Urban agriculture as a tool for sustainable urban transformation

Atatürk Forest Farm, Ankara

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Introduction: urbanization, food safety, urban health, and alienation

Greening the 21st century city will improve our health, stabilize our economy and bring us all closer together as we meet in the garden.

(Jack Smit, 2001)

There are several necessities for human life to continue: a place to shelter, food to feed, and an income to maintain all. To achieve better conditions and accomplish life many migrate to cities. The concentration of functions in cities while creating a productive and active environment for people, also generates many inequalities. Besides these inequalities, all societies have been trying to fight against two major problems in over-populated cities: poverty and environmental degradation.

Poverty and insufficient nutrition have become an important problem for many cities under the pressure of migration, unplanned growth, and urban sprawl. Urban sprawl threatens many environmental resources within the vicinity of cities, including valuable agricultural land, but also intensifies the problems of accessing safe, cheap, and nutritious food. Rapid urbanization and land speculation in urban territories causes land to be transferred into more overpriced uses such as housing, commerce, or even mega-public projects under the stroke of “urban renewal,” and these invalidate agricultural and public land. Unplanned and dense urbanization of land, while creating threats to the basic foundation of human life and human health, causes alienation from the means of production, nature, and natural resources.

Cities rose and prospered as a result of fertile land and surplus food in history, but now they undervalue their main motive: nature. Major problems of urban life in relation to food supply in metropolitan cities appear to have changed: food has to be bought, is expensive, and usually unhealthy or not nutritious enough. Access to healthy and fresh food either becomes very limited or very expensive within the boundaries of cities. Though an important and necessary part of family survival and budget, food by itself becomes an expensive product and goes through a laborious process before it reaches the cities and city markets.
A very high percentage of population will be living in cities in the future; therefore arranging better food supply networks depends on how well the available urban land is re-allocated for agricultural production and supply of food. So reducing cost and enabling accessibility to cheaper and healthier food will be very important, especially for urban poor. Nevertheless keeping agricultural land productive will benefit society by accessing healthier food and organizing contact with land and production processes. Such transformations will also open new employment channels and opportunities through urban agriculture.

Urban sprawl also affects the land, which is valuable with its land cover and soil, and then its ecological and agricultural foundations. Thus without better management tools and better governance of urban land at the local scale and without getting adequate support from the national government and international organizations, all citizens but mostly the urban poor will continue to suffer more from environmental problems, undernourishment, and costly consumption as a result of unproductive use of public land. The academic arena must also provide research and case studies and develop guidelines and implementation principles to help out in the process.

Accordingly, many international meetings, documents, and conventions have been focusing on alleviating poverty, including primarily insufficient nutrition and unhealthy living conditions in cities. Since the last decades of twentieth century, international organizations such as the Food and Agriculture Organization (FAO), Resource Centers on Urban Agriculture and Food Security (RUAF) Foundation, United Nations Development Programme (UNDP), United Nations Children’s Fund (UNICEF), and the World Health Organization (WHO), with varied partnerships, have emphasized the importance of governance and management of urban land to curb these issues by building guidelines, leading case studies, and providing support to local and central governments, and to related parties. Scientific organizations, such as COST-Action UAE (Urban Agriculture Europe – European Cooperation in Science and Technology), draw attention to the importance of urban agriculture (UA) by innovative research, new methods (research by design), trans-domain networking, and through publications (for example the European Atlas on Urban Agriculture).

Many of the above organizations and researchers underline the importance of protecting, developing, and better management of urban agricultural lands, whether in the vicinity or in the city borders (De Wilt and Dobbelaar, 2005; McClintock, 2010; Mougeot, 2000, 2005, 2006; Viljoen, 2005; Viljoen and Bohn, 2014). Lastly, pressures from powerful stakeholders mostly override public land, public interest, and benefits for the urban poor; and commonly concerns over economic development and possibilities of higher returns usually weaken the governance of the benefits for the needy. As a result multi-actor, multi-functional supervision is highly stressed by the international community. The emphases on better governance and management provide a wider approach to issues, integrate many concerns, and have the power to assemble diverse groups.

Under the topic of Sustainable Urban Agriculture and Food Planning we concentrate mainly on governance of an urban “agricultural” land and here in this
chapter we question and discuss the destiny of an urban farm, Atatürk Forest Farm (AOÇ), as a case study in the heart of Ankara, Turkey.

After giving a brief comment on the historical development of the forest farm, the discussion will be built upon governance, productivity, and management of land in accordance with sustainable urban transformation, and will focus on new spaces and new social encounters through AOÇ’s capacities. Along with this discussion, we also emphasize the empowerment of individuals as active citizens instead of being just onlookers. Our further aim is to question the case of AOÇ nationally and to create an international platform.

