

# URBAN GARDENING



## #GLOBUS

Gardening and Landscaping Opportunities  
for Building Urban Societies



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## TABLE OF CONTENT

Foreword	3
The Concept of Urban Garden	4
Statistical Overview of Urban Gardening Practices in the Nordic-Baltic Region	9
Methodology from concept to thriving urban garden	21
A practical toolkit for urban gardening beginners	38
Urban garden community event marketing plan	57
Acknowledgements	80



## FOREWORD

For five years now (excluding two years in Glasgow, UK), I've been immersed in the topic of urban gardening at various levels in Lithuania. For me, as an architect, from the very beginning it became a tool to bring people together, to involve them in community building, in shaping space, in dialogue. The urban garden becomes a place for informal meetings, an experimental space, an enriching environment – a true oasis in the city bustle.

It's a creative process that starts with an idea and a desire, goes through negotiations with local authorities for land, organizing funding, community involvement and nurturing. Finally, it develops to a stage of self-organization, when the community takes over and grows on its own.

### Why is this important? What is the need for it?

When used correctly, the urban garden becomes a simple but very effective tool for regenerating underutilized spaces. It is a way to empower residents to actively participate in the creation of their living environment, so that their space does not become just a transit – from home to work or entertainment venues.

Through such initiatives, people not only physically animate their living environment, but also create a stronger connection with the place and the community. This promotes social cooperation, environmental awareness, and a sense of local identity. Urban gardens involve people in transforming spaces that would otherwise be empty or unused into vibrant, communal places that serve both physical and social needs.

I was passionate about joining the GLOBUS project team and sharing my experience with urban gardening enthusiasts in Scandinavia and the Baltic region. It has been a great pleasure and a significant commitment to contribute to the downloadable Handbook and Practical Toolkit, now available as intellectual outputs in English, Danish, Lithuanian, Latvian, and Estonian. Drawing on best practices in urban gardening and expert guidance from gardening and landscape specialists at Latvian and Estonian academic institutions, GLOBUS provides knowledge transfer, analysis, and systematization relevant to all urban gardening enthusiasts. I believe that by sharing these seeds of urban gardening, we sow the promise of a vital and vibrant ecosystem that will flourish for years to come.

*Laura PETRUŠKĖ,  
GLOBUS inspirational leader*

# The Concept of Urban Garden

Madara Dobeļe, PhD, assistant professor  
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In recent decades, urban agriculture has undergone significant transformations and diversification, garnering the attention of researchers, practitioners, and policymakers. Three novel trends have been identified and described:

- *community-based urban agriculture*, which captures the shift from a practice predominantly carried out by individuals to one in which community groups manage farms and gardens to grow food and provide a service to the local community;
- *metabolic urban agriculture*, a term representing the attempt of farmers to root their practice within the material and social flows of cities;
- *experimental urban agriculture*, representing projects experimenting with technologies and a circular economy approach to food production.

These emergent trends coincide with a modification of the demographic profile of urban farmers, which has become younger and possesses new skills. These new skills are necessary for urban farmers to engage with volunteers and the general public, when relevant, or to deal with technology.

**Community-Based Urban Agriculture** dominates in Europe and North America. In Europe and North America, urban agriculture is still mainly done by individuals or families (Kitao, 2005), following a model that was set up, at least in some European countries, even before World War II. Back then, there wasn't enough food, so people had to dig for food in their backyards or in parks. But over the last few decades, urban agriculture has become more than just a way to garden and be proud of growing your own food. It's also become a way to improve local communities. These social benefits of urban agriculture inspire groups in different ways, from radical ideas of living differently to more practical goals of helping disadvantaged groups in society. Rosol's study in Berlin (2012) shows how local authorities supporting a new urban farm, mainly to develop educational activities for kids, led to the transfer of park responsibilities to community groups. Whether you think it's a good or bad thing when community groups take over managing urban space, you can see that urban agriculture is basically a social movement. It's a way for regular people to come together and push for fairer resource distribution (Barthel et al., 2015).

**Metabolic Urban Agriculture** is a new way of thinking about how nature and cities interact. It's one of several ideas that are changing the way we see urban agriculture. Urban metabolism is another idea that sees the city as a living organism that follows the same natural laws as other living things and the environment. In this view, resources are taken in and reused without waste. One idea, called Continuous Productive Urban Landscapes (Viljoen et al., 2012), combines ideas about urban ecology and urban design. It suggests ways to create green corridors that are edible and run across cities. Another idea that links urban agriculture practices with urban systems is Zero-Acreage Farming. This term was coined by Thomaier et al. (2015) and refers to an urban food production and supply system made up of **zero-mile farming** types that includes rooftops and indoor farming. These ideas, which are theoretical and analytical, offer or are based on ideas to solve the metabolic rift. They have a big impact on the thinking of community groups and, to some extent, part of civil society. Along with the circular economy and „de-growth,” these scientific theories now shape how we see society and the environment.

**Experimental Urban Agriculture.** The opportunities for growing food in an urban context have attracted interest from many areas, including business and research. This has led to the development of experiments that can potentially generate significant innovation. Some enterprises are investing in urban agriculture by starting production at a scale that can potentially have an immediate impact on food chains. When environmentally efficient, commercial urban agriculture can be seen as an alternative to resource-intensive industrial agriculture and a more resilient approach to a globalized food trade that seems to be increasingly vulnerable to climate change, local conflicts and politics. Effective urban policies can protect a space and role for a community-led urban agriculture while allowing urban food enterprises to thrive. In this perspective, it is reassuring to see that synergies can be created between local administrations and urban food enterprises. Experiments in agroecology are also worth mentioning, with urban farmers using organic methods of production based on a combination of modern technologies and traditional horticultural techniques (Morel & Léger, 2016). These experiments and the others mentioned in this section demonstrate the propensity of urban agriculture to experiment with new arrangements in the social, environmental, technological and economic spheres.

Multi-functionality and multiple functions of urban agriculture are terms used to indicate generally that agriculture can produce various non-commodity outputs in addition to food (OECD, 2003). Multi-functionality of urban agriculture is composed of economic, environmental, and social aspects that supply not only food but also services such as environmental conservation, good scenery and farm experience (see Table 1.).

Table 1

### Multi-functionality of urban agriculture

Function	Contents
<b>Production</b>	Basic functions such as production of foods
<b>Communication</b>	Enjoyment of culture and creation of communication through exchange between citizens and between citizens and farmers
<b>Welfare</b>	Prevention of aging through agricultural work, healing effects of plants, gardening therapy
<b>Education</b>	Emotional and environmental education through nature and agriculture and learning agriculture and forestry
<b>Recycling</b>	Organically grown vegetables by turning kitchen garbage into organic fertilizer
<b>Environmental protection</b>	Preservation of biological resources and natural environment
<b>Creation of landscapes</b>	Creation of pleasant landscapes, scenery of Japanese fields and scenery through which people can enjoy changes of the seasons
<b>Disaster prevention</b>	Disaster evacuation sites and routes, green spaces for disaster prevention, spread of fire, spaces for temporary housing
<b>History and culture</b>	Preservation of groves of village shrines and continuation of harvest festivals
<b>Support for building residential lands</b>	Promotion of building residential lands, provision of gardens and vegetable gardens that support good rural living
<b>Withholding or controlling of urbanization</b>	Temporary withholding or controlling urbanization for a certain period of time

Source: Zasada I (2011)

Urban agriculture is a highly multifunctional practice, which, regardless of the primary motivation and aim, is able to simultaneously combine several functions. M. Dobeles (2023) distinguished functions of urban agriculture and classified them into five groups. (Table 2)

Table 2

### Functions of urban agriculture and their benefits

Function	Benefits
<b>Political functions</b> <ul style="list-style-type: none"> <li>• support for urban sustainability</li> <li>• promotion of urban biological waste management</li> </ul>	<ul style="list-style-type: none"> <li>• support for the implementation of sustainable development strategies</li> <li>• implementation of circular economy principles</li> </ul>
<b>Economic functions</b> <ul style="list-style-type: none"> <li>• food security</li> <li>• reduction of expenditure on food purchases</li> <li>• income generation</li> <li>• poverty alleviation</li> </ul>	<ul style="list-style-type: none"> <li>• growing food for self-consumption and market</li> <li>• reduced expenses necessary for the purchase of food, especially organic food</li> <li>• generation of basic or supplementary income for household or commercial practice</li> <li>• food security, income generation, household economic flexibility</li> </ul>
<b>Social functions</b> <ul style="list-style-type: none"> <li>• developing social cohesion</li> <li>• public health promotion</li> <li>• promotion of education (food systems, environment)</li> <li>• maintenance and preservation of values and traditions</li> </ul>	<ul style="list-style-type: none"> <li>• alternative social networking</li> <li>• healthy nutrition, stress reduction, physical activity, recreation</li> <li>• inclusion in the activity program of schools and nursing homes, transfer of knowledge to the community</li> <li>• renewed connection with nature, restoration of agricultural traditions and values in the city</li> </ul>
<b>Technological functions</b> <ul style="list-style-type: none"> <li>• promoting technological innovations</li> <li>• promotion of energy-efficient buildings</li> </ul>	<ul style="list-style-type: none"> <li>• technological and practical innovations created by the need for space and territory adaptation</li> <li>• reuse of water resources, increasing the energy efficiency of buildings</li> </ul>
<b>Environmental functions</b> <ul style="list-style-type: none"> <li>• ecosystem service provision</li> <li>• preservation and improvement of the environment, including landscapes</li> </ul>	<ul style="list-style-type: none"> <li>• creating a microclimate by reducing the heat of the city, absorbing dust and improving air quality, preserving biological diversity</li> <li>• greening of the territory, diversification of the urban landscape</li> </ul>

Source: M. Dobeles, 2023

### Urban agriculture and Food.

When it comes to urban agriculture, it's not as simple as just picking up what you're used to doing in the countryside. One common problem is that the technologies and crops used in small urban spaces are the same as those used in rural areas, which is inefficient and expensive. Food is grown in small, isolated spaces, which costs more and doesn't produce as much. The benefits of being in an urban area aren't being used. But there are some pluses to being in the city. For example, you've got a direct consumer market nearby, fresher crops, people who can see where their food grows, and less transportation needs. When these isolated spaces are connected, like around a common market, the inefficient land use can actually become very effective. It's a whole new way of thinking. Instead of always growing bigger plantations, farms, crops, and cows, we should keep them smaller. Having smaller, more compact food growing operations that fit the hyper-local nature of urban neighborhoods is key. But some parts of food as community grow bigger. We're talking more intense communication, social networks, and more flourishing collaborations, and more people involved in growing the food, logistics, preparation, and consumption. For each urban area, we'll design a custom-sized and shaped food community, with the right types of crops, menu, social vibe, and local engagement.

