



## **Wind Farm Conflicts on the Rural-Ecological Commons: The Case of Karaburun**

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### **ABSTRACT**

With the growing urbanization trend, the disappearance of the strict borders between the rural and urban areas have accelerated and this has increased the heightening pressure towards the rural areas. Also, with the transformation of villages into neighborhoods by means of legislation (Law No. 6360), the common lands, as essential parts of the rural, are under the threat of enclosure. As infrastructural developments, renewable energy appears as one of the triggering agents of the enclosure threats. Renewables are seen as an eco-friendly type of development, which also have political and social legitimacy due to the global concerns of energy-related environmental problems. However, since the wind farms started to be located especially on the rural-ecological commons, several conflicts have emerged. This paper aims to investigate the transformative impacts of wind farm deployments on the rural-ecological commons on the case of Karaburun, the peripheral rural district of İzmir. The study will focus on the conflicts and local oppositions against wind energy investments in order to reveal the fundamental conflicts in relation with the enclosure movements on rural common lands. The methodology of the study is based on media search, in-depth interviews with NGOs and personal observations, which reveal the fundamental conflicts on the pastures in Karaburun.

**Keywords:** Renewable Energy, Wind Farms, Commons, Rural Planning, Karaburun

### **1. INTRODUCTION**

The growing urbanization trend has brought along with it the disappearance of strict rural-urban borders. This has resulted in intensified pressure on the rural, which is primarily exposed by the new infrastructural developments. One of these developments that has started to take place are energy developments to meet the energy hunger of modern cities. Among these, renewables have come to the forefront, which have great importance in terms of transition to low carbon energy and sustainable development (Bridge et.al., 2013). Wind energy has especially led the way as a great source of low-carbon electricity and large-scale and affordable alternative of energy provision (Yanıktepe et.al., 2013).

While support for wind energy has recently grown throughout the world, their large-scale deployment has accelerated which has started to expose major conflicts around the world (Avila, 2018), especially at the rural periphery because of locational choices. A similar problem has been experienced in Turkey, as the energy demand of densely populated urban areas and the 'high energy society' is expected to grow further in terms of economy and population. Thus, new energy developments have taken place especially at the rural periphery for meeting the growing energy need of the urban areas. The rural periphery of Izmir is particularly exposed to great pressures of wind energy investments because it provides suitable sites with high wind potential. Furthermore, the villages of Turkey have been transformed into neighborhoods by the 6360 numbered Metropolitan Law (2012), which may result in rural common lands being enclosed by several



initiatives, legislations and malpractices, paving the way for new infrastructural developments. The disappearance of the village legal entities due to the Law resulted in several ambiguities, especially regarding the rural-ecological commons. Eventually, all these processes including wind energy deployments have created an enclosure pressure on the rural-ecological commons, threatening their future.

Since the wind farm developments have started to be located predominantly on the rural common lands, several conflicts have emerged in Izmir. These conflicts have erupted due to local opposition seeking to protect rural areas as soon as the wind energy plants have been constructed in the proximity of rural settlements (Wolsink, 2007). Thus, these developments, along with the enactment of the 6360 numbered Metropolitan Law call for a 'right to the rural' attitude in order to protect the rights of the villagers to access the commons in opposition to the private investments (Saker et. al., 2015).

Commodification of the agricultural lands, enclosure movements on the commons and the resulting decrease of ecological sustainability are the main conflicts at the rural-ecological commons (Ostrom, 1990). Resource dependent activities, especially quarries, mines and several energy investments such as geothermal and wind energy demand the appropriation of the rural-common lands. Wind energy investments on pastures, public treasury lands and forests result in numerous civil actions from local residents, as they need these common lands for their rural everyday life and rural practices.

The study aims to reveal the fundamental conflicts and the transformative impacts of the enclosure and commodification processes at the rural-ecological commons by focusing on the wind farm development processes. In this context, it focuses on the pastures in Karaburun (İzmir), which have gradually decreased in number and quality. It is crucial to emphasize that the importance of the rural-ecological commons in terms of ecological sustainability requires a further analysis and evaluation to generate the pasture dimensions and rural planning parameters due to the very limited number of prior studies.

## **2. METHODOLOGY AND FIELD OF STUDY**

### **2.1. Methodology**

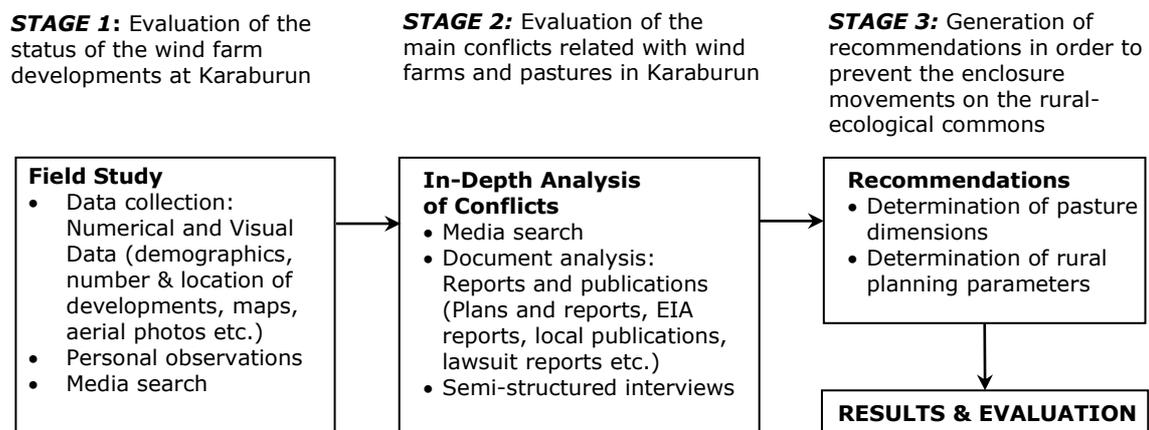
The study focuses on the conflicts triggered by the wind energy developments at the rural periphery of İzmir. Karaburun was selected as the case study area for analyzing the conflicts, because it stands out as the place with strong and organized opposition and constitutes the first example of legal struggle against the wind energy developments in Turkey (Özçam, 2016).

The methodology of the study is based on media search, in-depth interviews with key stakeholders and personal observations, which reveal the fundamental conflicts on the pastures in Karaburun. The study tends to be more concerned with interpreting the situation and gaining an understanding on the reasons behind the tensions on rural-ecological commons. Therefore, it inquires subjective data such as personal observations, concerns and perspectives of people involved in the process of conflict, in order to have an in-depth understanding of the underlying factors of the situation. The qualitative data collection methods such as in-depth interviews, media search, participant observation, and secondary data collection such as statistical data, visual documents, maps and aerial photos are used to analyze the case.

