

Urban agriculture in times of crisis: evaluating the impact

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Session: Urban agriculture, food and global crises

Introduction

Urban Agriculture helped increase social resilience during COVID19

- Urban gardeners were able to improve their mental wellbeing using their allotments and private gardens
- Urban farmers produced more to meet a higher demand of vegetable boxes
- Community gardens provided fresh food to food banks and soup kitchens

There was a mild policy recognition and support to farmers and gardeners. Will this support disappear as the emergency subsidies?



Introduction

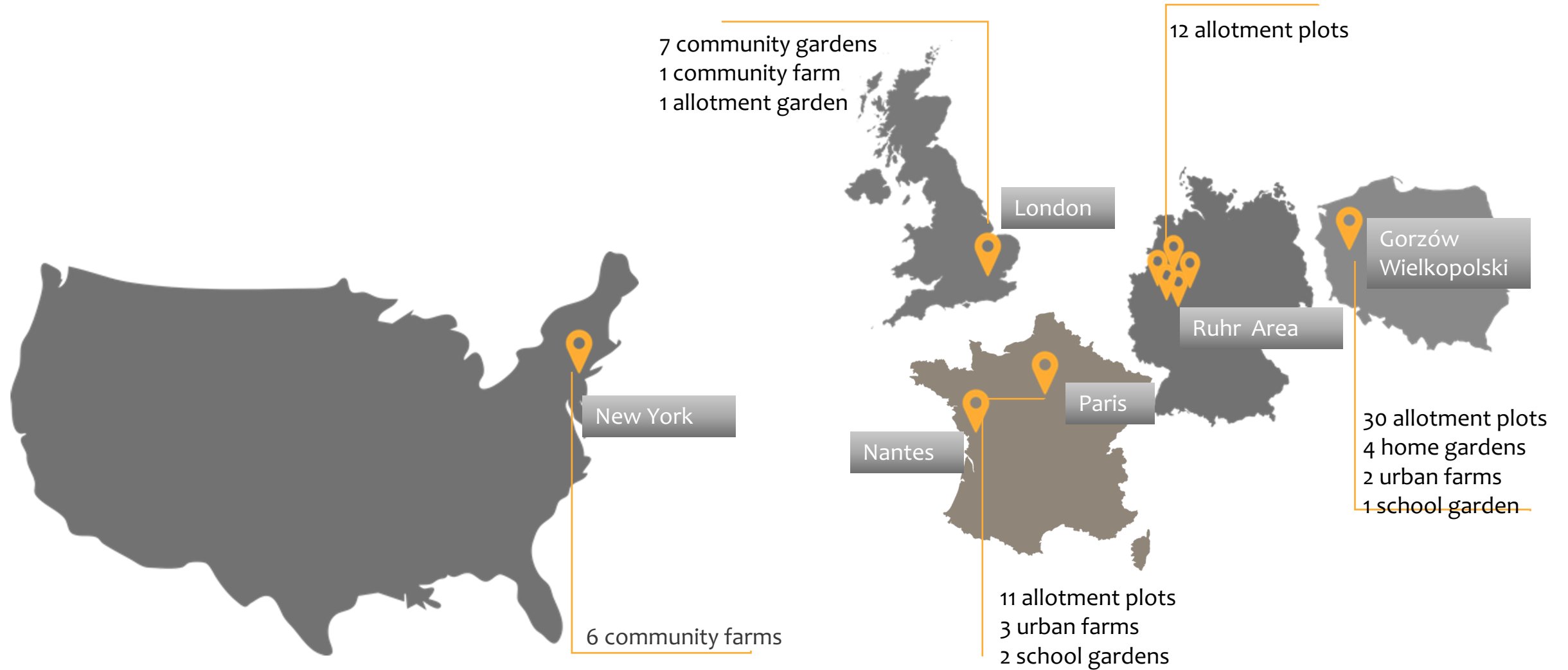
There are many advantages in assessing the benefits of urban agriculture:

- Realising that these benefits exist
- Demonstrating that urban agriculture is multifunctional
- Producing evidence that will help retain the support that is sometimes given to UA in times of crisis (which in turn enables a fast response when sudden crises arise)



the FEWmeter

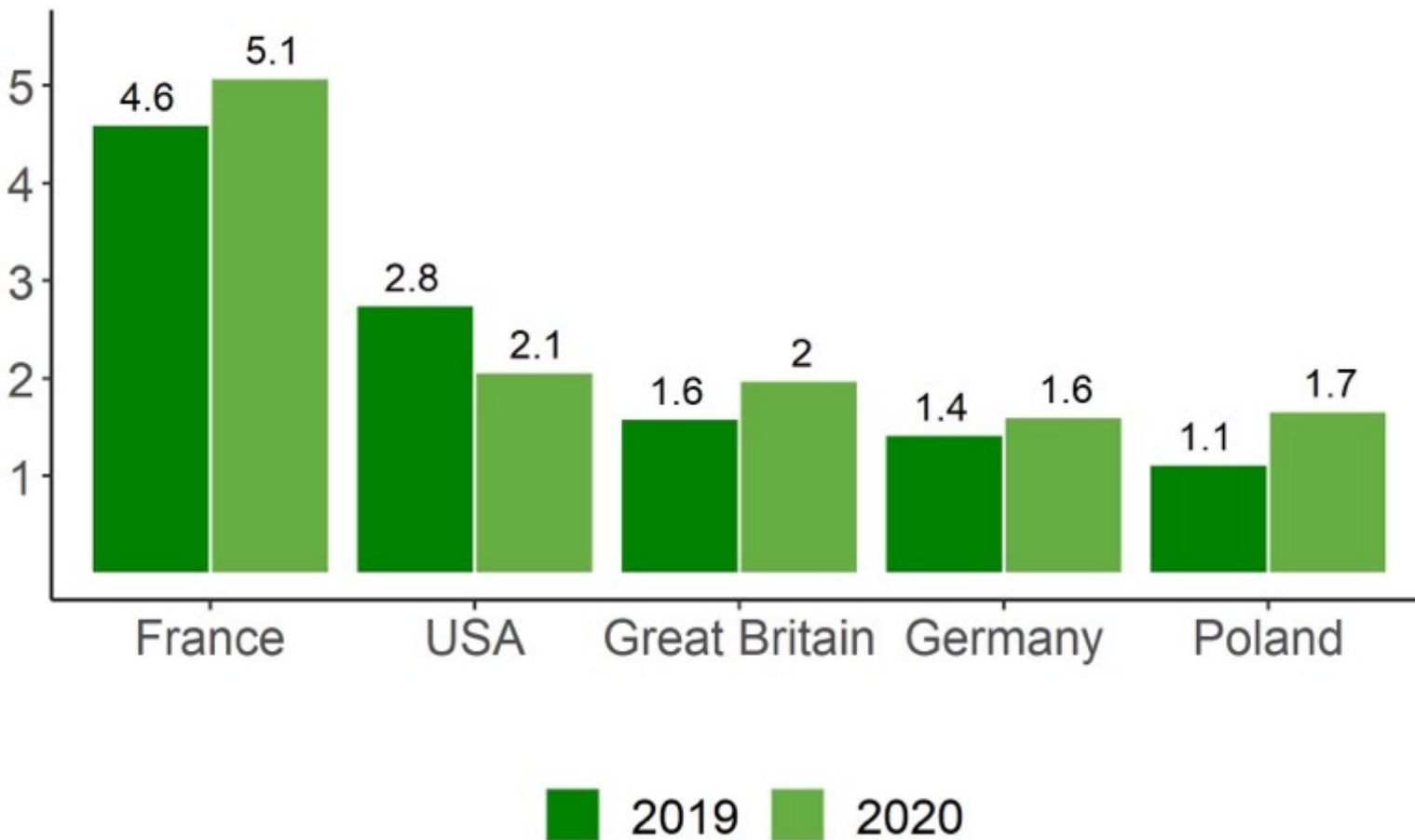
measuring the environmental efficiency and the benefits of urban agriculture in Europe



