



Effects of Expo Fairs on Urban Development as the Event Legacy and Their Sustainability: Comparison of Expo Lisbon and Expo Antalya Cases

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Abstract

In terms of the development and progress of cities, it is necessary to make investments and arrangements before large-scale events, to introduce the cultures and characteristics of the cities during the event process, and to plan their use after the event to ensure spatial sustainability. The aim of this study is to evaluate the urban development effects of Expo fair areas and their contribution to spatial sustainability in terms of being an event legacy. Within the scope of the study, content analysis was realized between the Expo fair held in Lisbon in 1998 and the Expo fair held in Antalya in 2016, and the event legacies they left to the cities were compared. Research results reveal that Expo Lisbon was a tool in terms of urban development and spatial sustainability, while Expo Antalya was a purpose. The study underlines the necessity of planning the spatial uses during and after the fair, associating the fair area with the city, and sustaining social life and economic employment in order to transform the Expo areas into an investment and space that will be effective in the long-term for the cities. The study is limited to the urban and spatial sustainability of Expo Lisbon and Antalya areas. It is recommended to carry out studies that include different Expo areas and socio-economic sustainability in the future. This study provides important contributions to the field of science and practice in terms of presenting the effects of Expo fairs on urban development and sustainability relations through the examination of Lisbon and Antalya examples. In addition, the comparison of the two Expo cases is aimed to guide the countries and cities that will host large-scale events in the future.

Keywords:

Event legacy, Expo Antalya, Expo Lisbon, sustainability, urban development

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INTRODUCTION

Large-scale events are organized around the world in order to appeal to large audiences on an international scale and to increase interaction, communication and sharing among communities. Large-scale events contribute to the cities, and some of these contributions are the investments made during the preparation process, the economic activity that occurred during the event, the promotion of cultural features and the arrangement of qualified spaces. World fairs and Expos are one of the prestigious international events known worldwide, as they have been going on for many years and make lasting effects and structures on the host cities (Polat, 2019).

National and international fairs, which continue for centuries with different purposes and methods, are cultural and economic sharing spaces that revitalize the economic and social structure of cities. As Pinto (2018) states, after the national fairs in which industrial and technology products were introduced and exhibited in Europe at the end of the 18th century and the beginning of the 19th century, the first international Expo was organized at the Crystal Palace in London in 1851. It was realized under the name of “Great Exhibition of Industrial Artifacts of All Nations”. In addition to industrial products, different exhibition goods such as handmade, natural products and works of art were included in this fair. After London, Expo fairs were organized in different cities such as Paris, Vienna, Philadelphia, Barcelona, Brussels, Milan and San Francisco. All the international fairs held since then have been an educational and developing environment where countries share their cultures, scientific and technological studies they have developed, their understanding of art and many other elements.

Expo fairs offer important opportunities for investing in cities, developing and promoting them. In this sense, the “Bureau International des Expositions” (BIE) was established in 1928 to be responsible for the organization of international fairs with the participation of 31 countries. Headquartered in Paris, BIE is responsible for organizing and supervising all non-commercial international exhibitions (Expo) lasting more than three weeks. BIE organizes four types of exhibitions: World Fairs, Special Fairs, Horticulture Fairs (Botanical Fair) and Milan Fair. The World’s Fair under a universal theme in every five years, a Special Fair with a special theme between the two World Exhibitions, and the Milan Fair with the theme of decorative arts and architecture in every three years since 1993. On the other hand, Horticultural Fairs have been organized since 1960 after the candidacy of countries and cities, as a result of the cooperation between BIE and the International Association of Horticultural Producers (AIPH) (Polat, 2019). The purpose of BIE is to determine the host country at the fairs, organize the event, ensure that the host country and all exhibitors comply with the BIE agreement and Expo rules, and constantly improve the quality of the fairs (BIE, 2021). Currently, 170 countries are members of BIE, and these fairs are important in terms of both countries

sharing their own values and following the developments in other countries.

Each Expo, with its own theme, is a large-scale event that reflects the characteristics of the period and the host country, provides international communication and interaction, promotes awareness, development and change, while bringing innovation to the host city (Polat, 2019). Countries hosting the fairs are responsible for developing the necessary infrastructure for the realization of the event, arranging the event area, and making the necessary spatial arrangements for the anticipated visitors. Realizing all these require the expenditure of high budgets. Investments and regulations made considering the needs of the event can affect the city positively or negatively in terms of the quality of their effects. Erturan Topgül (2019) defines these effects with the concept of “event legacy” created by the event in the city and its residents. The legacy of the event has direct effects such as spatial/physical, economic and social-cultural as well as indirect effects such as image, branding and urban recognition. Policies, culture, social structure and economic power that dominate the city have a decisive role in the legacy of activity. In this sense, each host country shapes its event legacy and determines whether the sustainability of event venues is ensured or not.