A three-stage model has been developed for identifying the conflicts and establishing pasture dimensions and rural planning parameters. The flow chart of the model is given in Figure 1.

*In Stage 1;* in order to evaluate the status of wind farm developments at Karaburun, web-search has been done to collect numerical and visual data on wind farm

developments in the region. This stage has been extended with media search in addition with personal observations, in order to have a general understanding on the status of wind farm developments and related local oppositions. *In Stage 2*; in order to deeply evaluate the arisen conflicts related with wind farms and rural-ecological commons, in particular pastures, an in-depth analysis with qualitative data collection methods have been done. In this stage, documents related to site selection of the wind farms, development plans with reports, environmental impact assessments reports, locally produced reports and publications as well as lawsuits reports are collected and examined. Media search has been done and related news have been collected and analysed. Moreover, semi-structured interviews are conducted with key stakeholders in the process. *In Stage 3*; in order to prevent the enclosure movements on the rural-ecological commons, recommendations in terms of pasture dimensions and rural planning parameters are generated.



**Figure 1.** Flow chart of the methodology of the study

### 3. STUDY AREA

#### 3.1. The Rural-Ecological Commons

Commons are the social systems in which the common users and producers decide the usage, production and distribution methods and usage of the common resources within a bottom-up administration of the users. Commons are of prime importance for both anti-capitalist social movements and the capital itself because commons are produced and locate against the capital, which demands the absorption and enclosure and have a possibility to be a social power (De Angelis and Harvie, 2014).

The International Association for the Study of Commons (IASC) reveals the definition of common resources as both the embraced spaces in the city centers (e.g. public parks, occupy movements) and the common pool resources with a limited access within the consensus of the communities (Adaman et.al., 2017). Common spaces can be defined as the spaces of public use and collective ownership, which belongs to society as a whole with free access (Santos Junior, 2014). Commons are divided into several groups: rural commons; ecological commons (e.g. air, water bodies, and pastures); and urban/civic commons (e.g. streets, public spaces, and public transit), which can also be defined as the public goods (Gidwani and Baviskar, 2011; Ostrom, 1990).

Hardin (1968), a neo-Malthusian ecologist, brought forward the idea of 'tragedy of the commons', which claims that the finite natural resources cannot support the exponential population growth. Accordingly, the population problem cannot be solved by the conscience of the human beings in such a system of profit maximization (capitalism). Hardin claimed the necessity of a finite, optimum population with a limited access to the commons and proposed two solutions: (1) private enterprise, and (2) government



control. Eventually, these propositions have become arguments on behalf of enclosure movements (Hazar, 2018).

Hardin's view is criticized by many, including Ostrom (1990), as the privatization or government control cannot guarantee the sustainable use of natural resources. As a political economist, Ostrom proposed an alternative solution for the management of the commons, 'collective action' through the traditional limited access to the commons by the common users (e.g. village pastures, fisheries) in her study of 'financial governance and commons analysis' and gained a Nobel Prize in Economics. She has revealed several case studies and examples that there could be other solutions, involving cooperation and collective unities. Eventually, Hardin's 'tragedy of commons' has been accused of providing a basis for capital to attack the common resources by triggering the attempts at privatization (Hazar, 2018).

This study focuses on the situation of pastures in Karaburun, which are an integral part of the 'rural-ecological commons' and crucial in terms of ecological sustainability, biodiversity, CO<sub>2</sub> absorption, erosion prevention, and common culture and tradition (Hazar, 2018). Pastures cover approximately 3.5-billion-hectares of land, which is 72% of the total agricultural land and 27% of the total land in the world. Pastures are vital natural resources that provide free forage crops for husbandry. However, in Turkey, due to irregular, unseasonable and heavy malpractices, pastures continuously lose their productivity, in parallel with occupations by urbanization and rural settlements, public investments and appropriation for other uses such as agriculture, wind energy plants, quarries and mining; and thus, require urgent protection (Avcıoğlu et. al., 2009).

### **3.2. The Rise of Renewables and Wind Energy**

On the renewable energies side, it is seen that the need for a transition to low-carbon energy systems has recently gained great urgency in the world with heightening concerns related to global warming and climate change. Renewables in general and wind energy in particular has started to be seen as an efficient tool to solve the social and environmental problems triggered by rising energy-hunger and anthropogenic activities (Tekeli and Ataöv, 2017).

Through the legitimization based on environmental concerns, wind energy developments have intensified, and this has been guided mainly by state interventions. The main motivation behind this is that the renewables and wind energy in particular, offer a way of reducing greenhouse gas emissions, as they are considered as low-carbon and environmentally friendly. Therefore, they have a key role in the efforts to combat the climate change. Parallely, low-carbon technologies including renewables have become an important economic sector providing new types of investment and renewables have gained high public and policy support, which resulted in the rapidly increasing investments in renewables (Matthews and Paterson, 2005; Atlı, 2012).

Moreover, recent policies have accelerated the commodification of all fields of services for opening up the new areas for profit making and these marketization and commodification processes have been directly mediated by state institutions. Therefore, the role of the state in regulating the economy has increased through its encouragement of large-scale projects (Bayırbağ and Penpeciöğlü, 2017). In that sense, states are expected to support and stimulate the renewable energy market creation with regulatory arrangements and incentive mechanisms (Atlı, 2012). Concordantly, rural hinterlands have started to be seen by the state as profit-making assets on which privatization can provide new sites for capital accumulation. As a result, rural areas have started to be affected by large-scale infrastructural developments, including large-scale energy investments increased due to the privatization and liberalization policies (Brenner, 2004; 2013).



Relatedly, the privatization of large-scale energy provision systems in the neoliberal period has accelerated the investments in the energy sector. Renewables started to expand as an eco-friendly type of development, which profits political and social legitimacy due to global concerns of energy-related environmental problems. As a result, they started to be infused into the rural areas worldwide and the changes caused by wind farm developments started to create several conflicts at the local level (Toke et.al., 2008; Peker, 2013; Arslan and Uzun, 2017).

The key issue in the tensions related to energy developments is that regardless of being environmentally friendly or not, wind energy developments as infrastructural developments are rapidly spreading on natural and rural areas (Avila, 2018), as well as on the rural-ecological commons. The changes brought by the wind power plants are perceived by the local residents as violations committed by foreign structures (Woods, 2003) and the intrusion of the power plants into the rural creates a significant transformation not only on rural landscape, but also on rural daily lives and practices, rural culture and rural identity. This mainly leads local residents to be concerned about their common lands, the reciprocal relationship they build with them and also their living environment and livelihoods.

