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Perspective

# Edible Green Infrastructure for Urban Regeneration and Food Security: Case Studies from the Campania Region

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**Abstract:** Ten identified edible green infrastructure (EGI)-related urban regeneration case studies within the Campania region, Italy, are explored in relation to local community development, involvement, and education. Urban space and agriculture are promoted as sustainably planned networks for edible food components and structures. Within an urban ecosystem, city planners are actively promoting urban agriculture after an increase in the availability of unused land. Advantages for public health include stress reduction and physical activity, as well as sustainability of urban gardens by way of far-sighted urban planning. Case studies within the Campania region illustrate EGI know-hows and awareness, and they elucidate upon a number of beneficial reasons for its implementation. Within the Campania region, all five provinces showed positive impacts when using EGI for urban regeneration and well-being. Recent developments from the COVID-19 pandemic are reinforcing a rethink of food security and food supply chains.

**Keywords:** urban agriculture; ecosystem services; social agriculture; allotment gardens; Italy

## 1. Introduction

Cities produce less than 10% of their food and rely on water, energy, fuel, and construction materials from external sources [1]. A cause-and-effect reproach from escalating global population brings to the forefront the need to re-examine how urban spaces are developed and used, and how urban inhabitants are fed [2]. Furthermore, food insecurity is an important health problem and an under-recognized social determinant of health [3]. With the escalation of populations in cities, important urban environmental services in correspondence with ecosystem services play a vital role in urban health and its overall landscape [4]. A “green”-friendly, vibrant, and constructive community promotes well-being, essential to sustainable development; when correlated with urban food security, it is a safe and sound concept of healthy living intergenerationally. Green infrastructure is gaining momentum. The integration of green and gray infrastructure can produce lower cost and more resilient services [5]. Multifunctional and connected green infrastructure systems are linked to human well-being and city resilience [6]. Green infrastructure such as green roofs, urban parks, green walls, and rain gardens provide several ecosystem services [4,7]. Green roofs, for example, are reported to reduce temperature at street level ranging from 0.03–3 °C and to remove PM<sub>10</sub> pollutants at roof level ranging from 0.42–9.1 g/m<sup>2</sup> per year [8].

The link between green infrastructure and human well-being implies that equitable access and distribution of quality green spaces is a human rights issue [9]. Recently, the concept of green infrastructure was bolstered with a novel approach called edible green infrastructure (EGI) that can improve resilience and quality of life in cities and can boost food insurance [4].

EGI is a sustainable planned network of edible food components and structures within the urban ecosystem which are managed and designed to provide primarily provisioning ecosystem services [10,11]. EGI typologies are macro-categorized in conjunction with urban agriculture, with eight sub-classifications: (1) edible urban forests and edible urban greening, (2) edible forest gardens, (3) historic gardens and parks and botanic gardens, (4) school gardens, (5) allotment gardens and community gardens, (6) domestic and home gardens, (7) edible green roofs and vegetable rain gardens, and (8) edible green walls and facades [11,12]. EGI also includes urban foraging practice from formal and informal urban green spaces [13–15]. An example of this practice can be found in the city of Andernach, Germany, where edible plants are grown in urban greenspaces in which citizens can harvest for free, resulting in a better diet and increased social interaction [14]. However, edible plants in urban areas can be contaminated by pollutants [11,16]. Entwistle et al. [17] sampled nearly 280 paired soil and crop samples across 31 urban gardens in Newcastle-upon-Tyne, United Kingdom. They found that Pb concentrations in 98% of the sampled soils were above the United Kingdom soil guideline for urban agriculture sites (80 mg/kg), but the majority of crop samples had Pb levels < 0.1 mg/kg fresh weight [17].

A number of cities are already integrating different types of EGI into their urban management plans; however, management and planning endeavors still need to consider context-specific geographic (e.g., climatic zones and soil characteristics), social (e.g., community development, educational benefits, and equity), and economic (e.g., employment opportunities and inexpensive food sources) requirements [12].