Architecturally, the structures built for Expo affect the image of the cities, and symbolic and/or monumental structures are designed in the city. Crystal Palace in London and Eiffel Tower in Paris are touristic and historical focal points brought to the city after the fairs. As Polat (2019) stated, 51 million people visited the fair, which was held in Brussels in 1958 with the theme of “Democratic Demand for Peace” and the iconic “Atomium” was built for this fair. “Space Needle” was designed at the fair organized in Seattle in 1962, and this structure still maintains its feature of being an interesting design today. Vasco da Gama Bridge, built for Lisbon Fair, is one of the structures that make up the city’s image. In addition to the cultural and architectural structures gained through these fairs, it should not be forgotten that local and foreign tourists who come to visit the fair spend time in the city and experience the culture and life of the city (Dirsehan, 2019). In this sense, it is important that the fair should be planned in a way that interacts with the urban space and the citizens, its location is determined to have easy access, it hosts cultural events and contributes to tourism.

As Erturan Topgül (2019) states, with the competitive environment created by globalization, interest in international large-scale events has increased to make new investments and developments in cities. Expo fairs, which are at the forefront of large-scale events, are effective in investing in cities and becoming the focus of touristic interest, while providing improvements in the physical structure of the city through infrastructure investments and spatial arrangements. At the same time, with the increasing awareness regarding sustainability, the highlight is placed on emphasizing sustainability both in the spatial planning of the Expos and in the content of the themes. In this sense, the sustainability of

Expo organizations depends on some criteria and processes. These processes can be defined as the organization preparation process, establishment and implementation of the organization area, management and functioning of the organization, and post-organization management (Karahana et al., 2021). The priority of urban development and spatial sustainability in planning, implementation, operation and management processes provides many benefits to the city and its citizens in the short, medium and long terms (Batuhan, 2020). In this sense, it is important to plan and implement large-scale events in line with sustainability goals, both for the organizers and funders of the event, and for the host cities.

METHODOLOGY

In this study, a content analysis was realized about the planning, event and post-event stages of the Lisbon Expo Fair, which was held in 1998 with the theme of a special fair, and the Antalya Expo Fair, which was held with the theme of the botanical fair in 2016. Content analysis is defined as categorizing all kinds of verbal and written data in a way that meets the purpose of the research, summarizing, measuring and interpreting the data (Arık, 1992, as cited in Böke, 2017). In the content analysis, the information obtained as a result of scientific researches, organization websites and field trips was examined with a systematic methodology.

Turkey has participated in many events since London Expo in 1851, yet became a member of BIE in 2004 and experienced its first Expo hosting in Antalya in 2016. Portugal has been a member of the BIE since 1932 and hosted the specially themed Expo in 1998 (BIE, 2021). The aim of this study is to evaluate the urban development effects of the Expo fair areas and their contribution to spatial sustainability in terms of being an event legacy. For this purpose, within the scope of the study, the Expo fairs, which were organized in Lisbon and Antalya were compared in terms of the event legacy they left to the city. In the light of the analysis and comparison of the information obtained from the two fair fields in question, inferences have been made so that the investments and plans to be made in the city through the Expo fairs will be effective in the long term. Within the scope of this study, it is aimed that the information obtained from the comparison of the two Expo fairs will be a guide for the countries and cities that will host large-scale events in the future.

EXPO LISBON

Special Fairs within the scope of Expo are international events aimed at finding solutions to specific humanity problems. Although it is similar to World Expos in terms of the content of its theme, these fairs are smaller in scale and remain open for about 3 months (Batuhan, 2020). 143 countries, 14 international organizations participated in the special themed Expo fair, which lasted for about 4 months between May 22 and September 30, 1998 in Lisbon, the capital of Portugal, and 10.128.204 people visited the fair (BIE, 2021).

500 years after Vasco da Gama's discovery of Portugal on his way to India in 1498, the idea of celebrating this discovery on an international platform shaped the main theme of the Expo (Kantürer, 2016). The theme of "Oceans, a heritage for the future" determined at the fair, aims to reflect Portugal's relationship with the sea and its national identity, while emphasizing raising awareness of the sea and oceans, ensuring the nature-human relationship and sustainability (Pinto, 2018). Since the year of 1998 was determined as the "International Year of the Ocean" according to the United Nations declaration, the theme of the event was also related to the current issues of the period (BIE, 2021). During the planning process of the fair, training programs related to this theme were also given in schools. Between 1994-1998, a national environmental education program was developed under the name of "love of the ocean", and "sea clubs" were established where scientific, artistic and sports activities were carried out. Scientific meetings and conferences were held during the fair, and after the fair, three different books were published about the theme of Expo Lisbon (Pinto, 2018). While planning the fair, training programs, conferences and publications aiming to raise awareness were organized beyond creating a physical sightseeing area within the determined land.

