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A SUSTAINABLE TOURISM DEVELOPMENT IN ALACATI, TURKEY: (RE) INVENTION OF PUBLIC SPACE WITH CLEAN ENERGY

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1   ABSTRACT

Although there is an increasing recognition of the impacts of climate change on communities, residents often resist changing their lifestyle to reduce the effects of the problem. By using a landscape architectural design medium, this paper argues that public space, when designed as an ecological system, has the capacity to create social and environmental change and to increase the quality of the human environment. At the same time, this ecological system can engage residents, enrich the local economy, and increase the social network.

Through methods of design, research and case study analysis, an alternative master plan is proposed for a sustainable tourism development in Alacati, Turkey. Our master plan uses local geographical, economic and social information within a sustainable landscape architectural design scheme that addresses the key issues of ecology, employment, public space and community cohesion. A preliminary community empowerment model (CEM) is proposed to manage the designs. The designs address: the coexistence of local agricultural and sustainable energy generation; state of the art water management; and the functional and sustainable social and economic interrelationship of inhabitants, NGOs, and local government.

1.1   Keywords

Public space as design framework, site-specificity, sustainable development, ecological systems

2 INTRODUCTION

Cities are increasing their consumption of primary energy at a time when energy resources are decreasing. This global issue requires radical rethinking and a shift from fossil fuel based resources, as well as a change in energy consumption, production and distribution regimes. The necessity for self-sufficiency of human settlements, given concerns regarding climate change, profoundly influences the production and consumption processes of energy, food, water and waste. Clean energy and local scale clean energy production has been shown to be a sustainable alternative (Dunster 2010). Although technological solutions are available, there is strong social resistance to changing lifestyles to achieve such targets. This paper proposes that energy production be incorporated into the socio-cultural and ecological purpose of public space so as to create social and environmental change, whilst at the same time engaging society, enriching the local economy and increasing social networks.

Public space, by its nature, is open and accessible to the public. *Project for public space* (2000) highlights characteristics of quality public space including accessibility, comfort, security, activity diversity, and sociability. The Australian Institute of Landscape Architects (AILA 2010) defines 'public space' as 'land provided for public use, access or visual or ecological reasons'. It contends that it 'is an important part of the community's green infrastructure asset and should be designed, developed and managed with adequate funding and the best professional guidance available.' While design based studies are more concerned with physical qualities, public spaces also have a political aspect, by giving community members a place to express themselves through speaking out, being heard and protesting: 'Public spaces do not exist as static physical entities but are constellations of ideas, actions and environments' (Miller, 2007).

The capacity of public space to create social change is correlated with such nonphysical qualities as those mentioned above. As Miller (2007) states: '…[p]ublic space is a kind of hybrid of physical spaces and public spheres'. Many characteristics of public space have emerged in response to the needs of society. While the social and environmental benefits are well documented, a growing amount of literature stresses the necessity of physical space for a democratic life: 'New public space designs need to arouse desire in the public to participate, to cultivate and to advocate' (Tilder, Blostein, and Amidon 2009, 178). Public space is a fundamentally social space that can operate as a showcase for a new lifestyle; this may include encouraging the imminent social acceptance of clean energy technologies through the use of educational and information spaces.

Jan Gehl (2010) the renowned public space designer, explained the reciprocal link between society and public space in his dictum: 'We shape cities and they shape us'. This paper explores this link in the urban transformation process of Alacati, an Aegean-Mediterranean town in Turkey. In the last two decades, this transformation has directly impacted on the lifestyle, economy and physical space of the town. Background literature suggests that the primary function of Alacati's public space significantly changed during privatization within the new tourism development. Monoculture public spaces became a focus for servicing exclusive and expensive cafes and restaurants. The town became a place for wealthy residents and visitors, excluding lower socioeconomic groups (Gürkan 2008). As there is a significant need for public space in town, this paper identifies the capacity of public space within the historical context of national Turkey.

Based on the available evidence, this paper proposes that public space can be used as a design framework within a sustainable tourism development vision. When used for production, public spaces could engage inhabitants around their natural and cultural assets, enrich the local economy and increase social networks. An asset map using local geographical, economic and social data is used to develop various sustainable landscape architectural designs which address the key issues of ecology, employment, public space and community cohesion. A preliminary community empowerment model (CEM) is suggested to manage the designs effectively. Designs include (but are not limited to): local agricultural-sustainable energy generation coexistence, state of the art water management, and functional social and economic sustainability between inhabitants, NGOs, and local government.