Urban agriculture and EGI have the potential to increase the sustainability and resilience of urban communities [18]. In particular, community urban gardens can support community resilience in terms of disasters and pandemics (e.g., the COVID-19 pandemic) [19]. As such, the coronavirus lockdown is driving more urban dwellers to cultivate fruit and vegetables locally—especially at home [20]. Urban agriculture can be used for the sustainable regeneration of urban environments [11,21–24]. Urban regeneration is a key focus for public policy throughout Europe, in which critical focus continues to explore aspects of its most deprived neighborhoods. There was a sporadic decline in these neighborhoods from a variety of causes, including globalization and related structural influences [25]. Urban regeneration, in this context, hints at a European-centric practice that closes the gap in developing an overall better EGI approach.

According to the Urban Development Network Program II (URBACT II) report, the state of the art on sustainable regeneration in urban areas stipulates “regeneration policies and processes within a city, which seek to address inter-related problems in order to consider, reduce, and mitigate their environmental impact” [26]. Such policies, plans, and actions led us to conclude that the minimization of required inputs (i.e., energy, water, food, materials, etc.) and processed outputs (i.e., waste, heat, air and water pollution, carbon emissions, etc.) are dimensional to EGI practices (Table 1).

**Table 1.** Types of regeneration policies, plans, and actions from an environmental dimension. EGI—edible green infrastructure; URBACT II—Urban Development Network Program II.

Energy †	Transportation
Energy efficiency in buildings Energy demand management and fuel poverty (nonphysical) Energy generation (renewables) District heating and smart grids	Cycling and walking Public transportation and modal shift “Smart travel” and car pooling
Land	Water
Densification of existing urban areas Urban infill Change of land use in response to local needs	Water conservation Sustainable urban drainage

Table 1. Cont.

Waste	Food
Waste recycling and reduction	Urban agriculture EGI
Others	
Urban biodiversity and sustainable landscape architecture	
Use of local construction materials and contractors	
“Taxation” on consumption (non-physical)	
Behavioral “nudges” for more pro-environmental behavior (non-physical)	

<sup>†</sup> adapted from the URBACT II report [26].

Worldwide local authorities are now investing in food-growing projects as part of their urban regeneration programs [27]. The urban agriculture and EGI literature center on the importance of community development and offer tool-oriented research for social regeneration, reducing crime and discrimination, and generating ecosystem services [28]. EGI as a nature-based solution provides an appealing enhancement to quality of life, health, and well-being—essential for local governance and inner-city development. Examples of its use include (1) inner-city lanes reduced to encourage greenways to combat air pollutants and encourage alternative transport, (2) restoration of polluted and degraded waterways, and (3) urban renewal processes through the regenerative process of assistive urban agricultural advancements (i.e., regeneration of residential and industrial areas). This can be extremely important for cities undergoing transitional change (e.g., a post-industrial shift). Examples of this type of transition can include abandoned industrial sites and unused infrastructure removed and de-toxified by using bioremediation (i.e., the process that uses plants to degrade and reduce or detoxify waste products and pollutants) to then be converted into EGI [29–34]. However, remediation should be made very carefully to guarantee that contamination problems are fully mitigated [35]. Transformative public green spaces can be used for recreation, converted into community gardens and urban farms—enriching social cohesion and regenerating disadvantaged urban areas [21,36]. Urban agriculture and EGI as tools of sustainable landscape design were brought into European and American cities by landscape architects and artists from the early 1970s [37]. In 1982, two acres of wheat were planted and harvested on a landfill near the World Trade Center in New York by the American–Hungarian artist Agnes Denes. The artist stated that “placing it at the foot of the World Trade Center, a block from Wall Street, facing the Statue of Liberty, also had symbolic importance. It represented food, energy, commerce, world trade, [and] economics. It referred to mismanagement, waste, world hunger, and ecological concerns” [38].