Until very recently, many studies explained the local oppositions as grounded on the concerns on the impacts of new developments on local environments and livelihoods (e.g. Van der Horst, 2005; Wolsink, 2007). Any development causes changes in land uses, so they may be considered as 'objectionable', even if deemed nationally needed (Kaya and Erol, 2016). Possible changes caused by different technologies, such as wind energy, can also be considered objectionable as they have negative externalities on the local environment and people. These concerns primarily include environmental damages, visual disturbances and noise pollution (Wolsink, 2007). Moreover, economic damages can also be added to the externalities, caused by land use changes in favor of the energy fields. All of these are considered as the primary reasons for the conflicts on the rural-ecological commons, especially if they occur due to a large-scale, mass-production development (Devine-Wright, 2009).

In addition, issues of trust, justice and participation in development processes are important determinants of acceptance at the locality. Procedural justice is also taken as an important determinant (Mundaca et al., 2018). Wüstenhagen et al. (2007) emphasize the role of justice and community trust in development processes for the community acceptance of wind energy investments. Socio-political and market acceptance is mostly high for wind energy developments as they have support from the general public and there is positive motivation on the side of the investors. However, the decision to invest should be approved by different stakeholders. Ignoring and excluding the local demands and concerns during the planning and decision-making process provokes reactions from localities and increases the level of opposition to wind power (Peker, 2013). Procedurally just processes are also expected from different stakeholders, as the power structures can dominate development processes and creates unjust conditions regarding decisions (Mundaca et al., 2018). Thus, the decisions and procedures regarding wind energy developments should be acceptable not only by government institutions and investors but also by local institutions and people in order to provide equity and fairness (Wüstenhagen et al., 2007; Peker, 2013; Mundaca et al., 2018).

Today, the new perspectives on oppositions against wind energy, have moved beyond the problem-solution perspectives such as the NIMBY syndrome denoting the oppositional behavior as motivated only by individual self-interests (Wolsink, 2007), and the social gap perspective explaining the problem as the gap between high public support and low success rate in implementation (Bell et al. 2013), that all seek to solve the block over the growth of the wind energy industry (Avila, 2018). New perspectives now started



to address more heterogeneous claims coming from different social groups with different relationships with rural (Jessup 2010; Avila, 2018).

#### **4. ANALYSIS**

##### **4.1. The Conflicts on Pastures in İzmir**

According to the 4342 numbered Pasture Law (1998), pastures are defined as “the lands which were previously assigned for the public use or which were used as pastures since the ancient times”. Pastures are under the provision and ownership of the State that are assigned to the use of one or few village(s) or town/county municipalities to utilize for grazing or vegetation. The common benefit and use of these areas are under the control of the villages or municipalities. There are four types of pasture property in Turkey: (1) public treasury common property; (2) village legal entity; (3) appendant endowments, and (4) private property (Hazar, 2018).

Pastures are rural-ecological commons and cannot be carried over to private property or cannot be used out of purpose. However, their ‘use right’ can be rented according to the principles specified by the regulations (e.g. mining, tourism, public investments, village implementary development plans, land conservation, national parks, forest conservation, flood control, stream and water resource rearrangements, geothermal resources, public emergency and security situations). Additional regulations in the 4342 numbered Pasture Law allowed the 6306 numbered Urban Renewal Law to the out-of-purpose use of the pastures by the permission of Ministry of Environment and Urbanization. Moreover, added regulations in the 4342 numbered Pasture Law created the risk of more building constructions on the pastures by the land allocation acts (e.g. urban renewal projects). The 4342 numbered Pasture Law aims to provide protection and reclamation for the degraded pastures in Turkey. The rules of the determination, delimitation and allocation, reclamation projects and funds, professional training to improve field crops and the relevant organizations are described in the 4342 Pasture Law. Ministry of Food, Agriculture and Livestock, Universities, Agricultural Faculties and several NGOs study for the improvement of pastures. However, the juridical problems interfere as well as the failure of the farmer participation in the process; and thus, malpractices continue, and protection and reclamation of the pastures inevitably fail without the participation of the farmers. Briefly, there are vigorous efforts and several positive developments; however, there are many economic, technical and social conflicts and constraints against the protection and reclamation of the pastures in Turkey (Avcıoğlu et. al., 2009).

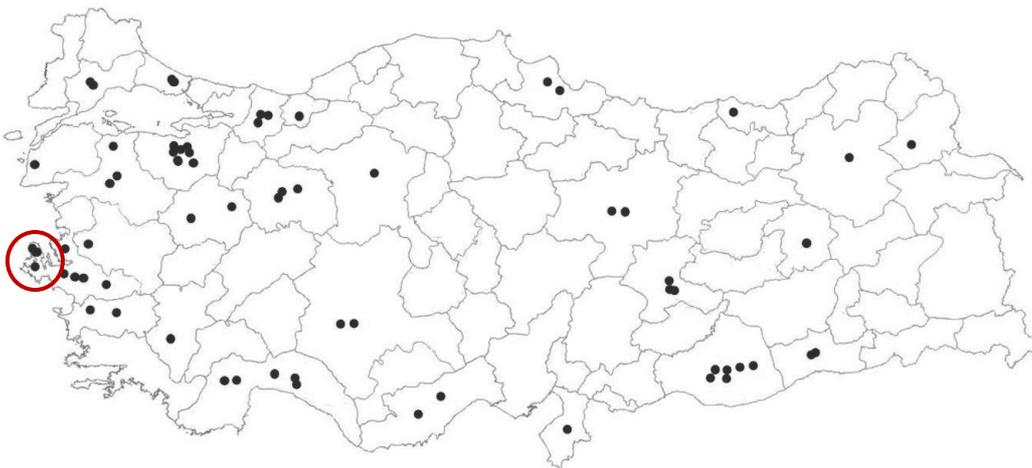
Some of the foremost reasons for the conflicts on pastures are weak regulations against the malpractices, land grabs, inefficient agricultural policies, limited number of sheep and goat farming, renting/allocation of pastures to other uses, conflicting land uses, mining activities, the 6360 numbered Metropolitan Law and its ambiguities, property conflicts, poor ecological conditions, inefficiency of the vegetation, litigations, high reclamation costs, disinfection by agricultural pesticides and lack of cooperatives. Moreover, the fragmentary allocation of the pastures to other uses creates a very problematic situation as it may have massive negative effects on the overall pasture condition and destroys the integrity of its functions (Hazar, 2018).

According to the interviews with the İzmir Provincial Pasture Commission (IPPC) conducted in 2017, it is observed that pastures are frequently sacrificed for the sake of the national economy. IPPC claims that they decide the pasture allocation acts after a careful investigation of mines’ or energy plants’ performance and ratio share in the country. In terms of land allocation demands, Aliağa district has the lead in İzmir in terms of appropriation requests and acceptances. Other appropriation requests come respectively from Bergama, Ödemiş, several plots at Kınık, Urla, Bayındır, Torbalı, Tire, Foça and Dikili. The main factors triggering these allocation demands are the wind energy investments (4342 numbered Pasture Law - article 14/ğ), public investments and mining.