It's clear that food as a commodity is a better option for producing and consuming food. It's safer, healthier, and more environmentally friendly. People can celebrate their local food more easily. Over time, food production has grown larger and more intensive. This has led to higher productivity and more products and output. At the same time, the food market has grown from local to global, with food being traded like a stock. Most food is grown in places that consumers can't see, sometimes even behind security fences, making it hard to trace its origins. This means that the connection between what we eat and where it comes from is broken. In fact, some kids these days say „the supermarket“ when asked where milk comes from, not the cow. This shows that people don't really think about what they're eating, how it's made, or what's in it, especially the artificial ingredients added to make it last longer or change the taste. All of this makes it easier for most people in the city to have unhealthy diets. Another thing that happens in cities is that people become more focused on themselves. Having local food gardens, forests, and markets can help people understand where their food comes from and get to know their neighbors. People can meet each other, become part of a social network in their neighborhood, and learn about the local plants, trees, and fruits that they can grow, harvest, and cook together. Besides fostering social cohesion, communal food gardens turn residents from supermarket-oriented consumers into collective food-producing entrepreneurs.

The last decade has shown a rise in attention for urban agriculture, local and organic food, biological produce, agroforestry, and food forests. This movement is very promising. It gives hope to:

- ☐Solve environmental problems;
- ☐Create social cohesion and work together in gardens;
- ☐Produce healthy food
- Prevent diseases;
- Produce enough food locally;
- Shorten production chains;
- Reduce food waste;
- Design hyper-localized meaningful places



**Another thing that happens in cities is that people become more focused on themselves. Having local food gardens, forests, and markets can help people understand where their food comes from and get to know their neighbors.**

## REFERENCES

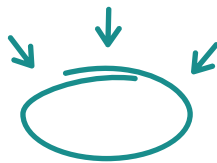
1. Barthel, S., Parker, J., & Ernstson, H. (2015). Food and green space in cities: A resilience lens on gardens and urban environmental movements. *Urban studies*, 52(7), 1321-1338.
2. Bohn, K., & Viljoen, A. (2014). Urban Agriculture on the map: The CPUL CITY concept. In *Second Nature Urban Agriculture* (pp. 12-17). Routledge.
3. Dobeles, M. (2023) The concept, potential and development perspectives of urban agriculture in Latvia: PhD thesis, 2023.
4. Kitao, Y. (2005). Collective urban design shaping the city as a collaborative process. DUP Science.
5. Morel, K., & Léger, F. (2016). A conceptual framework for alternative farmers' strategic choices: the case of French organic market gardening microfarms. *Agroecology and Sustainable Food Systems*, 40(5), 466-492.
6. Morel, K., San Cristobal, M., & Léger, F. G. (2017). Small can be beautiful for organic market gardens: An exploration of the economic viability of French microfarms using MERLIN. *Agricultural Systems*, 158, 39-49.
7. Multifunctionality The Policy Implications [https://www.oecd.org/content/dam/oecd/en/publications/reports/2003/09/multifunctionality\\_g1gh38e2/9789264104532-en.pdf](https://www.oecd.org/content/dam/oecd/en/publications/reports/2003/09/multifunctionality_g1gh38e2/9789264104532-en.pdf)
8. Rosol, M. (2012). Community volunteering as neoliberal strategy? Green space production in Berlin. *Antipode*, 44(1), 239-257.
9. Thomaier, S., Specht, K., Henckel, D., Dierich, A., Siebert, R., Freisinger, U. B., & Sawicka, M. (2015). Farming in and on urban buildings: Present practice and specific novelties of Zero-Acreage Farming (ZFarming). *Renewable Agriculture and Food Systems*, 30(1), 43-54.
10. Viljoen, A., & Bohn, K. (2014). *Second nature urban agriculture: Designing productive cities*. Routledge.
11. Zasada, I. (2011). Multifunctional peri-urban agriculture—A review of societal demands and the provision of goods and services by farming. *Land use policy*, 28(4), 639-648.

# Statistical Overview of Urban Gardening Practices in the Nordic-Baltic Region

Urban gardening has become an increasingly popular activity in the Nordic-Baltic region, driven by a growing interest in sustainability, community building, and self-sufficiency. Cities across Denmark, Iceland, Lithuania, Latvia, and Estonia are witnessing a surge in community gardens, rooftop gardens, and small-scale urban farms. These green spaces transform urban landscapes, provide fresh produce, and offer residents a chance to engage with nature, improve their mental health, and build stronger community ties.

**Critical trends in urban gardening include:**

- **Community Engagement:** Many urban gardens are community-driven projects that foster social interaction and cooperation among diverse groups of people.
- **Sustainability Focus:** Urban gardens promote sustainable practices such as composting, rainwater harvesting, and organic gardening.
- **Educational Initiatives:** Gardens often teach children and adults about agriculture, ecology, and healthy eating.
- **Health and Wellbeing:** Gardening activities are recognised for their positive impact on mental and physical health, offering a therapeutic and recreational outlet for urban residents.



# Key Statistics on Participation Rates and Types of Gardening Activities

Participation in urban gardening varies across the region, with notable engagement from different demographic groups. Here are some key statistics.

## DENMARK

# 35%

### PARTICIPATION RATE

Approximately  
of urban residents are involved in  
some form of urban gardening

### POPULAR ACTIVITIES

Community gardens, rooftop  
gardens, and allotment gardens

### DEMOGRAPHICS

High participation from families  
and elderly individuals



*The GLOBUS team visited TagTomat in Copenhagen in 2022, an initiative with a thriving rooftop garden, founded by urban farmer and architect Mads Boserup Lauritsen. Their fundamental design philosophy, Danish Upcycle, utilizes the city's resources by upcycling residual products from industries like food and furniture.*

## ICELAND

# 25%

Approximately  
of urban dwellers engage  
in urban gardening.

### PARTICIPATION RATE

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### POPULAR ACTIVITIES

Community gardens and school  
gardens

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### DEMOGRAPHICS

Significant involvement from  
schools and youth programs

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*During the GLOBUS project partner meeting in May 2024, we learned that urban gardening isn't widespread in Iceland due to challenging weather. However, Jacek, a member of the Polish community in Iceland, enjoys tending his plot at Seljagarður (<https://seljagardur.is/>), Reykjavik's only community garden, established in 2014.*

# LITHUANIA

## 30%

### PARTICIPATION RATE

About 30% of urban residents participate in gardening activities.

### POPULAR ACTIVITIES

Community gardens and balcony gardens

### DEMOGRAPHICS

Diverse participation, including young professionals and retirees



*„Šilainiai Gardens“, a community-led urban garden project established in 2018 at Kaunas VIII Fort, thrives despite not being officially legalized by the city council. Locals, volunteers, and partners work together to cultivate a diverse range of produce, from common vegetables and berries to more unique items like quince and even chocolate mint. During the GLOBUS team visit in May 2024, the gardens offered a beautiful escape, with the scent of flowers and the sounds of birds.*

# LATVIA

## 28%

Approximately  
of city inhabitants are engaged  
in urban gardening.

### PARTICIPATION RATE

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### POPULAR ACTIVITIES

Allotment gardens and  
community gardens

### DEMOGRAPHICS

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Strong involvement from families  
and local organisations



*The „I Want to Help Refugees“ community garden in Riga brings together various groups of residents, including those seeking international protection, to work together on community development. Through gardening and related events, the project aims to foster inclusion, break down barriers, and promote intercultural dialogue. This initiative is co-financed by the Riga City Society Integration Programme and UNHCR.*

# ESTONIA

# 32%

## PARTICIPATION RATE

Around of urban residents are active in gardening.

## POPULAR ACTIVITIES

Rooftop gardens and community gardens

## DEMOGRAPHICS

High engagement from environmental groups and educational institutions



As part of the GLOBUS project exploring urban gardening best practices, the team visited Tallinn, a Baltic leader with 33 community gardens. This photo captures a moment at Ameerika aed (American Garden), one of six gardens the team had the opportunity to learn from during their time in Estonia.

# COMPARATIVE ANALYSIS

Urban gardening practices across the Nordic-Baltic region share common goals but also exhibit unique characteristics shaped by cultural, environmental, and socio-economic factors. Here's a comparative analysis of all GLOBUS participant countries.

COUNTRY	STRENGTH	CHALLENGES
Denmark	Advanced infrastructure for rooftop and community gardens; strong support from municipal governments.	Limited space in highly urbanised areas; need for more public awareness campaigns.
Iceland	Innovative approaches to gardening in harsh climates; integration of gardens in educational settings.	Short growing season; reliance on imported materials for gardening infrastructure.
Lithuania	Strong community involvement and an increasing number of urban gardens in residential areas.	Limited funding for large-scale projects; legal issues regarding land ownership; need for more training programs for urban gardeners.
Latvia	The rich tradition of allotment gardens; active participation from local organisations.	Urban sprawl reduces available land; there is a need for better resource management systems.
Estonia	High engagement from educational institutions; innovative use of urban spaces for gardening.	Environmental concerns such as soil contamination; need for more robust policy support.

Overall, urban gardening in the Nordic-Baltic region is thriving, with each country contributing unique practices and innovations. By sharing experiences and knowledge, these countries can continue to enhance their urban gardening initiatives, promoting sustainability and community wellbeing across the region.

This statistical overview highlights the importance of urban gardening as a multi-faceted tool for community building, education, and sustainability. Each country's unique approach contributes to a rich tapestry of practices that can be shared and adapted across the region.

## GOOD PRACTICE EXAMPLE

### TAGTOMAT's Epicenter

**By Mads Boserup Lauritsen**

**Architect and founder of TagTomat**

The foundation for TagTomat was laid on a warm spring day at the end of May 2011, when I was sitting and looking down at the roof of our garbage shed – I was annoyed (read: very angry and frustrated...) that we couldn't get an allotment in Copenhagen. The sun was on the roof until four in the afternoon, providing fertile ground for growing vegetables against the south-facing wall, like in a greenhouse. And from there, it wasn't a long leap from thought to action. I grew up in a villa in Odense with a greenhouse, where we grew tomatoes and lettuce in homemade self-watering planters. With the help of five old plastic tubs, some used Styrofoam boxes from the local greengrocer, pliers to cut the barbed wire off the roof's edge, and five bags of soil from the local DIY store, a small rooftop garden was created with space for tomato plants and some pre-sprouted lettuce and flowers. I "forgot" to ask the courtyard guild for permission. Initially, there was some constructive resistance from some courtyard guild members, mostly concerning who would clean up when I no longer felt like tending the rooftop garden. During the summer, a couple of the kids from the courtyard came up on the roof, and we collectively harvested a single bowl of tomatoes.

