



Hypothetical Approach to the Rural-Urban Fringe: The “Common Space”

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ABSTRACT

The urban and rural areas have encountered a rapid transformation and adaptation process while living quarters exposed reconstruction activities within ambiguous boundaries such as urban-nature, rural-nature and rural-urban. Ecologically-sensitive action plans have the potential to guide these activities by environmental protection and management, revealing the interaction of existing land uses and natural and socio-cultural assets, especially in transition and intersection areas. The rural-urban fringe has potential as a diverse, dynamic and multifunctional region in terms of historical development, biodiversity production, recreation, identity and landscape aesthetics. Within the scope of the study, an urban design competition area in Guzelbahce, located at the rural-urban fringe of Izmir is selected as a study area. The case area is a potential buffer zone to prevent the urban sprawl on the rural-ecological commons. For this purpose, following the literature review, in-situ observations and analyses, *the common space* approach is proposed for the case area located at the intersection of the potential green belt axis of Izmir and determined rural landscape planning policies and design criteria are evaluated.

Keywords: Rural-urban fringe, commons, common space, rural landscape planning, Guzelbahce.

INTRODUCTION

There has been a need for rapid changes in urban and rural areas due to the adaptation to the global climate crisis since the last decade. Accordingly, the living spaces have entered a process of restructuring and evolved into a situation where the separating boundaries such as urban-nature, rural-nature and rural-urban have become more blurred. Natural landscapes are important economic and socio-cultural resources with their contribution to the quality of life (Brabyn, 2005). Today, the pressure of urbanization on the rural and natural areas has brought the necessity of conservation. In addition, the Article 6 of the European Landscape Convention (APS) states that “*each country should work on determining its own landscapes, creating landscape policies, protecting landscapes, planning and management*” (Silaydin Aydin and Culcuoglu, 2010). For this reason, an action plan series should be a priority to guide environmental protection and management studies and reveal the interaction of existing land uses with landscape values through an “ecological-sensitive approach”. This approach should also be adopted to the rural-urban fringe, which is one of the most vulnerable regions of the city.



The rural-urban fringe is a diverse, dynamic, multifunctional region in terms of historical development, biodiversity, production, recreation, identity and landscape aesthetics (Gallent et al., 2006). It frequently consists of open and green spaces and alternative land uses, different from the densely built-up urban areas. Thus, it has the potential to be used for recreational and agricultural purposes of the citizens. However, it has also been under and intense urbanization pressure that carries the risk of rural transformation. Under these circumstances, the approaches and the planning policies developed for the rural-urban fringe are very important. Furthermore, it is crucial to integrate ecological and social aspects of sustainability as well as the economic aspect in planning of the rural-urban fringe.

Within the scope of the study, a competition area of approximately 57 hectares with the status of "Qualified Natural Protection Area" and "Sustainable Conservation and Controlled Use Area" is chosen as a study area in Yelki neighborhood of Guzelbahce district. The case area, which is located at the rural-urban fringe of Izmir is taken as a common ecological station and a buffer zone and a crucial local asset with its ancient olive culture and ecological character. The site is at the intersection of olive and bicycle routes and has a potential to become an important ecological station in the future. Thus, it is aimed to construct a "common space" approach that will support "nature-based solutions" by integrating with the green-belt surrounding central districts by the Izmir Green Infrastructure Strategy. In addition, preventing the disconnection between the nature-urban and urban-rural and emphasizing the ecological and social aspects of creating healthy and qualified areas, especially in the post-pandemic era are necessary.

The study evaluates the "common space" approach, as a tool that local governments can use in the planning of the transition zones including both rural and urban characteristics in the rural transformation process. The study aims to improve the rural landscape by protecting its natural and/or socio-cultural assets while proposing adequate planning and design policies for the rural-urban fringe. The authors esteem that a "common space" approach on the rural-urban fringe can prevent the collapse of the city on the rural and become a tool to protect the rural-ecological commons.

THEORETICAL BACKGROUND

Commons

The term *commons* can be briefly defined as the "tangible and intangible spaces of the public use and collective ownership that belong to a society with free access" (Santos Junior, 2014) and categorized into rural/urban commons, natural/ecological commons, artificial/man-made commons and tangible/intangible commons (Table 1). Commons can be *ecological* including air, water, forestry and seed; and *artificial (urban)* including public goods (e.g., public parks, public transport); as well as *intangible* like tradition, language and big data (Ostrom, 1990; Adaman et al., 2017).

Table 1. Types of the Commons (developed from Ostrom, 2010; Hazar & Velibeyoglu, 2019)

Commons	Rural Commons		Urban Commons	
	Tangible	Intangible	Tangible	Intangible
Natural / Ecological	Seed, pasture, forest, river, sea, ocean, natural resources	-	Waterfront, river, urban park, market gardens, natural resources	-
Artificial / Man-made	Village square, village fountain, agricultural land, cemetery	Tradition, apparel, dance, folk music, tales	Street, square, public transport, cemetery, public library, public goods	Etiquette, fashion, technology, big data, open-access resources



The resource-pessimist literature on the commons has started with *An Essay on the Principle of Population* (1789), which focused on the problem of mode of production. Malthus, an English cleric and economist predicted a future of environmental destruction, resource degradation, hunger, famine and violence. In the 1970s and 1990s, alarmist neo-Malthusian literature was dominant in the environmental discourses (Castree and Braun, 2001; Matthew, 2002). Hardin (1968), a neo-Malthusian ecologist, attempted to reduce the overpopulation phenomenon by natural law and brought forward the idea of *Tragedy of Commons*, which claims that a finite, optimum population within a limited access of commons and proposed two solutions: (1) *private enterprise* and (2) *government control*. Hardin's idea was accused of providing a basis for the capital enclosure on the commons and triggering the attempts of privatization (Harvey, 2012).

Ostrom (1990), a political economist, criticized Hardin's view as the privatization or government control cannot guarantee the sustainable use of resources and proposed an alternative solution by *collective action* in her works, which gained a Nobel Prize in Economics in 2009. She revealed that the model established by Hardin was an open-access model, rather than the limited-access model; as the commons are the courses, in which the common users are the members of a well-defined group or organization and have a right to prevent the outsiders of that specific common and/or resource (Hardin, 1968; Angus, 2008; De Angelis and Harvie, 2014). She focused on the limit of the use of natural resources to ensure their long-term economic viability. By specifying the common-pool resources (CPRs), she claimed that under favorable conditions, resource systems can produce maximum quantities of resource units, without harming the resource system (Ostrom, 1990; 2002).

However, Ostrom's promising option for commons has also been criticized because of its suspended definition of the *users* and *community*. The first criticism was about the equality in the access and decision-making on the CPRs as there are no ideal communities without intersectional inequalities. Moreover, the enclosure movements should be analyzed within a wider *political economy* context, which is deficient in the collective action theory. Yet, none of the commonisation practices can be independent of the *political economy* context (Akbulut, 2014; Adaman et al., 2017). Additionally, there are two fundamental risks on the commons; (1) *co-optation of the commons* by capitalism (Isla, 2009; Caffentzis and Federici, 2014), and (2) *homogeneous communities* that polarize and exclude others (Turner, 2006; Caffentzis and Federici, 2014; Esteves, 2018; Firat, 2020).

When it comes to the political context as a *systems approach* to the commons, Bayraktar (2019) proposes an understanding of *social municipalism* that encourages and enables city dwellers to meet on common grounds, states and concerns, which he calls "the politics of commons". He considers the politics of commons as an ontological reason of the local governments and states that local policies are "planning and implementing for common benefit within limited resources", which require a re-discovery of the local commons through commoning practices. Within this perspective a city is; (1) a *common place* where nobody is an outsider, open to everyone, where public grounds are built; (2) a *common state* based on direct communication, where ideas are exchanged, democratic discussions and forums are built, and where one is heard (e.g., social media); (3) a *common concern* that has a formal or de facto organizations and promotes participation at the local level, where civil society debates can be conducted (e.g., city councils, forums); and (4) a *common memory* that is established and/or fictionalized and immediately transmitted (Bayraktar, 2019).