3 PUBLIC SPACE AS A DESIGN FRAMEWORK
3.1 Public sphere and public space in Turkey

Harvey (2006) exposes the link between public space and public sphere in the Athenian agora and associates the physicality of urban public space with the performance of democratic governance in

the public sphere. Therefore, the idea of using public space as a development framework for the rural based economy in Turkey first requires an analysis of the change in the concept of 'public sphere' over time. During the industrialization process in the 16th-17th century, Jurgen Habermas discussed the notion of public sphere. He defined the 'public sphere' as the product of industrialization; not planned, but self-organised within modernization. It is the domain where values, taboos, dogmas, symbols, and actors previously hidden in tradition, become visible. Habermas's definition, however, has advanced with the advent of modernism and the concept now includes (but is not limited to) notions of pluralism, participation, freedom and democracy (Çaha 2003).

The word 'public' in 'public sphere' has an equivocal meaning that goes back to the time when the Republic of Turkey was first founded. In order to understand this obscurity, one needs to look at the concepts that create the meaning of public sphere in the context of the coexistence of national and religious identity. Traditionally, Turkish social structure is embedded in religion. Since the foundation of the Turkish republic, national policy embraced religion and used it as a tool to unite a multiethnic population. However, the Islamic movement in Turkey has resisted the process of westernization. Despite this, the multi-ethnic identity and minorities were accepted and legitimized in the public eye over time (Yavuz 2004).

The political power of the public sphere in Turkey usually controls the use of public space. The political character of public space has hitherto dominated its recreational uses. Using public spaces to convey a point or promote an ideology has been a common practice in the history of national Turkey. This has, for example, occurred through processes as different as: a statue of political heroes, a community protest, or a police force action in the public space. The use of public space as the image of new western life was promoted by the new republic; this has significantly impacted on Turkey's westernization process. However, this vision was limited and did not allow ideas about the use of public space to evolve in line with the development of international ideas.

3.2   (Re)Building the community through energy-conscious public space

Design and public space have the potential to create a more sustainable society, and can simultaneously respond to global and local issues. From a triple bottom line perspective, any innovations in the public space should address social issues, while also improving the environment. A successfully designed public space should engage the community. As public space has a strong political character in Turkey, this capacity can be channelled into positive societal change. There is the potential for a symbiotic evolutionary relationship between the community and designed physical space when public space is conceptualised as a framework. Such a relationship improves the local economy, the level of education about the environment, and social networks. Metaphorically speaking, a building begins to erode once built; a landscape, on the other hand, continuously evolves. A landscape, then, can be seen as an agent; as a framework for community development (North 2011, 15).

In the past, public space has been conceptualised as a passive and formal component of cities. Accordingly, rather than designing for dynamic conditions (which characterise any system that captures natural energy sources), designers of public spaces have commonly focused on formal objectives which are, by definition, static. Current landscape architecture theory, in contrast, promotes a dynamic approach for public spaces which are concerned with services, programs, infrastructure, network flows and multi-functional and flexible surfaces (Wall 1999, 234). Such a dynamic public space suggests a revitalized role for the design professions, and disregards the monotonous standardization of the public space in cities. North (2011, 20) states that a dynamic public space embraces, engages and supports the community, and evolves with its users when considered as a framework. The multifunctional use of public space can also promote positive synergies between social and ecological functions from a whole systems perspective, while at the same time using resources more efficiently (Birkeland 2008, 103). Public space can, for example, be a platform for the production of clean energy and for improving its social acceptance.

James Corner (1997, 86) stresses that '(l)andscape architects should look to ecology less for techniques of description and prescription (and even less for its apparent legitimizing of images of 'naturalness') and more for its ideational, representational, and material implications with respect to cultural process and evolutionary transformation'. Ecological discourse suggests that only a bottom-up approach can create a sustainable world, due to the incapacity of humankind to manage complexity and the dynamic scale of natural systems (Orr 1992, 29-38; Van der Ryn and Cowan 2007, 23). From an ecological design perspective, public space can be conceived as a bottom up and fine grained approach.

As public space is at the nexus of the material world and the human social network, it is the smallest socio-physical segment of complex urban environment and, perhaps, more comprehensible than any other urban scale. Complex system theory and self-organised systems, in particular, inspired many social scientists to advance community participation and small action in cities. Self-organising systems start with small actions which can then turn into large-scale events. They are flexible and dynamic, and learn and evolve from their own rules. Johnson (2002, 18) explains that self-organisation occurs both from bottom-up and low-level rules to a higher-level of sophistication in intelligence, personality and learning. The behavioural pattern of a self-organised system is inclined to shift into a steady state to sustain resources and achieve self-sufficiency; however, when resources are lacking or a threat occurs, it changes its state slightly to adapt to the new conditions. If a threat turns into chaos, the system can change its behaviour to survive. At the edge of chaos, in other words, a self-organised system behaves creatively in order to survive.

