



Why do research and innovation on Urban Agriculture matter?

Urban Agriculture (UA) is the practice of cultivating, processing, and distributing food in and around urban areas. Urban Agriculture is an emerging discipline and a fast-growing trend. It does not compete but help conventional agriculture with the many challenges and crisis the world is facing: climate-change, water scarcity, soil degradation, seasonality, food supply chain during pandemic, fossil inputs costs etc. It has to become a complementary way to strengthen food systems in a near future. Urban Agriculture comes in many forms and types (controlled and uncontrolled environment) and multifunctional outcomes. Research and innovation in urban agriculture targets supply chain, circularity, assessment of environmental and social aspects.

Urban Agriculture under Horizon 2020 and Horizon Europe



CORDIS search keywords

urban agriculture, urban farming, urban food systems, controlled environment agriculture, vertical farming



Nb of projects

18 Horizon 2020
6 Horizon Europe



EU contribution

€ 139 million
€ 44 million

Figures comprise Horizon 2020 SC2 and Horizon Europe CL6 projects, including WP2023-2024 expected projects / Selection of a few projects logos





Success stories dedicated to Urban Agriculture

Unlocking the potential of urban agriculture

EU funded research on urban agriculture started back in 2012 with ‘[Urban Agriculture Europe](#)’ COST action the first comprehensive, transdisciplinary study about Urban Agriculture in Europe, continued with the ongoing [EFUA European Forum on Urban Agriculture](#) aiming to unlock the potential of urban farming, addressing urban agriculture from a holistic perspective, developing a comprehensive vision about its future role. Hereby non-exhaustive list of projects on Urban Agriculture assessment, on promoting urban agriculture through technological and social innovation, and on recycling water and turning cities biowaste into valuable agronomic by-products for urban agriculture development.

Uncontrolled Environment Agriculture (UEA) refers to open-space and in/on soil agriculture in urban and peri-urban areas such as vegetable gardens, rooftop gardens, community gardens or more traditional farms (including livestock production). Due to their open-air nature, these initiatives can contribute to expanding area under organic farming, urban greening, and biodiversity. Moreover, Urban farming has a positive impact on citizens’ wellbeing, it can promote civil engagement and many ongoing initiatives have a strong social focus and can have an educational, intercultural, or therapeutic purpose. Community gardens often strengthen local communities and promote social inclusion. Hereby examples projects on collaborative short food supply chains and on small innovative processing technologies. Furthermore, projects on urban planning empower local communities to overcome social problems by their inclusive and participatory dynamics and create new green businesses and jobs, thereby generating local economic growth and fostering social cohesion.

Controlled Environment Agriculture (CEA) refers to any form of agriculture that controls and optimises environmental conditions such as temperature, light or nutrient concentration. Examples of CEA include modern greenhouses, vertical indoor farming, building-integrated agriculture, hydroponics, aquaponics and aeroponics. CEA finds fertile ground in cities for the proximity to skilled workforce and quality of connections. However, in terms of energy efficiency, many CEA systems need to be considerably enhanced through further development of technology for them to be fully sustainable. Hereby some projects on urban food vertical farming, on aquaponics, on hydroponics and insect farming.

Urban Agriculture Policies & International Cooperation systems Well-designed governance arrangements will be conducive to decisions that will strengthen beneficial relations between rural-peri-urban- urban areas and contribute substantially to Europe’s smart, sustainable and inclusive growth agenda. See hereby examples of projects on urban food policies and food systems transitions, and of international cooperation projects on urban agriculture (with China, Africa, Latin-America).

Horizon 2020 and Horizon Europe collaborative projects on Urban Agriculture

Follow the **CORDIS** link for more information on the start-end date, EU contribution, coordinator and results.
Non-exhaustive list sorted by ascending start date.