In line with the perspectives and political attitudes of the countries, in some countries, if a city is selected as a host for the fair, the fair is included in the strategic development plan of the city and is planned as a part of the urban development (Polat, 2019). As can be seen in studies in the literature (Kantürer, 2016; Erturan Topgül, 2019), the Expo Lisbon has been a remarkable project as it aims to create a new city center as a result of extensive studies and dual-functional design planning. As for Aelbrecht (2014), the majority of the fair fields is generally abandoned after the fair, and the part that is not abandoned is left as it is without being developed with large debts. The fact that these areas, for which serious budgets are spent and provide an economic and international potential to the host country, are not active during the event and cannot be integrated into the city afterward, harm the city's economy and land in the long run. However, Expo Lisbon, which was realized as a Special Fair in 1998, has been a different and remarkable positive example in terms of the event legacy with its planning process, methods, results, and what it has brought to the city after the event.

Effects of Expo Lisbon on Urban Development

According to Carrière and Demazière (2002), in the Lisbon Metropolitan Area Plan of 1990, it was emphasized that Lisbon should be a world city, and it was stated that there was a need for a comprehensive urban transformation study. This decision was also approved in the 1992 Strategic Plan and an application was made to BIE for the Expo this year. On the edge of the Tagus River to the east of Lisbon, 5 kilometers long and 0,6 kilometers wide, rectangular shaped, nonfunctional industrial area has been designated as the Expo field (Fernandes et al., 1998) (Figure1).



Figure 1. Expo Lisbon field map (BIE, 2021).

The planning of re-functioning the area that is valuable with its location to become the second center of the city is closely related to urban policies. The aim of the re-functioning of the existing industrial buildings in the region and the planning that will be effective in the long term and after the Expo fair in the urban space were effective in the BIE's selection of Lisbon as the host country for the 1998 Expo (Aelbrecht, 2014).

When the location of the Expo Lisbon in the city is examined, it is seen that the fair field is 10 kilometers away from the city center and 3 kilometers away from the city's international airport. In addition to the existing railway and highway connecting the area to the city, the transportation network has been expanded with new metro and tram lines within the scope of the Expo project (Aelbrecht, 2014). The metro line has been developed and connected to the city center with 7 new stations, including the airport and Expo stops (Kantürer, 2016). The fact that the Expo area is located by the river, close to the city center and the airport and has sufficient and diverse transportation networks, has been effective in making the region easier to reach during the fair, as well as being preferred for living and spending time after the fair. In this sense, the importance of paying attention to the fact that the choice of location in the Expo fields is preferable both in terms of tourism and for the life of the citizens after the fair is clearly seen in the example of Expo Lisbon.

To realize the Expo Lisbon project, a private company named "Park Expo'98" with access to public capital was established. This company was tasked with designing, developing, constructing and dismantling the exhibit, as well as purchasing, developing and selling land throughout the region. While the completion of the Expo area in 1998 was the priority for the works carried out by the company, the comprehensive transformation project outside the fair field was allowed to be completed by 2010 (Carrière & Demazière, 2002).

Abandoned urban areas have the potential to become a second city center with renovation and transformation works. In this sense, the redevelopment of the abandoned industrial port area and the creation of the second city center emerged as two basic strategies for determining the location of Expo Lisbon (Carrière & Demazière, 2002). After the location was determined, a systematic planning process was initiated with a team of many architects and experts, led by architect Luis Vassalo

Rosa. The fair area was named “Park of Nations” by the project team (Figure 2). As stated by Aelbrecht (2014), the strategies developed under the leadership of Vassalo Rosa were discussed under the headings of planning, design, development, management and finance. During the planning phase, it was aimed to make the area a center, create a mixed-use area, an economic base and develop the infrastructure for during and after the Expo fair. In the design phase, the structures were designed to be dual-functional with temporary and permanent spatial features to enable the structures built for the exhibition to be reused after the exhibition. In temporary spaces, flexible usage areas are generally created in modular structures. In permanent buildings, importance and priority was given to their use with their new function after the fair. The Park Expo organization was authorized for development and management, and it is planned to sell the spaces in the fair to the private sector or investors after the event for the financial model.



Figure 2. Left: Park of Nations; Right: Expo Lisbon fair field (Park of Nations, 2021).

Within the scope of the project, new structures such as the Ocean Pavilion, the Portuguese Pavilion, a 600 mooring capacity marina and the panoramic Vasco da Gama tower were built for the event, and the landscape project was realized for 5 kilometers along the river. For transportation, Vasco da Gama Bridge, which is one of the longest bridges in Europe with a length of 17 kilometers, Gare de Orient Train Station and Park of Nations cable car have been implemented (BIE, 2021; Erturan Topgül, 2019; Kantürer, 2016) (Figure 3).



Figure 3. Left: Vasco da Gama Bridge (URL 1); Right: Gare de Orient Train Station, (URL 2).