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Food harvested (kg/m²)

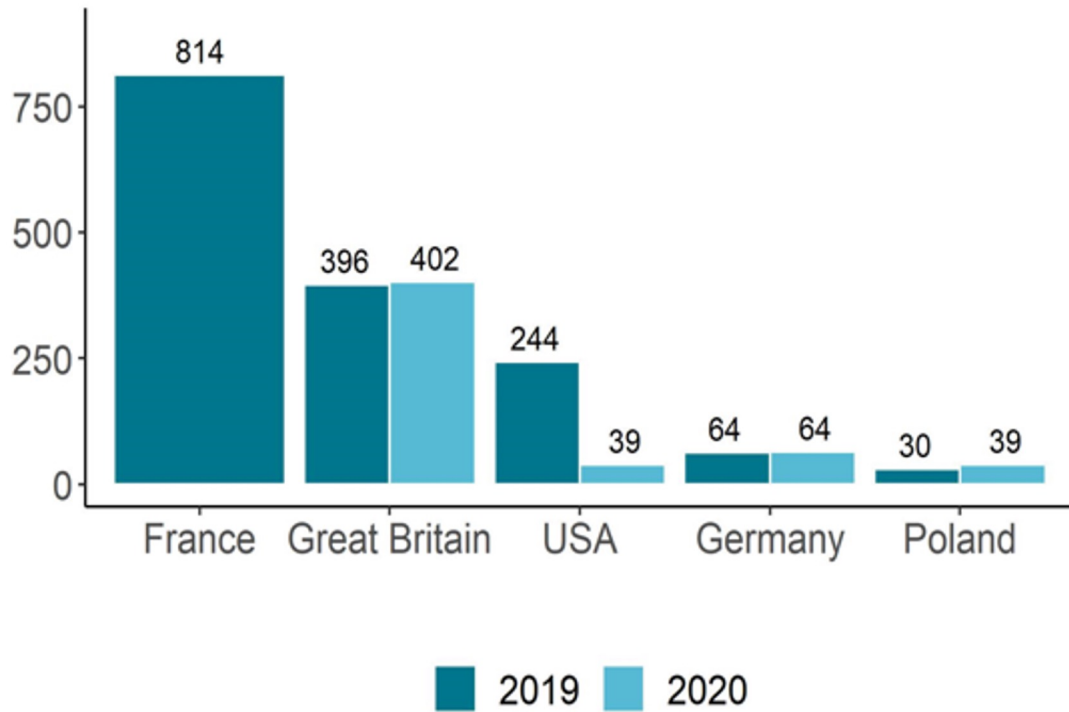


2019 – ca. 69 tons

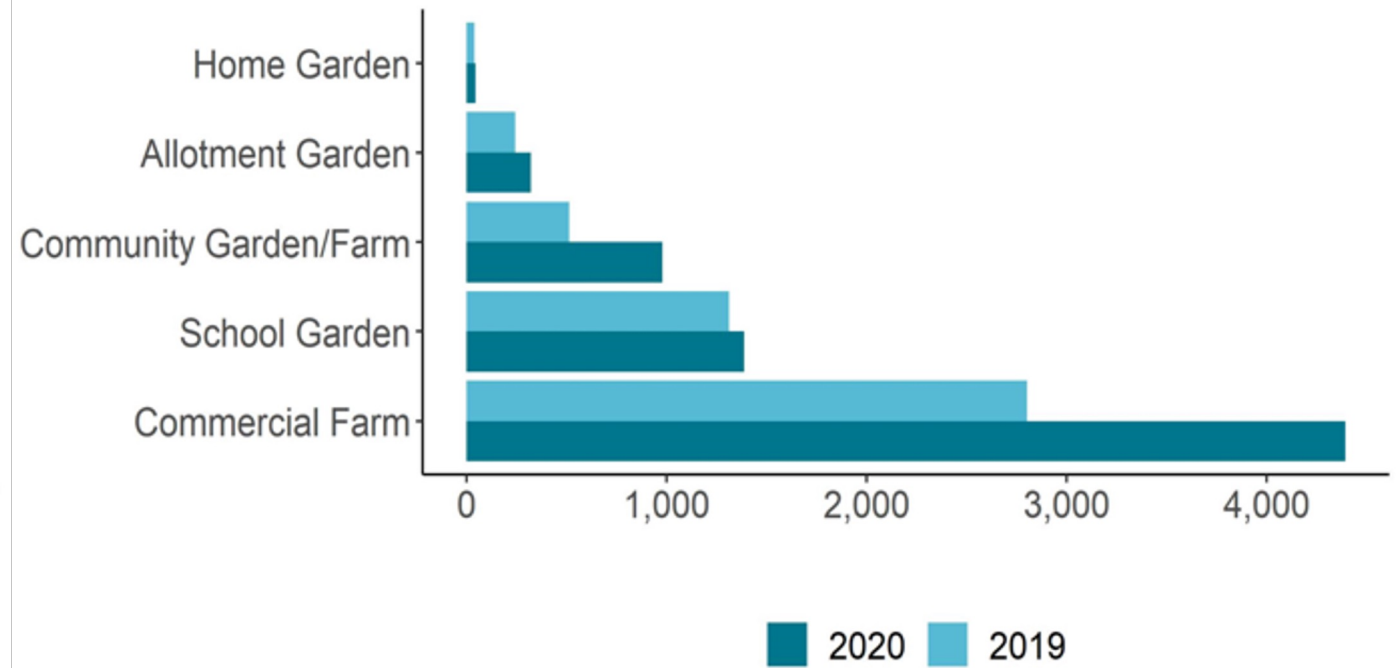
2020 – ca. 76 tons

In total ca. 145 tons

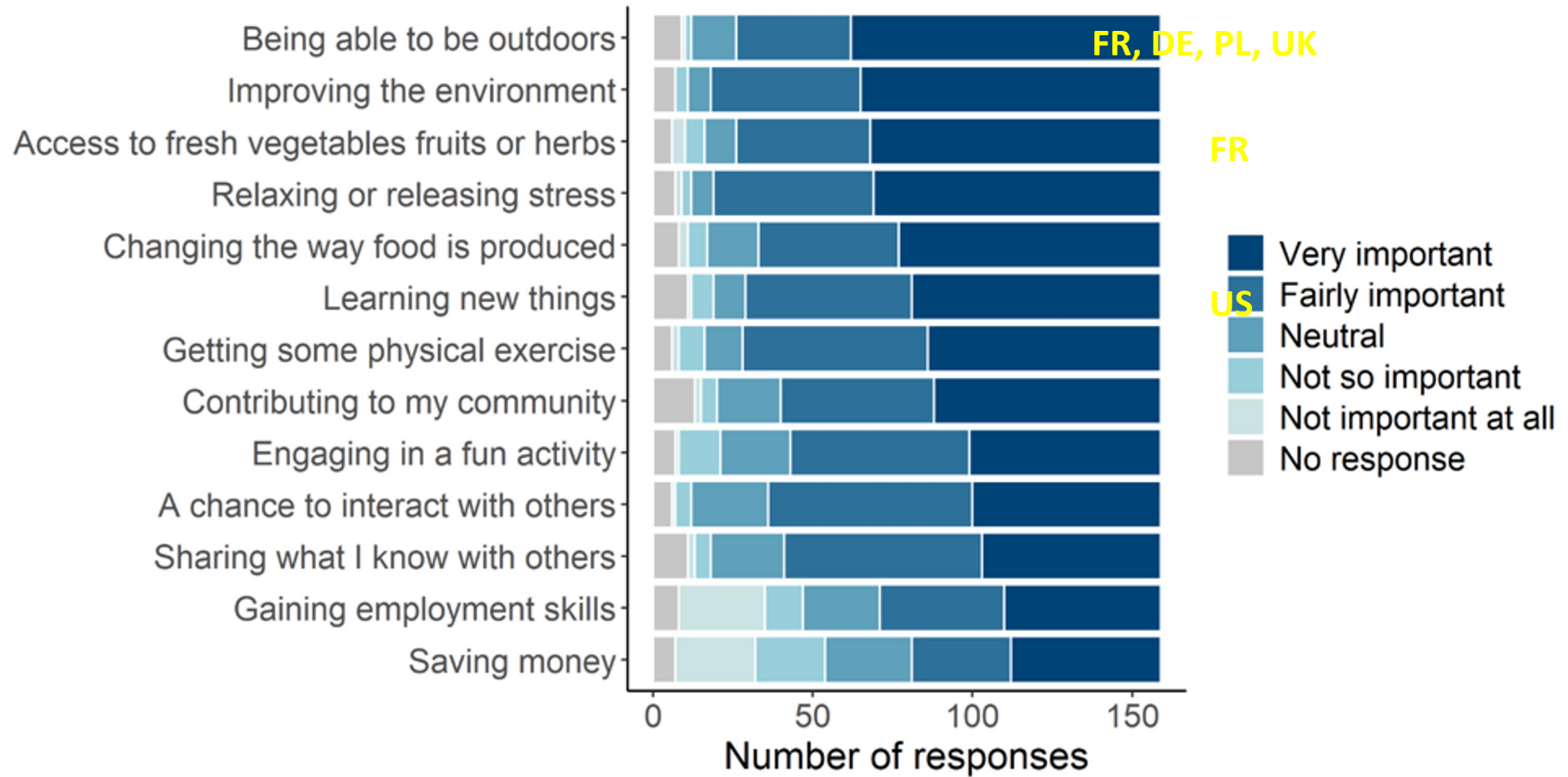
Water use (L/m²)



Water use (L/m²)



Motivations for gardening/farming



the FEWmeter Bogota'

Using the same methodology in the Latin America context

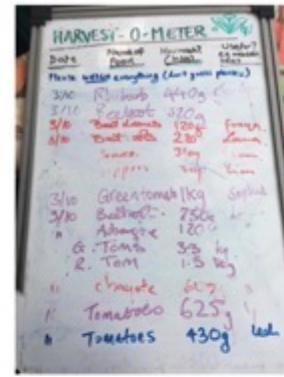
Urban agriculture in Bogotá

- **Population** 7,412,566 people in 2018 (approximately 16% of the total inhabitants of Colombia)
- **Food insecurity** affects 24% of the households
- At present time, there are more than **2500 gardens** on the city's territory.
- **These gardens produce both food and social benefits**



