

**AGRARIAN ECONOMY, SOCIOLOGY AND POLICY AREA. UNIVERSIDAD DE VALLADOLID.**



**Universidad de Valladolid**

# **URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE**

Dr. Beatriz Urbano López de Meneses

Department of Agricultural and Forestry Engineering

Universidad de Valladolid

Spain

## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- More than half of the world's population lives in urban areas (55%), rising to 68% by 2050,
- As a consequence of rapid urbanization, the cities encounter increasing **pressures** such as:
  1. pollution,
  2. environmental degradation,
  3. resource scarcity and
  4. decreasing public health

*(The United Nations, 2015)*

### United Nations Sustainable Development Goals Goal 11



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

**Urban greening** is the act of incorporating or **promoting nature in the urban cores** through the recovery of the native flora and fauna in an acceptable and sustainable way.



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The aim is to create greened areas of a certain extent connected by green belts and rings through,

- i) the transformation of a part of the urban area into forests and areas with plants that serve as an **ecological lung** and **recreational space** for the citizens, and
- ii) link the areas using green corridors and **ecological passageways**, at any point, to allow **air renewal**.



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The urban greening ability to improve the citizens' quality of life arises from the **benefits of urban greening to**

1. the environment,
2. the buildings and
3. the citizens.



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- Urban greening decreases environmental pollution through the **fixation of pollutants** by **plants and substrates** (*Vijayaraghavan, Joshi, & Balasubramanian, 2012*).
- Urban greening **absorbs carbon dioxide** and **reduces the green-house effect** by providing oxygen in the unbreathable environments of the urban cores, (*Gorbachevskaya, 2012*).
- Urban greening effectively contributes to **echo and noise reduction** (*Yen, 2009*).



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- Urban greening reduces **daily temperature fluctuations** and stabilize the temperature of the city (*Gross, 2012*).
- Urban greening **intercepts ultraviolet radiation** preventing it from directly reaching the Earth's surface (*Tabares-Velasco et al., 2012*).



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- Urban greening **retains moisture** acting as a mattress and return of rain water to its natural cycle.
- Urban greening **regulates the drainage flow** of torrential rains and prevents floods (*Jim & Peng, 2012*).
- Vegetation **improves** urban **landscape**.



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- Urban greening in the form of **urban community gardens** positively influences the citizens' **psychosomatic balance**, strengthen **food and nutritional security** (FAO, 2010).



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- The United Nations (*FAO, 2010*) states that urban gardens help **fight hunger, poverty, exploitation** and lack of hope that can lead to high **crime rates, prostitution, lack of attention to children and the consumption of drugs.**



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- In Bogotá, the community gardening program included **ex-combatants, elderly, inmates, disabled, and people in social exclusion.**
- In Nairobi's, young people with a history of theft now earn a decent living by **growing and selling vegetables in their community.**
- In Buenos Aires are a symbol of vitality and growth in neighborhoods known for their **crime and poverty.**



*(FAO, 2010)*

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- In Senegal's micro-garden project, **isolated housewives** joined social networks.
- In Mexico City, **domestic workers** found a new livelihood in horticulture and more **time to dedicate to their children** reducing the time to move to city center.



*(FAO, 2010)*

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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

Food security

Environmental awareness

Nostalgia

Social benefits

Therapeutic and health

Leisure



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- Both to ensure the **food needs** and to obtain **fresh and healthy** products.
- Families that cultivated an allotment **consume 1.4 times more fruits and vegetables** and that were **3.9 times more likely to consume five pieces of fruits and vegetables**, necessary per day (*Alaimo et al., 2008* ).



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- Many gardeners, especially those who come from urban areas, cultivate to have **contact with nature** and **feel a connection** to the land (*Freeman et al., 2012*).
- Some families, cultivate urban gardens to know what they eat and to **avoid the transport and transaction** costs of large food distribution. They are moved to **reverse** the system by **consuming products produced locally and by themselves** (*Comassetto et al., 2013*).



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- For some urban gardeners is a way of paying tribute, respect and pride to the **cultural heritage** maintaining **traditional cultural practices** (*Comassetto et al., 2013*).
- Many of today's gardeners come from the migration from the countryside to the city of the 1950s. They **raised and born** in the countryside and cultivate due to **nostalgia for their origins**.