This chapter is an outcome of a research series carried out by the authors since 2012 and studio work by Arapgirlioğlu. Believing that UA can be an important tool to revitalize developing cities and help to solve the above-mentioned problems, we have concentrated on AOÇ, which is under serious threat and holds potential as a case study. The case has involved the students of Bilkent University, Department of Urban Design and Landscape Architecture (LAUD) through fieldwork and assigned research. Several meetings and workshops on UA, organized by COST-UAE and AESOP, also have supported this work and encouraged us to continue to work on UA and AOÇ.

A twentieth century utopia: the modern city of Ankara and Atatürk Forest Farm as a center for production

Mustafa Kemal Atatürk initiated AOÇ as part of a broader project in 1925 in Ankara. The foundation of AOÇ was one of the important building blocks of the twentieth century utopian vision of Atatürk and the new Republic of Turkey, including shifting the capital from Istanbul to Ankara. At that time the major aim of building city farms was to provide the Anatolian cities with safe and healthy daily products, create production centers, and empower urban life with new public and leisure uses. Besides supplying food to the new capital and bringing new technologies and knowledge of agriculture to the new nation, it also aimed to produce a bond between young urban people and agricultural production, and guide “members of the Republic” to retain a “modern” urban life.

As a start, 2000ha of barren land by Ankara river was bought by M. K. Atatürk from the local owners (Öztoprak, 2006; Semiz, 2009) and as initiator of the idea; he focused and insisted on this barren land, which was specified as “unproductive” by most of the specialists invited to the capital; being restored, cultivated, and transferred into productive farm complexes containing places of application, education, and knowledge.

The initial model included the formation of a large city forest, creation of a natural park area, and initiation of new cultural services, which brought together the urban park and agricultural production in the capital. Being close to water resources (Ankara river on the north border) and to abundant grain and wheat crops of Anatolia and to the railroad (on the south border) had been the major advantages of this barren land. Selecting a site close to the railroad made it easier for transportation of the raw materials from Anatolia and the distribution of
products all over the country. With the establishment of an agricultural research center, the idea also contributed to the advancement of agricultural production in the region and in the rest of Anatolia including agro-technical research and new methodologies. Existing transportation axes (highway and railroad) supported the collection of the products and the demand-supply processes. Among other farms founded all over Anatolia, AOÇ was planned to be the model and leader (Semiz, 2009). A foreign technocrat, Herman Jansen, who had been nominated to prepare the master plan of the new capital, Ankara, also supported the idea of a city farm parallel to his garden city vision and applied the aspiration of Atatürk.

As a model, AOÇ had a multi-purpose use and aim. After 13 years of hard work to cultivate this land, M. K. Atatürk transferred his private ownership to the national treasury in 1937, the utopia became real, and the city started to reap the fruits of this institution on several levels. AOÇ then became a real model for farms all around Anatolia and also became a symbol of taming nature, bringing new insight to urban recreation (Kaçar, 2011; Semiz, 2009).

Since its foundation AOÇ has gone through three major development stages:

- **Foundation and formation stage**; acquisition of land, planning, managing and development of uses (1925–1937);
- **State farm stage**; enactment of AOÇ law and change of status to a state farm, to a major production area, and a public reserve (1938–1983);
- **Decline/shrinking stage**; AOÇ as an invaded land and as a subject of economic speculation and political return (1984–2014).

**Foundation and formation stage (1925–1937)**

During the foundation stage (1925–1937), the main layout of AOÇ as an urban design project was formed by Ernst Arnold Egli, who had also designed many buildings located on site (Alpagut, 2010). In 1936, Egli with Jansen, put together a modest model of modernity by sketching the new urban spaces and many other new buildings and functions within AOÇ i.e. beer and malt factory, social housing for workers, a hamam (Turkish bath), a restaurant, a hotel with a swimming pool, a railway station, all offered many opportunities for citizens of Ankara. All these implementations with their social, economic, and recreational returns developed a new culture in Ankara (Kaçar, 2011).

Rehabilitation of the barren and swampland began as a fight against malaria and for the easement of further agricultural activities, and the greening of the area started with planting native trees and creating orchards. Production centers were founded to meet the needs of the city, such as greengrocery, dairy products, and ice. Livestock and apiculture programs started for stock breeding and bee fertilization; centers for producing agricultural crafts were fabricated, such as plows and iron tools. Altogether they established a new sector and a model for advanced agricultural production and know-how for the new Republic of Turkey.
State farm stage (1938–1983)

During the second stage as a state farm, AOÇ developed as a production area and as a public reserve. There were several planning acts and regulations put into practice in this period, and there were many improvements. Some of these improvements were: a milk and dairy products factory, built in 1957 with a contribution from UNICEF (the milk was supplied from different localities of Anatolia); and a wine factory was opened in 1961. The state farm was one of a kind in Anatolia, and it developed its capacity and brands during this stage including juice, pickles and vinegar production, honey and related products, especially during the period 1966–1967.