It is seen that the rural-urban fringe is an important region for common memory, which consists of several rural-ecological commons. Thus, rural landscape planning and management should be handled within a holistic and ecologically-sensitive approach



through improved rural policies. Within these policies, it is necessary to protect and encourage rural labor and protect the local implicit knowledge, as well as the commons.

Rural Landscape Planning

The impact of urban pressure on rural areas should be well investigated while promoting the "common space" approach; therefore, rural landscape planning methods should be discussed elaborately. Rural landscape can be defined as a mosaic of natural and/or artificial land outside of the city, including rural settlements and landscapes related to economic activities such as agriculture, cultural landscape and natural landscape (Forman and Gordorn, 1986; Wang Yuncai, 2003; Qingjuan et al., 2011).

According to Aran (1975), "rural landscape" is the view of the environment in which off-city human activities manifest in nature. These activities can be agricultural, industrial, recreational and/or forestry (Gul, 2000; Kiper, 2013). Rural landscapes are places where local agricultural and rural production styles are reflected in the settlement pattern and structuring. In such areas, public spaces and structures, agricultural production areas and settlements create authentic unique and locally identifiable patterns (Uslu et al. 2011; Kiper, 2013).

The ambiguity of the term "rural" allows the rural landscape studies to cover a range of different problems with different methods and approaches such as landscape imagery, aerial photography, censuses, quantitative surveys, qualitative methods and anthropological and experiential approaches. The major branches of landscape studies today are represented: (1) large-scale approaches of land cover, land use and practices of the users and managers; and (2) small-scale approaches of landscape as identity and symbol of individuals (Kizos et al., 2010). Rural landscape planning provides a balance between the natural potential of the region that constitutes the living space and the needs of the society. The local culture and identity of the people in these regions are one of the most important potentials of rural recreation (Cinar, 2007; Kocan, 2012).

Liu (2019) discusses the applications of rural landscape design in western countries and states that reasonable and effective rural landscape planning in the USA benefits from the adequate applications of the rural planning policies; and rural landscape planning in Europe is implemented under government control. In Japan, however, urban-rural integration has begun to be formulated in a series of environmental policies and management systems, accelerating the revitalization of rural areas, sustainable development in rural areas, and rural inheritance. Thus, he states that the construction of rural areas and the development of *creative agriculture* not only promote economic development and cultural reshaping but also optimize the national governance structure.

Planning is substantially one of the key instruments for the rural-urban integration strategies. So far, planning primarily focused on the urban areas, while the rural areas were reduced to sectoral plans (Qian & Wong, 2012). In Turkey, planning of the rural areas had also covered a very little place in the spatial planning system until recently (Corek Oztas & Karaaslan, 2017). Today, it is frequently stated in planning literature that we cannot identify rigid boundaries between rural and urban areas. Tekeli (2004) reveals that there are intertwined economic activities and new geographic and cross-country borders in *city-regions* within globalization as a new socio-spatial process. He describes primary problem areas that need to be solved to eliminate the causes of rural-urban migration, increase the quality of life, control conurbation and prevent *gentrification* (Tekeli, 2004).

The 1980s is an important era for the economic transition of Turkey to neo-liberalization. The rural-urban relations in Turkey before and after 1980 are summarized in Table 2-3. It is seen that the concepts of rural and urban strictly differ before the 1980s. At this

period, urban areas contain densely built-up areas, a large amount of population, proximity to administrative units, developed social and technical infrastructure services and economic activities based on service, industry and commercial sectors; while rural areas contain fewer population, locality at the forefront, natural and agricultural areas, underdeveloped social and technical infrastructure services and economic activities primarily based on agriculture sector (Table 2).

Table 2. The Rural-Urban Relations in Turkey before the 1980s.

Before the 1980s, The Rural-Urban Relations in Turkey	
Urban	Rural
-Central	-Local
-Dense housing	-Scattered housing
-Tall buildings	-Low buildings
-Crowded (migration-receiving)	-Uncrowded (emigration)
-Close to administrative units	-Far from administrative units
-Attractive	-Repulsive
-Urban area	-Rural and natural areas
-Developed social infrastructure service (health, education, culture, tourism, trade)	-Undeveloped social infrastructure service (health, education, culture, tourism, trade)
-Developed technical infrastructure (transportation, communication, natural gas, water, sewage, etc.)	-Undeveloped technical infrastructure (transportation, communication, natural gas, water, sewage, etc.)
-Economic activities: service, industry and trade	-Economic activities: agriculture

After the 1980s, when we look at the rural-urban relations, it is seen that the rural-urban fringe has created a transition zone at an intermediate scale, which has both rural and urban characteristics and boundary features. The primary problems of this transition area are zoning and planning issues, which differ from the urban and rural problems (Table 3).

Table 3. The Rural-Urban Relations in Turkey after the 1980s.

After the 1980s, The Rural-Urban Relations in Turkey		
Urban	Urban fringe	Rural
-Central	-Central & Local	-Local
-Dense housing	-Medium-density housing	-Scattered housing
-Tall buildings	-Low buildings	-Low and middle-rise buildings
-Chaos cosmopolitan	-Suitable for development and dynamic	-Uncrowded and green (urban landscape)
-Repulsive (emigration)	-Attractive (migration-receiving)	-Repulsive / Attractive
-Close to administrative units	-Close to green and rural areas	-Far from urban, closed to nature
-Urban problems	-Zoning and planning problems	-Service problems
-Social, technical infrastructure very advanced with technology	-Social, technical infrastructure tends to develop with technology	-Social, technical infrastructure improved with technology compared to before the 1980s
-Economic activities: service, tourism, trade, etc.	-Economic activities: service, industry, tourism, trade and agriculture (mixed land use)	-Economic activities: agriculture and tourism

The rural landscape is thought to create ecological, aesthetic, and cultural benefits as a productive landscape type (Qingjuan et al., 2011). It mainly consists of natural areas, agricultural areas and forests. The latter ones are the most significant ones for local economic activities, recreational activities and green energy production. However, appropriations to other land uses, construction types and a number of structures frequently create conflicts in these areas and they lose their local assets. Recently, it is seen that the phenomenon of the rural landscape is changing because of the diverse flow of goods, people, information and policies for agriculture, landscape and rural development at different levels (Kizos et al., 2010).

The Rural-Urban Fringe

The rural-urban fringe is "a dynamic transition zone with intermeshing land uses located in between the rural and urban areas" and usually contains land uses that need larger plots" such as; agricultural areas, forests, small farms, infrastructure facilities, regional



hospitals, industrial areas, warehouses, football stadiums, airports and campuses. These areas are frequently the potential resources for recreational activities, conservation areas, economic development, green energy production; and also important for historical development (Gallent et al., 2006).

The rural-urban fringe is usually exposed to transformation pressure by ecologically-insensitive planning processes, which eventually results in the urbanization of the agricultural areas. Especially agricultural areas and pastures at the rural-urban fringe lose their productivity due to malpractices and land allocation to conflicting land uses. It is crucial to underline that the rural-urban fringe is a suitable area for implementing a nature-oriented urbanization model that has lower density and possible alternative land uses, which may constitute a green belt and/or a buffer zone between the rural and urban. This green belt can create an alternative urban focus by transportation hubs and public, recreational and agricultural uses. The rural-urban fringe has a great potential to be a socio-spatial integration zone of both urban and rural residents as a *transition area*. Thus, the ambiguous rural-urban dichotomy may disappear and the rural and urban may function as a whole without losing the originality and/or destroying one another (Hazar, 2017).