Jacobs also emphasized the link between community led action and public spaces in her seminal work, *The death and life of great American cities* (Jacobs 2000; Johnson 2002). People influence others while their actions are exposed. Public spaces have an important role in creating community action. By providing space and using the right design framework, public spaces have the potential to instigate positive change. Conceptualising the built environment on a small scale by working at segment level creates the flexibility and space for creativity and innovation. Each public space within its site specificity has the potential to incubate a community action with the right design framework. To increase the quality of life standards equally, a holistic strategy is required. This requires working with local social, environmental and economic data, rather than simply taking a retrofitting approach by integrating solar panels, green walls or any other technical 'fixes'. As self-organising systems in an ecosystem move towards a steady state of self-sufficiency, public spaces in urban environments can be similarly designed with clean energy resources dependent on their site specific energy potentials (solar, wind, thermal, bio-energy, wave), and their unique social, cultural, environmental and economic merits.

4   ALACATI: THE TRANSFORMATION AND ITS AGENTS
4.1   History and geography of Alacati
Alacati has witnessed numerous demographic and cultural changes throughout history. During the Ottoman Dynasty in the 1830s, the local governor transferred people from the Greek islands to work in construction. By excavating a drainage canal extending to the sea, a malaria breeding marshland was dried and eventually formed the existing ecosystem in the southern section of the historic town centre. Due to increasing population, today's historic town was built in addition to a port settlement. At present, nothing of this port settlement remains, but the ruins of a church. The estuarine beside the harbor and the historic town centre define Alacati's current political boundary. The Greek minority from these times played an active role in developing the town through construction and viticulture. Soon after, Alacati became one of the primary trade ports exporting wine to France and Italy (Atilla 2005).
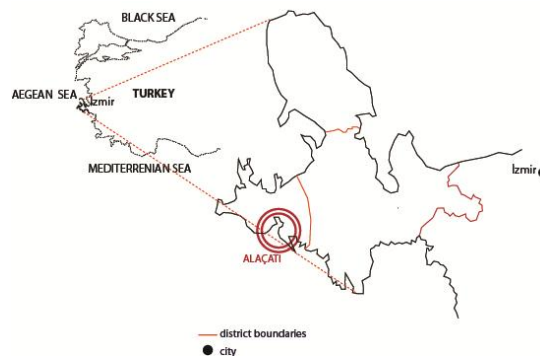

Figure 1. Alacati's location context. (2012) Diagram by the author.

During the Balkan war in the 1910s, people from diverse ethnic backgrounds migrated to the town after the Diaspora of Greeks to the island of Crete. This cultural shift was first seen in the change of house ownership and in farming habits. Viticulture, mastic farming, sea weed production, fruit and olive groves

was abandoned in favour of tobacco, wheat, aniseed, barley, and rock melon farming. While the cellars of stone houses were initially used to store grapes for vine production, new migrants used them for tobacco storage. Atilla's (2005) interviews with local people and local NGO leaders show that the shift from traditional crops to (mainly) tobacco production was a mistake in the town's development. One interviewer suggests that Alacati needs to embrace its old agricultural products for any development possibilities in the future (Atilla 2005).

After the 1980s, the national government introduced a new tourism policy that opened the land to building development to boost the economy of coastal towns: 'As capital seeks ever more locations where to raise profits, processes of this new cultural economy of space affect all Western, at least, world, but they appear most strikingly in contemporary tourist destinations' (Terkenli 2007, 38). This was the time when the national tourism policy encouraged the locals to become involved in tourism, either directly through tourism services, or indirectly by selling their property for new tourism businesses. Urban transformation in Alacati thus started when property ownership moved from locals to new residents, who were mainly the entrepreneurs and elite of big cities. The original stone houses were renovated accommodate new functions including boutique hotels, cafes, and restaurants. Terkenli (2007, 39) stresses that emerging cultural forms and trends potentially overtake the conventional forms of culture while making them benign to a capitalist economy through spectacle. This has certainly occurred in Alacati; however, based on interviews with local people cited in previous research, the public domain and its facilities have also changed within the new tourism development. Monoculture public spaces are mainly devoted to exclusive and expensive cafes and restaurants. The town has become a place for the wealthy and excludes the lower socioeconomic classes (Gürkan 2008).

