

Finally, in the case of government-led PGS development project, a common problem is too much focus on the capacity building component and not enough (effective) engagement with the market (private sector), which does not lead to sustainability after the end of the project funding period. In some cases the government-led PGS initiatives try to set a shop or markets to sell PGS products but they lack the business experience and funding to keep the shop going beyond the establishment stage. It is therefore highly recommended that, when governments wish to engage in a PGS project, they do so in partnership and with significant (management) involvement of the local private organic sector representatives.

e. Support to urban gardening and collective gardens

Political justification

There are many reasons to support urban gardening and collective gardens, from a policy point of view. They produce local food with a very low carbon footprint and contribute to local sustainable production. They reconnect people with their food and contribute to education about what food production entails, which then helps people to better understand and participate in programs supporting agriculture and farmers. They encourage people to consume more vegetables in their diet. It contributes to city landscaping by maintaining nice green garden patches in urban environments. They provide a healthy, stress-relieving, community-building, and productive social activity for people of all ages, background and economic situation to engage in.

Many collective garden projects include social integration components, such as rehabilitation of ex-convicts, integration of refugees and immigrants, people with mental or physical disabilities, children from economically disadvantaged households, or elderly people in need of social connections.

Collective gardening and urban gardening can play an important educational role. Most collective gardens make the choice of going organic, because there are usually people in the group that are aware of the risks of handling and using pesticides. Other people in the group become aware and are then more likely to purchase organic products for the rest of their diet. Gardeners also become more used to eating a variety of vegetables, including ancient or forgotten varieties of vegetables and fruits, and to cosmetic imperfections in produce, which also influences purchasing behavior in the shops. They become more aware of the value of food and make more efforts to reduce waste. All these encourage positive consumer behavior, in line with an organic lifestyle.

Suitable contexts

Support to organic urban gardening and collective gardening can be implemented in any context (any stage of development of the organic sector, any organic regulatory framework, any culture of government intervention on the organic sector) and often

happens at the level of local governments. It is relevant to all objectives of support to organic, except the one to earn foreign currencies through organic exports. It is suitable to the objective of increasing self-sufficiency, even though the potential in terms of volume replacement is usually limited.

Possible modalities of implementation

Local policy makers (especially at the municipal level) can do much to encourage and facilitate urban gardening and collective gardening projects. Municipalities have a strong role to play in terms of urban zoning policies, in making public land available, in remediating contaminated land, and in providing financial and other types of support for kick-starting urban/collective gardening projects. State or national governments can also set-up enabling frameworks, both from a land policy point of view, but also with special grant programs linking, for example (organic) urban/collective gardens to care for disadvantaged groups such as the disabled, unemployed, immigrants, old people, homeless, formerly incarcerated residents, etc. In this way, urban gardening can be a tool to achieve broader social policy goals.

Rather than detailing here the types of public policies and support programs that can be developed to encourage urban gardening, interested readers are referred to existing resources on the topic.

A very good toolkit "*Seeding the City – Land Use Policies to Promote Urban Agriculture*" was developed in 2012 by ChangeLab Solutions, a US NGO, to provide a framework and model language for land use policies that local policymakers can tailor to promote and sustain urban agriculture in their communities. Apart from providing specific model legislation related to urban agriculture promotion, the toolkit also reviews other laws affecting Urban Agriculture. The concepts in this toolkit may be adapted for other countries.

Still from the US, PolicyLink published, also in 2012, a report entitled "*Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities*".

Aside from the general actions and policies supporting urban and collective gardening, governments can develop specific policies and actions to encourage specifically organic gardening. For example, organic gardening projects can be given priority access to funding or access to plots of land. As a radical measure, municipalities can also pass local decrees prohibiting the use of agrochemicals (other than those allowed under the organic regulations) on public land such as where urban gardens are located. This is the case for example in Havana (Cuba) where the use of synthetic fertilizers and pesticides is prohibited by law.

Country examples

There are many examples of local and broader public policies and programs supporting urban agriculture.

Cuba, and particularly Havana, is perhaps the most renowned example of urban (organic) agriculture. Cuba's national program for food production in urban areas has developed in the 1990s due to the embargo and resulting economic crisis and has put a very strong focus on organic practices. See the "best practice" case.

In the **USA**, Seattle was an early adopter of policies in favor of community gardens. The municipality approved a resolution making community gardens part of the city's Comprehensive Plan in 1992. In 2008, the Seattle City Council passed a resolution supporting community garden and urban agricultural development.

Many States in the **USA** have enacted legislation or provided allocation of funds for programs that promote urban agriculture by supporting local and regional food. For example, in 2009, North Carolina, Montana, Oregon, Vermont, and Minnesota enacted legislation supporting local and regional food systems.

Due to the National Backyard Gardening Programme, almost 10 percent of **Antigua and Barbuda's** population eats homegrown food.

Denmark passed in 2001, a nationwide "colony garden" law that effectively made permanent all community gardens on public land and in spaces located on the Danish railway system land. Gardens can be dismantled only for reasons of substantial social importance, in which case the gardening association is entitled to replacement space. The colony garden law also includes provisions aimed at increasing the number of plots.

Within the framework of the EU COST program for transnational research cooperation, several EU countries¹³⁶ have funded with EUR 36 million an international project (2011-2015) to help create a European approach for implementing urban agriculture programs. The project outputs include a website¹³⁷, a book and a map of urban agriculture initiatives.