After the transfer of its ownership to the government treasury in 1937, AOÇ was under a lot of pressure to donate its land to other public institutions and usages (Öztoprak, 2006) and in response a law was implemented to protect its unity and status in 1950. However, despite such protective measures, AOÇ lost major quantities of its land to other public bodies through numerous changes made to AOÇ law (Figure 11.1).

Decline/shrinking stage (1984–2014)

The main characteristic of this third stage (1984–2014), other than sales and the renting of land, was the start of privatization in Turkey and the private sector’s interest in dairy products and production. After 1990s with the enactment of privatization law, some of AOÇ lands owned by public institutions7 were transferred to private enterprises; other functions of AOÇ also became the subject of privatization, which created new gaps in land and loosened authority and unity. As urban rents overpowered agricultural uses within the urban borders and as there were more risks in keeping land in agricultural production, AOÇ was considered as a reserve area and unfortunately was exposed to speculation, law suits, and was defeated by political greed and private enterprise.

Though AOÇ had been taken under protection as a first degree Natural and Historical Site by the Ankara Superior and Regional Council of Immovable and Cultural and Natural Property in 1992, by 2007 the planning authorization of AOÇ had been given to the Greater Municipality of Ankara, and by 2012 first degree natural and historical protection had been downgraded to third degree, opening the door to changes of land use and to construction of an eight lane highway dividing the land in two, a huge presidential house (450,000m²), a massive theme park8 (one of the biggest in Europe), and expansion of the zoo area, causing extensive logging of trees (according to some sources adding up to 9,000 trees) and resulting in a break down of AOÇ’s ecological integrity, land unity, and agricultural productivity.

During this stage, as the uses and the land had not been properly maintained by the responsible bodies, the citizens of Ankara started to lose their earlier bonds with AOÇ and to shift their interest to other newly developed recreation areas. This also led to the psychological break of ties with AOÇ and also with the main ideology.
Figure 11.1 AOÇ: major stages of progress and decline
behind it. There was a major alienation towards what was happening to AOÇ and to its future plans. Moreover, predominantly between 2005 and 2015, AOÇ faced serious land loss and experienced negligence of its agricultural land use and production (Figures 11.2 and 11.3).

**Existing state of AOÇ: advantages, possibilities, and shortcomings**

For more than 80 years AOÇ was a symbol of “reliable and healthy food,” a center for urban leisure activities, and a widely used urban park. Since its foundation, with agricultural production and as a center of production, AOÇ has provided a wide range of dairy products (though with less market share now, it still does) not only to the Ankara metropolitan area, but also to its hinterland. AOÇ, up until the 1990s, with its advanced retailer network, know-how and production capacity, contributed to many agricultural establishments by purchasing and manufacturing products, providing financial and information support, and reaching many sales points. Now AOÇ network is catering to a wider range of consumers through its

![Map of Atatürk Forest Farm Master Development Plan](image-url)

*Figure 11.2 AOÇ master development plan*
After the 1990s, with more government support and incentives given to private manufacturing and food industry, some other substitute products shared the market. Along with lower investment in AOÇ and in agricultural production, and the supply of new diversified products on the market not only weakened AOÇ as an institution but also the goods of AOÇ lost their market share within the local and regional markets. This effect was also augmented by organizational and regulatory negligence towards AOÇ.

During the following years, the neoliberalization in urban sphere introduced a new mode of production to urban space and brought new experiences into the urban arena. Ankara as the second biggest city of Turkey, with governmental institutions and many other potential service sectors and functions, i.e. administration, education, health, and agriculture (until 2000s) (Table 11.1), became the target expansion area of the country after Istanbul. In this regard the approach of central and local authorities towards potential urban land drastically changed, with a massive construction boom within or in the vicinity of the city. Valleys, agricultural lands, wet lands, forest areas, treasury lands, and fringe villages were threatened by this expansion and new form of urban transformation. Eventually, AOÇ too was under pressure from this densification process.

At the wider level, between 1950 and 2000, Ankara has lost 105.962ha of its agricultural land with major changes in development plans (Sezgin and Varol,
2012), and there has been a major shift from agriculture to service sectors in the economy (Table 11.1). Now with its population over 5 million, Ankara needs a new vision to sustain its future and feed its habitants.