Allocation demands are denser on the pastures which are closer to urban development; especially towards the villages close to the seaside, which have tourism potential. Pasture allocation demands mainly come from relevant Directorates such as the Ministry of Energy. The primary demands are for the mines and quarries in Aliğa (article 14/a) and wind energy and bioenergy in Bergama, Çeşme and Aliğa (article 14/ğ). Karaburun district is not within the context of IPPC, because it has not any registered pastures; it has public grazing lands. Public grazing lands are mostly in the possession of public treasury and are not under the provision of the 4342 numbered Pasture Law, although they are as crucial as registered pastures for husbandry and ecological sustainability (Hazar, 2018). This situation makes the public grazing lands more brittle against the enclosure movements in comparison to the registered pastures.

However, technical teams from IPPC suggest pastures to be registered within the context of article 5/b, especially in Karaburun (19 in Bozköy; 32 in Haseki), which may provide wider protection in the future. Yet, IPPC underlines that they primarily prefer to approve wind energy projects, because unlike mining or quarry, the turbines cover a smaller area at sitting, without causing serious destruction of the land. It is also claimed that grazing activities may continue in their vicinity. One of the reasons for this is that the complete recycling of the land after mining or quarry activities is almost impossible as the recycling of land requires at least three years (IPPC, 2017), but wind energy regarded as outside of this condition.

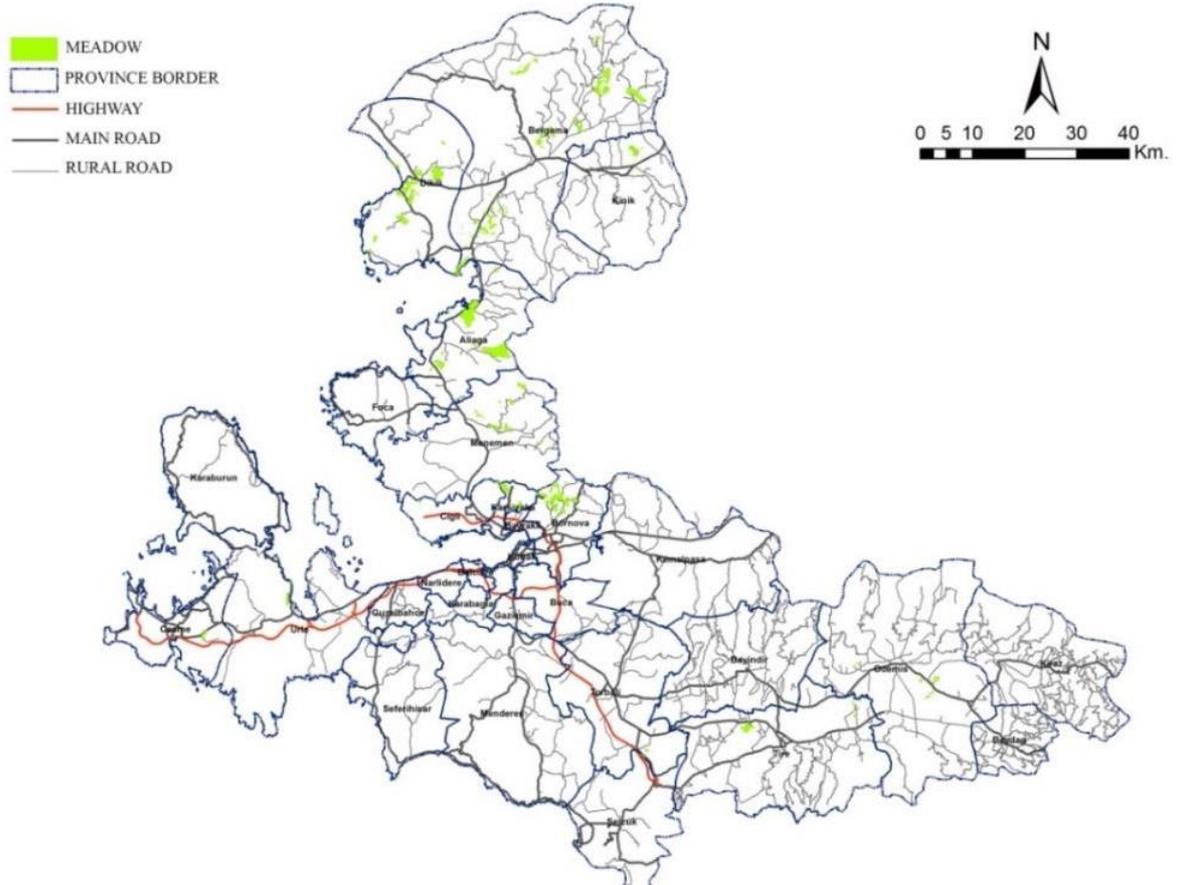
The conflicts on pastures in Turkey have been searched within the annual web-based media archives between 2012-2017. The concentration of negative news about pastures in the press relevant to the wind energy developments directly indicate the public grazing lands at Çeşme-Karaburun peninsula (Figure 2). Accordingly, main negative news detected about overall pastures involve occupations (e.g. forestation, housing), energy investments (e.g. wind farms at Karaburun), quarries, mines, degradation, drought, negative externalities of agricultural uses and pesticides, numerous bills, legal gaps, the ambiguity of 6360 numbered Metropolitan Law, and the urbanization risk posed by rural and mass governmental housing projects undertaken by the Housing Development Administration (TOKİ).