The rural-urban fringe has a great potential to reduce the negative impacts of urbanization on the rural areas with the help of adequate "rural transformation" and "rural landscape planning" policies. The concept of "rural transformation" aims to improve the rural living standards by eliminating the deficiencies in education, health and infrastructure and developing policies to ensure gender equality, planning to facilitate the access of rural producers to the market and participation in the production chain (Boto and Fotabong, 2012). Onal (2006) underlines that the rural transformation is the arrangements made to eliminate the *rural-urban inequality* caused by the rapid industrial development since the capitalist transition.

The rural-urban inequality due to the capitalization process is the focus of the rural transformation research area. The concept has been used in empirical and theoretical studies since the 1950s. It is seen that there are studies on the transformation of small farming, which is predominant in terms of labor and land ownership (Yıldırım, 2014). It is seen that "rural transformation" keyword has first begun to be used in 1998 and 19 thesis studies were identified in total in Turkey. These studies usually have carried out issues related to "expropriation", "rural labor", "seasonal labor" and "urban sprawl into rural areas". It is obvious that, especially in the cases where the rural-urban dichotomy is uncertain such as metropolitan cities, the number of studies on the concept of rural transformation need to be increased (National Thesis Center, 2020).

Today, the dynamics that cause transformation are the decreasing young population in villages, aging, rural-urban migration and parallelly decreasing in the agricultural labor, enclosure of the commons and reverse migration to urban to rural as *rural gentrification* in Turkey. It is predicted that the phenomenon of *reverse migration* from urban to rural may cause a new decentralization from urban centers to urban peripheries for isolation needs due to the COVID-19 pandemic (Hazar Kalonya et al., 2020). In this context, Lefebvre's (2011) "right to the city" approach should be re-considered as a radical reconstruction of the social, economic and ecological relations in the urban and the rural areas, which is described as "beyond the city". In this way, it can be ensured that the unique values of the locals would not be lost by rural gentrification in the rural transformation process.

There are two recent concepts in relation to the rural transformation: (1) *new urbanism* and (2) *landscape urbanism*. The concept of new urbanism is the most essential urban design movement, which supports *social equity* and aims to create a pedestrian-oriented



settlement (Steuteville, 2011). The concept is related to sustainable behaviors, such as walking and social interaction (Trudeau, 2013). On the other hand, the concept of landscape urbanism covers *environmental awareness* (Waldheim, 2006). The term emphasizes five principles such as; horizontality, infrastructure, forms of process, techniques, and ecology (Mostafavi & Najle, 2003).

Many researchers aimed to analyze the landscape and nature in detail by dividing them into layers. Therefore Jackson (1986), divided the landscape into three layers and addressed that people affect the landscape rather than the terrain structure. Landscape historian Hunt (2000), also divided nature into three layers and considered nature as the *first*, *second*, and *third* nature according to their degree of human influence. He defined the *first* nature as the unchanging nature, untouched by human hands; and *second* nature as the nature in which human intervention is felt (Kaplan & Velibeyoglu, 2016). According to Hunt (2000), *second* nature covers agricultural and urban development; and *third* nature is related to gardens and parks (Menon, 2019). The *third* interpreted nature as a kind of returning to nature where there is a human intervention with a design effort. Moreover, Jencks (2004), introduced the concept of "zero nature" and classified nature under three categories that are untouched by human hands and/or wildlife, agricultural lands and gardens (Kaplan & Velibeyoglu, 2016). Menon (2019) adds a new nature type, which is called the *fourth* nature. This type includes regenerative natural systems aiming to solve man-made problems such as industrialization, overpopulation, deforestation, habitat and biodiversity loss and extinction.

The rural-urban fringe provides an interaction between the natural, rural and urban landscapes and plays a crucial role in urban health and resilience; and it is a potential area for the designed *third nature* activities in line with the "common space" approach. It is determined that there have been negative effects on natural areas and rural life around İzmir recently with the expansion of the city population towards the periphery. For this reason, İzmir Metropolitan Municipality (IMM) organized a workshop called "Urban Periphery Parks / Ecological Parks at the Urban-Rural Transection" within the "İzmir Green Infrastructure Strategy" (2018). The ideas proposed in the workshop were combined with the activities for the "Living Parks" aiming to take an active attitude in peripheral areas. Following this, an urban design competition called "Olivelo: Ecological Common Living Space Idea Project Competition" was organized by IMM (Velibeyoglu, 2021). The field of the competition was located in the Yelki neighborhood of Guzelbahce district at the rural-urban fringe of İzmir, which is also the case area of the study. These examples reveal that the rural-urban fringe has great importance and potential to constitute a green belt with accurate planning and design policies.

METHODOLOGY AND FINDINGS

The methodology of the research is conducted upon is the case study on the rural-urban fringe in İzmir. Within the scope of the study, following the literature review, in-situ observations were made to make an environmental analysis and the connections of the project area with the environment, vegetation cover, transportation networks and land texture were photographed. The transect analysis, transportation, slope, hydrology, risk, land use, vegetation cover, sociological and demographic characteristics of Guzelbahce district were analyzed. As a result of these analyzes, it was investigated how "common spaces" and "nature-based design" can be created. For all these analyzes, GIS analyst tools, Adobe Photoshop, Google Earth and Autocad programs were used.

Güzelbahçe district is one of the touristic areas through the vicinity of the sea and the secondary housing uses are high. Paragliding and mountain tourism are popular in this area; therefore, these opportunities provide an increase in coming tourists. Besides, agricultural areas consist of strict agricultural areas and planted agricultural areas (İzmir Development Agency, 2014). As the case study area, the Olivelo competition area is

chosen in the Yelki neighborhood of Guzelbahce district, which has a total population of 36.727 in 2020 (Url-1) and the population of the neighborhood is 5.410 in 2020 (Url-2). The project area approximately has 57 hectares and under the status of "Qualified Natural Protection Area" and "Sustainable Protection and Controlled Use Area". The area is a transition zone located at the rural-urban fringe (Figure 1). Yelki neighborhood (primarily known as Seki) was built up in 1478. It is in the middle of Urla-Cesme Karaburun Peninsula and Izmir city center. The Guzelbahce-Seferihisar highway connection led to the site-based settlement developments on the agricultural areas from the coastal areas towards the interior areas (Pinar, 2012).

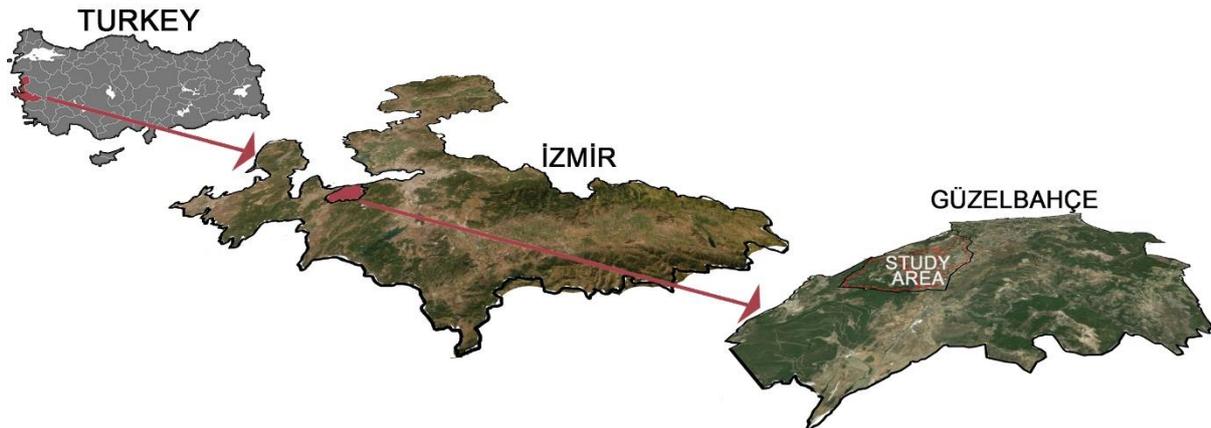


Figure 1. Study area

Hazar and Ozkan (2019) propose a green belt axis for Izmir including ecological corridors (streamlines), urban parks and fringe belts, which are the former urban peripheries that are embedded within the city during the historical development process. In contrast to densely built-up areas, fringe belts are the potential green belts and public spaces including open green areas, urban farming, industrial uses, industrial heritage sites, institutional uses, sport areas and recreational areas (Hazar & Kubat, 2015). Accordingly, the proposed green belt axis is developed and connected to the case area located on the rural-urban fringe in line with the "common space" approach (Figure 2-3).