In the past, the European URBACT II project, i.e., based on sustainable food in urban communities, generated a body of knowledge ranging from food production to social inclusion, food education, sustainable regeneration, and artistic projects in 10 European cities [39]. However, to our knowledge, there are no peer-reviewed studies in the Campania region that discussed the role of EGI for urban regeneration. This perspective study fills this research gap and introduces important examples in terms of the main benefits and aims of EGI implementation. Moreover, this perspective considers the growing need to contribute toward two of the United Nations Sustainable Development Goals (SDGs)—specifically, SDG 3 (ensure healthy lives and promote well-being for all at all ages) and SDG 11 (make cities and human settlements inclusive, safe, resilient, and sustainable)—by targeting the need for urban food security and adding significant knowledge base at the case study level [10]. In detail, we identify and examine 10 EGI-related sustainable urban regeneration case studies within the Campania region, Italy, which assist in developing local community involvement and education, and we focus on the trends within the discipline.

## 2. Case Studies

A number of Italian municipalities apply the Food and Agriculture Organization of the United Nations (FAO) support tool to assist with low-income households and “victims of unemployment [to] improve their own social status as well as their city” [40]. Allotment gardens, “*orti urbani*” in Italian, are components of EGI that increased diffusively throughout Italian cities in recent years (i.e., *orti urbani* increased 4% with two million square meters in 77 key urban centers [41] between 2016 and 2017). This phenomenon pressed municipalities to adopt regulations and allotment-based management schemes within an urban agricultural context. In accordance with the Regional Law No. 5, dated 30 March 2012, the Campania region considers and backs the multifunctional agro-oriented advancement of social services, well-being, education, and infrastructure development. The region put together regionwide oversight developing its social agricultural programs—a platform that provisions “eco-friendly development and a bottom-up stance in the form of EGI governance” [29]. In 2009, the region published a number of policies directed at “social and community gardens” with three key components: “social assistance, town planning, and zonal management” [42].

In terms of health benefits, a number of factors contribute to the development of an alternative EGI system, via a self-production of agricultural means, including (1) food and environmental education (i.e., in partnership with third-party organizations), (2) development of bartering among tenants, (3) recovery of traditional crops, (4) development of organic agriculture, (5) promotion of new forms of socialization, (6) training in biological horticultural techniques and orthotherapy, (7) psychosocial rehabilitation, and (8) physical and motor skills development [43]. In recognition of these policies, many urban agriculture and EGI-oriented projects were initiated and can be found throughout the region, especially within the provinces of Salerno and Naples (Figure 1). Several of these urban agriculture projects were grouped in an interregional network and mapped online [44]. The database contains 23 projects: one each in Turin, Milan, and Potenza and 20 within the Campania region. Regionally, within the context of Italy, we considered the main benefits of 10 EGI case studies within the Campania region using a desktop study and on-site verification [26]. The main benefits are listed in Table 2.



**Figure 1.** Key urban agricultural and EGI-oriented projects labeled (i.e., yellow points) within the provinces of the Campania region, Italy. Source: Google Earth.

**Table 2.** EGI case studies in the Campania region.

Province	Case Study	EGI Type	Main Benefits and Aims
Salerno	Matti per l'orto	Allotment garden	<ul style="list-style-type: none"> <li>■ Sustainable social integration of mentally ill, disabled, and minors at risk</li> <li>■ Encourage senior citizens (i.e., over 65 years of age) urban farming and leisure time (with particular attention to the most disadvantaged)</li> <li>■ Urban regeneration (i.e., recover and remake fractional areas usable and productive for small needs)</li> </ul>
	Gardens of the Mediterranean diet OrtoMondo	Urban farm, domestic garden Allotment garden	<ul style="list-style-type: none"> <li>■ Food security</li> <li>■ Healthy diet</li> <li>■ Food security</li> <li>■ Migrant inclusion</li> <li>■ Tourism</li> </ul>
	archaeological park	Allotment garden	<ul style="list-style-type: none"> <li>■ Education</li> <li>■ Horticultural therapy</li> <li>■ Cultural events</li> </ul>
Benevento	“Bosco Lucarelli” Institute	School garden	<ul style="list-style-type: none"> <li>■ Education</li> <li>■ Environmental sustainability</li> </ul>
	Buon orto fa buon sangue	Allotment garden, urban farm	<ul style="list-style-type: none"> <li>■ Convivial sociability</li> <li>■ Food security</li> <li>■ Crime reduction</li> </ul>
Naples	De Filippo park	Urban park	<ul style="list-style-type: none"> <li>■ Horticultural therapy</li> <li>■ Education</li> </ul>
	Ciro Esposito park	Urban park	<ul style="list-style-type: none"> <li>■ Crime reduction</li> <li>■ Education</li> <li>■ Social agriculture</li> </ul>
Caserta	Orti.net, coltiviamo la socialit@Caserta	Allotment garden	<ul style="list-style-type: none"> <li>■ Urban regeneration</li> <li>■ Education</li> <li>■ Food security</li> <li>■ Biodiversity thinking</li> <li>■ Rediscover peasant traditions and human relationships</li> </ul>
Avellino	Irpinia Solidale	Allotment garden	<ul style="list-style-type: none"> <li>■ Build educative community-oriented nature-based solutions</li> <li>■ Urban regeneration</li> </ul>