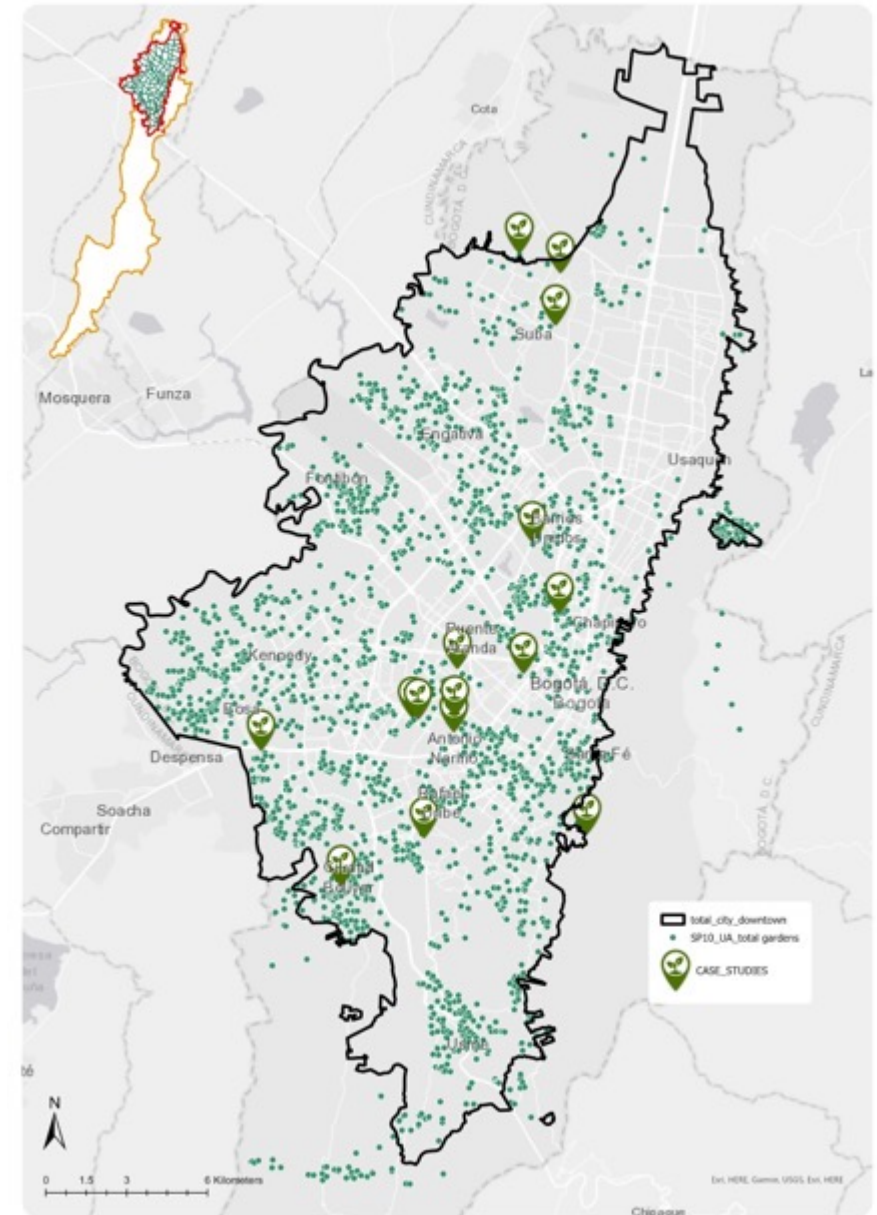
Measuring impacts

- Physical and digital questionnaires
- Adaptation to local specificities
- Diary: energy and water consumption
- Diary: food production
- Questionnaire for garden managers: organization of the garden, economic revenue, physical infrastructure
- Volunteer questionnaire: social impacts of UA on urban farmers



Case studies

	Garden	days	months
1	Hidropónico de la plaza_ siembra social	72	2.4
2	Mundo verde corazón verde	135	4.5
3	Junta de Accion Comunal San Eusebio	150	5
4	Enverdesiendo, huerta casera	150	5
5	La Huerta de mi barrio	62	2.066667
6	Parque ecologico la libelula	148	4.933333
7	Huerta Hojas de esperanza	75	2.5
8	Huerta comunitaria Santa Matilde	135	4.5
9	PIWAM_alimentos para la vida	112	3.733333
10	Huertopia	61	2.033333
11	Huerta Doña Mariela	112	3.733333
12	Huerta comunitaria Villa Ines	145	4.833333
13	Huerta orgánica Micaela	74	2.466667
14	Cobà, el hogar de las abejas	97	3.233333
15	Asociacion comunitaria por el desarrollo integral dos circales	69	2.3