Around the Expo field, which has an area of 50 hectares, different usage areas that will contribute to urban development such as 330 hectares of residential areas, shopping center, hospital, education, sports and entertainment areas were planned. Social housing built in Olivias and Chelas neighborhoods around the Expo area, where the low-income group generally lives, has become one of the largest mass housing

projects in the country (Erturan Topgöl, 2019). All these practices realized with the construction of the fair cause the question of “is it a big international event in a city or an urban redevelopment process that includes an exhibition” (Matias Ferreira, 1997, as cited in Carrière & Demazière, 2002). For Lisbon, it is possible to say that urban arrangements that will contribute to the city in the long term have been realized through the Expo event. In this arrangement, the Expo area was not only evaluated with its own borders, but also the areas adjacent to the event border were designed together to be used both during and after the event. This approach made a significant contribution to the Lisbon Expo’s main goal of creating a second city center.

Spatial Sustainability at Expo Lisbon

According to Vassalo Rosa (1998), the leading architect of the Expo Lisbon fair, the city should be considered as a limited sustainable environmental resource. For this reason, studies such as recycling and re-functioning in urban space should be prioritized. Expo fair has been a tool for the urban development and renewal of Lisbon, and the spaces that can always be used have been left to the city as an event legacy, with the flexibility and continuity built between temporary-permanent spaces. Transforming the event legacy into permanent effects can bring much more to the city than the fair will. It is possible to say that the investments and projects made for Lisbon, rather than the event itself, provide permanent changes and contributions to the city in the long run, and these contributions and changes are also sustainable.

The old oil refinery tower that existed before in the area was re-functionalized as the central boulevard and the entrance gate to the fair (Vassalo Rosa, 1998). The new structures built within the scope of the fair were turned into a part of the urban space with their secondary functions after the fair. The Ocean Pavilion was converted into a large aquarium named “Oceanarium”, the Utopia Pavilion was transformed into a venue called “Meo Arena” where cultural activities such as concerts and exhibitions are held, the exhibition pavilions were converted into the “Lisbon International Fair Hall”, the main entrance structure was transformed into Vasco da Gama Shopping Center and brought to the city with new uses. (Erturan Topgöl, 2019) (Figure 4). The Oceanarium was one of the first large aquariums in Europe with the size of four olympic swimming pools housing more than 500 creatures (BIE, 2021).



Figure 4. Left: Oceanarium (URL 3); Right: Meo Arena, (URL 4).

The most important reasons why Expo Lisbon fair is still an active and livable area today are that the buildings in the fair area were brought to the city with different functions and the housing areas around it were arranged. The study of Aelbrecht (2014) demonstrated the success of the fair and urban renewal in Lisbon with numbers and stated that there are 1247 million square meters of residential area, 626 million offices, 190 million commercial areas and 19 thousand people living in the region.

In addition to the spatial contributions of the Expo to the city, it is also necessary to mention the techniques applied in terms of energy use and the benefits it provides. As Fernandes et al. (1998) stated, one of the objectives of the project is to realize low-energy and environmentally friendly urban renewal while planning the event venue. To achieve this, tests were carried out to reduce the amount of energy use and microclimate indoors and outdoors on a 3D model, considering the dimensions of the land, the heights and shapes of the buildings, the width of the streets, and the placement of the trees. In addition to the tests, the use of energy in infrastructure applications and transportation networks was also considered. As a result, despite the dense use in the Expo area, approximately 50% less energy is used than any equivalent size and density area in Lisbon.

In addition to all these positive developments, there are also some negative views about the Expo Lisbon project. According to these views, while the fair and the new settlement area were planned, the old settlement area in the vicinity was ignored, and the railway, which is a threshold/border, strengthened the spatial and social separation of these two areas. Although social housing was built in these neighborhoods later, it is necessary to facilitate the adaptation of the people living there economically and socially to the city. Although it was developed together with the areas adjacent to the borders of the Expo field, the social dimension was ignored in the arrangements. In this sense, while creating a new development area in the city, planning in a way that will improve its environment in every aspect is an important issue to ensure holistic development in cities.

In short, with the strategies developed during the planning phase of Expo Lisbon, the port area with abandoned warehouses and barracks was brought to the city and turned into a focal point for international events. Since it is an actively used urban space after the fair, it has become the second city center of Lisbon. As a result, the example of Expo Lisbon, about which there are positive and negative opinions, is an important example in terms of showing what large-scale events with serious budgets and intense efforts can bring to the city and its citizens.