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- Community gardens activate the sense of **belonging** to the community and **contact with other neighbors**, favoring the creation and strengthening of **social networks**.
- The community garden is a place where the **elderly share time with the younger ones** and communicate with other gardeners (*Freeman et al., 2012*).



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- Urban community gardens **improve social relations**, favor reciprocity, mutual **trust**, **common decision-making**, civic commitment and **community building**, which favor both **individual and community health** (Alonzo, 2012).
- These relationships are also vital to **promoting healthy lifestyles** and strengthened neighborhoods.



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- Community gardens are cultivated for **gardeners' health benefits**, including **mental health**.
- The therapeutic function of urban gardens help to **combat isolation** and contribute to the **development of social relationships**.



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

Gardening produces:

- Improvements in **breast cancer** (*Unruh et al., 2000*),
- Physical **benefits** due to increased activity,
- the **reduction** of the risk of **hypertension, diabetes, and heart attacks** (*Yee Tse, 2010*).



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- **Community gardens** are **leisure spaces**. The 65.7% of the citizens use these recreational spaces and **young people** between 20 and 30 years **use them the least** (*Chen y Jim, 2008*).
- Gardening offers an activity that **evades** urban dwellers from **sedentary lifestyle** and from the **stress** of the city (*Orsini, 2013*).



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## STUDY CASE: CONTRIBUTION OF VALLADOLID COMMUNITY GARDENS TO QUALITY OF LIFE

- The Valladolid “Community Gardens” is an activity for **pensioners**, financed by the Valladolid City Council, since **2005** with a total of **430 allotments**.
- The questionnaire included variables related to i) sociodemographic characteristics, ii) habits and practices in the urban garden, and iii) **motivations and satisfaction with gardening**.



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The garden is cultivated:

1. for leisure,
2. to remain active and
3. to produce food, followed
4. to socialize

Motivations	Frequency %	
	Yes	No
Leisure	99.18	0.82
Remain active-health	98.36	1.64
Food safety	94.26	5.74
Socialize	90.16	9.84
Food help to sons/daughters	59.02	40.98
Curiosity	50.82	49.18
Share with friends	47.54	52.46
Learn agriculture	44.26	55.74
Nostalgia	30.33	69.67
Contact with nature	9.84	90.16

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- The gardeners stated that the garden had provided them with **entertainment, activity**, meeting people and a **place of their own** in which to escape from routine, family pressures and **feel useful**,
- in the contrast with other **occupational activities**, classified as useless, programmed for retirees **like gymnastics or playing cards**.



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- For many of them, the garden is **an illusion** that they always had for their retirement after a long working life in the city,
- either gardeners who did not cultivate before and **want to learn and for curiosity**,
- or gardeners who come from rural areas who **can not** cultivate their own fields.



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- All those consulted expressed their **satisfaction with the program** and
- that they **would renovate the orchard** in the next few years.



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Moreover, in the recent pandemic scenario of Covid19, urban greening give opportunity to:

- **increase the social distance** in city,
- **improve landscape** and
- **living cores** during isolation and
- **avoid virus propagation** due to air renewal.



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Covid19 disruptions in the food supply and food logistics (according to FAO Investment Centre Director Mohamed Manssouri:

- Restrictions on movement
- Quarantines
- Trade barriers
- Shipping delays have disrupted food supply chains, trade and logistics.



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- Large overcrowded cities have problems in **terms of environmental cycles and waste**, building, **social and health** problems.
- **Urban greening reverses this trend** and brings benefits to the environment, buildings and users.



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## URBAN GREENING FOR THE IMPROVEMENT OF CITIZENS' QUALITY OF LIFE

- The community gardens are cultivated by Valladolid pensioners **for leisure**, to **remain active** and to **produce food**, followed to socialize.
- Covid 19 disruption in food supply provides a huge opportunity for Urban Agriculture to provide **food security** and resilient supply chain in the face of **uncertainty and future crises**.



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THANK YOU FOR YOUR ATTENTION

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