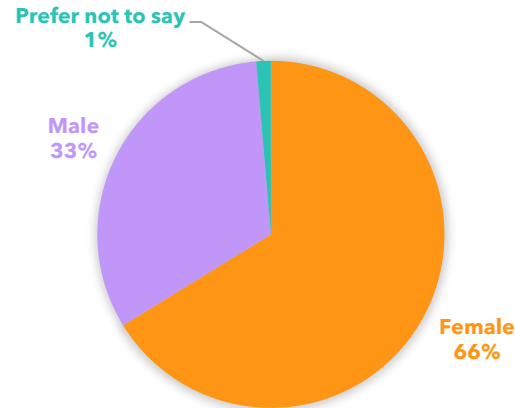


Gardener demographics

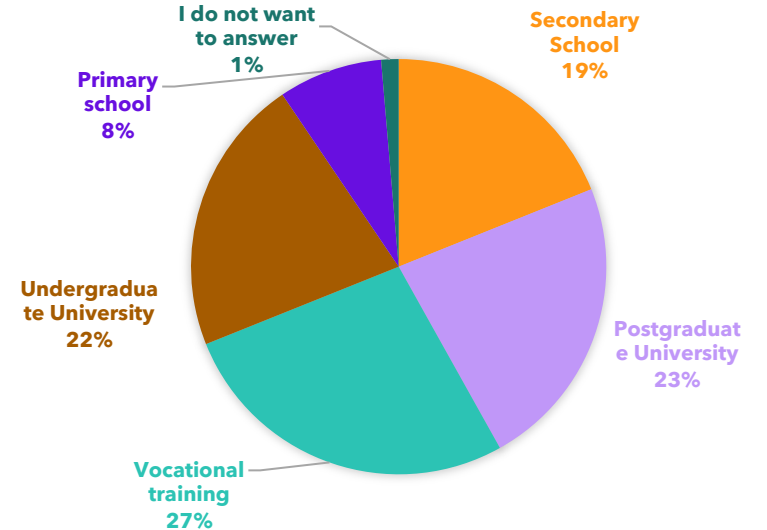
MONTHLY EARNINGS IN COP



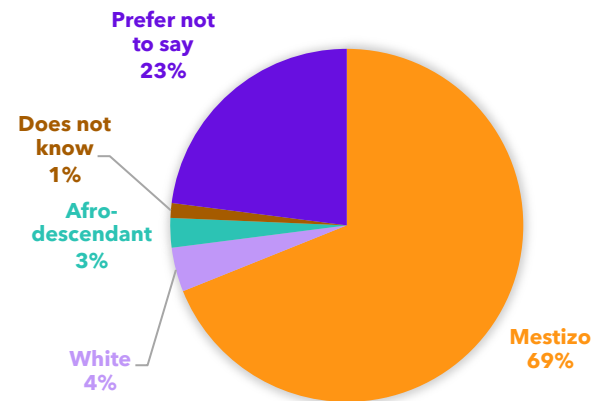
GENDER



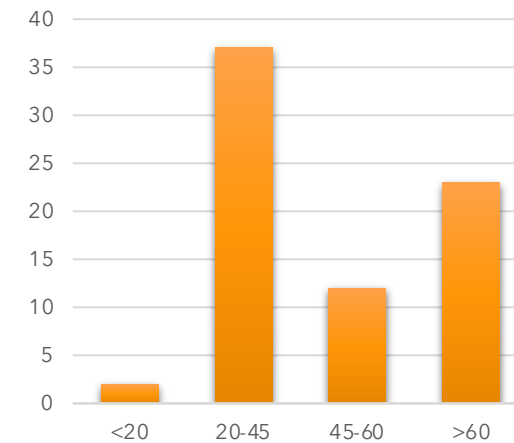
EDUCATION