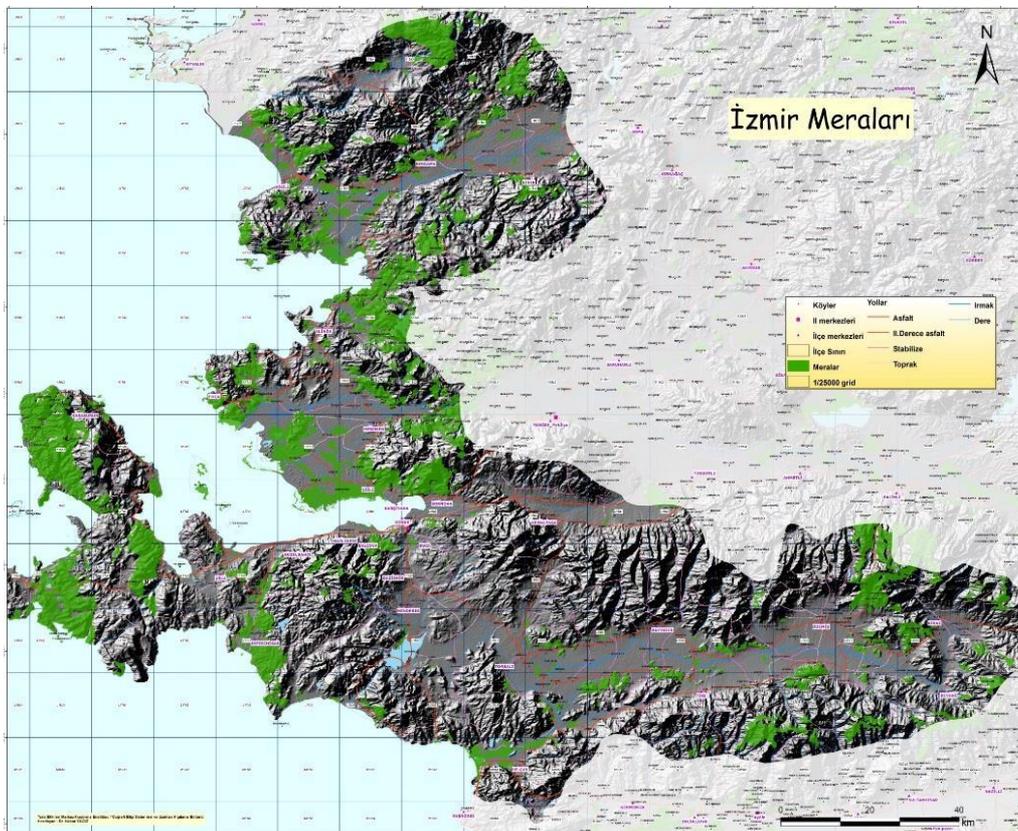
**Figure 2.** Negative news about the pastures in Turkey, 2012-2016 (Hazar, 2018)

In Turkey, there are critical gap between the amount of public grazing lands and registered pastures that are under the protection of the 4342 numbered Pasture Law. The difference between the registered pastures and total pastures in İzmir can be seen in Figure 3 and 4.

This surely creates a clear conflict and vulnerability against the appropriation acts.



**Figure 3.** Registered pastures of İzmir (İzmir Land Classification Report, 2013)



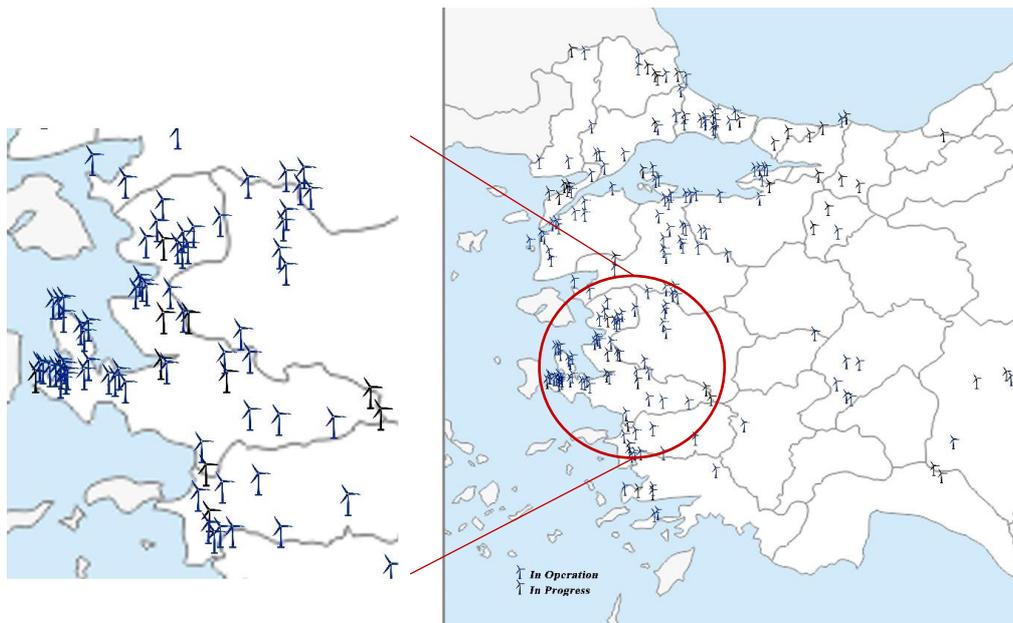
**Figure 4.** Pastures and public grazing lands of İzmir (Yıldız, 2016)

#### 4.2. The Case of Karaburun

Karaburun peninsula is located at the entrance of İzmir Gulf, the north-west region, which is generally called 'Çeşme-Karaburun Peninsula'. Çeşme is located to the south, Urla to the east, Foça Çandarlı to the north and Chios to the west of the peninsula. The district of Karaburun, as the last point of the peninsula to the north, has the population of 10,759 people in 2019, corresponding to the smallest population among the districts of İzmir (TURKSTAT, 2020).

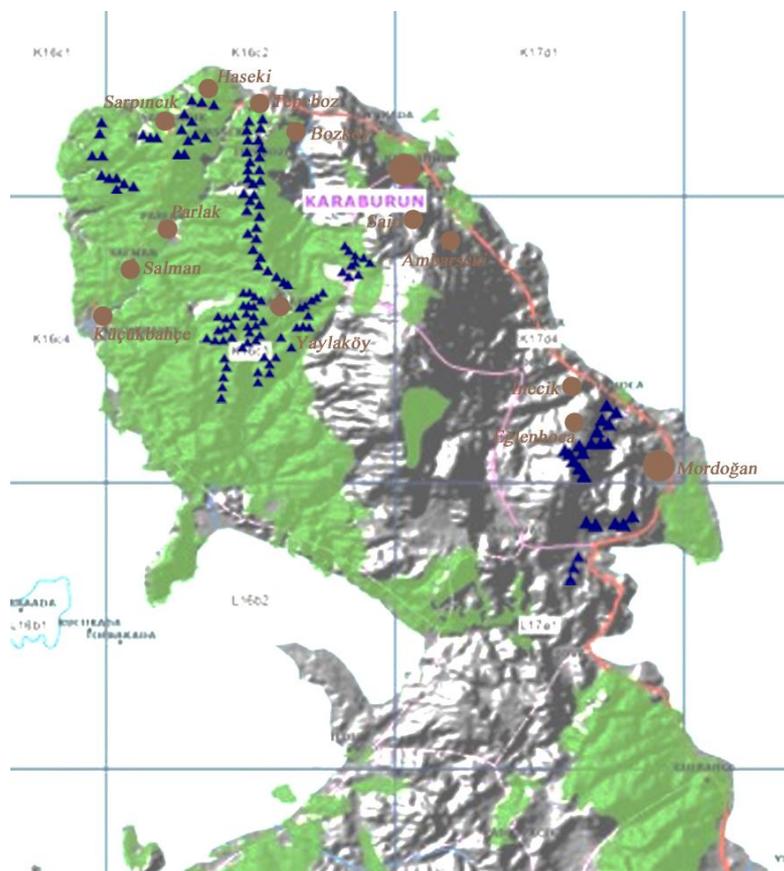
Even though the Karaburun district was included in the İzmir Metropolitan Borders and the village legal entities are transformed to neighborhoods by the 6360 numbered Metropolitan Law (2012), Karaburun still protects its rural characteristics. The district contains 16 neighborhoods, 15 of which were villages with crucial natural and agricultural assets. The economies of these rural neighborhoods are still dependent on agriculture and husbandry, and these rural neighborhoods continue their existence with their natural and agricultural assets. In the district, primary agricultural products are olive, olive oil, artichoke, tangerine and grape. Floriculture, apiculture, sheep and goat farming and fishery; thus, endemic flowers, honey, cheese and marine products are important as well. Especially Yaylaköy, the only mountain village of Karaburun has husbandry as the main economic activity. Kirkim festivals celebrated at May maintain the 6000-year-old traditions (Karaburun Municipality, 2019). Therefore, starting from Yaylaköy, all the rural neighborhoods are very important for local implicit knowledge and rural traditions.