### 2.1. Province of Salerno

Within the city of Cava de Tirreni, near Salerno, the ongoing project “*Matti per l'orto*” successfully centered on persons with mental disorders for eight years. Its high rate of success focused on presenting persons with mental disorders the opportunity to learn, cooperate, and interact within the community by producing alternative urban food sources. Another project, within the subregion of Cilento, called “Gardens of the Mediterranean diet” explores dietary health and offers the opportunity for young people to learn about farming and food productivity. More recently, Legambiente, the environmental offshoot of the opposition party in power, started the “*OrtoMondo*” project within the township of Capaccio Paestum in which 30 migrants from a nearby migrant center oversee 11 of its nearby garden allotments [45].

Throughout the province of Salerno, and greater Campania region for that matter, examples of EGI-oriented projects illustrate continued commitment and educational grassroots understanding of the intrinsic value of agricultural self-production. A key example, set out in 2001 as another Legambiente initiative, is the first community garden experiment built inside the archaeological park at Pontecagnano [46]. The park, made up of 22 hectares, remains and is preserved as one of the most important Etruscan settlements in Italy (Figure 2).



**Figure 2.** Example of a restorative dig site within the archaeological park in Pontecagnano, Salerno. Left—archaeological dig site; right—map of archaeological dig site. Source: Photographs taken by A. Russo on 16 July 2018.

Presently within the archaeological park, the community gardens are divided into a number of sections, including 54 individual 100-m<sup>2</sup> plots assigned to pensioners over 55; one plot of 1000 m<sup>2</sup> divided by waterways, named the “*ortone*”, allocated to an association which supplies local and small groups the ability to purchase sub-plots of 50 m<sup>2</sup>; a horticultural therapy section of about 50 m<sup>2</sup> assigned to the Department of Mental Health; pedagogical gardens assigned to the local schools; a section assigned to the Christian Associations of Italian Workers; a section assigned to the Campania Rheumatic Disease Association; one distinctive “sentimental mood-oriented” garden designed to attract and entice the five senses covering about 250 m<sup>2</sup> [46–48] (Figure 3). As such, the development of the park also attracts a fair share of tourism, creating an overall socially positive impact and useful blueprint for other areas throughout the region and beyond.



**Figure 3.** Cont.



**Figure 3.** Urban agricultural and EGI integrated zoning within the archaeological ark in Pontecagnano, Salerno. **Top left**—park map; **top right**—entrance allotment garden; **bottom left**—allotment garden; **bottom right**—allotment garden socialization space. Source: Photographs taken by A. Russo on 16 July 2018.

## 2.2. Province of Benevento

Love and respect for nature are taught at the comprehensive “Bosco Lucarelli” Institute in Benevento. This institute is an example of an edible school garden [11,49] that began offering instructional classes from February 2018 in “educational gardening”. Throughout the school year, tutorial studies include applied and theoretical classes in which students participate in growing vegetables in flowerbeds throughout the institute’s buildings. The initiative stems from a collaboration between the city of Benevento, the “Bosco Lucarelli” Institute, and the landscaping company “Vivai Barretta Garden” [50].