ETHNIC BACKGROUND

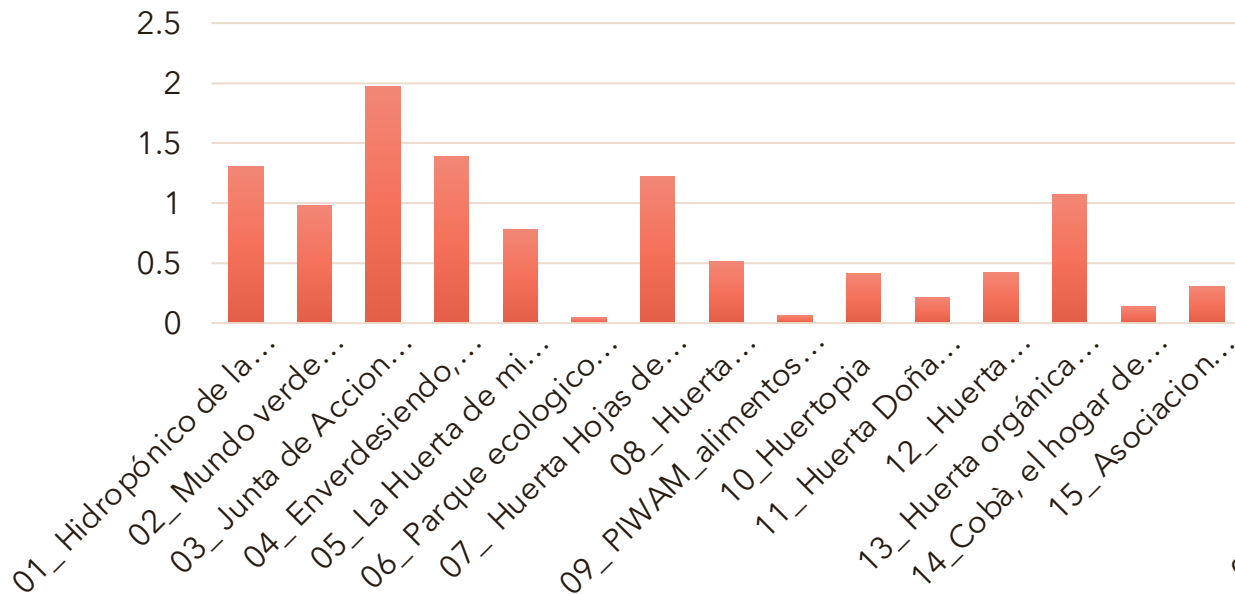


AGE

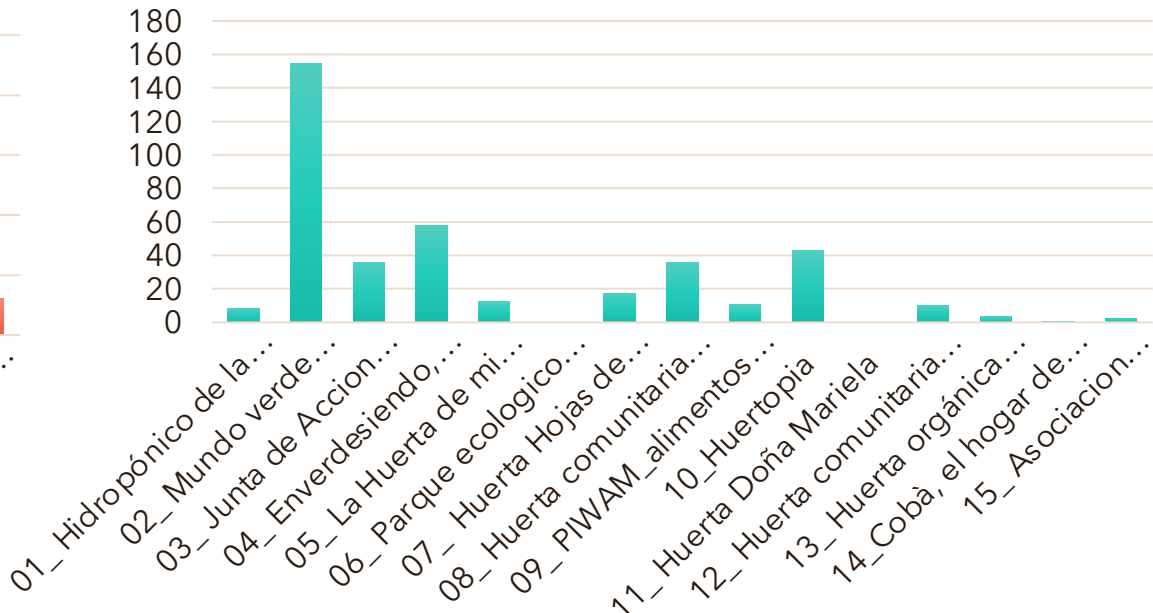


Quantitative impacts of UA (3 months)

Yield (kg/m2)

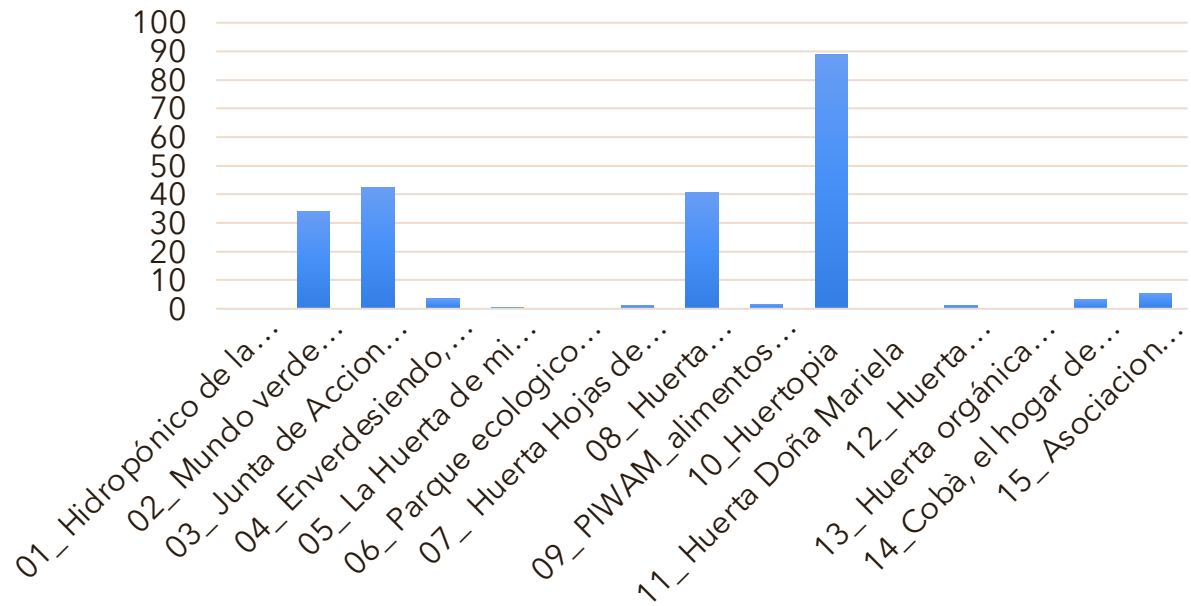


Water usage (L/m2)