In **France**, the municipality of Paris created in 2016 a new legal instrument called a "*Permit to grow*" to encourage residents to help greening of the city by setting-up their own urban gardens. The instrument is part of Paris's 2020 target of adding 100 hectares of vegetation on the city's walls and roofs, with a third dedicated to urban agriculture. Any resident can apply for a renewable three-year permit to start his or her own urban garden project in a public space. The city also provides planting kits with topsoil and seeds. Gardeners are not allowed to use pesticides and can plant only local species. The greening program also involves the development of educational farms, orchards and vegetable gardens in schools.

In **Norway**, the City of Oslo developed a comprehensive sustainability policy: the Urban Ecology program running from 2011 to 2026. A strategic plan was developed, which includes measures such as securing land for school gardens and allotments. Indicators

¹³⁶ Namely Austria, Germany, Spain, France, Italy, Netherlands, Poland, and UK

¹³⁷ <http://www.urbanagricultureeurope.la.rwth-aachen.de/>

to assess impact include the area of school gardens and allotments as well as the number of children and adults who use school gardens and allotments.

In the Municipality of Barcelona, **Spain**, the Department of Environment conducts a program called Barcelona Urban Gardens' network, which aims to involve people over the age of 65 in organic gardening. The municipality provides 12 gardens within the city center, including water and tools for gardening to retired people living close to the gardens. Users of the gardens must grow organically and are not allowed to sell products obtained from their gardening activity. Another municipality initiative supported by the Department of Environment and the Department of Education started in 2001 when the City Council, within the Agenda 21, encouraged schools to set up their own vegetable gardens. 200 schools have developed their gardens within this project.

In **South Korea**, Seoul's "Urban Agriculture Promotion Act" enacted in 2011, enabled community gardens and local produce sales stations to flourish throughout Seoul. The community gardens are often divided into several sections, allowing individual families, community organizations, and professional farmers to take part in farming. The produce is sold at local sales stations with clear traceability. The Seoul city government is injecting about US\$ 46 million to transform unused spaces at schools, parks and even apartment rooftops to activate urban gardening. By 2018 it plans to establish 1800 vegetable gardens within a ten-minute walking distance from all homes in the capital. A special farm zone will also be set up to train Seoulites to become professionals in urban agriculture.

Best practice example(s)

Best Practice Example: Havana's urban agriculture policy¹³⁸

The Province and Capital City of Havana has over 2 million inhabitants and accounts for 19 % of the country's population. Urban agriculture in Havana is one of the most successful examples of urban agriculture in the world. It has developed from a combination of bottom-up and top-down initiatives emerging in response to the food crisis after the fall of the socialist bloc in the 1990s.

In the 90s, the Havana population spontaneously began to grow vegetables and was encouraged to do so by NGOs and some municipal authorities. This soon became supported by a comprehensive set of policy interventions. The Havana urban agriculture policy consists of a legal framework of over 18 Ministerial Resolutions, Decrees, Circulars and Laws that address various issues of urban agriculture.

The Havana Urban Agriculture Policy was officially launched in 1998 with the creation of the National Urban Agriculture Group. The group has oversight responsibilities for urban agriculture in the country and includes four ministries and 15 scientific institutions and agencies linked to the agricultural sector. In the same year, a Circular of the Council of Ministers instructed the Ministry of Agriculture to organize urban vegetable production. The Provincial Administration Councils were made responsible for organizing production on the ground, and

¹³⁸ Source: Havan, Cuba: Urba Agriculture Policy, available at http://www.uclg-cisd.org/sites/default/files/La%20Habana_2010_en_final.pdf

were given the task of identifying areas available for production. In 1999, the Provincial Physical Planning Authority prepared a land use plan for urban agriculture in Havana. Furthermore, a series of resolutions and decrees passed between 1990 and 2010 addressed issues such as the social organization of urban farmers in the various types of cooperatives, and the transfer of vacant land to urban farmers. Supporting policy measures also include the provision of training, technical support, and provision of basic resources such as water and supplies. The government established subsidized agricultural stores, compost production sites, artisanal pesticide labs and urban veterinary clinics. Additionally it introduced wage incentives to encourage people to engage in urban farming.

There are 28 subprograms within the National Urban Agriculture Program covering various aspects of production, marketing and value addition, including the production of organic fertilizers and agro-ecological integration. After a period of being organic by obligation rather than by choice, the Havana policy is now clearly pro-organic: the use of synthetic fertilizers and pesticides is prohibited by law within the city.

The policy was designed by the Ministry of Agriculture and the Provincial Government and is funded by local public authorities. It has also attracted a lot of foreign interest and support: at least 11 international development cooperation organizations support urban agriculture initiatives in the city by channeling funds through local Cuban associations, such as the National Association of Small Farmers.

The set of policies has proven successful in encouraging a variety of individual and collective urban gardens and farms on different scales, from the balcony garden to the multi-hectare fields that comprise Havana's greenbelt. On total, more than 35,000 ha of land are being used in urban agriculture in Havana. The sector employs more than 22,000 urban farmers and contributes significantly to the country's food production.

Pitfalls and challenges

Space is a major constraint to urban gardening. While there are often areas that could be turned into urban gardens, scaling up of urban gardening would inevitably face the constraint that cities are often growing and becoming more and more densely populated.

On the technical side, there are also challenges such as the fact that urban soils can be heavily contaminated, to the extent that growing crops in the soil is not recommended. Finding reliable, safe and affordable sources of water can also be a challenge.

Urban or collective gardening projects are often dependent on a few enthusiasts, which is a challenge if they move, as is often the case in university towns. The knowledge of how to store and process the crops into food may also be lacking. While this can be challenging it is also an opportunity to expand the scope of gardening into food production and eating.