In recent years, Turkey has progressed in wind energy market, as it is a favorable domestic resource and a favorable investment, that will expand the energy market and the national economy in its pursuit. Large-scale wind energy developments have accelerated since 2006 with positive policy moves and regulatory arrangements such as the ninth development plan and the 5346 numbered Renewable Energy Law, enacted in 2005. These renewable energy investments require large and vacant lands; therefore, rural locations are mostly preferred. Accordingly, Aegean region and the city of İzmir with its rural periphery have appeared as an important target area (TWEA, 2020). The rural periphery (e.g. Karaburun) has been preferred due to the availability of large and unproductive agricultural lands as well as high wind potential (Figure 5).



**Figure 5.** Wind power plants in Turkey and İzmir in particular (Produced by the author, based on the maps of TWEA, 2020)

In Turkey, most of these wind energy developments are implemented according to the old procedures based on the related legislations and regulations applicable in the period (e.g. 5346 numbered Renewable Energy Law; 177 numbered EIA Directive, enacted in 2003), in which there was no criterion for site selection and requirements for EIA processes. As a result, wind energy projects received approval regardless of their site selection. Energy generation licenses were easily acquired. Once the legal compliance is ensured, companies can enter the construction phase for the facility. Thus, wind energy investments, which usually pass through a simple procedure, began to spread rapidly in rural areas with high wind potential. As a result, rural areas have been exposed to many wind energy developments. A number of power plants started to rise on rural landscapes within a very small period of time with the help of the procedures and regulations in favor of wind energy investments. Some of these power plants were installed at a critical proximity to rural settlements and rural-ecological commons such especially public grazing lands (Figure 6).



**Figure 6.** Wind turbines and their location overlapping with grazelands (Produced by the author)

The current situation suggests that the wind energy investments have densely concentrated in Karaburun. There are seven wind energy plants in the area operated by different companies, including 139 wind turbines in total (see Table 1) (EMRA, 2020). As the negative impacts of developments are disregarded in the planning phase of the developments, the power plants have been established in areas that are very close to settlements or on many high-quality natural lands. Some of these developments are too close to rural settlements and some of the power plants are located on environmentally important areas; on rural-ecological commons such as public grazing lands and forests as well as the farmlands where the main economic activities of villagers take place (Figure 7).

Table 1. Wind Power Plants in Karaburun District (EPDK, 2020)

| Licence Status        | Starting Date | Ending Date | Plant Name                         | Capacity (MWm) | Number of Turbines |
|-----------------------|---------------|-------------|------------------------------------|----------------|--------------------|
| In Progress (Renewed) | 01.03.2018    | 29.05.2057  | KARABURUN RES (Firma: Lodos)       | 236            | 87                 |
| In Progress           | 07.06.2011    | 07.06.2060  | Emres RES (Firm: GRC Energy)       | 2              | 3                  |
| In Progress           | 06.10.2011    | 06.10.2060  | SALMAN RES (Firm: Öres)            | 27.5           | 10                 |
| In Progress           | 29.05.2008    | 29.05.2057  | MORDOĞAN RES (Firm: Ayen Enerji)   | 31.5           | 15                 |
| In Progress           | 29.05.2008    | 29.05.2057  | YAYLAKÖY RES (Firm: Yaylaköy Res)  | 15             | 5                  |
| In Progress           | 29.05.2008    | 29.05.2057  | SARPINCIK RES (Firm: Çalık Energy) | 32             | 14                 |
| In Progress           | 29.05.2008    | 29.05.2057  | MORDOĞAN RES (Firm: Egenda Ege)    | 15             | 5                  |
| TOTAL                 |               |             |                                    | 359            | 139                |

Among the rural-ecological commons, pastures are very important for the villagers and their economic activities. Although the public grazing lands in Karaburun are not registered as pastures and not protected by the 4342 numbered Pasture Law, they are vital for the village economy and rural daily practices. Among the villages, the public grazing lands are crucial especially for the Yaylaköy village, as the villagers are strictly engaged in husbandry. Yet, the village is surrounded by intense wind power plants and the pastures are in danger of disruption and degradation because of the large-scale wind power developments.



**Figure 7.** Wind power plants in Yaylaköy Village (left) and Sarpıncık Village (right) in Karaburun (Personal Archive, 2018)

After many wind turbines have exposed the lands of Karaburun, several conflicts have emerged. The conflicts have grown when private properties were expropriated and have been assigned to investors for wind farm developments along with the rural-ecological commons, especially the public grazing lands. Agricultural lands and olive groves have been subject to 'urgent expropriation' and enclosed for power plant siting. Consequently, economic activities of the villagers have been interrupted. As a result, some of the farmers began to suffer from these developments as the pastures and farmlands are divided and turned into energy fields. Furthermore, no procedure is provided related to the mitigation of externalities on the local environment prior to the wind energy installations. Lack of proper site selection decisions has led to the establishment of the projects on the local priority areas and the massive energy

generation on the area has started to affect the region negatively. Moreover, the construction of the power plants started to damage the natural and rural environment as the construction of wind energy plants requires site clearing activities including clearings for the structures of energy production and distribution systems such as roads, turbines, power lines and substations (Yetiş et.al., 2015). Eventually, the environmental quality of these rural areas has degraded. Therefore, concerns about the negative externalities of the wind power plants on the area have increased and triggered the oppositions.

The local oppositions increased to a great extent when the villagers started to be negatively affected by rapidly increasing energy developments. According to the media search, the conflicts in Karaburun peninsula appeared to have the leading position in İzmir as well as in Turkey. Many protests have been performed against the developments in the region and the protests have grown when new constructions have taken place consecutively. Afterwards, the protests have continued through litigations. The opposing local initiatives along with the villagers have launched legal processes against the developments and the organization of environmentalist lawyers (ÇEHAV) also gave its support to the legal process (Figure 8).