Despite all its loss of land, devaluation of its identity and organizational unity, and societal and collective cultural status, AOÇ still has a rich and abundant potential to become a twenty-first century refuge in a densely urbanized city. There are 1000ha of agricultural land, green houses, and a research center, and there are over 1000 ha of meadow, commons and feed fields. Researchers confirm that almost 50 percent of AOÇ's agricultural land still has fertile soil (Dengiz and Keçeci, 2006). Within AOÇ boundaries, there is almost 20km of riverfront (Pekin, 2007) and 1000ha of forested area available to be used as a recreation area, including also many registered historical buildings and cultural sites (Table 11.2). Its existence as an open area is still important for Ankara.

The advantages and potentials of AOÇ include:

- An experienced and well operating establishment (since 1938);
- Its floating assets and product diversity (3300ha of land);
- Its large budget and profit from leasing and sales (an average annual budget of EU€23.5 million and a profit of €2 million from leasing and sales of products by 2011);
- Good administration and skilled staff, with know-how and experience of at least 75 years of collection, production, and distribution of a variety of goods (around 25 brands);
- An advanced network of wholesale distributors and licensed retailers;
- Agricultural land, production, and established directorates of botanic production with a research center for saplings and good practice of Anatolian agricultural crops and saplings;


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</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>263,989</td>
<td>313,419</td>
<td>271,664</td>
<td>288,097</td>
<td>200,191</td>
<td>223,488</td>
<td>94,000</td>
<td>(36.0) (32.3) (27.6) (26.4) (18.1) (16.2) (7.3)</td>
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<tr>
<td>Industry</td>
<td>79,589</td>
<td>136,686</td>
<td>130,490</td>
<td>141,330</td>
<td>147,758</td>
<td>184,897</td>
<td>303,000</td>
<td>(10.8) (14.1) (13.2) (13.0) (14.3) (13.4) (23.5)</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>360,179</td>
<td>500,627</td>
<td>569,232</td>
<td>648,984</td>
<td>752,186</td>
<td>966,636</td>
<td>893,000</td>
<td>(49.1) (51.4) (57.9) (59.5) (67.6) (70.1) (69.2)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>29,882</td>
<td>20,935</td>
<td>12,881</td>
<td>11,919</td>
<td>3,190</td>
<td>3,678</td>
<td>–</td>
<td>(4.1) (2.2) (1.3) (1.1) (0.01) (0.27)</td>
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<tr>
<td>Total</td>
<td>733,639</td>
<td>971,667</td>
<td>984,207</td>
<td>1,090,330</td>
<td>1,103,325</td>
<td>1,378,699</td>
<td>1,290,000</td>
<td>(100) (100) (100) (100) (100) (100) (100)</td>
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</tbody>
</table>

Note: Data include urban land.

• Location and accessibility; it is in the very center of the city allowing easy access of people and goods;
• Water resources; Ankara river, besides its recreational potential with its long riverfront (20km riverfront), holds many other potentials including becoming a cooling corridor for Ankara, strengthening its ecological integrity;
• A vast forested area holding various species, with 2 million trees planted after its foundation;
• Building stock, infrastructure, and uses, with examples of the very early Republican architecture, holding an important stock of cultural heritage and collective memory.

The disadvantages and shortcomings of AOÇ include:

• AOÇ has been neglected for more than two decades and very few financial and personnel resources are allocated from its budget to agricultural production, to management, and to the maintenance of its assets;
• Many of its uses have been either diminished (the zoo), shut down (wine factory), or ineffectively used;