Website	Project	CORDIS
DECISIVE	A DECentralized management Scheme for Innovative Valorization of urban biowaste	689229
ROBUST	Rural-Urban Outlooks: Unlocking Synergies	727988
SKIN	Short supply chain Knowledge and Innovation Network	728055
INFARM	The vertical farming revolution, urban Farming as a Service	739479
SMARTCHAIN	Towards Innovation - driven and smart solutions in short food supply chains	773785
SiEUGreen	Sino-European innovative green and smart cities	774233
EdiCitNet	Edible Cities Network Integrating Edible City Solutions for social resilient and sustainably productive cities	776665
FOX	Innovative down-scaled FOod processing in a boX	817683
SHEALTHY	Non-Thermal physical technologies to preserve healthiness of fresh and minimally processed fruit and vegetables	817936
WaysTUP!	Value chains for disruptive transformation of urban biowaste into biobased products in the city context	818308
VALUEWASTE,	Unlocking new VALUE from urban bioWASTE	818312
CLEARING HOUSE	Collaborative Learning in Research, Information-sharing and Governance on How Urban tree-based solutions support Sino-European urban futures	821242
PROTEAN	Prospective Environmental Assessment of Urban Agriculture Emerging-Systems	842460
FoodShift2030	Food System Hubs Innovating towards Fast Transition by 2030	862716
CONEXUS	CO-producing Nature-based solutions and restored Ecosystems: transdisciplinary neXus for Urban Sustainability	867564
WIDER UPTAKE	Achieving wider uptake of water-smart solutions	869283
CITIES2030	Co-creating resilient and susTainable food systEms towardS FOOD2030	101000640
EFUA	European Forum for a Comprehensive Vision on Urban Agriculture	101000681
Fusilli	Fostering the Urban food System Transformation through Innovative Living Labs Implementation	101000717
FOOD TRAILS	Building pathways towards FOOD 2030-led urban food policies	101000812
URBANE	One Health approaches to support agroecological transformation of peri-urban farming	101059232
FOODCLIC	integrated urban FOOD policies	101060717
INCiTIS-FOOD	INtegrated and Circular Technologies for Sustainable city region FOOD systems in Africa	101083790
AWARE	Aquaponics from WAstewater REclamation	101084245
AfriFOOD-Links	Transforming Africa's urban food environments through strengthening linkages between food systems stakeholders in cities	101084322
FOODCITYBOOST	Integrated assessment of urban farming impacts and policies for boosting sustainable urban agricultural development linking urban, peri-urban and rural areas	101132315



Relevant sources of information supporting Urban Agriculture

Other instruments and other programs, like the 'European Innovation Partnership for Agricultural productivity and sustainability' ([EIP-AGRI](#)), Partnerships and EU missions also help maximise the adoption and development of urban agriculture.

Urban Agriculture under EIP-AGRI activities – Focus Groups and Operational Groups

- Operational Group [Automated vertical farming in the city](#), Sweden

Urban Agriculture under the EU Missions and European Partnerships

- [EU Mission: A Soil Deal for Europe](#) 100 living labs and lighthouses to lead the transition towards healthy soils by 2030, and especially the topic [HORIZON-MISS-2022-SOIL-01-04](#): Remediation strategies, methods and financial models for decontamination and reuse of land in urban and rural areas.
- [EU Mission Climate-neutral and Smart Cities](#): 100 Climate-neutral and Smart Cities by 2030, and especially the topic [HORIZON-MISS-2023-CLIMA-CITIES-01-01](#) 'Urban greening and re-naturing for urban regeneration, resilience and climate neutrality'.
- [European Partnership on Agroecology](#), to cover issues pertaining to the transition to agroecology in all agricultural production systems, including urban farming.

In the pipeline and future funding opportunities

- [HORIZON-CL6-2024-CLIMATE-01-1](#): Improving irrigation practices and technologies in agriculture, for new or improved tools for an efficient combined use of water and fertilizers via irrigation for different agricultural systems, including urban agriculture.
- [HORIZON-CL6-2024-COMMUNITIES-01-1](#): Unlock the potential of the new European Bauhaus in urban food system transformation, to provide multi-functional benefits and help transforming food systems especially in urban and peri-urban areas.

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