**Figure 8.** Photos from the protests against the wind energy investments in Karaburun, 2018 (Url-1)

In 2019, Karaburun City Council and Karaburun Citizens' Plaintiffs made a press statement in front of İzmir Provincial Directorate of Environment and Urbanization, against the government's declaration of farmlands as a 'disaster area' for the RES project to be built on a land in Yaylaköy (Figure 9).



**Figure 9.** Photos from the protests of Yaylaköy villagers, 2019 (Url-2)

Arguments of the opponents have been extracted from in-depth interviews with the key local participants, including villagers and environmentalist groups. These arguments are mainly formulated through discourses related to the negative environmental impacts and natural damage on the area. In addition, the negative impacts on the economic activities

is another emphasis of the opponents, especially the villagers. Consequently, concerns about the negative impacts of the developments have become determinative in the attitudes towards wind power in Karaburun.

According to the interviews done with Karaburun City Council and Environmental Organizations, conducted in 2016, it is observed that the main reason for oppositions are the natural damage done to the area at the construction phase. In addition to natural damage, City Council representatives (mostly newcomers), also emphasize the damage on rural features in the second place. For them, Karaburun is a rural area which is needed to be protected with its natural and rural features, and Karaburun should develop with its ecologic and natural values and by rural development models aiming at protecting local values it has (based on the interviews). They stress that wind energy developments with these sizes obstruct rural development potential of Karaburun by giving harm on local rural features.

It can be inferred from the arguments in interviews that, a large number of developments have spread all across the district and due to their locations, they have started to damage the natural environment, limit local people's living spaces and disturb the local economic activities that are already limited in the region. Moreover, the developments have been established without considering the economic needs, vital necessities and socio-cultural and natural values. Therefore, the impact of the change on the rural landscape and the commons has started to be perceived as a 'damage to the rural'. Eventually, the oppositions started to arise as the 'place-protective actions' to cope with the problems, which resulted from the developments on the places that people have frequently positive connections.

On the other hand, the decisions related to wind energy developments are taken top-down at the national level without providing any opportunity to local people that are influenced by the project outcome. Consequently, only after the whole process has been completed, the local residents faced the situation where many wind energy developments were about to take place in their living environments. This has reduced the sense of local control on developments and the negative perception of unfairness has increased. The local community is inclined to oppose this and organize protests against the wind power plants in Karaburun in order to convey their opinions about the developments. Therefore, the top-down decision-making processes have been significant in triggering the oppositions towards the wind energy.

**Table 2.** Stakeholder position analysis for wind farm conflicts

| Actors Interviewed             |   | Position  | Reason  |
|--------------------------------|---|-----------|---|
| Local Community                | Villagers & Natives<br>(all peasants, farmers, shepherds, elderly ones and headmen) | Opponent  | - <b>Negative externalities:</b> noise problem & enclosure on commons   |
|                                |   | Supporter | - <b>Economic Benefit</b> (working for WE plants)   |
|                                | Newcomers (Rural Gentrification)  | Opponent  | - <b>Negative Externalities:</b> damage on natural assets<br>- <b>Procedural Problems:</b> Planning processes |
| Non-Governmental Organizations | Local Initiatives   | Opponent  | - <b>Negative Externalities;</b> damage on natural assets<br>- <b>Procedural Problems:</b> Planning processes |
|                                | Outsider Platforms  | Opponent  | - <b>Negative Externalities:</b> damage on natural assets<br>- <b>Procedural Problems:</b> Planning processes |



|                     |  |            |  |
|---------------------|--|------------|--|
| Public Institutions | Municipal Institutions                       | In-Between | - <b>Procedural Problems:</b> Exclusive & top-down planning        |
|                     | Central Government Institutions (Ministries) | Supporter  | - <b>National Interest</b><br>- <b>Public-Private Partnerships</b> |
| Wind Farm Companies | Investors                                    | Supporter  | - <b>Company Interest:</b> Profit Maximization                     |

Ideally, all actors and stakeholders should be involved with each other within the decision-making process regarding the rural areas and rural-ecological commons. Thereby, social strategies, central and local governments, villagers, users, newcomers, investors, agricultural policies, husbandry activities, enclosure movements, rural gentrification, changing legislations and spatial strategies, plans and policies; as well as the geography function such as ecological thresholds, climate and topography should be taken into consideration within the rural planning process.

Protecting the rural-ecological commons from the pressures of development, including wind energy deployments, is possible through enabling ecologically sensitive planning and decision-making processes. This is possible especially when the lack of communication among the institutions and the relevant stakeholders is addressed. In this sense, participatory decision-making in planning processes becomes the key, as it can increase the mutual understanding, reduce conflicts, create trust and result in delivery of a better decision-making process concerning the commons. In this context, the study aims to generate recommendations on the pasture dimensions and rural planning parameters.

Very recently, in 2019, Karaburun Peninsula and Ildır Gulf was declared as the 'Special Environmental Protection Area' by Central Government (Url-3). To be declared as 'SEPA', Karaburun City Council had made an application long ago, but it was pending at the council of ministers. The declaration has taken many years. There were believes among the newcomers and the villagers that the SEPA status was held to prevent energy investments from being blocked by the preservation regulations brought by that, so this was also an element of conflict. Today, it is a great achievement for Karaburun to be declared as SEPA. This status does not directly restrict energy investments, but it is certain that it will restrict investment processes with preservation regulations. It is clear that the better protection of the natural environment as well as pastures can be possible with this regulation.

#### 4.3. Pasture Dimensions

Pastures are the rural-ecological commons, which have use value over exchange value and crucial for the ecological sustainability, biodiversity, flora and fauna, erosion prevention, CO<sub>2</sub> absorption, apiculture and the rural development. However, the common pastures in Turkey are degrading and shrinking due to several conflicts and threats such as ecological constraints, enclosure movements, allocation to other uses and malpractices such as false mapping, overgrazing and undergrazing. Forestation, agricultural use and the development risk on the pastures by the new legislations and bag laws also create serious conflicts (Hazar, 2018).

Pasture dimensions that create conflicts can be summarized by focusing on the driving forces that triggers the pressures; pressures that creates the current state of the pastures; and their inevitable ecological, social and economic impacts.