### Table 11.2 Atatürk Forest Farm property and land use

<table>
<thead>
<tr>
<th>Land use</th>
<th>Atatürk Forest Farm property (ha)</th>
<th>2004 Irrigated land</th>
<th>Arid land</th>
<th>Total land</th>
<th>Use (%)</th>
<th>2005 Irrigated land</th>
<th>Arid land</th>
<th>Total land</th>
<th>Use (%)</th>
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</thead>
<tbody>
<tr>
<td>Cultivated land</td>
<td></td>
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<tr>
<td>1. Arable fields</td>
<td>200.5</td>
<td>730.2</td>
<td>930.7</td>
<td>27.7</td>
<td>168.2</td>
<td>745.6</td>
<td>913.8</td>
<td>27.40</td>
<td></td>
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<tr>
<td>2. Horticulture and orchards</td>
<td>76.2</td>
<td>–</td>
<td>76.2</td>
<td>2.3</td>
<td>76.2</td>
<td>–</td>
<td>76.2</td>
<td>2.28</td>
<td></td>
</tr>
<tr>
<td>Total (1+2)</td>
<td>276.7</td>
<td>730.2</td>
<td>1006.9</td>
<td>30.0</td>
<td>244.4</td>
<td>745.6</td>
<td>990.0</td>
<td>29.68</td>
<td></td>
</tr>
<tr>
<td>3. Meadow, commons and feed fields</td>
<td>14.4</td>
<td>20.0</td>
<td>34.4</td>
<td>1.0</td>
<td>14.4</td>
<td>20.0</td>
<td>34.4</td>
<td>1.03</td>
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</tr>
<tr>
<td>Total (1+2+3)</td>
<td>291.1</td>
<td>750.2</td>
<td>1041.3</td>
<td>31.0</td>
<td>258.4</td>
<td>765.6</td>
<td>1024.4</td>
<td>30.72</td>
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<td>4. Other lands:</td>
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<tr>
<td>Occupied land</td>
<td>–</td>
<td>98.3</td>
<td>98.3</td>
<td>2.9</td>
<td>–</td>
<td>75.0</td>
<td>75.0</td>
<td>2.25</td>
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<tr>
<td>Forest and parks</td>
<td>–</td>
<td>1150.4</td>
<td>1150.4</td>
<td>34.4</td>
<td>–</td>
<td>1150.4</td>
<td>1150.4</td>
<td>34.49</td>
<td></td>
</tr>
<tr>
<td>The zoo</td>
<td>32.0</td>
<td>–</td>
<td>32.0</td>
<td>1.0</td>
<td>32.0</td>
<td>–</td>
<td>32.0</td>
<td>0.96</td>
<td></td>
</tr>
<tr>
<td>Rental property</td>
<td>–</td>
<td>688.1</td>
<td>688.1</td>
<td>20.6</td>
<td>–</td>
<td>703.2</td>
<td>703.2</td>
<td>21.08</td>
<td></td>
</tr>
<tr>
<td>Vacant and unused lots, roads, and canals</td>
<td>–</td>
<td>338.6</td>
<td>338.6</td>
<td>10.1</td>
<td>–</td>
<td>350.1</td>
<td>350.1</td>
<td>10.50</td>
<td></td>
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<tr>
<td>Total (4)</td>
<td>32.0</td>
<td>2275.4</td>
<td>2307.4</td>
<td>69.0</td>
<td>32.0</td>
<td>2278.7</td>
<td>2310.7</td>
<td>69.28</td>
<td></td>
</tr>
<tr>
<td>Overall total</td>
<td>323.1</td>
<td>3025.6</td>
<td>3348.7</td>
<td>100.0</td>
<td>290.8</td>
<td>3044.3</td>
<td>3335.1</td>
<td>100.0</td>
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</tbody>
</table>

• Ankara river and its waterfront have been neglected, with no water treatment and used as a dumping ground;¹²
• The recreational and agricultural activities have lost their previous significance, efficiency, and liveliness, which also caused many businesses to close down in the vicinity of the site;
• What is left of AOÇ is under the threat of ongoing exploitation.

However, AOÇ, with its numerous potentials and with a new organizational perspective could overcome its disadvantages, and has great capacity to become an efficient “urban agro-open space system,” a place for improving urban agriculture, a new center for food planning and management, and to become an urban open space for citizens and for reconstructing the twenty-first century Ankara as a productive and self-sufficient city.

In this respect, governance, planning, participation (involvement of actors), and decision-making processes are essential for generating a new perspective for AOÇ, and considering urban agriculture as a new tool for urban transformation is essential for sustaining its core values. All concerns related to mismanagement of AOÇ could be overcomed by improved governance and social/cultural gains reaped under a new act, an organization, and a concept, combined together under the concept of an “urban agro-open space system” that integrates urban agriculture with the concept of an agro-park.

A joint model “urban agro-open space system”: integration of urban agriculture with the concept of agro-park

Regional or global initiatives hold several perspectives for sustaining cities. Their concerns are twofold: one is the ineffective use and management of resources. Second is the high concentration of population in cities. It is predicted that there will be 1.5 billion people living in the periphery of cities by 2020, mostly unemployed and lacking access to nutritious food. One of the key instruments to overcome this troubled future is to create self-sufficient cities that can feed themselves. Promoting urban agriculture and building agro-parks within cities arose as core solutions in many cases.

Urban agriculture (UA), since the early 2000s, has been the focus of governments, organizations, and scientific societies as a solution to many of the problems mentioned above. It has been cited by many (McClintock, 2010; Mougeot, 2000, 2005, 2006; Viljoen, 2005; Viljoen and Bohn, 2014) that UA improves food security, creates jobs, balances ecology of the city, and has many more advantages.