Today, authentic stone houses, a unique landscape and wind surfing as well as the multicultural ethnic background, attract visitors over the winter and summer seasons, causing a population change from 8,000 to 60 000. Wind surfing, in particular, has a big impact on changing the lifestyle in the town. In 1991, the first wind surfing school was established. Currently, there are over 10 surfing schools, which create an annual revenue of ten million dollars. The geomorphology of the bay is excellent for learning swimming and wind surfing. Alacati periodically invites national and international professional surfers and surf enthusiast from all over the world. As wind is so powerful in the region, 44 wind turbines have been built since 1998. Together with solar and geothermal energy, wind is the best potential clean energy resource of the region and will be used primarily in future developments (Atilla 2005).

4.2   Tourism and urban transformation in Alacati

During the urban transformation in Alacati, the pressure of tourism has had a significant impact on the physical and social space. Projects were promoted and built, including a freeway that connects the town to the city Izmir. Despite its controversial location, an airport project was planned, but is on hold for the construction approval. The local government has agreed upon a university project with Germany. While big development plans have been on the agenda, local people complain about the local government's insufficient service in improving the water supply, waste water management and garbage collection systems (Gürkan 2008).

Two main actors had significant roles in transforming the town. First was the civil movement led by big city entrepreneurs who came to Alacati in early 90s. This was not part of a central planning policy and can be called a grass-roots movement. The charm of windsurfing through word of mouth attracted many surf enthusiasts to the town. Slowly, these newcomers took ownership of authentic stone houses and opened new businesses including boutique hotels, cafés, restaurants, and surf schools. The local people, however, were not the primary actors in the transformation process due to their lack of economic and social capacity. Initially, they sold their properties to the newcomers and were not involved in the tourism economy. After a while, some of the new business owners connected with the local people to establish authentic culinary businesses. The new entrepreneurs also developed organisations which acted as NGOs to preserve the natural and cultural assets of the town. However, based on interviews with people from local government, collaboration was lacking between NGOs and local government and needed better management and coordination (Gürkan 2008, 2010). The emerging local economy and self-conservation mechanism of this movement could have been supported by local government and top-down planning policy to achieve an ecologically sustainable tourism development. However, a holistic vision was lacking.

4.3 Port Alacati Project and its criticism

Local government was another key actor in the urban transformation. After recognising tourist potential along the coasts of Turkey, the national government prepared tourism policies for new developments. Following this, an uncontrolled construction boom occurred with a significant impact on natural and cultural landscapes of the coastal settlements. As cited by Knox and Mayer (2009) '…[s]uch big city policies will lead to the development of 'would-be cities' that have lost their unique characteristics stemming from their smallness.'

In 1995, the local council established the Alacati Tourism and Investment Corporation with national and international partners to build the Port Alacati project, designed by François Spoerry. Land initially protected by regional environmental law was opened to tourism development. Consequently, Spoerry's team was commissioned by the local government and the Tourism and Investment Corporation to develop a master plan. The project disregarded the existing ecological qualities and excavated the terrain to expand the estuary and accommodate luxury housing. While the first stage of this plan has been implemented, further development ceased over environmental and social concerns.

Figure 2. Port Alacati project, the confluence, port and estuary. (2010) Photo by the author.

Issues related to the postponement were twofold. Firstly, the law stated that coastal developments have to be outside of 100m coastal edge line. The law simply reserved the right of coastal edge for public use and rejected any building or construction activity that obscured such use (Topal 2010). The second issue concerned the possible consequences of the first law which jeopardized the ecological balance of the existing estuary, lagoon and aquifer system, and created the backdrop of social separation and polarization (Yayman 2011). These criticisms have led to further discussions in local and national media.

Guzer (2010),for example, has discussed the success of the project within its objectives and direct relationship with water. In this sense, the project was provocative and pioneering, while dealing with conservative national planning policies. Given the potential of the development to build meaningful relationships with water, the project retained a pastoral, postcard-like aesthetic (Guzer 2010). As the development stopped after the completion of first stage, interestingly and exceptionally, such rigid planning policies seem to have worked for the future of Alacati, not against it. Another important criticism, mostly overlooked in Turkey, was the application of sustainability concepts to new developments.