The seed for the first community across the housing associations was sown in the autumn of 2011. I was throwing out green tomatoes when I heard a friendly but firm voice say: "What are you doing? You're not throwing out green tomatoes, are you?..."

It was Nanna from the other end of the courtyard, who, in addition to having had a huge herb garden before she moved to the city, makes the most delicious pickled green tomatoes with vanilla. During the autumn, we gathered a few more interested people and talked about how we wanted to create more community in the courtyard beyond what already existed around the sandbox and the swings and internally within the different housing associations.

The courtyard consists of a large owner-occupied housing association, a property with rental apartments, two cooperative housing associations spread across three stairwells, and a small owner-occupied housing association with a back building. In total, 14 stairwells, comprising approximately 135 apartments.

#### **From 30 to 3,000 Tomatoes**

In the spring of 2011, Dyrk Nørrebro started on the roof of Blågård School, parallel to TagTomat. It wasn't until late summer that I had time to visit this fantastic rooftop paradise, where Anders and Cristian told me about the possibilities of applying for funding from the Nørrebro Local Committee for community-oriented projects in the district.

During the autumn, I saw the communities that the urban garden created on the school's roof, and this prompted me to apply for DKK 10,000 from the local committee to hold a volunteer workshop in the spring of 2012 where people could learn how to make planters.

The courtyard guild was a co-applicant for holding the workshop, with a deficit guarantee for the materials that we ourselves used in the backyard. There was still some constructive criticism from a single courtyard guild member who would have liked the rooftop garden in 2012 to be a bit more "organized" visually. With this in mind, we started the 2012 season by pre-sprouting in our own windowsills, and tomato plants, soil, and mortar tubs were bought via the internet, and Styrofoam boxes were collected from the local greengrocers in Nørrebro.

I was on parental leave for seven months from March, so I had plenty of time to put up notices in stairwells and local shops to create awareness about our workshop. The workshop was held at the end of May with great and enthusiastic participation from many people from neighboring courtyards. Our backyard's local artist, John Normann, helped decorate the planters.

For this first workshop, I chose to buy some of the ready-made planters in pure Styrofoam, as we didn't know if people would embrace the idea of homemade ones.

But that was also the last time we bought anything ready-made... During a pleasant afternoon, we planted the rooftop garden together with 35 planters, and the foundation for a harvest of approximately 3,000 tomatoes during the season was laid.

During a season, there are approximately 5-10 very engaged families in the rooftop garden, and about twice as many who eat the vegetables.

## **Herbs at Ground Level**

Alongside the rooftop garden project, there was so much energy and desire to grow greenery in our backyard that we cobbled together a couple of raised beds from pallet collars lined with plastic, placed on top of a recycled plastic pallet. We planted them with herbs one lovely evening in June, the same day they had been filled with a grab from a truck. We have some good pictures of the whole process in our blog posts from May and June 2012.

The plastic pallet was an important lesson learned from Dyrk Nørrebro, where they could see that some wooden pallets quickly rotted when they got soil on them. Pallet collars are a quick way to make an urban garden, but partly you don't know what they have been used for, and partly they are usually made of pine or spruce and therefore rot after 3-5 years. But judging from the number of pallet beds around the country, the easy approach trumps, even though the beds decay after a couple of years.

As a supplement to the herbs, we try each year to plant a few different vegetables in the raised beds, and there are approximately 15-20 families who regularly use the herbs. My theory is that the higher usage rate is due to the beds being more easily accessible.

## **Building and Organizing Green Communities**

From the start, there has been a very loose organization around the cultivation in our backyard. Every year, the courtyard guild holds two joint workdays – one in the spring and one in the autumn – where garden furniture is painted, the playground is tidied, and corners are swept, but also summer flowers are sown, and perennials and fruit bushes are planted in our regular beds on the ground.

Each year, the informal cultivation group has joined the workdays and prepared the rooftop garden, planted new herbs, or, for example, carved pumpkin heads in the autumn or set up compost bins for our garden waste. We have tried to establish a regular weekly gardening day, but it has always ended up with us managing various tasks such as watering and planting via SMS chains or emails. We have created an internal

Facebook group for the courtyard guild, but the two "old-fashioned" methods have resulted in the highest attendance.

The rooftop garden is approximately 20 m<sup>2</sup> in size. It consists of two rows with 17 planters in each, and as a central aisle between the rows, we have laid out some Euro pallets. When all the containers are filled with water, the garden section itself weighs approximately 1.5 tons. No calculations have been made as to whether the roof can hold the weight, but if it could hold 40 cm of snow on the entire roof in the winter of 2010-11, it must also be able to bear a small rooftop garden in the summer.

Each year, we have bought new soil and used the old soil as soil improvement in our perennial beds and around fruit bushes in the courtyard. We have an intention to recycle the soil, but so far it has only remained an idea. It is the courtyard guild that pays for the purchase of soil, plants, and seeds, and when we plant out in the spring, summer flowers are also purchased, which the various engaged residents plant around their stairwells in pots and balcony boxes. Access to the rooftop garden is via an old aluminum ladder that we found in bulky waste, and it is tied down with a rope so that it cannot slide and tip over when people climb up. As long as you do not build a fixed ladder/staircase, you do not have to apply for building permission or have fall protection.

We do not know how much we harvest in the rooftop garden, as all crops are shared. Apart from a few isolated instances where all radishes have been harvested at once, there is always enough greenery for those who want some. There is an unwritten rule that you should save some for the next person, and otherwise, we continuously ensure to sow new lettuce and radishes, which are very popular. And then there are of course a lot of different kinds of tomato plants that grow really well along the south-facing wall. We have not managed to pre-sprout our own tomatoes, so every year we have bought good tomato plants for planting out at the end of May. We have built a simple frame that is attached to the central aisle for tying up the tomato plants. Steel wire is fastened between the individual modules, and from the steel wire hangs string that tomato plants and beans can climb up. In the winter, we have a string of lights hanging, which is switched on at the same time as the courtyard's Christmas trees.

## **Animals Have Their Place**

Over the years, in addition to growing greenery, we have gradually increased the number of elements to get a small ecosystem up and running. We have hung eight tit boxes from the Danish Ornithological Society, built a bird feeder, and made an insect hotel from junk from bulky waste. Whether the insect hotel has overnight guests is unknown, but tits and sparrows are breeding happily in the nesting boxes, which is clearly heard in the spring and summer months, when pleasant chirping and warbling song fill the courtyard.

In the spring of 2014, several of us hoped to set up a couple of beehives on one of the sheds in the courtyard, but for various reasons, including a procedural error in a summons to an extraordinary general meeting, it was not possible. The beehives had been purchased, so until they find a place here in the city, the bee families live at a scout cabin in a suburb of Copenhagen. As you can read in another article in this book, it is not dangerous to keep bees, and they rarely sting. There are, of course, people who are hypersensitive to bee stings, but generally, it is only wasps that attack humans.

In August 2014, many engaged residents began digging for a chicken coop on the dilapidated petanque court. The rules in „Regulations for Non-Commercial Animal Husbandry in the Municipality of Copenhagen" from 1994 have been followed, and in addition, wire mesh has been dug down to a depth of 30 cm all the way around the chicken coop to keep out any rats. The chicken coop itself hangs from the roof, so it

floats more than the 35 cm from the ground as the regulations prescribe. It took almost a year, from when we started digging and pouring concrete, until we could inaugurate the chicken coop in June 2015 with the purchase of three magnificent hens, who bear the names Hans, Charlotte, and Darth Vader.

In addition to the fact that it took a little long to finish building the chicken coop because the work was carried out on a voluntary basis, we now have a small but well-functioning chicken guild, where the members take turns looking after the chickens one day a week. We check food and water daily, and the coop is cleaned out once a week. The eggs go to whoever has the tending duty on the day in question. The chicken coop is approximately 12 m<sup>2</sup>, so there is enough space for the chickens to, in principle, be eco-certified if we wanted to. In other courtyards in Nørrebro, they have had trials with having free-range chickens in the courtyard, which worked fine until a resident complained that there was a little chicken poop in the corners. We have not yet eaten any of the chickens, but I imagine that it will happen, and perhaps we will one day get rabbits, which can both eat green garden waste and end up on the dinner plate.

### Challenges in a Shared Courtyard Garden

When many people have to share the limited space in a backyard, it is always difficult to determine how much space the garden projects should occupy. By starting small with a couple of planters on the roof and then a couple of herb beds at ground level, we have adjusted the amount of cultivated area so that it is not overwhelming for those actively involved to manage.

In 2013, we tried to get a shared compost system up and running with two compost bins, where residents could compost their green kitchen waste, and we could supplement with garden waste from the courtyard. A permanent "compost manager" never materialized, and when some residents, out of ignorance, kept pouring cooked vegetables, rice, and old rye bread into the compost, the courtyard guild decided during 2014 to close the experiment. Although we had put up large information signs and continuously informed verbally about what could be composted, it didn't help. So, as of this writing, we do not compost our kitchen waste, while our caretaker continues to place leaves and small branches in the compost bin.



In some seasons, many of us have tended the courtyard's beds, in others, fewer. It is especially in those seasons where we have called for joint meetings at the beginning of the year that there have been more engaged people. Personally, I spent the first couple of years spending a lot of time getting many people involved in the rooftop garden, while in recent years it has stood as an open invitation – that everyone is welcome. And I am pleased with those who want to participate actively, but just as much with those who just look, nod approvingly, and smile as they walk past the various mini-projects in the courtyard.

## **The Finances of a Shared Courtyard Garden**

If you want to create a rooftop garden yourself, the expenses for materials in the first year are approximately DKK 6,000-8,000 if you look for good deals. In addition, new soil, seeds, and plants must be purchased annually. Since the project started, our courtyard guild has paid for the establishment of an outdoor water tap, for materials for raised beds on the ground, and for the materials for the chicken coop. The actual operation is handled by volunteers, and in addition to plants for the roof, flowers and bushes are purchased, which are planted out at the semi-annual gardening days.

Most courtyard guilds have a relatively large operating budget. By participating in the general meeting or joining the courtyard guild, you can influence what you should spend your money on. We have reduced our expenses for snow removal by having a resident hired for it, and we have reviewed all operating agreements and weeded out those that were not relevant. This has meant that in addition to having a caretaker/janitor employed for the daily operation, we have found money for a gardening company to prune trees and bushes, and that we have funds to, for example, support the green initiatives that people come up with.