UNDP (1996, 2001) defines UA as a foundation system, a supportive act, and an organization for urban economic activities, urban recreation, and urban aesthetics. According to other sources, UA has to be differentiated from informal urban agriculture, which exists mostly in urban ghettos or gecekondu areas,¹³ and from privately owned community gardens. Principally UA is considered as an organized form of agricultural network for cities and their vicinities. It is mostly carried out on public land, and allocation of production is operated by cooperatives or public
organizations, thus providing profit not only to society in general but a greater profit to the producers and consumers who are involved in this activity, and it also helps develop confidence.

According to international documents (UNDP, 1996, 2001; FAO, 1996, 2006, 2011; van Veenhuizen, 2006) UA has to be:

- Defined within the frame of organizational model;
- Taking place within social development policies;
- Developed to create income and decrease unemployment;
- Aimed at food security, developing necessary precautions and controls;
- Have defined spatial boundaries;
- Involve environmentally sensitive waste and resource management;
- Involve new technology, considering organic agriculture;
- Contribute to the urban open space networks, landscape aesthetics, and urban recreation.

In the case of AOÇ, many of the above mentioned criteria and characteristics fit with the definitions that empower the idea of UA.

According to Mougeot (2000), different from other types of production, UA activates multiple actors, includes local and central government, and creates interactive communication. These peculiarities once more validate UA as a regenerative tool to reform a twenty-first century city, as illustrated by the example of AOÇ and Ankara.

UA, through these practices, could become a helpful tool also to control three important realities of dense urbanization and neoliberal urban politics: the use of agricultural land for non-agricultural purposes; environmental problems and degradation due to high population and urban sprawl; and the isolation of individuals and society from land and nature.
Recently, with growing interest, governments and non-governmental organizations (NGOs) have started to invest in UA, not only to lower food costs but also to reclaim urban lands for the use of the society. Agro-parks are another approach to managing such lands, establishing a multi-purpose urban use and a program specially focusing on agricultural activities and marketing. They not only work as agricultural production spaces but also for the production of socially active and attractive urban spaces, which have many advantages. They are self-contained systems, reduce transportation costs, bridge gaps between different social groups, and generate social, economic, and ecological benefits (De Wilt and Dobbelaar, 2005). Thus, the agro-park concept coupled with UA may advance diverse motives into regenerating urban agricultural land and uses. Nevertheless in rural agricultural systems, it has also been proved that a combination of uses and multiple functions on agricultural land multiplies benefits. For example agriculture, forestry, and livestock uses together bring more efficiency of use and productivity by lowering distance between uses and users, by creating closer communication networks, and by easing interaction of different sub-groups of the larger sector (Frey et al., 2012).

In Ankara, there are many actors and coalitions acting against the exploitation of public lands by urban transformation projects. In the AOÇ case there are two major opposing parties: one is the members of The Union of Chambers of Turkish Engineers and Architects (UCTEA), and second is the NGOs. In Turkey members of UCTEA14 have always been powerful actors and defenders of public lands and ecological values. However after the 2000s some environment-focused NGOs15 also started to fight for major environmental issues. These actors have been fighting back all major changes in the case of AOÇ through protests, law suits, and by organizing meetings and conferences aiming to create public involvement and awareness, and also to create public pressure on the politics of growth. A recent resolution of the Administrative Court, which is a result of the efforts of these actors, has overruled all changes made recently on AOÇ plans by the Greater Municipality of Ankara.16

Loss of cultural identity is also another important debate: the inhabitants of Ankara for more then half a century felt themselves to be an important part of AOÇ by consuming its products and spending their leisure time and weekends on grounds of AOÇ. A survey done shows that AOÇ still has an important share in citizens’ memories and worries (Açıksöz and Memlük, 2004). Therefore efforts to regenerate AOÇ will provide a chance to create a new social setting and create a socially productive bond among citizens of Ankara. A new beginning for AOÇ will generate a synergy echoing that of a century ago and moreover, redeveloping AOÇ with multiple uses will give a chance to regain the memories and knowledge of AOÇ for the generations who have lost their contact with it. Along with these efforts, reviving AOÇ’s agricultural identity by promoting UA, renewing its waterfront for recreational purposes, and giving it new contemporary uses as an agro-park, will protect the land from exploitation of other forces and actors, and will give it a chance to survive and enhance its ecological and cultural identity.

In this respect, planning and design are other necessary steps to be taken towards
achieving these aims and objectives. Planning and design are important mediators between political and mental activities, turning thoughts into usable spaces (Lefebvre, 2007). Through practice, experience, and social activity, new forms of public spaces and uses will be accomplished by these acts and AOÇ could regain its social character and agricultural activities, together with enhancing its recreational and ecological potential.

Though it may seem like wishful thinking under present conditions, it is unavoidable that local government and central government and AOÇ administration must join forces with concerned NGOs, unions, chambers, and universities to create a more productive approach, effective interaction, and participation over the issues. This will bring many benefits, including public productivity, and empowering future generations by designing a self-sufficient city.