Although the Port Alacati project makes an effort to integrate sustainability, it refuses to go beyond the green-wash demonstration for marketing purposes. Despite a few green technologies, the project does not respond to the equity aspect of sustainability of the town. While offering no positive development for the inhabitants, it privatizes the water edge and discourages the use of public space. 'Sustainability' remains as a buzz word in the project brief. The project disregards site-specific qualities of the town and geography, and envisions a tabula rasa development for the marketing slogan 'First canal development in Turkey'. The purpose of this paper was to develop this criticism and open a new discussion on the basis of design, public space and community engagement.

5 AN ALTERNATIVE PROPOSAL FOR ALACATI

Sustainable development principles are well-documented for different scales and types of settlements. As claimed by political scientist David Imbroscio, an alternative economic development for a small town should raise the wealth in society with stable economy and employment, expand the capacity of local assets, distribute the costs and benefits equally back to the community, and improve other foundations for social needs. Such a prospectus would provide the basis for moving towards a self-sufficient economy (Knox and Mayer 2009, 113).

Alacati, back in the early stages of its urban transformation, experienced a grass-roots movement which has notably shaped the current development dynamics, despite the lack of support from any

community economic development model. Such movement though, if implemented and managed by national sustainability policies, would have been pioneering and unique from a social sustainability perspective. By using a landscape architectural design medium in public spaces, the paper proposed a bottom-up sustainable development strategy. Rather than following a top-down sustainable development prospectus, the paper aimed to construct a community economic model that can manage the new designs.

5.1 Methods

This paper used threefold method: research, planning and design. The case was studied as part of a student design competition in 2011, for the International Federation of Landscape Architecture (IFLA). The case took our attention first because the town had a controversial agenda of a new canal development. This project has been in the middle of many discussions since its first stage completion. The other stages have failed to be implemented due to the court's decision and growing public criticism. Despite the local and national condemnation so far, neither any idea, policies nor any alternative design proposal has been proposed or disseminated. The paper aimed to bring the discussion one step beyond 'just criticism' and demonstrated an alternative master plan envisioning a sustainable tourism development as well as ecologically designed new public spaces for community development and environment.

Literature and previous research

The primary local information concerning the urban transformation of the town has been gathered from the background literature and previous research that were mainly compiled from the interviews with inhabitants, NGOs and local government. The information has been useful to create an analysis map for the design and planning process. As this paper has focussed on the urban transformation and public space in particular, we have identified the key events and their actors who actively took role in transformation process. Once we knew our vision for a sustainable tourism development, we exposed these events and their actors to construct the new relationships for our proposal. We have recognised that local assets were ignored in the controversial Port Alacati project. Considering the importance of locality in building sustainable economies for small towns, we focussed on the local assets in particular to use them for our design proposal.

Analysis

A local asset map was prepared on the basis of historical, economic, and geographic data from previous research and existing literature. We compiled these assets and represented them within a timeline which also showed the expansion of the town (See Figure 3).
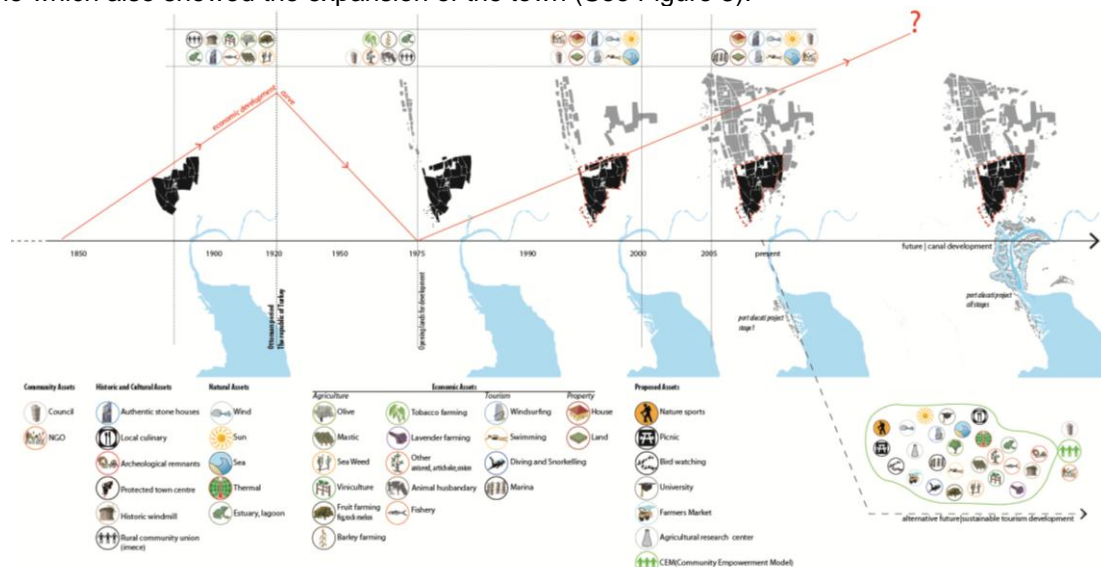

Figure 3. Asset mapping analysis and town's expansion. (2012) Diagram by the author.