## **Future Green Communities**

In the years that have passed since the rooftop garden was started, it is especially the fact that we have gotten chickens in the courtyard that I experience as the biggest community-building thing. It is enormously affirming to see young and old say good morning to the chickens or pop by with dandelions and other greens that have been picked on the way home from school or kindergarten. The large owner-occupied housing association in the courtyard has gotten balconies, which are now adorned with flowers, and at the end of the courtyard where there is evening sun, some residents have suggested that an outdoor kitchen with seating areas be made. In the widest part of the courtyard, we might one day tear up the asphalt and sow some grass. You are allowed to dream... it was, after all, the yearning for grass between my toes that started the thought that became TagTomat...

For more see [www.tagtomat.dk/taghaven](http://www.tagtomat.dk/taghaven)



The GLOBUS team extends its sincere gratitude to Mads Boserup Lauritsen for his warm hospitality during our visit to Copenhagen in November 2022. We especially appreciated the inspiring rooftop visit and the engaging seed bomb workshop.

# **METHODOLOGY**

## **From Concept to Thriving Urban Garden**

Starting a community garden involves a combination of legal considerations, community engagement, and practical agricultural efforts. Regular communication, inclusivity, and a shared vision will contribute to the success and sustainability of the community garden.

This Methodology provides a step-by-step approach to starting and maintaining an urban garden, emphasizing ecological sustainability, community engagement, and fostering a space everyone can enjoy.

## PHASE 1

### PLANNING AND SITE PREPARATION

#### 1. Identify and Evaluate Potential Sites

- **Location Selection**

Start by choosing an accessible and safe location. Ideal spaces have plenty of sunlight, as most plants require at least 6-8 hours of direct light daily. Common urban garden spots include rooftops, vacant lots, courtyards, and balconies.

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**TIP: If you're unsure about sunlight, observe the site throughout the day to see how much direct light it gets. Avoid sites that are heavily shaded.**

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- **Permissions and Permits**

Before you start, check with local authorities to see if you need any permits. Municipalities, especially in places like Denmark, often have supportive policies for community gardens, but it's essential to confirm what's required.

- Contact your local municipal office or property manager to learn about any legal requirements or permissions for gardening on public or private land.
- Check local zoning laws and regulations regarding land use for community gardens.
- Obtain any necessary permits or permissions from local authorities to start a garden.
- Consider liability insurance to protect the community in case of accidents or unforeseen events.

#### 2. Engage the Community Early On

- **Outreach and Inclusion:** A garden thrives best when many hands are involved. Meet with residents, schools, and community centres to introduce the concept and discuss shared interests.

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**TIP: Bring a simple layout or photos of other urban gardens to inspire ideas. People will feel more invested if they can envision what's possible.**

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- **Form a Core Team:** Recruit volunteers who are passionate about the project. The team should include people with diverse skills, from gardening and event organising to budgeting and outreach.
  - Create a contact list for everyone interested and schedule regular meetings to discuss roles and progress.
  - Conduct informational sessions or workshops to raise awareness about the benefits of community gardening (we suggest using the interview with Estonian architect Kadri Maikov, for more see next pages).
  - Utilize social media, local newspapers, and community bulletin boards to share information.
  - Organize social events or gatherings to foster connections among community members.
  - Create online platforms or forums for discussions and idea-sharing.
  - Implement practices that express gratitude, such as acknowledging contributions or organizing appreciation events.

## **ASSESS RESOURCES AND BASIC NEEDS**

### **Gathering Tools and Materials**

- Start with essential gardening tools: shovels, rakes, watering cans, and gloves. Recycled materials, like old containers or pallets, can make excellent planters and reduce costs.
  - Clear the area of debris and weeds.
  - Assess the chosen site for soil quality, sunlight, and drainage.
  - Organize a community "tools day" where members bring and share any extra tools or materials they may have.
- **Infrastructure Setup**
  - Install raised beds, compost bins, water access points, and any necessary structures.
  - Consider sustainable and eco-friendly construction methods.
- **Soil Enrichment**
  - Conduct soil tests and amend the soil with compost or other organic matter as needed.
  - Explore sustainable farming practices, like no-till gardening.

### **Common Principles and House Rules**

- Define the community garden's mission, vision, and guiding principles.
- Establish guidelines for sustainable and organic gardening practices.

- Develop rules regarding plot assignments, shared responsibilities, and respectful behavior.
- Clearly communicate rules to all members and ensure they are agreeable.

### **Budgeting and Funding**

- Consider other essential costs, including but not limited to materials such as soil, seeds, planters, tools, and any event or promotional expenses.
- Consider ongoing costs, such as water and maintenance supplies.
- Allocate funds for each category and revisit the budget periodically to ensure it aligns with actual expenses.
- Research and apply for grants from local governments, community foundations, or environmental organizations. Baltic and Nordic countries often have municipal grants for such community projects. Check with your city's community development office for funding opportunities.
- Explore crowdfunding platforms to involve the community in fundraising.
- Seek partnerships with local businesses, schools, or nonprofits for financial support or in-kind contributions.
- Membership fees or small contributions can help sustain the garden while fostering a sense of shared investment.

### **Marketing the Garden Production**

- Create a brand identity for the community garden.
- Design promotional materials, including logos, posters, and banners.
- Establish relationships with local farmers' markets, restaurants, or grocery stores to sell or donate surplus produce.
- Utilize social media and community events to showcase the garden's products.

### **Crisis Management Plan**

- Identify potential risks such as extreme weather events, pest infestations, or conflicts among community members.
- Compile a list of emergency contacts and resources.
- Establish communication channels for emergencies.
- Develop contingency plans for different scenarios, outlining steps to be taken in case of crises.
- Train community members on crisis response protocols.

## PHASE 2

### DESIGNING AND BUILDING THE GARDEN

#### 1. Plan the Garden Layout and Design

- Use Permaculture Principles. Focus on sustainable design by arranging plants and resources efficiently. For example, group plants with similar water needs together and consider companion planting to reduce pests naturally.

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**Urban gardens often incorporate rainwater collection and composting areas to support eco-friendly gardening.**

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- Create Zones, or Designate areas for specific purposes, e. g. raised beds for vegetables, a small seating area for social gatherings, a compost bin, and a spot for tools.

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**TIP: Sketch a simple garden map, noting where each area will be. This helps everyone visualise the plan and understand how the garden will function.**

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#### 2. Setting Up and Planting

- Choose Planters and Structures. If you have limited ground space, use planter boxes or vertical gardens. For example, a self-watering Plant Bottle is perfect for small spaces and can be made with a plastic bottle and string.
- Select Easy-to-Grow Plants. Start with plants that adapt well to local conditions, such as herbs (mint or basil), leafy greens, and root vegetables (carrots, radishes). These plants are often resilient and provide early rewards for beginner gardeners.

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**TIP: Sketch a simple garden map, noting where each area will be. This helps everyone visualise the plan and understand how the garden will function.**

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- Prepare the Soil and Plant: Fill planters with nutrient-rich soil or compost. Place seeds or seedlings at the recommended depth and spacing.

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**TIP: Label each plant with its name and care instructions (watering needs, sunlight) to make it easy for everyone to help maintain the garden.**

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## PHASE 3

### MAINTAINING AND SUSTAINING THE GARDEN

#### 1. Organise Roles and Create a Care Schedule

- Assign Weekly Tasks. Set up a rotating schedule for watering, weeding, and harvesting tasks. This way, everyone feels responsible and involved.

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**TIP: Use a shared calendar (digital or physical) to track tasks. Regular check-ins ensure nothing is overlooked.**

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- Host Workshops for Skill-Building. Offer sessions on composting, seed saving, and organic pest control. This not only builds knowledge but also strengthens community connections.

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**TIP: Invite local gardening experts or experienced community members to lead workshops.**

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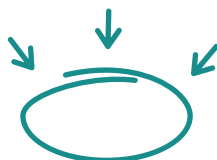
#### 2. Seasonal Planning and Adjustments

- Plan for each season. For example, shift to hardy plants in colder months or explore indoor gardening if the climate is too harsh for outdoor activities.
- Use a regular watering schedule and compost-based fertiliser. Like a Plant Bottle, a self-watering system can help maintain moisture and reduce daily watering needs.

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**TIP: Place compost bins and rain barrels strategically to easily access nutrient-rich compost and water.**

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## PHASE 4

### COMMUNITY EVENTS AND ENGAGEMENT

#### 1. Organise Seasonal Events

- Host planting days in spring, harvest festivals in autumn, and other seasonal workshops (like composting in winter). These events bring the community together and celebrate milestones.

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**TIP: Announce events on social media and create a festive atmosphere to attract participants and newcomers.**

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- Schedule open days for visitors to explore the garden, learn about ongoing projects, and consider joining. This boosts visibility and fosters a sense of community pride.

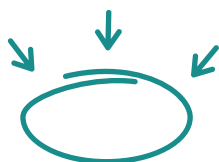
#### 2. Include Diverse Community Groups

- Design the garden to be inclusive. Raised beds and accessible paths make gardening possible for people of all abilities.
- Arrange for local schools to use the garden for hands-on learning. Educating youth on gardening and sustainability helps pass on valuable knowledge.

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**TIP: Create a simple garden activity guide for children to make educational sessions fun and engaging.**

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## PHASE 5

### ECO-FRIENDLY GARDENING AND SUSTAINABILITY PRACTICES

#### 1. Composting and Water Conservation

- **Set Up Compost Bins.** Composting reduces waste and provides natural fertiliser for your plants. Offer workshops to teach composting techniques to community members.
- **Collect Rainwater.** Install rain barrels to save water, especially when water conservation is essential.

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**TIP: Position compost bins and rain barrels close to planting areas for easy access.**

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#### 2. Organic Pest Control and Plant Health

- Use Eco-Friendly Methods, for example plant pest-repellent plants like marigolds and natural repellents, e. g. neem oil, to protect plants without harming beneficial insects.
- Inspect plants regularly for signs of pests or disease and take immediate action to prevent spreading. Keep a log of observations and treatments to maintain plant health over time.

### CONCLUSION

By following these steps, you'll build a garden that thrives and serves as a vibrant community gathering space. Urban gardening offers a way for people to learn, share, and grow together, fostering a sense of accomplishment and connection. With consistent care, community involvement, and sustainable practices, your garden will become an enduring source of pride, well-being, and green beauty for everyone involved.

# Inspiration

**Kadri Maikov,**  
**Estonian University of Life Sciences;**  
**landscape architect**

People are further away from nature in their living environment. In an innovative and development-oriented world, alienation from nature is an increasing phenomenon, which is unfortunately affected by today's production—and consumption-oriented society. At the same time, people are based on nature, and managing in nature is even more important, but unfortunately, awareness is decreasing about how to do it.

The well-being of an individual, including their mental health, is intricately linked to their environment. Numerous theories suggest that the quality of the environment and the degree of change can significantly impact a person's physical, mental, and social well-being. Mental health, in particular, is a cornerstone of human well-being, and the natural environment plays a crucial role in maintaining this balance. One effective way to contribute to this balance is through green therapy.