EXPO ANTALYA

The studies carried out for Antalya to host the 2016 Horticultural Fair were started in 2008 (Batuhan, 2020). After Turkey became a member of AIPH, became candidate for the Horticulture Expo, which would be held in the A1 category in 2016. Antalya's hosting application was accepted in

2010 and the fair field was approved by AIPH in 2011. Antalya Governorship has prepared a directive for the organization and management of Expo 2016 Antalya, and in line with the directive, the Expo Assembly and the Expo Executive Board, which included different actors such as deputies, mayors, non-governmental organizations, associations and foundations were established (Kantürer, 2016; Karahan et al., 2021). As Karahan et al. (2021) stated, Expo 2016 Antalya Law No. 6358 was enacted in 2012, and with this law, decisions regarding the planning and management of the organization were specified. In 2013, the Expo 2016 Antalya Agency was established to ensure the execution of the preparations by determining the procedures and principles related to the exhibition with the regulation numbered 28641, and construction works were started in the Expo area. All preparations for the Expo were carried out by the Ministry of Agriculture and Forestry and Expo 2016 Antalya Agency under the Presidency of the Republic of Turkey.

As Çelik and Aslantaş (2018) stated, Horticulture Expo (Botanical Expo) emerged in order to revive the fields of agriculture, horticulture and landscape architecture, to encourage and develop innovations in these fields. Horticultural Expo, organized in Antalya in 2016, was a type of fair in the A1 category, whose application was made 2-6 years ago, with a minimum exhibition area of 50 hectares and an exhibition duration of 3-6 months (Polat, 2019). The Expo fair held in Antalya was an international event where organizer and participant countries present their local cultures with their own gardens, with the aim of addressing the measures and solutions to environmental problems such as the extinction of plant species, global warming, desertification, and depletion of natural resources, and contributing to the future in the field of environment and sustainability (Hür, 2019). For this purpose, the theme of the Expo fair was “Flowers and Children”, since the target audience of the event was young people and children, and the slogan of the fair was determined as “Green the Future” in relation to the sub-themes of history, biodiversity, sustainability and green cities. Within the scope of the theme, cultural programs, activities, workshops for children and educational activities, seminars, meetings, panels, special organizations organized by international participants, and national day celebrations were held throughout the event (Batuhan, 2020).

In connection with the theme of Expo Antalya, the opening ceremony was organized on April 23, National Sovereignty and Children’s Day, and the fair continued until October 30, 2016. It was foreseen that 5 million foreign and 3 million domestic tourists would come to the event (Kantürer, 2016); however, a total of 4,693,571 people, 71% domestic and 29% foreign, visited the fair (Batuhan, 2020; BIE, 2021).

Effects of Expo Antalya on Urban Development

The land chosen for Expo Antalya is an area of 112 hectares, within the borders of Solak Village of Aksu district, between Aksu and Tehneli Streams, belonging to the Western Mediterranean Agricultural Research

Institute (Kantürer, 2016). The Western Mediterranean Agricultural Research Institute (Batı Akdeniz Tarımsal Araştırma Enstitüsü - BATEM) was established in Aksu in 1934 under the name of “Hot Climate Plants Station” in connection with the rural economic development plan of the Early Republican Period (Çetin, 2012) to conduct research on agriculture, develop agriculture and garden, and inform the owners. Since 1934, different studies have been carried out in the institution and it has undergone name changes. Today, BATEM, which is affiliated with the Agricultural Research and Policy Directorate of the Ministry of Food, Agriculture and Livestock, was formed as a result of the uniting of 5 research institutions (Mediterranean Agricultural Research Institute, Biological Control Research Institute, Citrus Research Institute, Greenhouse Research Institute and Regional Cotton Research Institute) working in different areas of plant production in Antalya at different times (T.R. Ministry of Agriculture and Forestry, Western Mediterranean Agricultural Research Institute).

According to the statement of Mehdi Eker, former Minister of Food, Agriculture and Forestry, it was decided to demolish 96 of 103 buildings with historical value belonging to BATEM in the Expo area, and the future of the remaining 7 buildings was left uncertain. Apart from these demolitions, it has been stated that, within the scope of the construction of the Expo area, infrastructure works, environmental and road arrangements, new botanical studies would be carried out in addition to the existing plant and tree species in the area for the flood and overflow hazard that may arise from the Aksu Stream (Arkitera, 2013). In relation to spatial and economic sustainability, instead of improving and re-functioning the existing buildings in the region, the method of demolishing cultural heritage structures and constructing new buildings with high costs was preferred. The construction of the Expo area, infrastructure and transportation works in and around the area and the event were completed with a budget of 1.8 billion TL (Batuhan, 2020).

When the site plan of the Expo fair is examined, a total of 665.562 square meters of green space, an artificial lake of 71.200 square meters (Hür, 2019; Kantürer, 2016), two bridges over the artificial lake, and Children’s Island in the middle of the lake where activities were held with children were inserted (Figure 5). Various activity areas such as the big amphitheater, small amphitheater, Expo Greenhouse, Children’s Science and Technology Center, Congress Center, Ottoman Garden, Agriculture and Biodiversity Museum, Mosaic Culture Areas, Seven Region Houses were located around the lake. Related to the theme, about one-third of the area has gardens organized by countries, districts, institutions and universities.