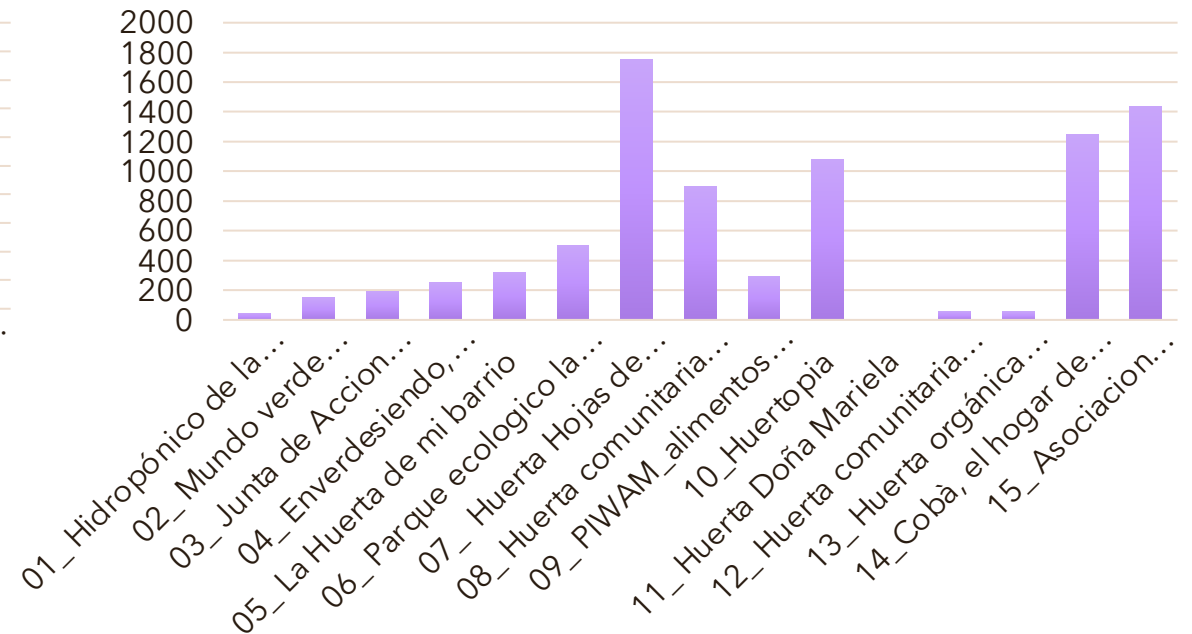


Quantitative impacts of UA (3 months)

Compost consumption (kg/m2)

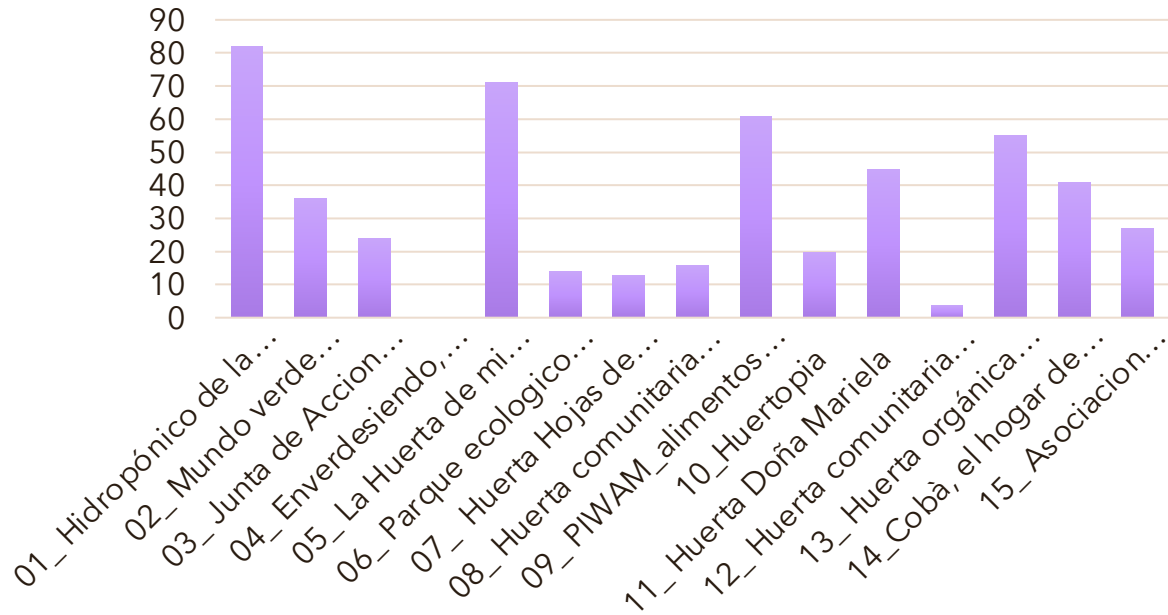


Compost production (kg)