Another analysis developed within the scope of the study is the "transect analysis". The term *transect* refers to the geographic cross-sections of a region, firstly used by Alexander von Humbolt in the 18th century as an analytical tool to define the habitats (Bohl and Plater-Zyberk, 2006), and by Andres Duany and Emily Talen (2002) in their study of "Making the Good Easy: The SmartCode Alternative". The term continued to be used as a definition of habitats in the following years. The sequence of transect provides continuity from rural to urban areas. The "transect analysis" is carried out to define the area and its surroundings, and a land definition was made from areas that we define as zero nature to areas where human intervention is higher (Figure 4-5).

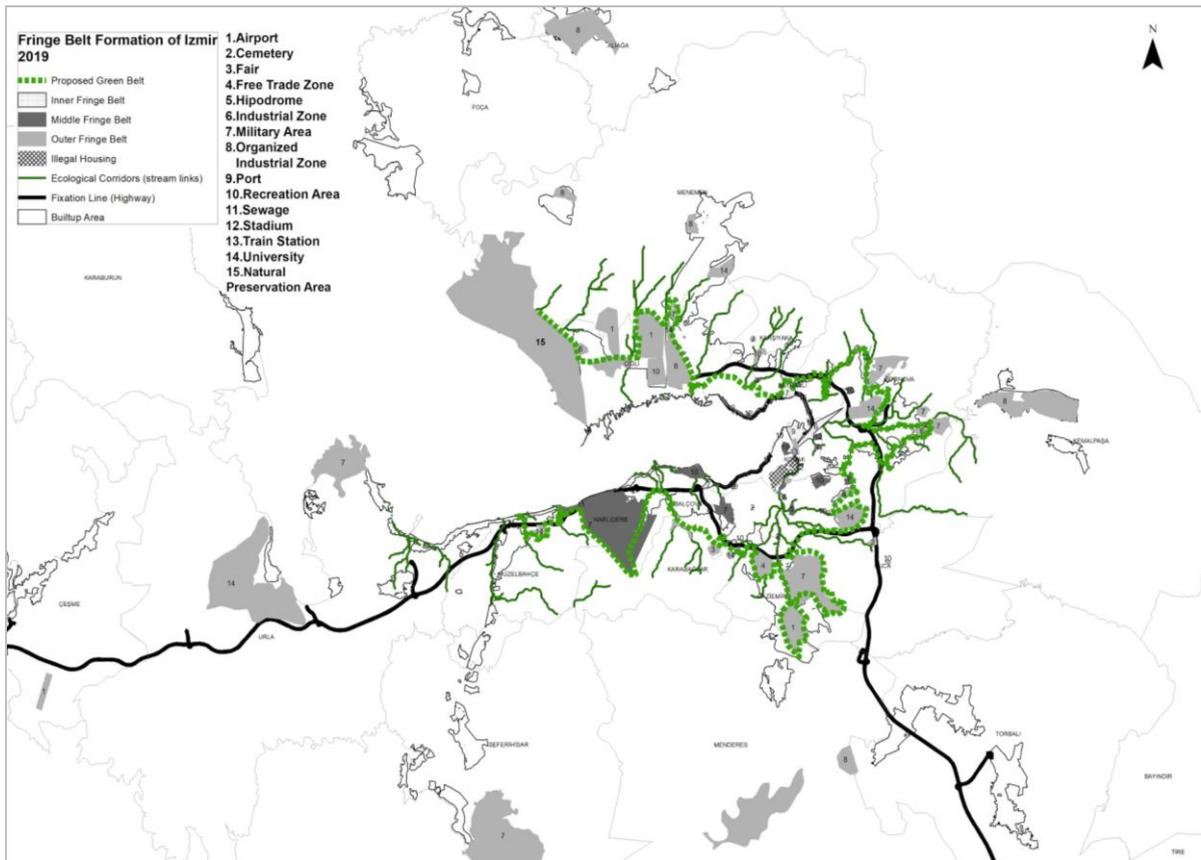


Figure 2. Proposed green belt axis of Izmir (Hazar & Ozkan, 2019).

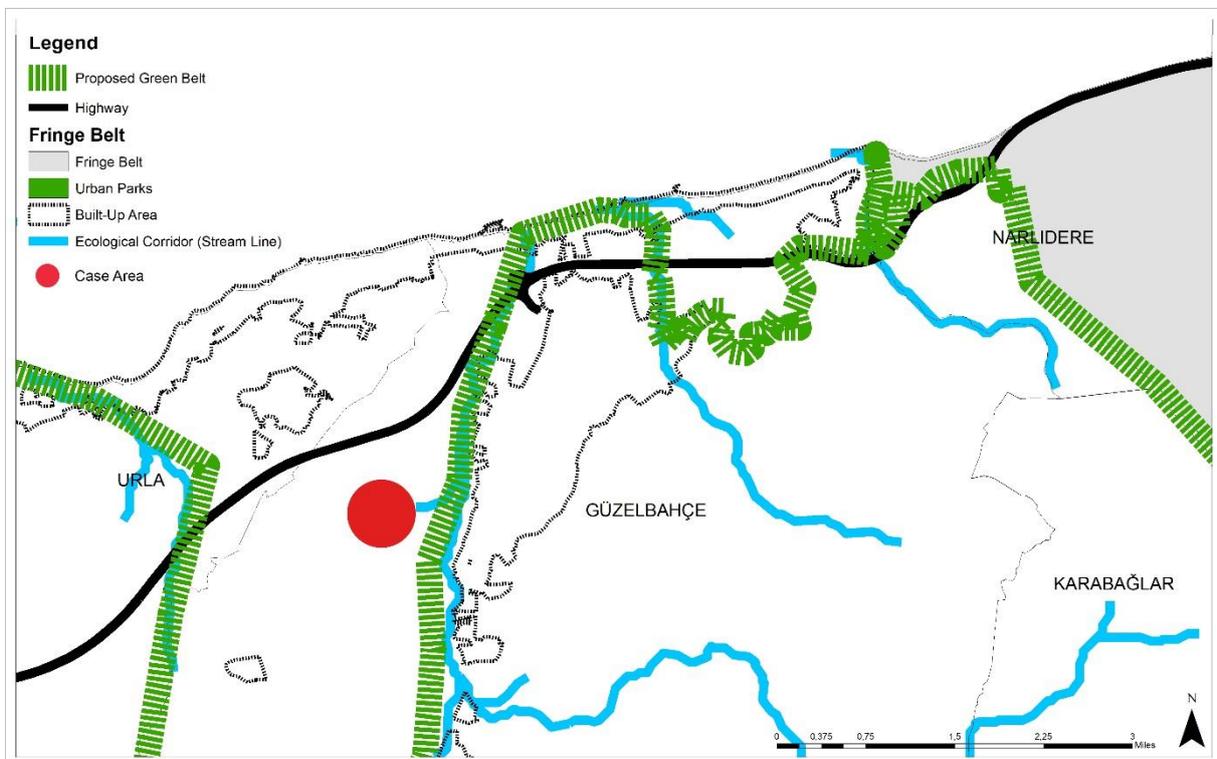


Figure 3. Proposed green belt axis and the case area.