As healthcare professionals, urban planners, and environmentalists, your role in promoting green therapy is crucial. Green therapy (green care) is a relatively new term, but this principle has quite a long history—it includes the conscious use of nature's positive influence to achieve better health, from simply sitting and watching activities in greenery. The more we raise awareness about this form of therapy, the greater the chance to increase humanity's well-being. Creating therapeutic gardens in urban areas and institutions and adopting green therapy and ecosystem services can ensure people's emotional, mental, and physical well-being and health.

The creation of a green environment must be planned consciously. First, there is a person, and then there is green space and opportunities. The most important thing is the relationship between them. The choice is where and how a person performs activities. Environmental activities are at the individual level in community gardens. The central place is still a person as a citizen, tourist or customer—whose activities are influenced by making them use their senses, directing green therapy to strengthen mental capacity—which helps to focus, acquire knowledge, create, analyse and orient themselves and plan their time and activities for green activities. In this way, developing your social, psychological and emotional skills is possible. More narrowly, green care develops self-expression, care and responsibility, communication skills and regulation of the sense organs. At the level of the extended subject, the development of communities, cohesion, and the promotion of joint activities are affected, which creates a more social mission-oriented and greener world, inspiring hope for a better future.

Scientists have researched the impact of nature and the healing environment, and, as a result of several project experiences and research works, it is possible to transfer effective results to the context of Estonia and neighbouring countries.

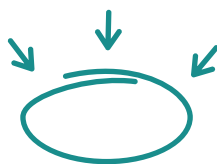
Green areas, activities in the green, and even a short walk in the forest can strengthen the immune system's resistance, increase energy levels, and lower anxiety, depression, and emotions. According to the researchers, consistent and habitual nature



therapy can have a positive effect on mental health by reducing the risk of contracting psychosocial stress-related diseases. It can be observed that, in addition to the cognitive stage, the amount of anti-cancer proteins increases in the human body after both a long-term and a single walk in the forest, which phytoncides released by plants cause. Phytoncides are natural chemicals plants use to protect themselves from insects and rot. The most characteristic representative of this is, for example, the essential oils of wood in the forest.

Green therapy has passed several tests over time, and having reached the 21st century, there is a clear sign of its effectiveness and reliability. Although the positive effects of the environment have been described since ancient times, Dr. Benjamin Rush has been called the „Father of American Psychiatry“ (American Horticultural Therapy Association 2017). This rich history connects us to a long-standing tradition of using nature for healing and well-being.

Greening is also shown in urbanised living environments, where opportunities are used differently in some areas and less in others. In most developed European cities - green areas and gardens are highly concentrated and purposefully developed environments. More and more, it goes in the so-called therapeutic direction. At the same time, let's step out of the city and into the wild natural environment, little touched by man; the same elements are scattered and less concentrated. At the institutional level, hospitals, nursing homes, and various health facilities are often located in cities and settlements, where the complex's surroundings, gardens, and parks play an essential role in treating people. Green areas, including therapeutic gardens, are created and used primarily to influence the mental health and well-being of different target groups (schools, kindergartens, nursing homes, etc.)—all of which have one goal to support people to cope in nature, the main thing is to use nature for self-healing and finding balance.



# Rules and Legislations

Nordic and Baltic states can proudly offer inspiring examples of how to cultivate thriving community gardens. By providing free land, fostering citizen participation, and prioritizing sustainability, these initiatives contribute to a greener and more vibrant urban future. This chapter explores the regulations and practices shaping urban gardening initiatives in Estonia, Denmark, Iceland, and Lithuania and serves as a valuable resource for policymakers and communities seeking to replicate this success story.

## ESTONIA

Since 2019, it has been a common practice in Tallinn that city land is given free of charge and everlasting for community garden activities.

According to the procedure for the use of urban property of the city of Tallinn (<https://www.riigiteataja.ee/akt/420122023027?leiaKehtiv>), city land is provided for use by decision (or to a specific organisation) and free of charge by the decision of the Tallinn City Council. Then, a land use agreement is signed between the city and the community garden keepers, where all obligations and rights are written down. In addition to the contract, the keeper of the community garden must comply with Tallinn's rules of good order (<https://www.riigiteataja.ee/akt/402062020029>) and Tallinn's waste management regulations on composting (<https://www.riigiteataja.ee/akt/418032023007>).

The process of proposing a community garden to the City Council begins with the initial presence of those interested, who are usually represented through an NGO or other legal entity. These interested parties, often led by the urban gardening project manager of the Tallinn Environment and Municipal Board or the district government, present a proposal to the City Council. This proposal outlines the plan for the community garden and the desired location, initiating the process of establishing the garden.

If necessary, an urban gardening project manager will help those interested to find suitable land for a community garden. In general, those who are interested have some options or know the area where they want to create a community garden. One or another urban district may be under the responsibility of a different city authority, such as the Tallinn Board of Education, the Tallinn City Property Board, the government of a specific district or another city authority. Therefore, the urban gardening project manager's task is to find a preliminary agreement between the manager of a specific urban land and those interested in the community garden regarding the use of the land to help put together the concept and sketch of the community garden.

The process of establishing a community garden involves an initial written agreement between the interested parties and the ruler of the urban land. This agreement is a crucial step as it leads to the community garden keeper drafting a proposal for the use of the plot belonging to the city. The proposal is then reviewed by the Tallinn City Government and finally by the Tallinn City Council, where the ultimate decision is made.

## DENMARK

The Danish Planning Act plays a pivotal role in regulating urban gardening. This act mandates that any new construction or refurbishment must first receive municipal approval. Furthermore, regional plans often outline specific conditions for urban gardening and other green space developments, thereby shaping the legislative framework governing urban gardening in the country.

Copenhagen has taken specific initiatives under its Urban Nature Strategy, developed by the City of Copenhagen's Technical and Environmental Administration. This strategy focuses on increasing the green coverage within the city, promoting urban biodiversity, and enhancing the quality of urban nature. It also empowers citizens, NGOs, and private businesses to be part of the solution, encouraging their involvement in urban green space projects.

Denmark's regulations and strategies for urban gardening are not isolated efforts. They are part of a broader national focus on sustainability and environmental stewardship. This focus reflects Denmark's commitment to integrating green spaces within urban planning, a key strategy that not only improves ecological health but also significantly enhances community well-being.

## **ICELAND**

The legal environment for urban gardening in Iceland highlights country's significant policies and regulations.

In Iceland, the legal environment for urban gardening stands out for its unique blend of sustainability, agriculture, and land management. This distinctive approach is characterised by policies that tie agricultural support to sustainability goals, involve communities in land care, and harmonize soil conservation with broader environmental and societal needs.

The Icelandic government has also established frameworks that focus on combating climate change and promoting sustainable development through land restoration and conservation. These efforts include fostering biodiversity, preventing soil erosion, and increasing carbon sequestration through ecological restoration.

The Ministry of the Environment, Energy and Climate in Iceland is a key player in the formulation and enforcement of environmental protection policies, including those related to urban gardening and landscaping. This ministry oversees a range of environmental issues, ensuring that urban agriculture initiatives are in line with national conservation and sustainability objectives.

Iceland's integrated approaches underscore the country's unwavering commitment to sustainable urban development and environmental stewardship. These approaches are not just policies, but a source of inspiration. They support urban gardening activities that foster community building and ecological balance, demonstrating Iceland's dedication to these causes.

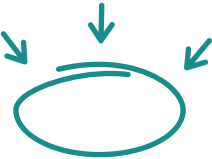
## **LITHUANIA**

The regulations governing urban gardening projects (UGPs) in Lithuanian capital Vilnius envisage that the Municipality is responsible for promoting these projects, aiming to strengthen communities, promote sustainable resource use, and encourage eco-friendly farming practices.

UGP locations are identified through the city's planning process, integrated into green space projects, and require public approval. Projects begin after the green spaces are established.

A public competition selects UGP implementers (non-profit organizations). The call for applications, published on the Municipality's website, outlines requirements, evaluation criteria (social/environmental benefit and project management/sustainability), and submission procedures. Applications are evaluated by a working group within 30 days. The highest-scoring applicant is offered a five-year contract, which may be extended.

UGP implementers are responsible for project activities, maintaining the site, and ensuring compliance with the regulations. They must promote environmentally friendly practices and community engagement, submitting annual reports. The Municipality can terminate contracts under specific circumstances. After contract expiry, the site must be returned to the Municipality in good condition. The regulations also cover contract signing, termination, extension, data protection, and complaint procedures.



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# Digging Deep: Riga's Community Gardens Thrive on Zero Budget

By Madara Dobeles, PhD, assistant professor

Andra Zvirbule Dr. oec., professor

Latvia University of Life Sciences and Technologies

In Latvia, the urban gardens are now more in the development phase, as they have become urban community gardens, and they also promote green thinking among the city dwellers.



*Photo from Augnīca*

The Augnīca is a green retreat from the Riga city center – a community garden in the making, where everyone is invited to be a part of it. To develop its activities, the Community Association Augnīca was founded in 2021. Its purpose is to promote informal environmental education, environmental communication and environmental beautification. More than 30 people have signed up to work at the small 1500 square meter site.



*Photo from Augnīca*

Audz is a garden that is not meant to fill the basement with an abundance of food for the winter, but rather a garden whose mission is to bring people together. This is probably the best way to describe the urban community garden "Audz" in the "Green Villa" district of Sigulda.



*Photo from garden Audz*

It is essentially a community of like-minded people who maintain the garden, but anyone can join in. As a novelty in the garden activities, there is also a place for the exchange of seeds. Everyone has a seed or a plant that they would like to have.

Audz is based on the principle of participation. It is a social, universal, and experiential design project where the garden is not just an area to grow vegetables, but a place to create awareness of the synergy between people, nature, and time. The idea is to bring people together and develop gardening in an urban context. By sharing knowledge among citizens, it will raise awareness about where food comes from and promote the movement for healthy and sustainable living.

An architectural greenhouse with a family table in the center, which has become a new meeting place in Sigulda, is also part of the Green Villa district.



*Photo from garden Audz*

The most famous public garden in Riga is Sporta Pils dārzi (Gardens of the Sports Palace), a non-profit project, the authors and organizers of which are Rigans who want to actively participate in the development of the urban environment of Riga.

The author of the initial idea of creating a garden in an abandoned space in the city center was Renate Lagzdina, who lives not far from this place. Renāte invited her friend, an architectural designer, to collaborate, and together they developed a vision for the future community garden. Above all, the garden is a method and platform for change, a space for all generations and nationalities, an exercise in civic engagement, a collective learning ground and a beautiful and healing public space.