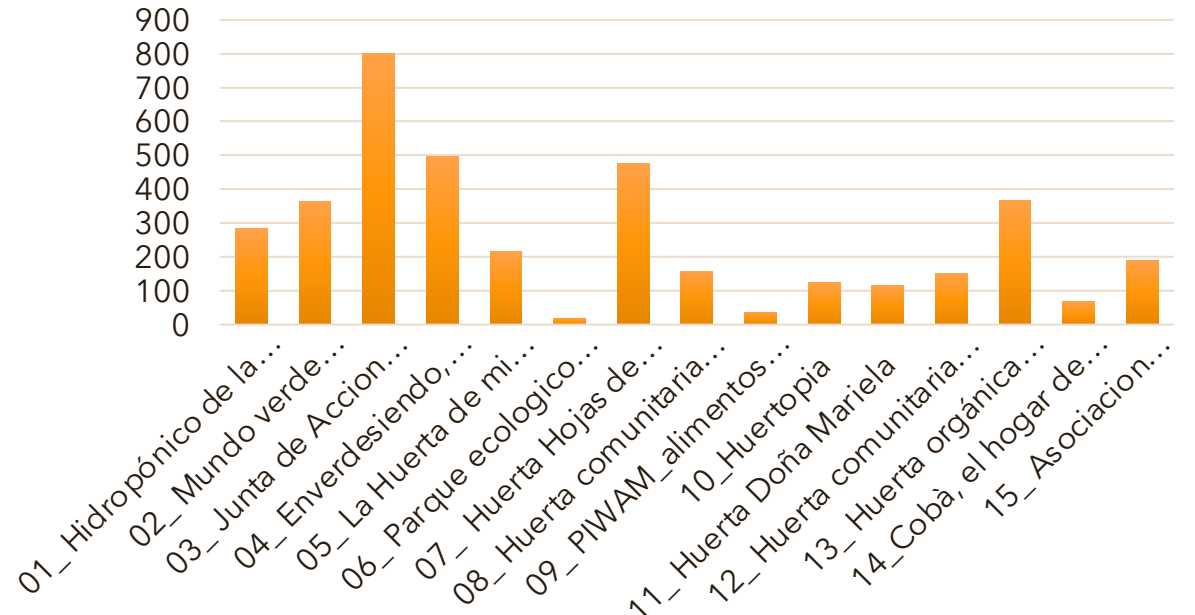


Quantitative impacts of UA (3 months)

Social activities (n)

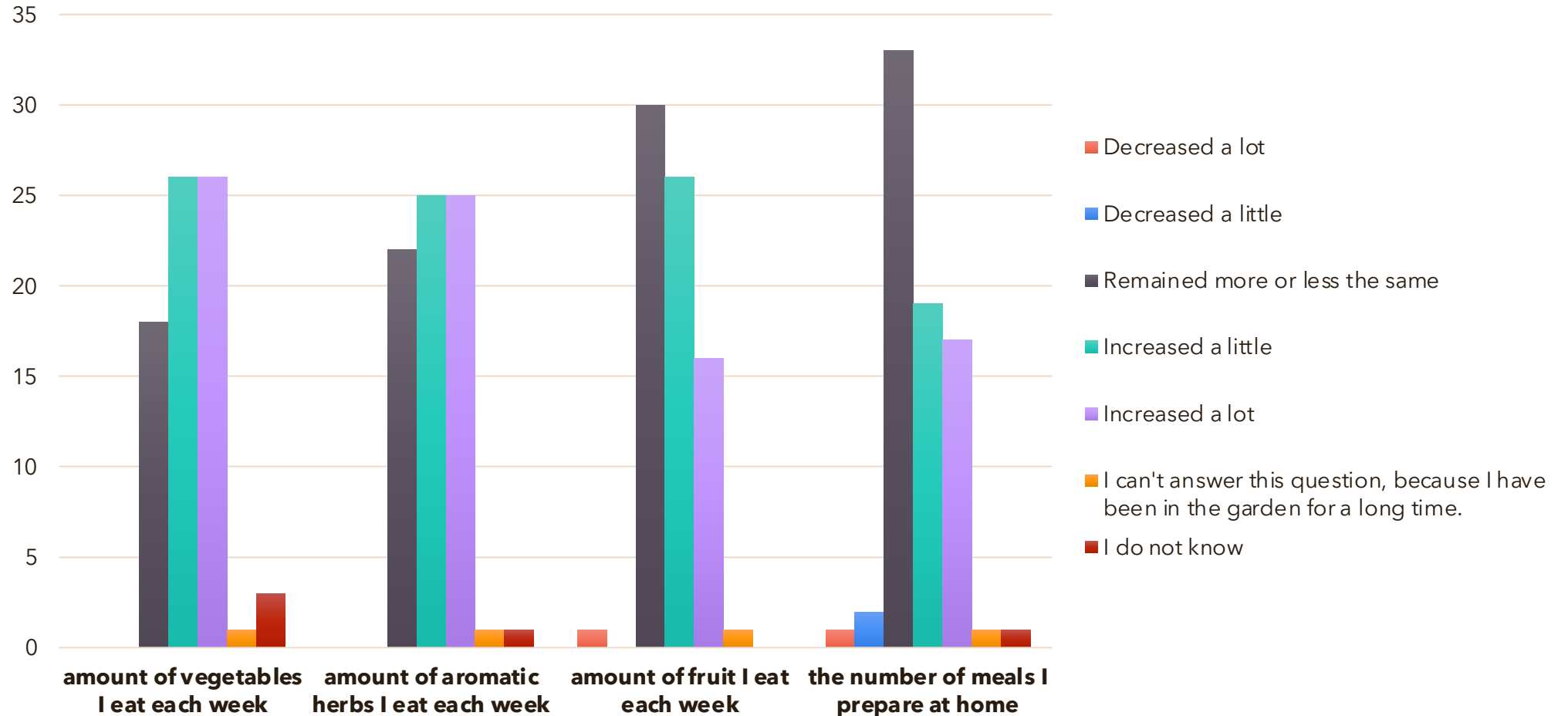


Calories per sqm (cal/m2)