Local NGOs, inhabitants, local government, local and national investors were the key actors in the history of urban transformation. The agreement between such key actors was crucial to determine the right tourism development strategy. However, the paper's primary focus was not constructing a detailed development vision but a preliminary planning and design framework for future research.

When the vision was determined and projected on the basis of local assets, we focused on the current issues of Alacati. Given the lack of public spaces and their uses in the town, we recognised a great opportunity to facilitate new public spaces for the community, while introducing production based local economies where people could be actively involved. We proposed the new public spaces as ecologically designed systems managed and delivered by a bottom-up planning framework: a community empowerment model which was directly tied to local government. In so doing, we used the town's local assets by integrating potential clean energy sources.

Planning and Design, Design and Planning

We demonstrated a number of design interventions that could simply be implemented through the proposed planning framework. The specific information concerning the delivery and management of the project was not the scope of this paper and could be further detailed. The design and planning process have been reciprocal and reflect the author's current PhD research on clean energy in urban public spaces.

The planning framework in this paper was inspired by a Japanese community empowerment model, SISDUK, which was used to coordinate and deliver resources in a rural decentralized development in Indonesia. It was successfully implemented in Indonesia and improved the local people's capacity to be directly involved in their future by building sustainable development (Land 2004). A primitive version of this
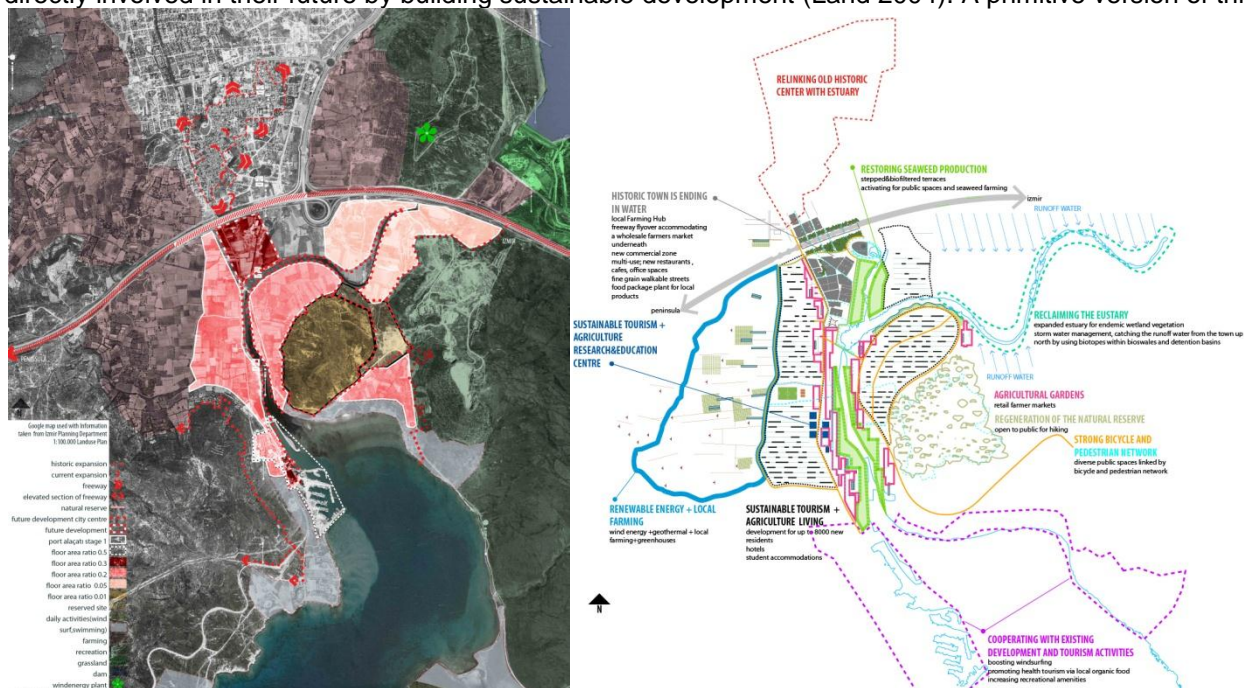
**Figure 4. Existing land use, future planning decisions, and proposed master plan. (2011)
Map and diagram by the author.**

model was ingrained in the rural culture of Turkey, and was known as IMECE. IMECE is an unpaid emergent activity that is based on community cooperation. No central authority is involved in any endeavour when tasks need to be done for the benefit of the community. Each individual, depending on their expertise, is voluntarily involved to address the required tasks. Although IMECE showed us how the communities functioned in rural human settlements in Turkey, SISDUK seemed to be a more advanced version that could better deliver the outcomes for a sustainable tourism development when led by a central authority and their related top-down policies.