Under the supervision of the gardening team of the Sports Palace Gardens, the overgrown two-hectare site in Riga's center is gradually being transformed from a place of nothing into a place – meadows and gardens that are open to the public. The fenced area of almost 2 hectares was divided into 150 plots, which can accommodate 800 wooden boxes for plants. Each plot is 12 m<sup>2</sup>, and can accommodate 3, 5 or 8 boxes. The future owners of the plots cleaned the space as volunteers, and they still maintain the garden clean and tidy. The Kronus company, a pallet manufacturer in Latvia, donated boxes of two sizes to the commune, as its management was very inspired by the idea. The commune already has almost 200 people.

Where the Sports Palace once stood will be transformed into greened recreation areas, while 150 urban gardens for community members will be created at street level, around the perimeters of the block. There will also be public flower beds, composting areas, workspaces, and garden tool-sharing areas that will be the responsibility of the entire community.

The gardens can be rented for a season at very democratic prices. This makes them accessible to a wide range of people.

Accessibility is a guiding principle throughout the project - 10 gardens will be created in the area that are accessible to people with disabilities.

One of the groups that will be given priority in the search for tenants for the gardens will be senior citizens.



*Photo from Sports Palace Garden*

The Sports Palace Gardens is a non-profit project with a small budget - the team does all the work for free and several sponsors have been brought in.

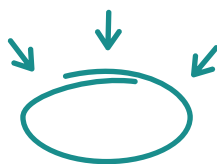
The symbolic rent of the gardens covers only part of the seasonal costs, but residents have supported the initiative with donations on the crowdfunding platform „Project Bank“.

The city government supports the project conceptually, but not yet financially or in any other tangible way, mainly because there are currently no mechanisms for promoting urban gardening.

Unlike traditional family gardens in Riga, the Sports Palace Gardens are also suitable for inexperienced, busy gardeners who may not have thought about gardening before. That's why relatively small plots are available for rent - 12-square-meter gardens where vegetables can be grown in boxes.

Water and lighting in the garden are provided by state companies that have concluded preferential contracts for servicing the territory. Renate is now the director of the project, together with representatives of the commune, she has developed rules for all owners of the garden, which are strictly observed. The rules, in particular, even take into account such things as the design of individual areas (for example, no plastic chairs). There is a fee for using the area, it includes a fee for the boxes used (5 euros per year per box) plus a portion for utilities. The total fee is on average 60 euros per year.

Four days a week the garden is open to visitors, with two representatives of the community always on duty at the entrance. And today the garden is a real event in the city center: more than 2,000 monthly visitors, popular for yoga classes, book clubs and other community meetings, loved by kids and seniors. In addition to growing plants, the garden offers a number of events: educational paid and free programs, free concerts and holidays in the local cafe. In addition, 20 garden plots are provided to refugees from Ukraine, which allows learning to raise voice together and supporting each other.





# #GLOBUS

Gardening and Landscaping Opportunities  
for Building Urban Societies

## A PRACTICAL TOOLKIT

### For urban gardening beginners

This practical toolkit will help you better plan your urban garden and avoid potential pitfalls along the way. It was prepared by summarizing the material of the GLOBUS project partners, collected in all five project countries, taking into account the good practices of the gardeners themselves.



Urban gardens come in a delightful variety of shapes and sizes, each catering to different needs and spaces. From compact balconies to shared community plots, there's a garden design to suit every urban setting. Among the most popular options are raised beds, simple ground beds, and container gardening using bags or pots.

When choosing the right type of bed for your garden, it's crucial to consider the specific needs of your space, the plants you wish to grow, and the people who will be tending to the garden. GLOBUS project contributors offer several examples below for beginner's convenience, along with additional tips to help you make the best choice.

## **Raised Beds**

Raised beds are constructed above ground level, typically enclosed by wooden frames, bricks, or other sturdy materials.

They offer numerous advantages, including:

- Improved drainage as elevated soil allows excess water to drain away easily, preventing root rot and other moisture-related problems. This is especially beneficial in areas with heavy clay soil;
- Better soil control. Gardeners can fill raised beds with a custom soil mix that is perfectly suited to their chosen plants, ensuring optimal growth;
- Reduced weed pressure as the raised structure helps to prevent weeds from encroaching from surrounding areas;
- Easier accessibility for people with mobility issues, as they reduce the need for bending and kneeling. This makes them an excellent choice for intergenerational gardening projects;
- Extended growing season because the soil in raised beds warms up faster in the spring and retains heat longer in the fall, extending the growing season.

## Simple Ground Beds

Simple ground beds are created directly in the existing soil. This is the most traditional gardening method and can be suitable if your soil is healthy and well-draining. Key considerations for ground beds include:

- Soil testing. It's essential to test your soil to determine its pH and nutrient levels. This will help you identify any necessary amendments;
- Regular weeding is crucial in ground beds, as they are more susceptible to weed infestation;
- Ensure that the area you choose for your ground bed has good drainage to prevent waterlogging;
- Ground beds may be less accessible for people with mobility issues.

## Container Gardening (Bags and Pots)

Container gardening is a versatile option for urban dwellers with limited space. Growing vegetables in bags, pots, or other containers offers several benefits:

- Containers can be easily moved around to take advantage of sunlight or to protect plants from harsh weather;
- Containers can be placed on balconies, patios, rooftops, or even windowsills, making them ideal for small spaces. This is a great space-saving option;
- Like raised beds, containers allow to use the custom soil mix;
- Containers can be made from a variety of materials, including fabric bags, plastic pots, terracotta pots, and even repurposed items.

## Choosing the Right Bed for Your Needs

If you only have permission to develop the garden for a few years, it is better to choose to grow vegetables in large bags or other portable containers. This allows you to easily move your garden if necessary. Fabric grow bags are a particularly good option, as they are lightweight, breathable, and promote healthy root growth.

If there are seniors in the community and you would like to include them in gardening, install a few higher beds than usual. Raised beds that are at least 24 inches tall are generally recommended for comfortable gardening without excessive bending. This height allows gardeners to sit on a stool or even use a wheelchair while tending to their plants.

## Additional Tips:

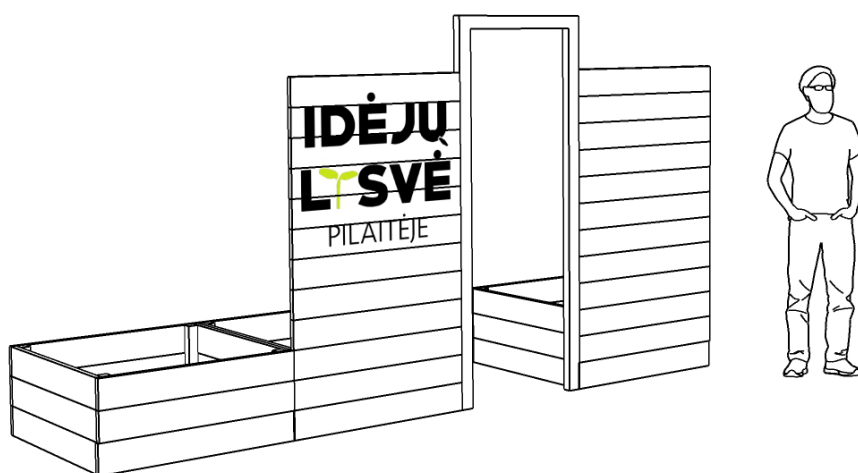
- Choose a location that receives at least six hours of sunlight per day for most vegetables;
- Ensure that your garden has easy access to a water source;
- Leave enough space between beds for comfortable movement and access;
- If you're a beginner, start with a small garden and gradually expand as you gain experience;
- Select plants that are well-suited to your climate and growing conditions.

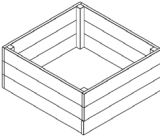
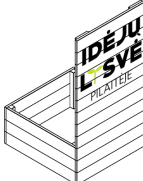
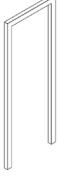
## A notice board for garden beds

The wooden board forms the side of the plant bed and serves as labelling surface.

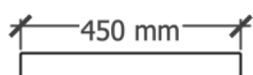
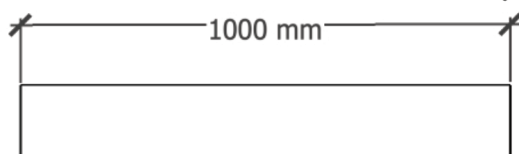
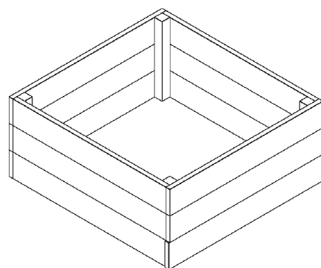
In Lithuanian urban garden Idėjų lysvė, they put up a notice board for garden beds to inform people about upcoming events. The vertical part of the construction can also be used to clearly label each plant, e. g. with its official botanical title as well as the name of the bed owner.

The bed markers can also be used to divide the garden into sections.



[A]	[B]	[C]
		
x 1	x 2	x 1

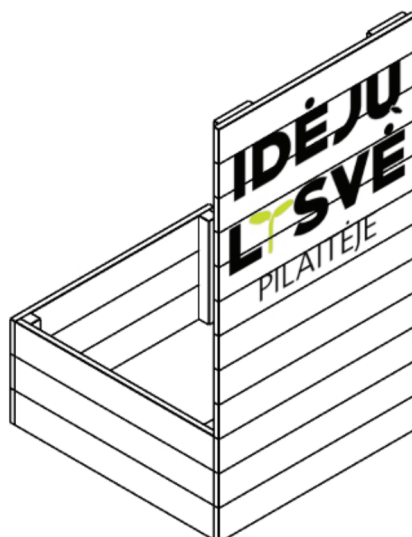
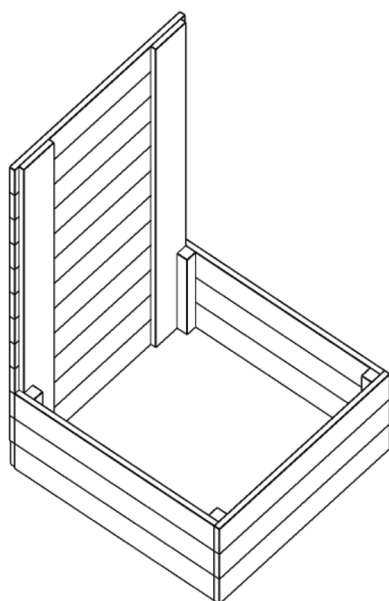
The construction of the bed module