Another good example is the “*Buon orto fa buon sangue*” initiative (i.e., translated in English to “Good vegetable gardens make good blood”), that is, an urban agriculture project promoted by the Associations Gramigna, Fratres Torrecuso [51]. Mini-allotments were created by Benevento’s Local Health Authority assigning citizens, informal groups, and associations with designated plots of land city-wide. With the creation of these gardens, an urban agriculture polo center was created which includes, in addition to these mini allotments, the “Orto di Casa Betania” social farm, managed by the Cooperativa La Solidarietà and the “Sale della Terra” non-profit consortium. In particular, in partnership with various cooperatives from Benevento, several rehabilitative therapeutic projects were launched using the Personal Health Budget Model [52]. Social activities are currently being carried out at the Garden of Casa Betania and on other lands throughout Benevento. The project was developed from the desire to make agriculture and urban gardens a tool that promotes quality of life, environmental sustainability, and convivial sociability—increasing the individual and collective well-being of participants [51].

## 2.3. Province of Naples

Regionwide, Naples leads the way in the number of urban regeneration projects. Its numerous EGI projects span throughout the city and surrounding suburbs. An example of urban regeneration, via an EGI approach, is De Filippo park, located in Ponticelli, an eastern suburb of Naples and one of the most degraded, overcrowded, and permeated crime-ridden areas. This degraded area was transformed into a variety of allotment gardens which provision EGI in the form of gardening of vegetable crops [40] (Figure 4). To assist with the clean-up of the area, the local health department put together a community-based project in conjunction with the Lilliput Day Center. The project sports the slogan “Social garden: share—join—unite” and communally works with the Naples firm ERA Coopertiva Sociale, which is accompanied by a group of Neapolitan-based non-government organizations (NGOs) [42].





**Figure 4.** De Filippo park of Ponticelli, Naples. **Top**—allotment gardens; **bottom**—aerial view of the park. Source: **top**—photographs taken by A. Russo on 30 May 2018; **bottom**—Google Earth

Throughout De Filippo park, the aim is to create urban-focused gardens and reduce crime. The extent of the project sparked interest not only from devoted users, but from concerned citizens, the community, and local associations (e.g., the Catholic church and local neighborhood watch) [42]. The combined project's intent is to trigger a community-wide protection and care program in defense and protection of the urban garden space. The objective of the park's urban gardens extends to the complete rejuvenation and augmentation of green space and creation of a territorial culture in favor of an EGI urban agricultural approach. To date, members come from a wide array of backgrounds (e.g., schools, associations, town committees, churches, and even the local archaeology organization) and are offered (throughout the area) custody of small plots to garden. The Lilliput Day Center, in conjunction with local law enforcement, collates and forms the social networking that promotes the project. Notable advantages to the users include EGI gardening know-hows, proficiency in farming, and, for the unemployed, the chance to reintegrate back into the workforce and society at large [42].

At first, the work of resettling De Filippo park was mostly stalled due to vandalism, with important work tools and material stolen and a number of persons threatened; however, local involvement at all levels persevered the project and, to date, made a difference with the park's restorative usage. One aspect worth discussing is the rehabilitative extent of persons who otherwise would be detached from society. People affected by pathological addiction or a criminal past are presented with a positive feedback loop and path forward out of the world of crime. In addition, the park's initiatives engage the elderly, mentally challenged, unemployed, and unmotivated the opportunity to connect and

learn within the controlled, protected confines of the park. The process of cultivating, nurturing, and harvesting food offers workers a sense of accomplishment and community identity [42].

Each month, participants meet to plan management strategies for the garden space and identify potential concerns (e.g., cooperatively allocating space for members and deciding if further protective measures should be enforced—including a complete ban on chemo-pesticide use, as well as park access). Apart from a zero tolerance to chemical pesticides, the use of a dedicated land surveyor assisted in developing better plot design and reduced issues concerning any plot disputes. By way of focus group, the park’s gardeners also successfully received additional funding from the region and national government—analogueous with many other Italian cities that stress EGI. With regard to waste disposal, the urban gardens fall under the support of Naples’ waste management services, and they regularly have organic waste removed weekly [40].