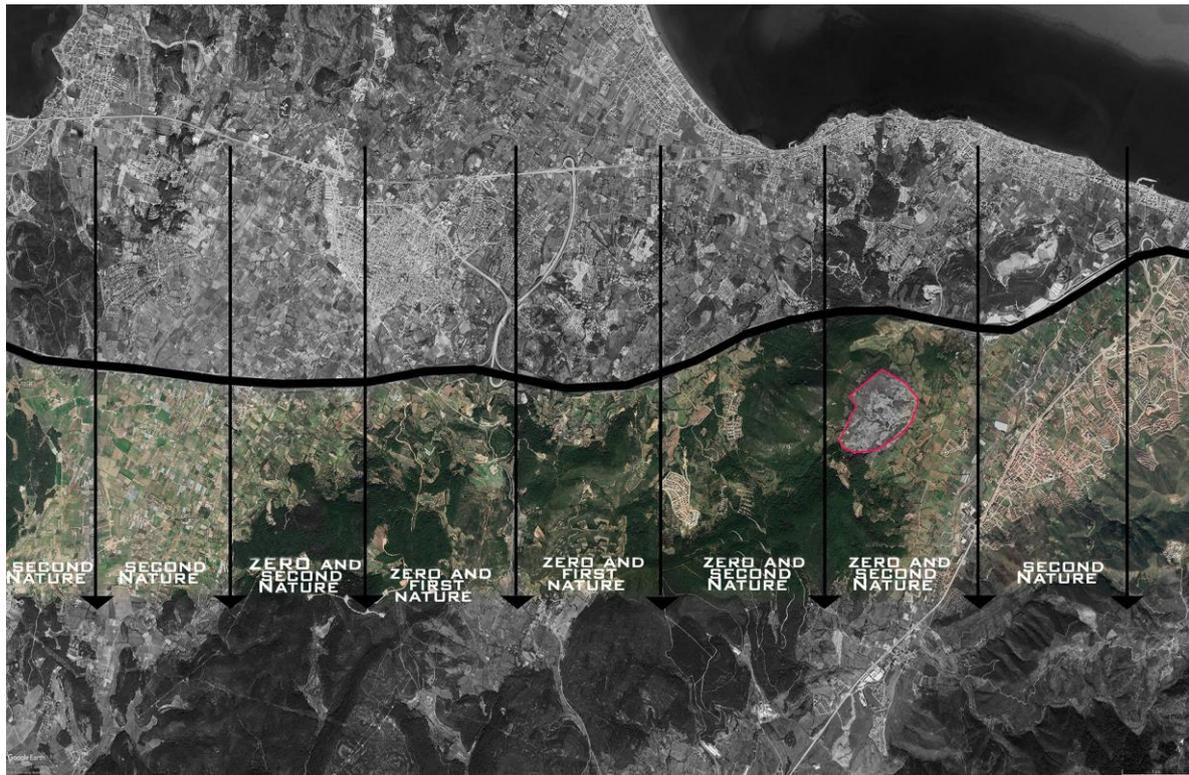


Figure 4. Guzelbahce transect model.

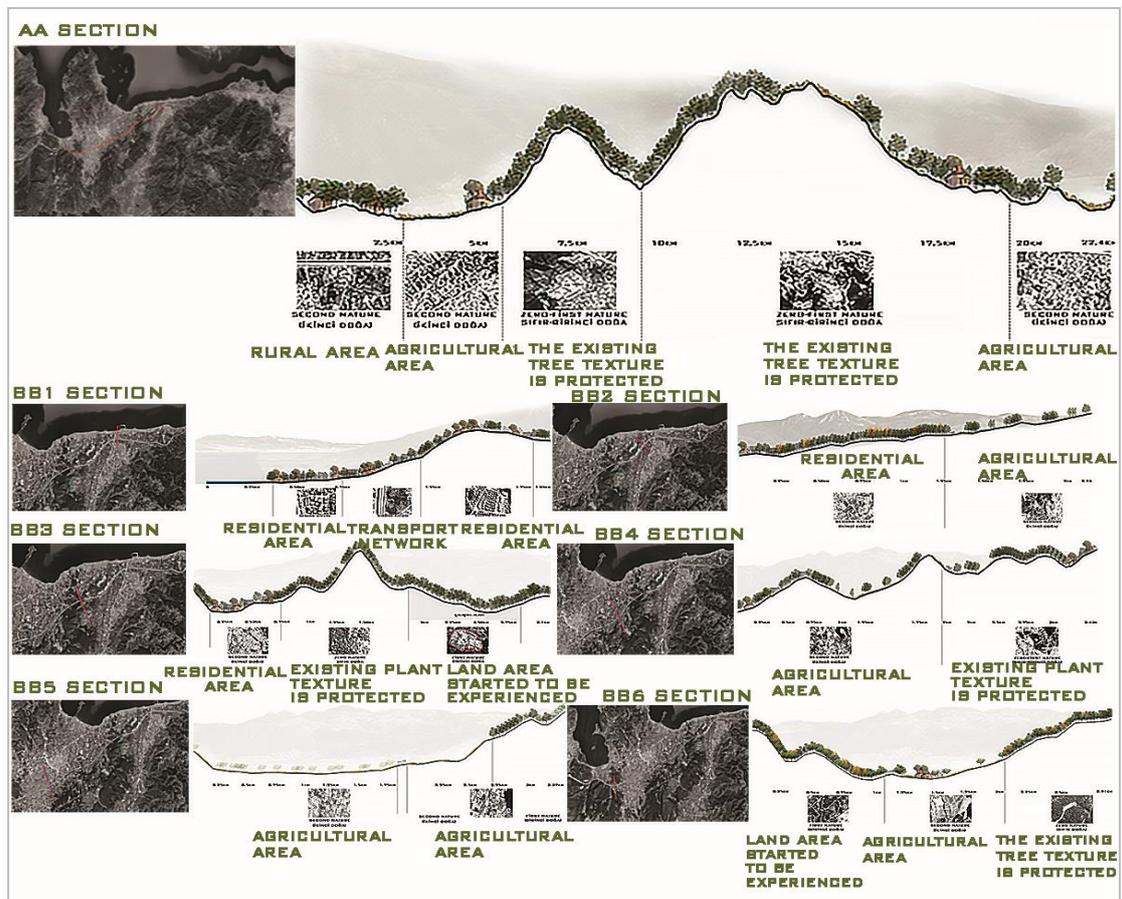


Figure 5. Guzelbahce transect model.



According to Andres Duany and Emily Talen, (2002) who use transect analysis for the new urbanism approach, this method consists of ecological principles for an urban planning approach. Also, this method is a significant analytical tool and it covers a linear cut across a landscape, usually horizontal, along a variety of systems and habitats is analyzed, measured. Besides this method generally is used by naturalists to describe the characteristics of ecosystems and also, the transition from one ecosystem to another (Steuteville, 2018).

According to Talen (2010), the elements of urbanism such as buildings, land use, street, and the other physical elements of the human elements can be organized by this approach. Transect planning uses urban to rural transect. The main elements of the transect have six different zones: T1- Natural, T2 - Rural, T3 - Sub-Urban, T4 - General Urban, T5 - Urban Center, and T6 - Urban Core (Figure 6).

The study area has been classified according to the transection zone with the current situation in each region. Accordingly, low density and less human intervention areas are specified as the " T1 - natural zone", areas, where rural activities are concentrated, are specified as "T2 - rural zone", areas where human intervention is more intense and agricultural activities continue are specified as "rural zone", and areas where human use is moderate and small gardens and balconies are produced are specified as "T3 - suburban zone". The areas where human population and human intervention are intense are called "T4 - urban zone" (Table 4).