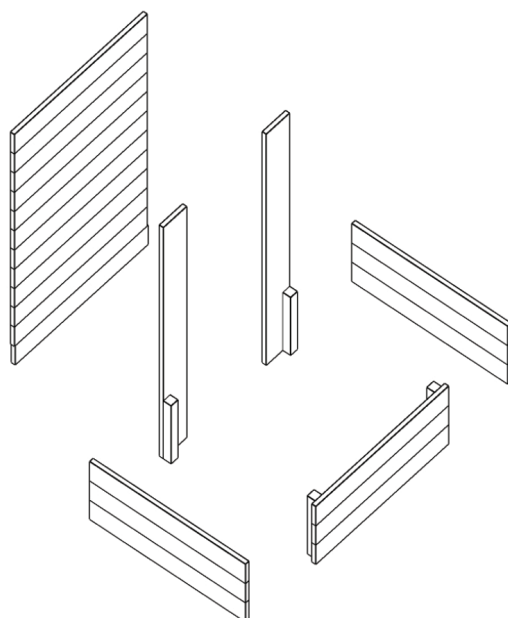
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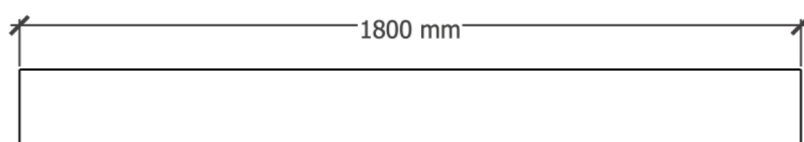
**[A]**



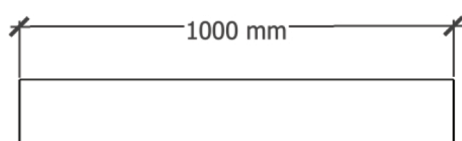
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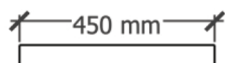
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**x2**



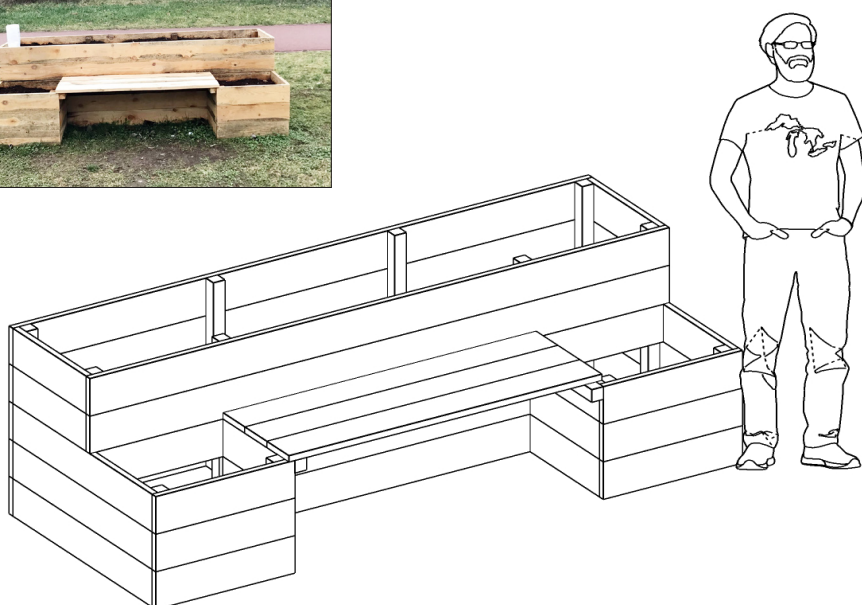
**x21**



**x4**

**[B]**

# Community bed (shared by friends)



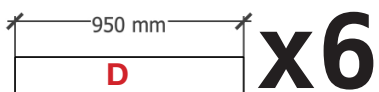
**x6**



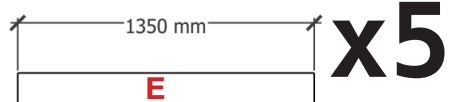
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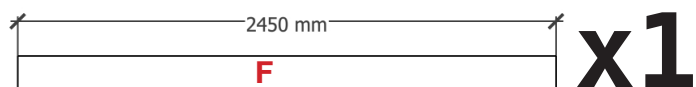
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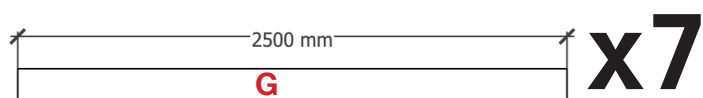
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**x5**



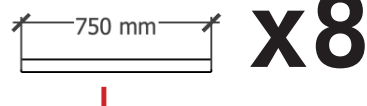
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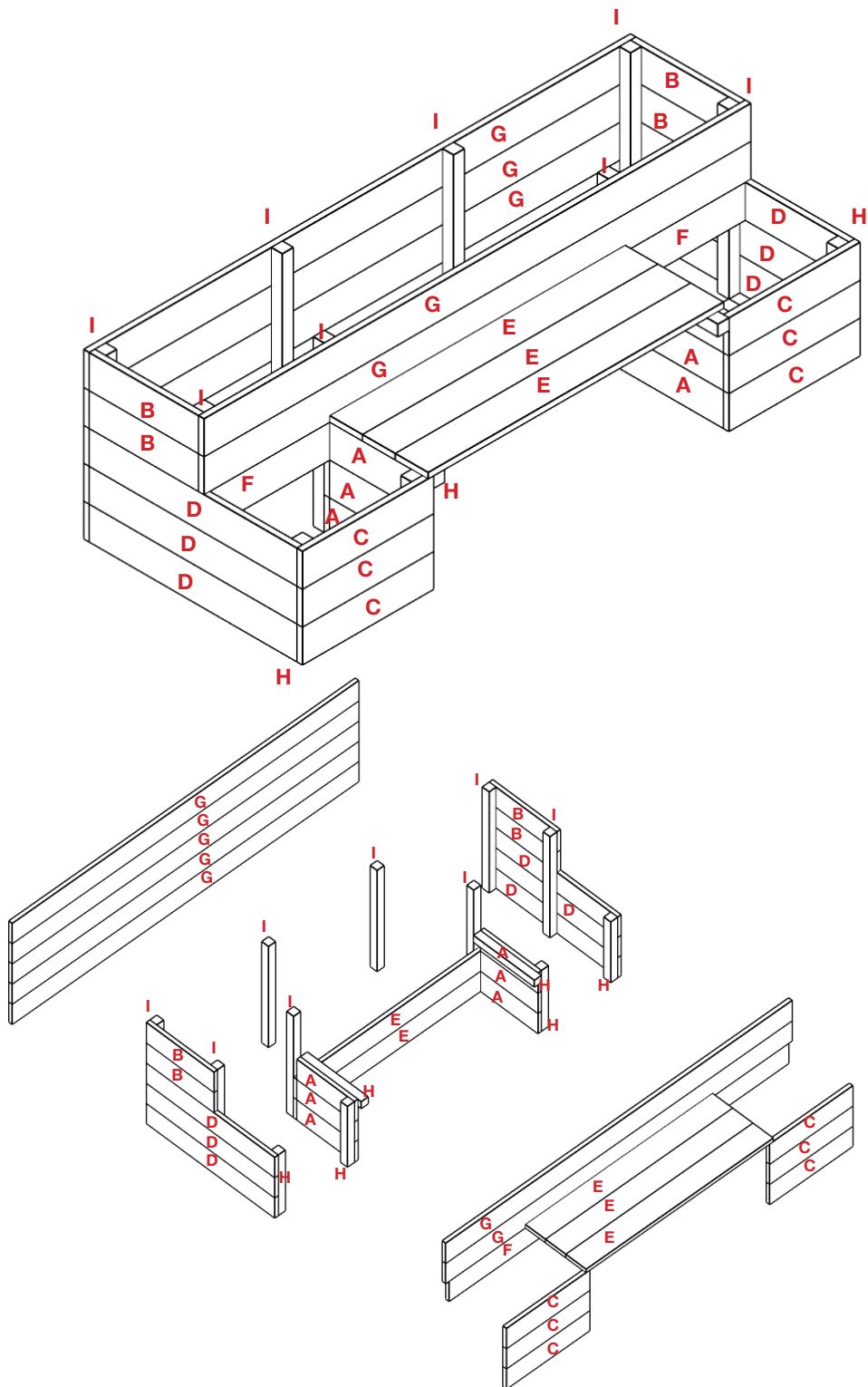
**x7**

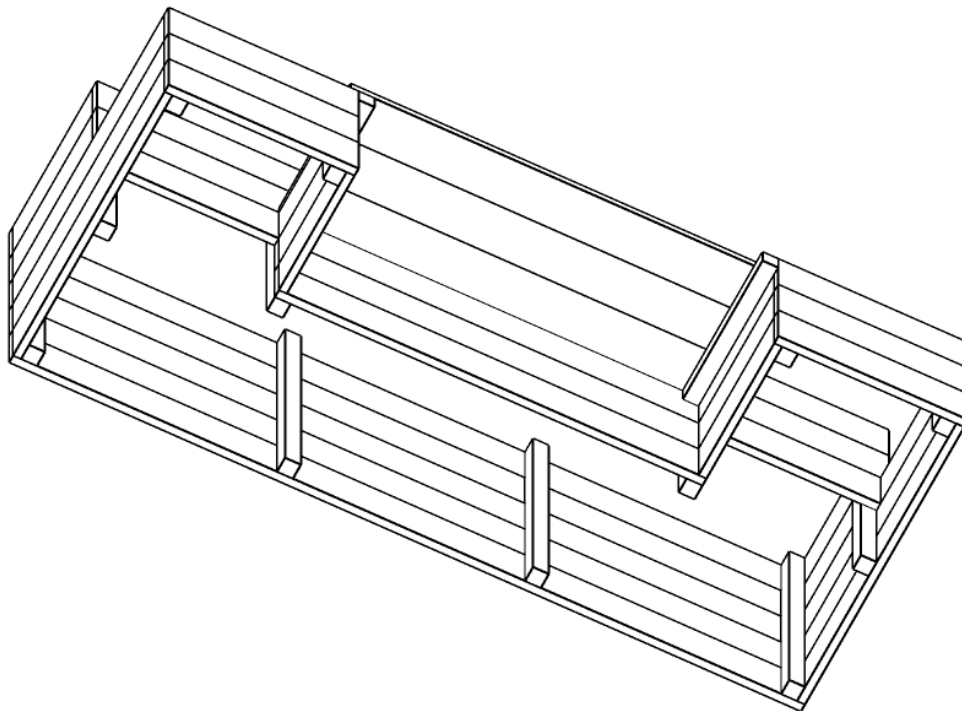
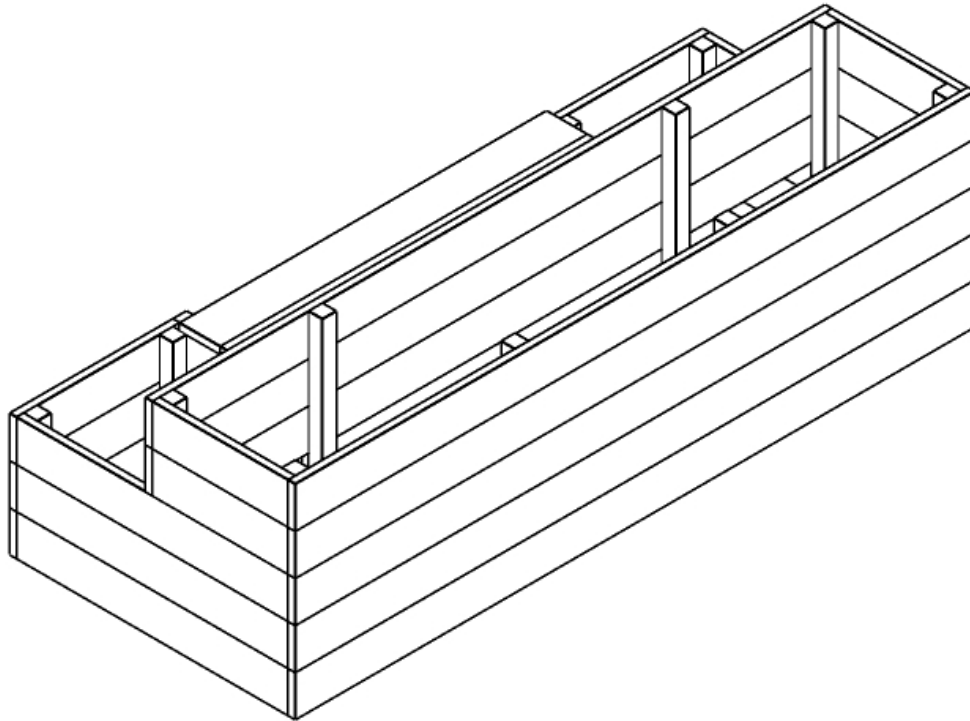