The model SISDUK works with multiple actors, places the community in the centre of the process, provokes multidisciplinary thinking, and creates new ideas and innovation. The local government of Alacati was the primary actor and worked with internal and external investors and NGOs. In this project, we acted as external investors and illustrated innovations within the new public spaces. Our main concern was capacity building rather than immediate financial results. Innovations were proposed to augment the use of public spaces through the coexistence of local agriculture and sustainable energy generation, and a state of the art water management system designed within water sensitive urban design principles.

5.2   Results

Following the asset mapping analysis, we proposed an alternative master plan (See Figure 4) for a sustainable tourism development. Rather than excavating the fragile landscape, we established the link between the estuary and the old historic town centre by extending the fine-grained pattern of the town to the south.

Although the existing freeway flyover physically separates the historic centre from the southern side, we turned this constraint into an opportunity to provide room for the new wholesale farmers' market underneath. Right at the southern edge of the flyover, we proposed a town park which works as a green buffer and a storm water infiltration utility for the runoff water from the town (See Figure 5).

Figure 5. Proposed wholesale farmers' market under the freeway flyover facing the town park. (2012). Illustration by the author.

We hypothetically doubled the current population and planned to accommodate 8000 new residents in two different types of development in town. The first type (Type A), a multi-use development consolidated between the freeway flyover and estuary consisted of archetypal Alacati streets and houses. The second type (Type B), endowed with state of the art green infrastructure and farm gardens for self-sufficient living, offered agricultural sustainable living. Both types of development suggested an alternative tourism experience that aimed to integrate the society, local government, and tourists.

We proposed seaweed production along the edge of the estuary, while keeping the promenade for public and tourism activities (See Figure 6). We protected the estuary simply by using it: we thickened its

Figure 6. Seaweed farming and public space along the estuary. (2012). Illustration by the author.

edge with other agricultural activities. Educational agricultural gardens were placed adjacent to the estuary both for production, education, and recreation and tourism purposes. A sustainable tourism and agriculture research centre was proposed to manage these farms and educate the residents and tourists,

while also engaging them in local farming practices. In this way, tourists were informed about local products right in the centre of town where the locals were practising daily, routine farming activities. These gardens were designed to function as the new public spaces of the town.

On the western section of the master plan, we suggested the coexistence of green house agriculture, wind energy plants, and mastic and olive farming (See Figure 7). It is well-documented that a renewable energy sector creates significant employment opportunities both during, and post production. One development strategy for the town could be to lease the land to clean energy investors and to use the energy income to seed and develop an agricultural economy.
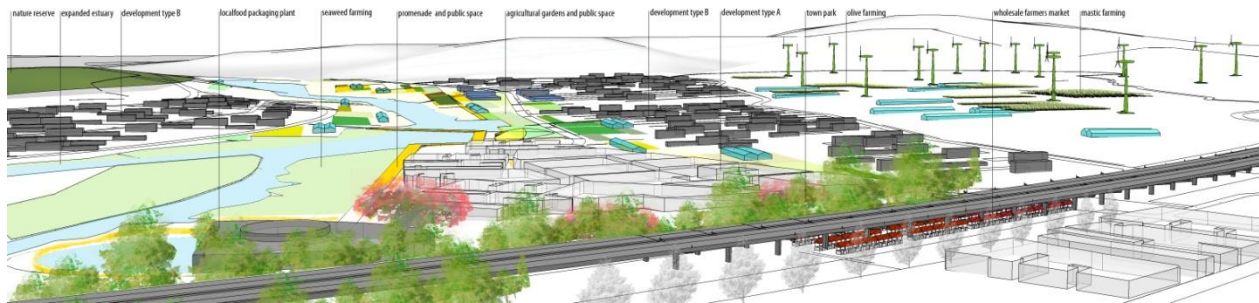

Figure 7. General view of proposed sustainable tourism development for Alacati. (2012). Illustration by the author.