According to Batuhan (2020), the objectives of Expo 2016 Antalya were to increase the quality of life with more green spaces and new investments in the city’s infrastructure, create new job opportunities and employment, support and promote ecotourism in Antalya. In line with these goals, 656.562 square meters of green space has been brought to

the city, the tram line has been added to the city's transportation, road and stream arrangements and improvements have been made, and employment created for Antalya residents in both activity areas and businesses throughout the event. However, after the fair, urban employment was adversely affected due to the return of the personnel working in public institutions to their previous duties, the termination of the employment contracts of the employees within the Expo General Secretariat on 31.12.2016 (Batuhan, 2020), and the closure of the businesses in the area.

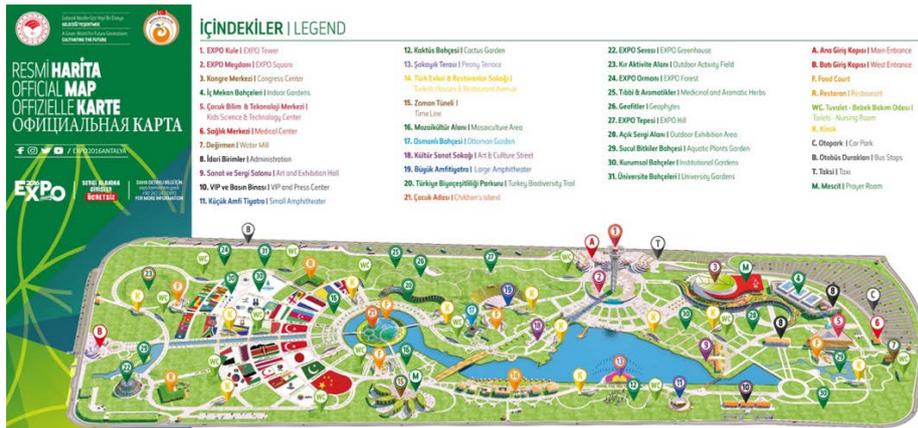


Figure 5. Expo Antalya field map (T.R. Ministry of Agriculture and Forestry Expo2016 Antalya).

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The Expo area is 22 kilometers away from Antalya city center and 11 kilometers away from the airport. In order to facilitate access from the city center to the fair field, a 16-stop tram line with a station was built both at the airport and the Expo area, and in addition to the tram, transportation was provided by private vehicles, tour buses, municipal buses and taxis throughout the event. After the fair, the Expo area lost its potential to be a place where tourists and Antalya residents stop by and spend time, as it is far from both the city center and tourism areas. Since Expo Antalya is far from the city center and there are no residential and service areas around it, it could not integrate with the urban space and become a part of the urban development. While one reason for this problem is the location, another reason is the lack of arrangements to improve the region during the planning process of the fair.

After Expo Antalya was closed on October 30, 2016, the privatization works of the area were started and it was stated that these works would be completed by December 31, 2022 (Batuhan, 2020). Since June 2018, the entrance to the Expo area has been made free of charge, but there has been no planning for the future and use of the exhibition area. In this sense, while the fair field remains uncertain in urban planning and development, it becomes physically neglected and loses its social and cultural attraction.

Spatial Sustainability at Expo Antalya

Although the Expo Antalya event is over, the entrance of visitors to the area continues. The main entrance gate of Expo Antalya was designed

with inspiration from the leaves of the peony flower, which was the symbol of the fair. At the entrance square, visitors are welcomed by the 100,7 meter-long Expo Tower, inspired by the Hadrianus Gate, the symbol of Antalya, and palm trees (T.R. Ministry of Agriculture and Forestry Expo2016 Antalya). The design of the tower, which was intended to be the symbolic structure of the fair, was determined as a result of a competition held by the Chamber of Architects (Kantürer, 2016). The viewing terrace of the tower offers the opportunity to watch the Expo area and its surroundings 360 degrees (Figure 6). The restaurant on the lower floor of the viewing terrace in the tower served during the event, but it was closed after the fair. However, it would have been possible for the restaurant to be operated by the public or private sector after the fair, making the area the center of attraction and making a positive contribution to the revival of tourism and employment.



Figure 6. Left: Fair entrance gate, kiosks, and Expo Tower; Right: View of the area from the Expo Tower (Personal Archive, January 2022).