Throughout the study, the degradation in the rural-urban fringe within the scope of the project area, the arising problems and solution proposals were discussed. As part of the solution, the "common space" approach has been proposed as an ecological station where rural and urban residents can come together with various activities.

The "Common Space" Approach

The case area evaluations reveal that a combined rural and urban space is necessary as an ecological common space and a "third nature" at the rural-urban fringe. Thus, the "common space" approach is proposed as an ecological station where the rural and urban residents can come together with various activities. In a broader sense; the common space, located at the intersection of the olive route and bicycle route of the Yarımada Peninsula, is a public ecological niche at the rural-urban fringe that will support the green belt of Izmir, which will serve as a buffer zone between the ongoing construction on natural areas and "Qualified Natural Protected Areas" with partial plan revisions.

Emphasizing the historical importance of the olive trees by transferring this importance and potential to the future, the development of cycling activities, agrotourism and health tourism in Izmir, and emphasizing the neighborhoods in order to keep the cultural and natural heritage alive is crucial.

The common space is a place where people can come together and engage in common activities in 12 months of the year, day and night, summer and winter, of all ages, sexes and income groups. It is predicted that the natural features, accessibility and hosting different functions of the area will be attractive elements for the area and its surroundings in the future (Figure 7).

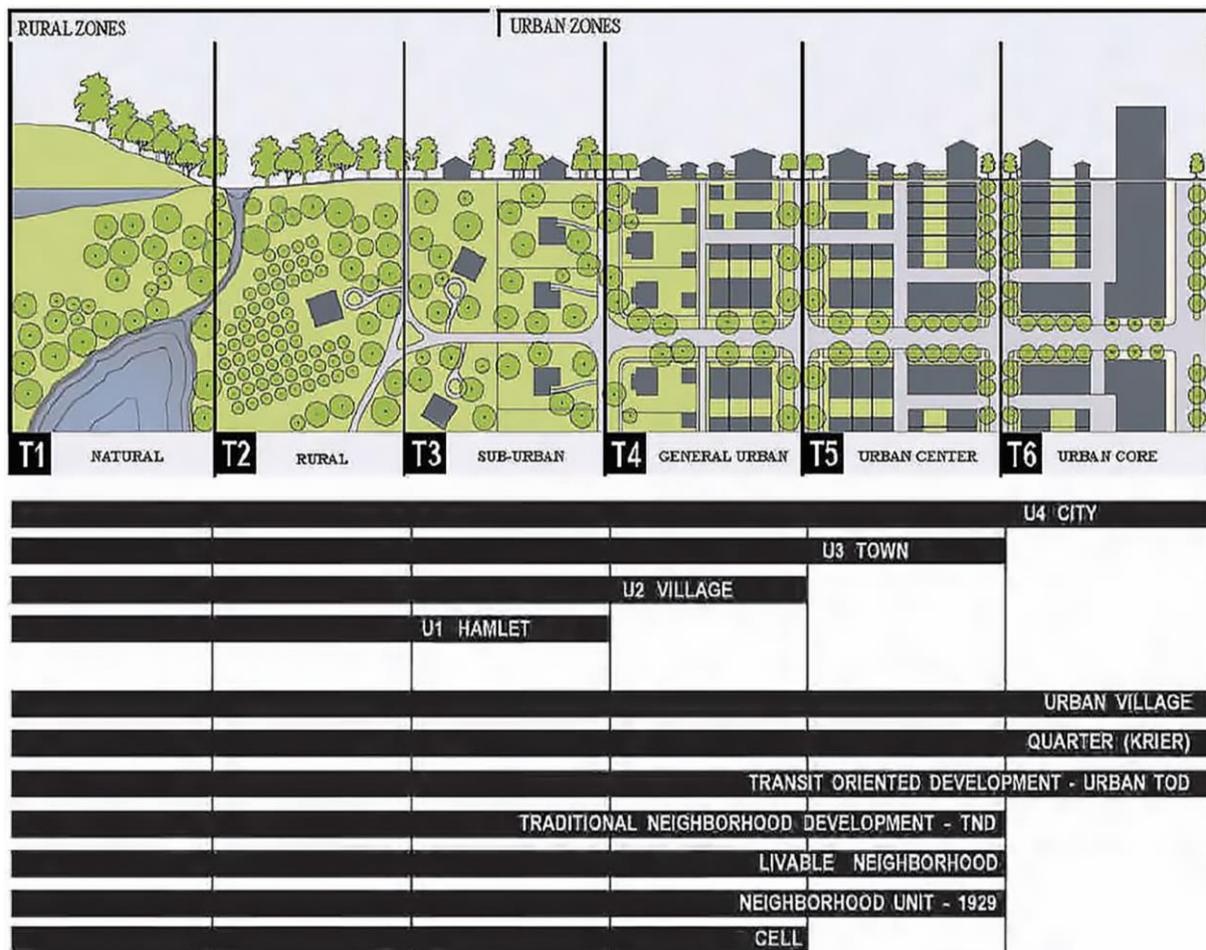
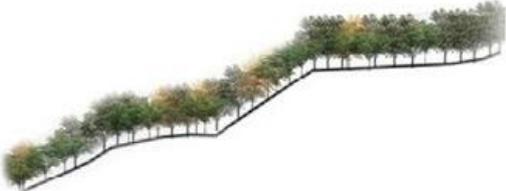
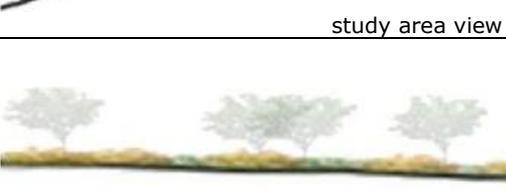


Figure 6. The transect system (Bohl and Plater-Zyberk, 2006)

Table 4. The characteristics of transect analysis in the study area.

THE CHARACTER OF TRANSECT ANALYSIS		
Natural Zone	<p>Zero Nature (Pure, no human interference phase)</p>	 <p style="text-align: center;">study area view</p> <ul style="list-style-type: none"> • low density, • existing green pattern, • local plant pattern, • land texture without human interference
Rural Zone	<p>First Nature (The phase that human intervention begins and experiences nature)</p>	 <p style="text-align: center;">study area view</p> <ul style="list-style-type: none"> • low density, • rural area, • agricultural areas, • pastures, • reforested areas
Rural Zone	<p>Second Nature (the phase that human intervention exists and begins to cultivate the land)</p>	 <p style="text-align: center;">study area view</p> <ul style="list-style-type: none"> • low density, • agricultural areas, • pastures, • reforestation areas • unpaved roads

Suburban Zone	<p>Second Nature (the phase that human intervention exists and begins to cultivate the land)</p>		<ul style="list-style-type: none"> • medium density, • commercial agricultural areas, • community gardens, • residential areas, • reforestation areas • green streets
Urban Zone	<p>Second Nature (Apartment blocks, public spaces)</p>		<ul style="list-style-type: none"> • high density, • residential areas, • urban roads, • green streets, • public spaces
Urban Zone	<p>Third Nature (Urban parks, urban gardens, community gardens)</p>		<ul style="list-style-type: none"> • recreation areas, • community gardens, • green ways-green roofs, • green streets, • urban parks

The organization of the enterprises in the common space can be with the cooperation of public-public and public-association. In this way, the area is *commonized* and functions as a common ecological niche with an open to the access and use of all segments. The stakeholders of the common space are, in particular, Izmir Metropolitan Municipality, Guzelbahce Municipality, Guzelbahce District Governorship, Union of Peninsula Municipalities, Izmir Development Agency, Guzelbahce City Council, District Food, Agriculture and Livestock Directorate, Muhtars, Universities, Guzelbahce Agriculture Credit Cooperative, Nature Association (Nature School), Zeytince Association (Olive School), Beekeeping Association (Petek School) and Bicycle Cooperative (BİSİKOOP) proposed within the scope of the project, other related foundations and associations and all citizens living in Izmir and integrated with the area (Table 5).