Conclusion: a model for a sustainable future and a space of social production

New policies and programs can help to improve the conditions of publicly owned lands. UA and the agro-park concept can create new opportunities, leading to the development of a more productive, actively, and freely experienced urban public open space. By doing so, multiple benefits could be gained in the case of AOÇ, including:

- Restoring the productivity of degraded agricultural land;
- Improving food productivity and effective use of land;
- Overcoming the disruption of the riverfront ecology;
- Generating new economic relations and employment networks;
- Strengthening the local economy and enhancing a sense of community and networks;
- Offering space for sharing and producing together;
- Bridging the gap between producer/consumer, citizen/land, youth/nature;
- Creating a platform for new innovations and advancements;
- Centralizing many uses and productions;
- Combining and clustering different sectors at one center;
• Reducing transportation costs and lowering fuel costs;
• Creating work as a process of social and individual development;
• Creating new meanings, values, and ways of life;
• Enhancing human physical and psychological health;
• Highlighting urban landscape with greening and maintaining open spaces;
• Working as an aesthetic stimulus for the citizens;
• Integrating agricultural uses with urban activities.

Future work to be done in AOÇ could involve two phases: promoting UA as an act and network for Ankara, together with advocating the agro-park concept, which will progress AOÇ’s industrial, recreational, and cultural characteristics.

UA, integrated with the concept of agro-park, is proposed as a strategy for the renewal of AOÇ and as an urban agro-open space system and could follow these steps:

• Collecting and assessing relevant data on Ankara’s socio-economic profile and unemployment data;
• Collecting relevant data, building up an inventory of existing capacities of AOÇ and assessing its potential (natural, social, economic) for future developments;
• Making sure that UA takes place within national and international communication networks in relation to food security and job creation;
• Providing a planning assessment of UA;
• Drawing attention to UA within planning practices and social policies;
• Assessing Ankara’s agricultural sector and related industrial production from the perspective of UA;
• Initiating special incentives for UA within the borders of Ankara and for the structure of the budget within AOÇ;
• Assessing the urban hinterland, and collecting data on additional potential sites appropriate for UA in the close vicinity of Ankara;
• Initiating a new financial, administrative model backed up with integrative planning and design scales;
• Establishing an UA research and development center to work in coordination with the existing research center;
• Improving the existing AOÇ workforce, incorporating UA as practice;
• Involving organic agriculture awareness and practices;
• Involving many different interest groups/actors to become a part of the practice of UA;
• Exploring possibilities of pooling various resources by involving various groups such as the young, female, and disabled;
• Considering additional and innovative uses to attract more partners;
• Preparing weekly, monthly, and yearly activity programs/charts, and reducing conflicts by promoting interaction between different uses and users;
• Integrating all means of media for publicity of UA and the activities of AOÇ to create higher interest and involvement;
• Introducing many innovative and environmental practices within AOÇ, integrating with UA;
• While preserving historical and cultural sites, developing new activity centers for all users with UA;
• Introducing an open and semi-closed bazaar area for the interactive exchange of goods, providing cheaper, healthier, easily accessible food;
• Providing cheap, easy, and safe access to the UA market area;
• Taking notice of feedback and monitoring of the process;
• Structuring a center for promoting productivity, for awareness of food security, production processes, and environmental issues at every level.

All of the above components could not be realized without: proper governance of existing data and uses by planning and design teams; governance of resources and finance by the administrative organization supported by an expert team; governance of activities and people by public relations and social worker teams; governance of productivity by scientific teams. All of which could only be accomplished only by an higher organization, a multi-layered, interactive, and collaborative (such as an advisory board). This will also enhance and support the know-how of local and central government.

How to structure and to oversee is essential, in order to succeed in a multi-purpose, multi-layered arrangement, which needs interactive communication promoting cooperation; collaboration and combining forces, by uniting know-how of and involving all related actors (ministries, chambers, universities, NGOs) in the case of AOÇ.

Though AOÇ’s existing organization with its experience of over half a century will create an important guide and supervisory role, we propose a new governance model for the revival and better management of AOÇ. In this model UA, being the umbrella concept, will trigger new progress and a new spirit for the land of AOÇ. For better functioning and efficiency, we propose a multi-layered, multi-purpose use that is the agro-park. Together both UA and the agro-park will form an urban agro-open space system, which in turn will strengthen Ankara’s open space system. Therefore joining two powerful ideas for the revitalization of urban agricultural land will help bring about higher productivity in AOÇ.