In the month of March of 2016, the city of Naples held a public event that promoted urban agriculture throughout the city and region. This event helped spur awareness for the key urban gardens in the city—De Filippo park being one of them. During the event, urban gardens had the opportunity to exhibit the benefits of EGI and discuss various projects, operational entities, and organizational implementation and performance. After the event, interest was sparked from the Lilliput Day Center, Ponticelli gardeners, and stakeholders banding together to hold a second major event inside the urban garden of Ponticelli, with the slogan “Let’s Grow Legality” [40]—with reference to the struggle the suburb faced and continues to endure in promoting EGI and smart, urban gardening.

Another project that is in a degraded and high-crime zone can be found in the redeveloped and ongoing rejuvenated district of Scampia. A number of areas and spaces throughout the district, in particular the area known as Villa Comunale (i.e., renamed *Ciro Esposito* park) and Piazza Giovanni Paolo II (i.e., the town square), exhibit a number of encouraging re-appropriation and aggregative green spaces (Figure 5). The unused structures give back to citizens an active role in changing their community and, overall, their district’s unfavorable reputation. Direct involvement of citizens, civil organizations, and local institutions are involved in promoting the following EGI-aimed rejuvenation, including (1) increased usability of space and livability of the neighborhood, (2) recovery and redevelopment of unused structures, green areas, and green spaces for social, sporting, and economic purposes, and (3) increased levels of belonging and participation at a cultural and community level. This project transformed and fulfilled EGI activities (e.g., allotment gardening)—inside the park [53]—to expand upon the community’s lack of safe social and interactive spaces.



**Figure 5.** Aerial view of *Ciro Esposito* park, Scampia, Naples. Source: Google Earth.

#### 2.4. Province of Caserta

In the province of Caserta, a notable project is “*Orti.net, coltiviamo la socialit@*” (i.e., translated in English to “Orti.net, societal cultivation”). The geography of the project encompasses the southern province of Caserta and some northern parts of the province of Naples. The area, formerly known as the “Land of Work”, presently fronts the name the “Land of Fire”. This name change is related to the presence of toxic waste and bonfires that relate to activities integrative to criminal organizations (e.g., Camorra) [54,55]. Throughout this area, these environmental concerns are at a state of emergency and, more often than not, intersect with the economic and socially under-privileged. The under-privileged often include the elderly, people with disabilities, and migrant populations. The *Orti.net, coltiviamo la socialit@* project focuses on giving people social space by way of cultivable vegetable gardens (i.e., a practice known as of social farming). The aim of the project is to promote and enhance environmentally sustainable action and sustainable EGI-oriented agriculture.

One aspect of the project, held within the township of Casale di Teverolaccio di Succivo, Caserta, incorporates students from local schools and universities in Aversa and Capua. The project teaches via its eco-learning laboratories about urban gardening, social agriculture, and EGI. The specific objective of the project supports and promotes responsible involvement of citizenry by teaching a better understanding of the common good in terms of civic relationships with one another in correlation with social responsibility [55].

#### 2.5. Province of Avellino

The “Irpinia Solidale” Voluntary Service Center, based in the city of Avellino, launched a number of projects that provision EGI-oriented urban allotment gardens. The aim was to reclaim green urban areas, redevelop them, and donate new small strips of abandoned land for agro-urban farming. The projects endow responsible biodiversity thinking, rediscover peasant traditions and human relationships, and build educative community-oriented nature-based solutions. Moreover, there is an encouraging level of solidarity among disadvantaged groups, including socio-integrative “green” spaces where EGI plays an active role in securing social networks and offering a positive cyclic-community response [56].