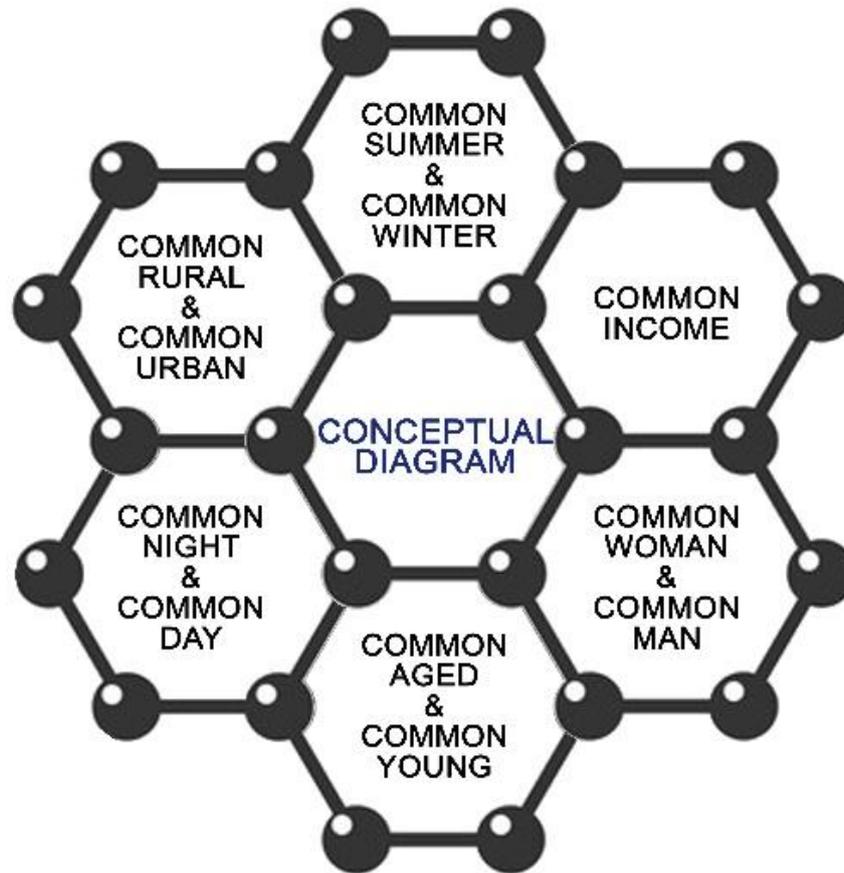


Figure 7. Conceptual Diagram.

Table 5. Organizational partnerships.

Stakeholders	Public-to-Public
Institutions	Izmir Metropolitan Municipality, Guzelbahce Municipality, Guzelbahce District Governorship, District Directorate of Agriculture, Headmen, Universities, Izmir Development Agency
NGOs	Guzelbahce City Council, Yarimada Municipality Union, Doga Assoc., Zeytince Assoc., Apiculture Assoc., other associations and foundations
Cooperatives	Bicycle coop., Guzelbahce agricultural credit coop.
Residents	Local residents in Guzelbahce and Yelki

Within the scope of the study, considering these concepts, the project area and its surroundings are divided into different nature types and analyzed. In this context, the following definitions have been accepted and *sewing* and *loop* tools as *design tools* are proposed for the common ecological station at the rural-urban fringe. In this context; Zero Nature: Areas that are not touched by human hands, mean pure nature. First Nature: Nature comes out of its purity and becomes the field used by humans. Second Nature: Nature becomes the living space of man; agricultural areas, residential, industrial and commercial areas are included in this section. Third Nature: Man becomes aware of his longing for nature again and begins to design habitable spaces. For these purposes, combining sewing and loop approaches are discussed. These approaches reflect the "Common Space Approach" and provide social life and economic activities, ecologic balance. Especially, the phenomenon of olive is a basic tool for this approach.

While the *sewing approach* describes the character of the area within the four specified layers of nature, that are interpreted with social and physical activity, and integrity achieved by creating smooth transitions between layers the *loop approach* describes the

process from production to seasonal operation to create a self-sustained area. Social, economic and ecologic activities convert existing natural type. According to "Common Space Approach", generally, zero nature type protect in all area, and also first nature type is expanded for protecting natural character. Thanks to the first nature character, people can experience nature by doing an activity, and thus they can learn to preserve the natural area. In addition, first, natural design tools involve walking roads and bicycle roads. In this approach, second nature represents agricultural activity, olive production and social activity spaces (Figure 8).

COMMON SPACE APPROACH		
SEWING APPROACH		LOOP APPROACH
	<p>ZERO NATURE</p> <p>SEWING APPROACH 1</p> <p>ZERO NATURE</p>	<p>THE OLIVE LOOP</p> <p>COLLECTION OF OLIVES AND PROCESSING OLIVE AND OLIVE OIL PRODUCTION EXPERIENCE OF OLIVE IN SOCIAL LIFE</p>
	<p>CONTINUATION OF THE PROTECTION ZONE</p> <p>CONNECTING THE GREEN TEXTURE TO THE ACTIVITY AREA</p> <p>INCREASING MOBILITY</p> <p>CREATING PUBLIC SPACE</p>	
	<p>SECOND NATURE</p> <p>SEWING APPROACH 2</p> <p>SECOND NATURE</p>	<p>ECONOMY LOOP</p> <p>FLOWER GREENHOUSE SHEEP AND GOAT FARMING VINE CULTIVATION</p>
	<p>CONTINUATION OF AGRICULTURAL AREAS TOWARDS THE CITY, EXPANSION OF PRODUCTION, DIVERSITY OF AGRICULTURAL PRODUCTS</p> <p>PUBLIC USE/TO BE COMMON</p>	
	<p>SECOND NATURE</p> <p>SEWING APPROACH 3</p> <p>SECOND NATURE</p>	<p>SOCIAL LIFE LOOP</p> <p>RECREATION ACTIVITIES COMMON USE HOBBY GARDENS ECOLOGICAL LIFE OBSERVATION POINTS BICYCLE AND PEDESTRIAN ROADS</p>
	<p>CREATING LIVABLE ENVIRONMENTS, ESTABLISHMENT OF URBAN AGRICULTURE, LOW CARBON TRANSPORTATION SYSTEMS INTEGRATION</p> <p>AVAILABILITY / COMMON USE</p>	
	<p>SECOND NATURE</p> <p>SEWING APPROACH 4</p> <p>SECOND NATURE</p>	<p>ECOLOGICAL LOOP</p> <p>CARBON LOOP HERBAL LOOP WATER LOOP FOREST LOOP</p>
	<p>OLIVE AREA</p> <p>INCREASING OLIVE PRODUCTION DEVELOPMENT OF THE OLIVE PRODUCTION SYSTEM EXPANDING OLIVE PRODUCTION</p> <p>PUBLIC USE/TO BE COMMON</p>	
	<p>SECOND NATURE</p> <p>SEWING APPROACH 5</p> <p>SECOND NATURE</p>	
	<p>BICYCLE AND PEDESTRIAN TRAILS</p> <p>CONTINUITY OF BICYCLE AND PEDESTRIAN PATHS THE INCREASE OF ACCESSORIES FOR CYCLISTS INCREASING SECURITY</p> <p>PUBLIC USE/TO BE COMMON AVAILABILITY / COMMON USE</p>	
	<p>FIRST NATURE</p> <p>SEWING APPROACH 6</p> <p>FIRST NATURE</p>	
	<p>ACTIVITIES</p> <p>MOUNTAIN BIKE HIKING WINDSURF JUMPING WITH PARACHUTE SLOPE SPORT</p> <p>PUBLIC USE/TO BE COMMON</p>	
	<p>SECOND NATURE</p> <p>SEWING APPROACH 7</p> <p>SECOND NATURE</p>	
	<p>HISTORICAL AND NATURAL PLACES</p> <p>KUCUKKAYA VILLAGE INKAYA CAVE QUARANTINE ISLAND URLA CENTER</p>	

Figure 8. Common Space Approach (Sewing & Loop Approach).