The congress center was designed as a venue where national and international events can be realized with its 3-storey structure and a total capacity of 6500 people. The Grand Amphitheater with a capacity of 3200 people was planned for events such as national day celebrations, concerts and shows and was actively used throughout the fair. In the middle of the Expo Lake and on the Children's Island, which was planned in a central location in relation to the theme of the fair, educational, entertaining activities and workshops that appeal to children were held throughout the fair. The Seven Region Houses (Konya House, Antalya House, Bodrum House, Diyarbakir House, Erzurum House, İstanbul House and Trabzon House) reflect the architectural features of the seven geographical regions of Turkey served as restaurants throughout the fair and the food cultures of those regions were introduced in these houses. In this direction, the structures built for the fair, the other structures and green areas transferred to the fair area by the participating countries, institutions and organizations have the potential to serve in many fields, primarily culture, art, education and sports (Karahan et al., 2021). Nevertheless, when the current conditions and uses of the Expo area and these structures are examined, it is seen that the structures are left closed or empty due to political uncertainties and lack of planning (Figure 7).



Figure 7. Left: Inside the Children's Island; Right: Seven Region Houses that are forbidden to enter (Personal Archive, January 2022).

The area allocated for the national garden exhibitions of 54 countries participating in the organization was divided into 86 parcels, and each country arranged its own gardens with semi-open and closed space designs and pavilions in relation to the theme (Hür, 2019). After the Expo, the country gardens and the maintenance of the gardens were transferred to the Republic of Turkey (Karahan et al., 2021). Apart from 54 country gardens and other gardens, the Mosaic Culture Plant Sculptures, which were created with 108 plant sculptures in 10 different areas, were designed to provide information about planting types in different geographies in history. Today, while the privatization processes continue, it is observed that both the general landscaping in the area, and the country gardens and Mosaic Culture Sculptures are not adequately maintained, the information and regulations about the country gardens are disappearing, and the green area is left neglected (Figure 8).

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Figure 8. Left: Country Garden in the neglected state; Right: Mosaic Culture Plant Sculptures' current situation (Personal Archive, January 2022).

After 2016, "Let's Meet in the Blue" event for children in 2019, and other events such as "GastroAntalya 2021", "Ironman 2021 bike track", "1st International Tourism Gastronomy and Hospitality Summit" were organized at the Expo Antalya area (T.R. Ministry of Agriculture and Forestry Expo2016 Antalya). However, when the indoor and outdoor potentials of the area are evaluated, the scope and quality of these events are quite limited and insufficient for the Expo field. In this sense, these activities have not made it possible to ensure both spatial and socio-cultural sustainability. Regarding sustainability, it is seen that the landscape areas are not adequately maintained and most of the indoor activity areas are closed and left idle (Figure 9). Today, the activities that can be done in the area of 112 hectares are very limited. There is a kiosk in the area for needs such as food and drink, a walking area, a tower to

watch the area, and a cine-vision show is active in a hall of the 7.500 square meter Agriculture and Biodiversity Museum, which is now called the Time Tunnel. These limited activities cannot provide the desired contribution to the spatial sustainability of the area.



Figure 9. Left: Closed ticket offices; Right: Neglected fair field and direction signs (Personal Archive, January 2022).

In the last 5 years, few events have been organized in the Expo area, the gardens have been neglected, and most of the buildings and restaurants have been closed. The fair field, which was built with high cost, creates the impression of being abandoned and neglected when visited today. Projects for which high budgets are spent during construction, but which are not efficient in terms of the economic situation and use, and cannot show the desired performance are called “White Elephant” (Erturan Topgöl, 2019). These projects not only cause spatial and economic damage, but also negatively affect the sustainability of urban life. In this sense, it is necessary to carry out the maintenance and arrangements, to produce solutions that will activate the area under the leadership of a management unit, and to evaluate the potentials of the area so that the Expo Antalya area, which has a history of 5 years, does not turn into a White Elephant in terms of event heritage. Also, considering the size of the area and the number of personnel employed during the active period, it was not possible for the personnel to continue their employment after the Expo. In this context, it is clearly seen that Expo Antalya, which also aims to increase employment in the region, has not been successful in this target.

DISCUSSION AND CONCLUSION

International events that offer investment and development opportunities to cities need to be carefully evaluated and planned. In order for international events to provide the cities with spatial, social and economic opportunities that will be effective and productive in the long term, multi-dimensional planning should be done with different actors and experts. It is also an important issue that international events and fairs, which are realized by spending high budgets, are considered a tool or purpose for the development of the city. This study, which aims to compare Expo Lisbon and Antalya in terms of their effects on urban development and spatial sustainability, reveals that Expo Lisbon is used as a tool for the development of the city, whereas Expo Antalya consists of only a purpose (Table 1).

Table 1. Similarities and Differences of Expo Lisbon and Expo Antalya Fairs

Similarities	Differences	
	Expo Lisbon	Expo Antalya
They are large-scale events organized within BIE.	The event area is planned as the second center in the city.	The event area is far from the city center and does not interact with it.
During the event, they were visited by local and foreign visitors.	Pre-existing buildings in the event area have been re-functionalized.	Pre-existing buildings in the event area were demolished.
During the event, social and cultural activities were organized, and the use of green and open space was encouraged.	After the event, the use of the area was continued with spatial and functional changes.	After the event, most of the event spaces were closed, the gardens were neglected, and visitors decreased.
Production and consumption were provided during the event period.	After the event, economic activity and employment continued.	After the event, economic activity and employment disappeared.
Vasco da Gama Bridge at Expo Lisbon and Expo Tower at Expo Antalya were designed as symbolic structures.	Vasco da Gama bridge was brought to the city as a structure that provides transportation within the city.	Service areas such as the restaurant in the Expo Tower were closed after the event. The tower is visited only to watch the area.