We regenerated the natural reserve using endemic planting and opened it to the public for hiking and bird watching. We cooperated with other developments in the southern section, including wind surfing schools, and the marina settlement to integrate them with the proposed sustainable tourism development.

We proposed a water management strategy for the town, which was of particular benefit in cleansing and restoring the estuary. We simply controlled all runoff water arriving at the estuary banks. Our town park proposal was integrated with bio-swales that cleanse the water coming from the town to the north. We have expanded the estuary bed and promoted endemic wetland planting. The outflow from the existing dam and all runoff water was filtered within bio-swales, and retention basins were built on the estuary plane (See Figure 8).
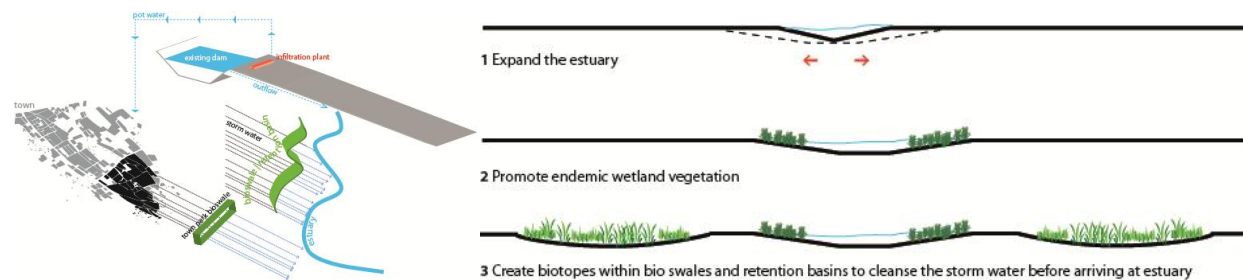

Figure 8. Storm water management and estuary restoration. (2012). Diagram by the author.

6   CONCLUSION

Social change plays a crucial part in supporting growing research around climate change science and urban studies. This paper argued the potential of design and public space to engage society in achieving a sustainable lifestyle. Through the research, design, planning and representation in landscape architecture, this paper explored a proposal in Alacati, an Aegean-Mediterranean town in Turkey.

The Alacati case revealed some important findings for the landscape architectural discipline and constructs the hypothesis through the design process and site-specificity. A new definition of public space was proposed that consists of two distinguishing classifications including;

1. Site-specific physical material world
    a. Public space for the design framework
        i. Designing with local agricultural assets
        ii. Designing with clean energy

2. Site-specific human social network (Grounded in self-organised systems in complexity theory, and local grass root movement in town's history)
   a. Public sphere for social sustainability (Social change)
      i. Planning and managing with community empowerment model (CEM)
      ii. Using design process and outcome for educating the public
      iii. Instigating the local economy
      iv. Expecting to create a centrifugal effect to change central policies

In the national historic context, public spaces were used as a propaganda machine to promote westernization in building a new modern Turkey. Therefore, we recommend that public space be re-envisaged to promote sustainability within a sustainable tourism development vision to increase the number and quality of public spaces designed both for the environment and people.

Agricultural gardens and recreational facilities within a promenade along the estuary, as well as a new town park adjacent to the existing freeway flyover, are proposed. Each design proposal incorporates established alternative tourism activities aimed at actively engaging tourists and local residents. These activities utilize the local assets, clean energy and state of the art green technologies, while promoting local production. As the new proposals are dynamic design artefacts, and participation is a priority, a preliminary planning, management and coordination model, entitled 'Community Empowerment Model' (CEM) is proposed (See Figure 9). CEM was recommended because of the similarity to the previous grass roots movement that achieved significant success earlier in the town's development. In this sense, CEM has been proposed to reconnect the local government, NGOs and investors with local people.

Figure 9. Community Empowerment Model (CEM) for Alacati. (2012) Diagram by the author.

Sustainable energy transition is a response to cities' growing energy demands. The most important and difficult part of this transition is likely to be the public consensus and action for making the changes required to address the sources of the problem. This paper conceptualises the importance of public space and design as an agent to instigate positive social change by redefining the use of public space. Landscape architectural design practice in the public space is used to bridge local energy production and its social acceptance by residents. The proposed CEM contributes to the discourse around productive public space designs with clean energy, food production, and state of the art water management to better manage sustainable outcomes. In conclusion, the recommendations are a response to a local problem but, at the same time, reinvent the idea of public space through site specificity to open a discussion and further research possibilities for production based programs in the human environment.

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