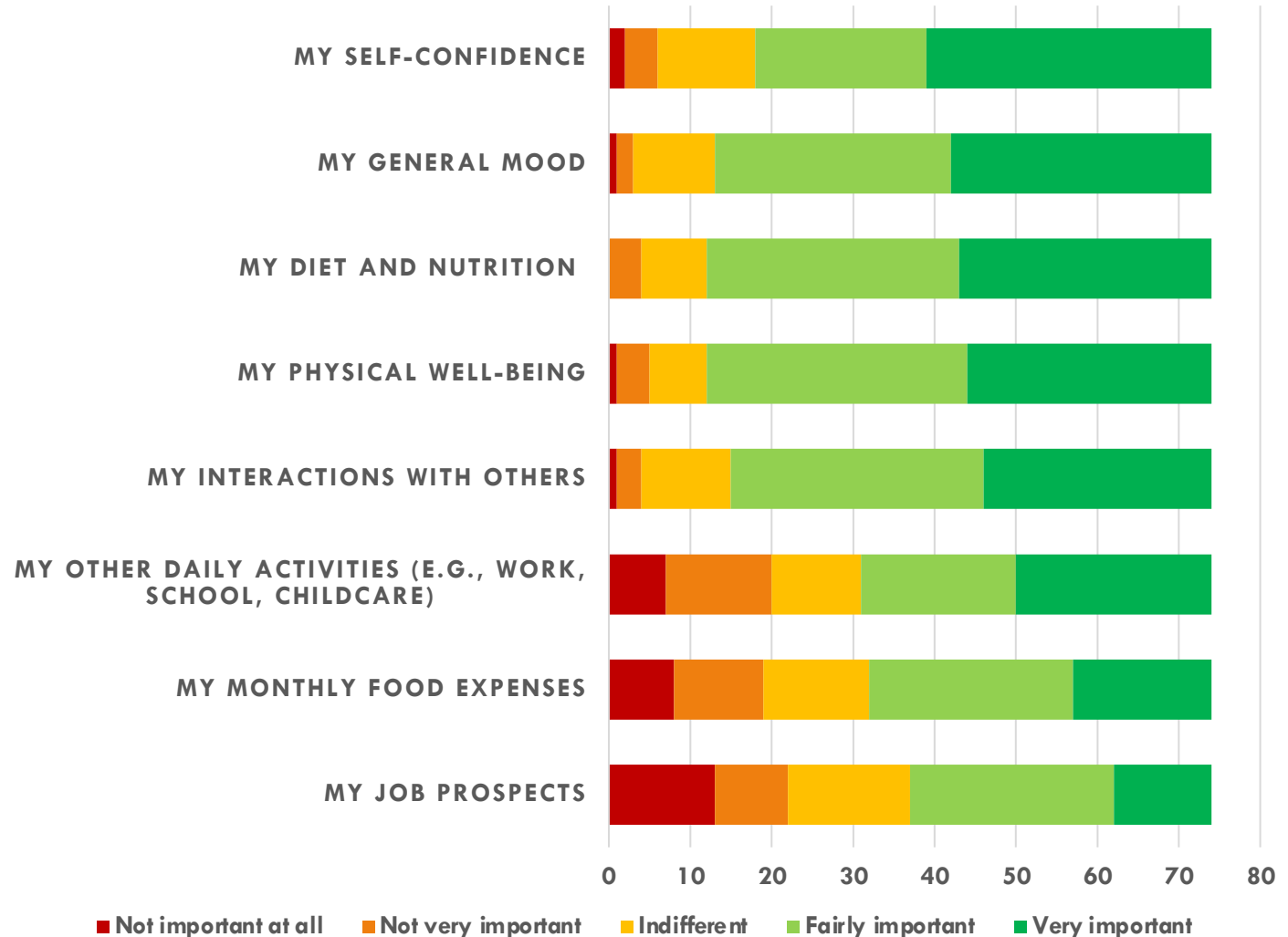
Dietary impacts of UA

Since I started participating in the garden/farm, the following activities have been impacted



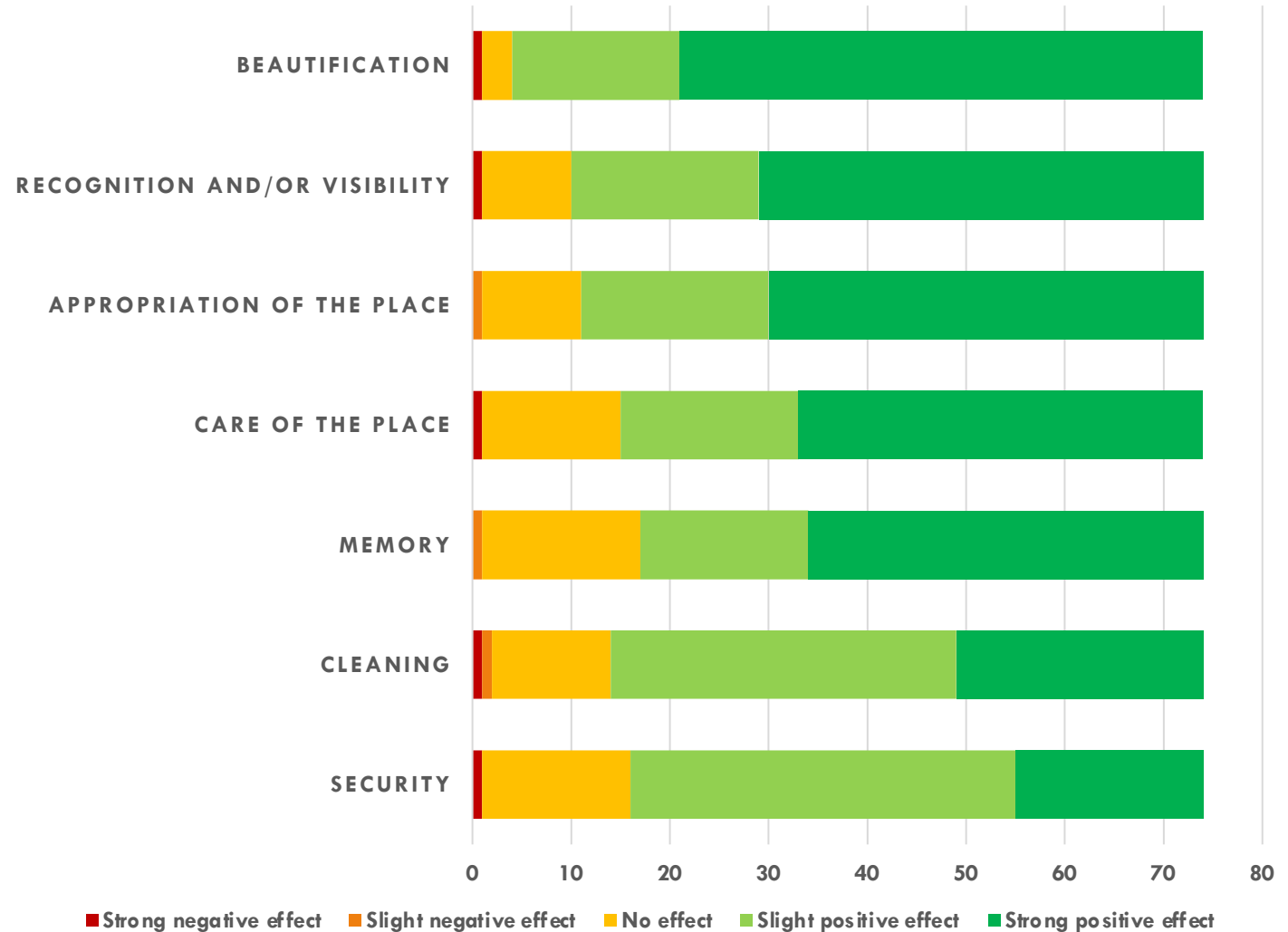
Social impacts of UA

Gardening and farming can have different effects on people. What were the most important effects, if any, that urban agriculture has had on you?



Spatial impacts of UA

Urban agriculture projects can also have an impact on the physical spaces where they are located. How has urban agriculture influenced your neighbourhood?



thank you

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