Firstly, when evaluated in terms of its contribution to urban development, it is seen that the Expo Lisbon was used as a large-scale event, a tool to attract attention in the international arena, create a second city center and provide investment resources for them, in order to transform the urban space. In this context, Expo Lisbon was planned to support urban renewal and integrated within the city. In this respect, even though the Expo Lisbon event has been completed, it still continues to be a living part of the city today. On the other hand, Expo Antalya is a region with great potential for both local and foreign tourists and Antalya residents, due to its large green area, tower, businesses in the tower and Seven Region Houses, and various activity areas for children and adults. However, it is seen that these potentials could not be evaluated after the fair and the area was left idle. In this sense, it can be interpreted that while the fair was being planned, it was not evaluated within the city's development plan, it was planned as a short-term event and it contradicted the sustainability criterion in the sub-theme of the fair. All these negative aspects reveal the inadequacy of the contribution of Expo Antalya to urban development.

Secondly, when evaluated in terms of spatial sustainability, the permanent event legacies of the Expo fair to the city of Lisbon are the construction of the fair in the re-functioning of an abandoned area, the consideration of natural environmental factors, the development of the fair area with its surroundings, the structures that provide dual-functional flexible uses and spaces. These are important indicators that Expo Lisbon provides spatial sustainability. All these contributions are important guides in terms of ensuring sustainability in the process of adapting cities to changing technology and living conditions. On the other hand, it is possible to say that the Expo Antalya area has been left to its

own disrepair today due to the lack of a management plan before and after the organization. Due to the lack of adequate promotions both during and after the fair, the area could not turn into a touristic and socio-cultural attraction center. For all these reasons, the spatial sustainability of the area after the event could not be achieved.

In addition to these determinations, when the effects of the event legacy of the fair on employment are evaluated, it is seen that the employment created during the Expo fair in Lisbon was continued with the active use after the event, while the employment created during the fair in Antalya could not be sustained after the event. This is another factor that negatively affects both urban development and economic and spatial sustainability. In addition, another issue that should be emphasized is that the field should be a part of urban development in the process of determining the location of such large-scale activity areas. This can only be possible by choosing the area that is easily accessible by different means of transportation within the city and located close to the touristic routes.

In the next period, in order to prevent the Expo Antalya fair field from turning into an abandoned area and to transform its existing potentials into an event legacy, a management unit should be established, necessary maintenance and arrangements should be done in the buildings and green areas, promotions should be made in order for Antalya to be considered within the scope of tourism activities. Also, international scientific, cultural, sports and entertainment activities should be organized and arranged as a recreation area for the citizens to spend time with their children in the city. Making these improvements and arrangements will enable the exhibition area to contribute to the city spatially, socially and economically, and will make urban development and sustainability possible.

The most important contribution of this study to the field of application is that it shows that urban development and spatial sustainability should be taken into account by public policies, local governments and practitioners before the realization of large-scale organizations by providing a comparison of two different activities that were carried out at different times and whose effects on the city can be seen today. The information obtained from the comparison of the two Expo fairs is expected to be a guide for the countries and cities that will host large-scale events in the future. In this context, international events with high-cost investments in order to organize the urban space, improve the conditions of the people living in the city economically, spatially and socially, and develop tourism activities should be planned by the actors of the process with not temporary but permanent aspects, and the sustainability and continuity of the positive effects of the fair should be ensured. In order to achieve this, governments, public institutions, local administrations, private sector and different actors that will contribute, should carry out collective studies in the planning, implementation and operation processes by informing the citizens and receiving their

support. As a result of the study, in line with the information obtained from the comparison of the two Expo fairs, it is recommended that the countries and cities that will host large-scale events in the future, carefully determine the location of the event area, design the event and post-event uses in the planning process, and determine the legacy of the event in a way that will contribute to urban development and sustainability.

The most important contribution of the study to the field of science is that it provides a basis for scientific research on the determination of urban and spatial sustainability criteria in the conduct of fairs and all similar organizations within the scope of large-scale events. The study provides an important contribution to the literature in terms of presenting the effects of Expo fairs on urban development and sustainability relations. In this context, it is recommended that the scientific research to be carried out in the future can focus on the determination of sustainability criteria in large-scale activity areas, which will improve the field of science. The study is limited to the urban and spatial sustainability of Expo Lisbon and Antalya areas. It is recommended to carry out studies that include different Expo areas and socio-economic sustainability in the future.

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