Looking at the sewing and loop approaches; the first one refers to linear operation, while the latter one refers to spot processing. The loop approach has a functioning within itself, which links to various physical and social activities.

Several spatial, economical, ecological and socio-cultural problems were determined in the study area. The main problems and solution proposals are evaluated in Table 6.



Table 6. Determinations and recommendations.

Policies	Potentials	Problems	Recommendations
Spatial	<ul style="list-style-type: none"> -Village square and village coffeehouse within the built area -Stone architectural structures suitable for the texture of the village -Transport, communication and infrastructure systems development 	<ul style="list-style-type: none"> -Urban sprawl -Urbanization pressure on agricultural lands -Inaccessibility -Housing sites in agricultural areas -New housing projects on Seferihisar road and towards CamlıCay stream 	<ul style="list-style-type: none"> -The "Common Space" approach to the rural-urban fringe -Rural planning -Rural transformation -Bicycle route
Economical	<ul style="list-style-type: none"> -Agricultural areas (citrus gardens, greenhouses, floristry) -Olive groves (monumental olive trees, olive mills, olive oil factories) -Husbandry -Farms -Local markets -Commercial function on Izmir-Seferihisar highway 	<ul style="list-style-type: none"> -Decrease in the agricultural sector -Decrease in sheep and goat farming -Decrease in irrigated farming 	<ul style="list-style-type: none"> -Promoting combined economic sectors such as agrotourism and ecotourism -Agricultural markets link to the olive route -Smart farming -Holistic production -Agricultural industry -Cold chain -Apiculture
Ecological	<ul style="list-style-type: none"> -CamlıCay stream -Natural assets -Conservation areas 	<ul style="list-style-type: none"> -Environmental degradation -Landscape fragmentation -The fragmentation of wildlife -The extinction of local plants 	<ul style="list-style-type: none"> -Creating a buffer zone to eliminate the negative externalities of the urban to the rural and nature -Third nature -Sewing and loop approach
Socio-Cultural	<ul style="list-style-type: none"> -Local flavors -Village customs and traditions 	<ul style="list-style-type: none"> -Rapid population increases -Private schools -Rural gentrification -Gated community 	<ul style="list-style-type: none"> -Socio-cultural integration policies -Local sustainable development to protect the residents

CONCLUSION

Along with the beginning of the migration from rural areas to urban areas and rapid urbanization towards the rural areas, the distinction between urban and rural has disappeared. In addition, human interventions have begun in natural areas and thus "zero nature" has started to disappear. As a result, architects, city planners, landscape architects and other relevant professions have started to investigate on the rural areas and recently the rural-urban fringe, individually or commonly carrying out the projects to improve the damaged natural areas. Some of the most fundamental studies carried out in this context are the "Garden City" by Ebenezer Howard (1902), the "Neighborhood Unit" by Clarence Perry (1920) and the "New Urbanism" by Andres Duany and Elizabeth Plater-Zyberk (the 1980s).

Within this scope, the study area was firstly characterized by a transect analysis, and then tried to be improved with sewing and looping design tools along with the determinations and recommendations within the "common space" approach. The sewing approach aims to repair the disconnection between zero natural zone, urban and rural zones, and it is also aimed for people to experience these areas with social activities. With the approach, it is aimed to make the region sustainable according to day, night, seasonal transitions and uses. In this way, an improvement study was carried out with the information conducted from the literature.



The *design philosophy* of the "common space" can reflect the "return to nature by human hand" interventions, which define the *third nature*, within the three nature layers of Hunt (2000), in the reinforcement elements proposed within the scope of the study. The study aims to emphasize the historical importance of olives in the area and to transfer this importance and potential to the future, to develop cycling activities and healthy life in Izmir, and to emphasize the neighborhoods to keep the cultural and natural heritage alive.

Ecologically-sensitive planning approaches and policies should be implemented in order not to cause irreversible damage to nature. Before deciding on these policies, based on the basic philosophy of "think globally, apply locally", a participatory approach should be followed, in which everyone who knows the geography well, lives there or who will be affected by these decisions can be included (Uzun et al., 2015). The rural-urban fringe has great potential; and thus, can be the economic, ecological and socio-cultural integration station of both urban and rural residents as a transition zone. Thus, the rural and urban areas can function together without losing their origins and destroying one another. In *ecologically-sensitive planning*, considering the cycles in nature, it is one of the first issues to consider how agricultural production will affect the ecosystem and its environment in the long term. Therefore, in successfully implementing plans, all factors must be considered, including the socio-economic conditions peculiar to the locality, besides a fundamental factor such as ecology in particular.

The fact that the study area is located in one of the cities that receive the most immigration in Turkey, the pressure of urbanization on agricultural areas as a result of urban sprawl, new housing projects and landscape fragmentation towards Seferihisar road and Çamlıçay stream, rural gentrification etc. brings with it many problems. However, besides these problems; it is also observed that the local village texture can still be seen in the area, olive groves, natural assets, farms and the continuity of village traditions, an area that has not yet completely passed from the rural-urban zone to the urban zone. For this reason, the "common approach" in the study, the third nature and sewing & loop approaches mentioned in the literature will set a good example in this field. The proposed rural plans will promote smart agriculture, holistic production, bicycle routes, agricultural markets and unified economic sectors. In addition, the necessity for a rural guide should be questioned in order to create a buffer zone in order to eliminate the negative externalities of the city to the countryside and nature.

Today, it is frequently mentioned in the literature of planning and landscape architecture that we cannot define strict boundaries between rural and urban areas (Tekeli, 2004). However, "living spaces", which we practically call *rural*, are defined in terms of the city, evaluated through its contribution to the city, and handled with an urban attitude. However, this attitude frequently ignores the *delicacy*, *richness* and *own existence* of these areas. Understanding the dynamics, life rhythm, relationships and textures of the rural is a difficult task for the designers. As a matter of fact, all these features are intertwined with each other. The fact that *rural design* is a subject that is discussed mostly over architectural content, and attempting to design without understanding the core values that make the rural leads to spatial designs that take the rural space apart from its essence and transform it into an invasion of conventional designs (Erdem Kaya, 2018).

The political context of the rural is another important issue. The 21st century rural is a *transforming landscape* with challenging conditions far from past. The rural residents that are affected from this transformation process are no longer in their *common lands*; they are in the *enclosed areas*, which eventually result in the socio-spatial changes on the *rural memory* (Erdem Kaya, 2018; Hazar & Velibeyoğlu, 2019). Thus, reconstituting the *common rural memory* is an important task and necessity for the future of the rural-



ecological commons, rural itself as an essence, rural life practices, local implicit knowledge, rural-nature interaction, rich morphological structures and rural space as a space of common/collective life; a *common space*.

The planning and design of rural areas in Turkey still barely takes part in the spatial planning system. Due to the planning approaches in the study, methods can be developed for zoning and planning problems of the transition regions. In future studies, it is necessary to conduct more studies on the rural landscape planning policies and design criteria in terms of rural transformation and transition model in order to reduce the urban pressure on the rural-urban fringe and promote the sustainability of rural areas and rural-ecological commons.

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