall
 4. Greenhouse
 5. Thermo siphon (Shoa'i & Arabesmaili, 2013)



6. Conclusion

As the issue of unconventional use of fossil energy resources and the resulting environmental pollution has become a serious and threatening issue, human beings have sought to discover various solutions to create sustainability in artificial environments. Sustainable design is not a style derived from ephemeral conditions and instantaneous emotions, but has deep meanings that connect man, nature and architecture. In this regard, indigenous architecture can well be needed in different climates and by taking special measures specific to that environment and taking into account the factors of visual aesthetics, many climatic problems can be tolerated relatively for the residents of that region.

What is certain is that all of these methods are for establishing several principles, including energy conservation, harmony with the environment and climate, reducing the use of resources, and meeting the needs of the residents. Since the life cycle is interconnected and chained, to achieve these goals, all the principles of sustainable architecture that lead to the construction of a healthy environment must be observed. Therefore, paying full attention to all climatic, cultural and social factors and the use of non-fossil fuels and clean and renewable energy and the importance of the site in order to respect the environment can be considered as a suitable model for architects. Sustainable architecture is an architectural answer to human life and its preservation in the present and future, the use of materials compatible with the environment and indigenous materials as much as possible, minimum fuel consumption and maximum use of solar energy with maximum efficiency and minimum environmental degradation and promotion Maximum recovery and comfort of life is expressed physically and mentally in the environment. Therefore, in order to achieve sustainable architecture, one of the most important sources is to pay attention to the experiences of Iranian native architecture, which has been considered as a response to align human living needs and design, which in addition to reducing damage to the environment and nature, it is economically viable.

Since we considered the sustainability approach for the present study in order to pay attention to the environment, one of the main issues was the challenge of choosing the type of building, considering the focus of man and nature and the type of needs, and also, according to the pleasant climate of Kordan region and its colorful recreational-tourism-sports dimension, it is the best option for choosing an equestrian complex that can take a useful step to preserve the environment by using the facilities and the type of local and sustainable design. In designing these complexes, in addition to the dimension of beauty and proportions, the principles of sustainable architecture such as climate, vegetation and building volume, coordination with the site bed and reviving the identity of the region should be considered.

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