This new organization has to have the freedom to act, creating its own guidelines and rules, and must be managed professionally to ensure satisfactory performance, while a committee of experts (members from the local and central governments, universities, chambers, and NGOs) will advise and oversee the model’s processing and productivity. This model has to involve an independent non-profit organization that will be able to sustain a self-sufficient economic and administrative system in order to be free from political and rental pressures on one hand, and on the other an adequate environmental recycling system and environmentally sensitive approach to lower the pressures of rapid and dense urbanization.

Existing AOÇ law and related regulations must be restructured according to the new needs and to meet the new management design. Using its capacities and improving many existing functions of AOÇ will multiply its productivity and open
space quality for new challenges. AOÇ management and law should be founded on three basic platforms: restoring the existing agricultural land; the maintenance of the neglected waterfront and adjacent areas; and the rehabilitation of its historical and cultural sites. These three developments should also provide additional functions where inhabitants of the city will meet and the productivity of social space will be challenged.

Proposed activities and uses will primarily consist of farming, recreation, and marketing. AOÇ will continue to function as a multi-purpose farm, while also offering many environmentally friendly leisure and commercial activities that will lead to exchange of goods and ideas. By enhancing its green character, keeping its existing land and many of its functions will not only help to sustain its own ecological balance but will also support urban ecological balances and nurture ecological corridors of the city. Despite all the negative developments on AOÇ land, we are still hopeful that the politicians will hear many of our calls for environmental awareness, food security, and healthy and productive life-styles, and anticipate that they will cooperate to overcome many obstacles resulting from over population and rapid urbanization. We believe that publicly owned lands are important assets and they ensure our ability to sustain a healthier life in cities. We hope that the proposals and discussions on public land, such as in AOÇ case, will offer new challenges and perspectives in the creation of more productive social spaces and self-sufficient cities.

All these features, the land, the people, and the functions, if governed well and wisely, will enhance not only the production capacity of the land but also provide citizens with a wide range of open spaces that will allow them to be more productive physically and psychologically. If a project such as AOÇ is governed consistently, as happened at the beginning of the twentieth century, it will always find its direction and receive approval from the majority of people and will also be rewarding for politicians in terms of future hopes and self-assurance. The AOÇ will therefore become an important refuge for many giving them a chance to regenerate themselves, preparing for the future, helping to produce new interactions, and new visions to maintain a perspective of environmental awareness and to reunion with nature.

Notes

1 Atatürk Orman Çiftliği in Turkish and referred to as AOÇ in the text.
2 The authors of this chapter, D. Baykan, K. Arapgirlioglu, with B. Batuman and G. Çulcuoglu, presented the paper Urban Agriculture and AOÇ as an Urban Transformation Strategy at the Symposium Atatürk Forestry Farm and the Future of Ankara, organized by TMMOB Chamber of Architects, ANKARA, 8 October 2012; and AOÇ has been studied as a case study in LAUD 481 Landscape Ecology course, taught by Arapgirlioglu in 2012–2013, involving students in the process.
3 6th International AESOP Sustainable Food Planning Conference.
4 The founder and the leader of the new Republic of Turkey and also the initiator of similar farms all around Anatolia as a part of the Republic’s foundation.
5 Including also the rivers of Cubuk, Macun, Incesu, Bend, and Kutugun (Semiz, 2009).
6 http://aocarastirmalari.arch.metu.edu.tr/; www.goethe.de/ins/tr/ank/
The lands owned by Sümerbank (former State Economic Enterprise on textiles), Directorate of Tekel/Monopoly (former State Economic Enterprise on Liquor and Tobacco Products) and Agricultural Equipment Institute were all sold to the private sector and are private islands within AOÇ (www.zmo.org.tr/genel/).


Total 1,200,000 sq. m. including 100,000 sq. m. of indoor space (www.melihgokcek.com/proje-detay/anka-park-25.html)

www.aocsatismagazasi.com/ with the slogan of “natural, healthy and reliable.”

Estimated to be around €37 million in 2015 budget, profits of €3.3 million by 2013 (www.meclishaber.gov.tr/).

Recently under construction due to new land-use changes and projects.

Gecekondu, Turkish origin, are areas of squatter houses, meaning “houses done overnight.”

The Union of Chambers of Turkish Engineers and Architects (UCTEA), Chamber of Landscape Architects, Chamber of Planners, Chamber of Environmental Engineers, Chamber of Agricultural Engineers (with recent changes in regulations, their budgets have been cut down as a result of their opposing attitudes).

Association of Ecology Collective of Contemporary City of Ankara.

This recent decision of the Administrative Court made all the changes and construction to date questionable, including the construction of the presidential palace, theme park, and expansion of the zoo, which were all previously protected against such actions under AOÇ law and other related regulations.

References