### 3. Concluding Remarks

The Campania region has several environmental, social, and criminal issues; nonetheless, application of the EGI approach may provide further food security and healthy living conditions. The development of numerous EGI-related regenerative projects and programs are exemplary for urban planners and thinkers alike; they can transform ruinous, abandoned, protected, or other types of urban-oriented landscape into a usable food source and lifestyle advantage. This perspective examined EGI with respect to the three-pillar approach (i.e., ecological, social, and economic co-benefits) by improving our understanding of food sources and, in particular, their proximity for city-dwellers [12,42]. In doing so, we recognized that increasing food security and decreasing food transport distances open up a vast array of interconnected advantages and services, since the majority of people worldwide live in urbanized areas. The concept reinforces low energy and minimizes chemical input practices, as well as decreases human consumption of processed foods, and it teaches people from all socioeconomic levels the equitable benefits of locally grown food. Moreover, EGI provides human health and well-being, and different EGI typologies provide different benefits, e.g., psychological and restorative benefits for allotment garden users versus domestic gardens [57].

Allotment gardens can be both tangible and intangible, as well as used for exercise, recreation, and community networking. These benefits can be extended to include space for meditation and solitude, as well as hobbyists being able to grow their own food in an idiosyncratic manner and for personal reasons. Allotment gardens have a social atmosphere to them. In conjunction with other EGI urban agricultural types, they offer excluded groups or individuals the ability to participate and become involved in the community at large. In this way, allotments can contribute to a sense

of self-worth, as well as community—helping to shape a person’s livelihood and encourage overall social integration [58]. Negative aspects can include a lack of societal recognition outside of the project, especially if persons throughout the community do not appreciate the allotment-based system. A need to cater, as well as create a safe project environment, is key. This can require a number of resources which are not always available, including financial support, space allocation, and security (e.g., patrol and digital surveillance). As allotment gardens usually have restricted access, Colinas et al. [59] proposed that public produce, i.e., “specific types of urban agriculture wherein food is legally grown in public spaces and freely accessible to passersby” [59], might impact the community in a positive manner and perhaps encourage its widespread use and acceptance.

Like in the Campania region, many cities in Europe promote EGI [60]. For example, in the municipality of Paris, France, one-third of its green space is planned to be transformed into urban farms via three approaches: food security and education (i.e., by introducing a food to plate concept), high-rise farming (i.e., based upon the Parisculteurs project started in 2016), and workforce development (i.e., by offering persons the ability to make a living from the practice). Respectively, the Parisculteurs project comprises 75 projects situated throughout the city, covering 15 hectares and producing more than 500 tons of food [61,62]. From an observational perspective, this urban transformative phenomenon was seen throughout much of the developed world from the Far East of Asia [63,64] to Western Europe [12,14], and North America [65,66]. Moreover, international cases extend to the developing world, which is seeing a rise in interest. In Belem, Brazil, Madaleno [67] elucidated how the city implemented the concept of growing one’s own food as an important secondary source of food security—teaching its urbanite population the notion of grassroots food production and food economics. Urban agriculture, from this example, specifies animal husbandry, fruit trees, and “crops of basic grains and horticulture, which coexist in the city with tree crops, and the raising of rabbits, poultry, or other stock” [67]. As a result, edible areas can broaden the scope of urban agriculture by adding additional sources of nutrition, as well as creating environmental benefits (e.g., urban-based ecosystem services). Other important points that should not be overlooked include the impact upon the poor and needy in which urban planners can reuse (i.e., via regenerative practices) urban areas otherwise lost. In this sense, close attention to the different EGI typologies and developmental options should be site-specific. The assessment of implementing EGI may, therefore, play a role in providing city planners and policymakers with further recommendations for green space conservation and management. Such research should take account of how the greening and usage of EGI in urban environments (i.e., via urban design factors) can prevent crime (e.g., widespread graffiti and vandalism found throughout much of the cities researched in the Campania region [68,69]). In such circumstances, the design of EGI-friendly environments can provision safe spaces. Future research, beyond the scope of this work, should look at individual benefits in relation to the COVID-19 pandemic and its effects on food security and food supply chains. The use of EGI-friendly, agri-urban areas could also play an important role in post-lockdown—above all, for urban dwellers wanting to get in touch with less cementified surroundings [70,71]. Likewise, the health benefits of urban greening [72], in this regard, overlaps with social agricultural research since particularly vulnerable populations may have restricted movement in and out of their household. As such, the use EGI could be seen as essential—in terms of urban and social well-being—for these individuals.

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