The possible driving forces observed are;

- Inadequate mapping and/or registration of pastures
- Indifference by the authorities
- Changing legislations



- Land occupation
- Underground sources
- Agricultural and forestry uses
- Land fill uses
- Public investments
- Energy investments
- Lack of coordination among institutions
- Other initiative and investors
- Weak agricultural policies
- Enclosure movements
- Uneven marketing prices
- Less precipitation and degrading soil fertility due to climate change

The possible pressures observed are;

- Urbanization
- Population increase
- Land allocation demands
- Lack of infrastructure for pasture reclamation
- Unsustainable reclamations
- Inadequate water resources
- Barren lands
- Malpractices (overgrazing etc.)
- Pesticide uses in agriculture
- Lack of supervision
- Lack of profit in husbandry sector

The possible states observed are;

- Brittle pastures
- Brittle ecosystem and biodiversity
- Pollution
- Drought
- Increase in the thorn plant population at the pastures
- Unprofessional farming
- Land allocation to other uses
- Rural poverty

The possible impacts observed are;

- Degraded pastures
- Loss of pastures
- Decreasing number of animals and small farmers
- Ageing farmers
- Degraded biodiversity
- Desertification
- Degraded ecological sustainability
- Rural-urban migration
- Rural gentrification
- Decreasing CO<sub>2</sub> absorption
- Food insecurity

The responses to eliminate the conflicting pasture dimensions are given within the rural planning parameters.

#### **4.4. Rural Planning Parameters**

The study aims to generate several rural planning parameters as a response to the pasture dimensions that create conflicts, as an approach to pasture protection from the conflicting land uses including wind energy investments:



- Participation in the decision-making process should be improved by stakeholders including international conventions, central and local governments, NGOs, users and professionals.
- Public grazing lands should be registered as pastures in order to be protected within the 4342 numbered Pasture Law.
- Pasture inventory should be digitized by IPPC (e.g. MERBIS).
- Pasture management unions should be established under the authority of the local governments.
- Agricultural cooperatives and unions should be encouraged by central and local governments for more professional farming and husbandry.
- Pasture quality should be improved by grazing management and sustainable pasture reclamations.
- Grazing management should be monitored by the local institutions (e.g. pasture management unions).
- Public disclosure, participation and civil acts should be encouraged.
- Subsidies and loans for small farmers should be increased in order to reduce the rural poverty and rural-urban migration.
- EIA reports should be improved for better decision-making on the site selection of conflicting sectors.
- Conflicting sectors (e.g. quarries, energy investments) should be restrained if they harm the rural livelihoods.
- Site selection of the conflicting sectors (e.g. wind power plants) should be restrained and/or decided by an improved participation.
- Integrity of the rural landscape should be well preserved.
- Transition zones such as the rural-urban fringe should be planned carefully and on the behalf of the rural-ecological commons.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

This study aimed to analyze the conflicts at the rural-ecological commons in relation with the wind energy deployments on the rural periphery of Izmir. Based on the Karaburun case, it is revealed that wind farms have risen over the past few decades and over the rural-ecological commons, as primary sites chosen for deployment. The tendency on the growth of wind energy market is mainly a result of the neoliberal policies in Turkey, which is experienced through the large-scale projects in the urban areas as well as in the rural areas.

In this process, the neoliberal urbanization strategies of the local governors based on city marketing (such as 'competitive city' and 'brand city') gain priority over the real needs of the citizens (Penpecioglu, 2013) and increased the large-scale spatial projects (Brenner, 2013), including the large scale wind farm developments. However, since these projects started to affect the local environments and threatened the rural livelihoods, oppositions started to arise as soon as the wind energy plants are constructed in the proximity of the villages. This experience shows that, under the neoliberal policies, not only the urban areas but also the rural areas are seen as the spaces for capital accumulation, which creates clear conflicts. These conflicts are important in order to understand the detrimental effects of large-scale spatial projects on local environments. These conflicts are also crucial to show the necessity of a 'right to the rural' attitude in order to prevent the loss of the rural areas. On top of everything, planning regulations in Turkey are mainly based on strict top-down rules and practices in which private interests override the public interest (Eraydın and Taşan-Kök, 2014). In the same vein, the wind energy development processes have been controlled by state regulations, where there is limited democratic opportunities for the public and/or the voluntary institutions to be included in decision-making, which has clearly triggered the conflicts and oppositions.

In Karaburun case, there have been expropriations of the farmlands and public grazing lands, which are assigned to wind farm developments under the control of the



governmental institutions. Therefore, the oppositions against the top-down wind energy developments increased, which brought great changes in local living environments and livelihoods of the local residents. In these circumstances, it was inevitable that such conflicts against the state regulated wind energy developments would occur. Therefore, it can be said that the struggles in the field of wind energy experienced in the rural periphery of İzmir can be regarded as struggles against the top-down policies and state regulations having detrimental effects on local environments and on public grazing lands.

Moreover, Karaburun peninsula is an important region with its natural and rural features with large rural-ecological commons, which also make up part of the economic activities and social life. However, the generation of many large-scale developments in the area have started to disrupt the nature as the number and size of the developments have exceeded the potential that Karaburun can handle. Therefore, the natural and rural features in the area are under the threat of disruption. Besides, the rural-ecological commons are under the pressure of investments, which degraded their quality and disrupted husbandry in the area.

There are several advantages and disadvantages of wind energy developments on rural-ecological commons and particularly on public grazing lands, which are vital for the socio-economic life and ecological sustainability of Karaburun. It is crucial to underline that; IPPC showed a tendency to prefer the wind energy developments over other energy investments or mines and quarries due to its 'relatively limited' occupation of land. In addition, according to the professionals from a group consensus workshop, the negative externalities of wind farms are relatively minor compared to the other energy investments (Hazar, 2018). However, their possible negative physical and psychological effects on local people and animals need further analysis.

Overall, this study on the rural-ecological commons and the pastures is distinctive for being within a proactive field and approach, rather than reactive. Pastures are the main sources for the high-quality field crops and crucial for the protection of the soil, biodiversity, greenhouse effect reduction and wildlife habitat. Pastures, groundwater basins and forests apart from the scope of the enounced conservation areas protect Turkey's biodiversity. Husbandry in Turkey is crucial in terms of feeding the growing population and being the industrial raw material. Therefore, the protection and registration of common lands is crucial, the main idea that this paper also aims to bring forward.

Local residents defend and protect their livelihoods if actors such as the Metropolitan Municipalities, NGOs, and universities support them. Awareness and demands of the locals and civil actions also affect the investors. Therefore, a resistance-conscious 'right to the rural' attitude against the conflicting investments should be constituted among the rural residents. In addition, a more comprehensive study on the pastures of İzmir is necessary and adequate mapping of all registered and unregistered pastures in İzmir is required by using technical analysis tools such as GIS and Remote Sensing. The interrelations of the pasture dimensions can be developed through the time comparisons and changing conditions, such as the increasing number of surveys and additive quantitative methods in the future. As final words, it is crucial to improve the renewable energy conditions and at the same time protect the rural-ecological commons and biodiversity by eliminating the conflicts and achieving local sustainable development.

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