**x6**



**x8**





# Promoting Soil Health

This short guide on how to promote soil health at a professional level will ensure that urban gardeners can enjoy sustainable agriculture and ecosystem functioning.

- **Soil Testing and Analysis.** Conduct regular soil tests to assess nutrient levels, pH, and organic matter content. Analyze soil texture and structure to understand its physical properties and identify any compaction or erosion issues.
- **Organic Matter Management.** Incorporate organic matter into the soil through practices like composting, cover cropping, and mulching. Use crop residues, green manures, and livestock manures to increase soil organic carbon and improve soil structure.
- **Crop Rotation and Diversity.** Implement crop rotation to break pest and disease cycles, reduce soil erosion, and improve nutrient cycling. Include cover crops in rotation to improve soil fertility, suppress weeds, and enhance microbial activity.
- **Conservation Tillage and No-Till Practices.** Minimize soil disturbance by adopting conservation tillage or no-till practices. Reduce erosion, preserve soil structure, and enhance water retention by limiting tillage operations.
- **Nutrient Management.** Apply fertilizers judiciously based on soil test results and crop nutrient requirements. Use slow-release and organic fertilizers to promote nutrient efficiency and reduce nutrient leaching. Employ precision agriculture techniques to optimize nutrient application and minimize environmental impact.
- **Water Management.** Implement efficient irrigation systems such as drip irrigation or precision watering techniques. Manage water runoff and erosion by incorporating contour farming, terracing, or buffer strips. Enhance water infiltration and retention through soil amendments like organic matter and cover crops.
- **Soil Erosion Control.** Implement erosion control measures such as vegetative barriers, windbreaks, and erosion-control blankets. Establish permanent vegetation cover on vulnerable areas to stabilize soil and prevent erosion.
- **Biological Soil Amendments.** Use microbial inoculants, such as mycorrhizal fungi and beneficial bacteria, to enhance soil microbial activity and nutrient cycling. Incorporate biochar into the soil to improve water retention, nutrient availability, and microbial habitat.
- **Soil Monitoring and Management Practices.** Regularly monitor soil health indicators such as aggregate stability, soil respiration, and microbial biomass. Adjust management practices based on soil monitoring data to address emerging issues and optimize soil health.
- **Education and Outreach.** Many urban dwellers may be unfamiliar with basic soil science principles, making targeted educational efforts crucial. Outreach programs can cover a range of topics, from basic soil testing and understanding soil composition (sand, silt, clay) to more advanced concepts like the soil food web and the importance of organic matter. Workshops, online resources, and community garden demonstrations can effectively disseminate this knowledge. Practical skills, such as composting, vermicomposting, and using cover crops, should be emphasized. By empowering urban gardeners with the knowledge and tools to assess and improve their soil, we can foster healthier urban ecosystems, increase food security, and promote environmental stewardship. Ultimately, well-informed gardeners are better equipped to create thriving urban gardens and contribute to a more sustainable urban environment.

## Edukacinė 1m<sup>2</sup> lysvė

Šilainių Sodų edukacinės programos metu, VIII forte, sodininkaujame 1m<sup>2</sup> pakeltose lysvėse.

Kiekvienas norintis gali labai lengvai ir greitai įsirengti tokią pačią lysvę savo sode ar kieme.

Jums reikės:

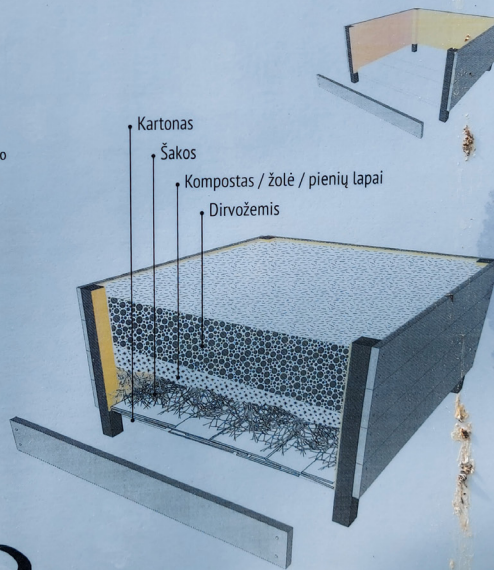
- 16 vnt lentų, kurių ilgis 1m, plotis 10cm, storis gali būti įvairus.
- 4 vnt kvadratiniai kuoliukai, kurių ilgis 50cm, 5x5cm.
- 64 vnt medvaržžiai arba viny, kurių ilgis = lentos storis x 2.
- 4,1m ilgio ir 0,5m pločio plėvelė.
- Kartonas padengti 1m<sup>2</sup> plotą keliais sluoksniais.
- Šakos.
- Kompostas / žolė / pienių lapai.
- Maždaug 0,3m<sup>3</sup> dirvožemio.

Darbo eiga:

1. Sukalame medinį **lysvės rėmą**.
2. Pritvirtiname **plėvelę** vidinėje rėmo pusėje.
3. Naudojant guliščią įstatome rėmą pagėdaujamose pozicijoje.
4. Suklojame **sluoksnius** paveikslėlyje pavaizduota eilės tvarka.
5. Sodininkaujame ir džiaugiamės darbo vaisiais.



Edukacinių 1m<sup>2</sup> lysvių programą  
VIII forte, Šilainiuose, vykdo  
VšĮ „Kultūros dirbtuvė“  
[www.kulturosdirbtuve.lt](http://www.kulturosdirbtuve.lt)



## Edukacinių 1m<sup>2</sup> lysvių programa

### EDUKACINIŲ LYSVIŲ PROGRAMOS DALYVIAMS SVARBI INFORMACIJA:

- Kovo 4 d. – Registracijos į programą pradžia
- Balandžio 16 d. – Registracijos į programą pabaiga
- Gegužės 3 d. – Kasmėnesinis sodininkystės vakaras (18val.)
- Birželio 21 d. – Kasmėnesinis sodininkystės vakaras (18val.)
- Liepos 12 d. – Kasmėnesinis sodininkystės vakaras (18val.)
- Rugpjūčio 2 d. – Kasmėnesinis sodininkystės vakaras (18val.)
- Rugsėjo 20 d. – Kasmėnesinis sodininkystės vakaras (18val.)
- Spalio 4 d. – Kasmėnesinis sodininkystės vakaras (18val.)

### ATYRI RENGINIAI\*:

- Balandžio 15 d. – Pavasario talka (10 - 13 val.)
- Birželio 2 d. – Daigų mainytuvės (14 - 20 val.)
- Rugpjūčio 5 d. – Kasmetinė VIII Forto vasaros šventė
- Spalio 14 d. – Rudens talka (10 - 13 val.)

\* Naujausia informaciją apie renginius VIII forte sekite Šilainių sodų, Šilainiai Project, Kultūros Dirbtuvė ir Kauno tvirtovės parkas Facebook paskyrose.



Edukacinių 1m<sup>2</sup> lysvių programą  
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# Innovative approaches to traditional gardening

Dig-free gardening, also known as no-dig gardening, is an approach to gardening that minimizes or eliminates the need for traditional deep digging or tilling of the soil. This method is based on building and maintaining healthy soil structure without disturbing its layers.

Here are some key principles and practices associated with dig-free gardening:

**Mulching:** Apply a layer of organic mulch (such as straw, leaves, or compost) on the soil surface. Mulch helps suppress weeds, retain moisture, and improve soil structure over time.

**Layering:** Instead of digging, create layers of organic matter on top of the soil. This can include compost, straw, and other organic materials. Over time, these layers break down and enrich the soil.

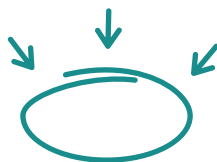
**Raised Beds:** Build raised beds and fill them with a mixture of compost and other organic materials. Raised beds provide good drainage, aeration, and can be easier to manage without extensive digging.

**Crop Rotation:** Practice crop rotation to prevent the buildup of pests and diseases in the soil. This can be done by simply changing the location of your crops each season.

**Minimal Disturbance:** Avoid unnecessary disturbance of the soil. Digging can disrupt the natural ecosystem of the soil and disturb beneficial organisms.

By adopting these practices, you can create a healthy and productive garden without the need for extensive digging. No-dig gardening has gained popularity for its ability to improve soil health, reduce weed growth, and conserve water.

**Composting:** Use compost to improve soil fertility and structure. Compost can be applied as a top dressing without the need for extensive digging. Composting also introduces beneficial microorganisms to the soil.



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## Good Practice Tips

### §1. Permaculture

**Permaculture, a portmanteau of 'permanent' and 'culture' or 'agriculture', is a holistic design system that aims to create sustainable and regenerative human habitats by integrating ecological principles into the design of landscapes, agriculture, and communities.**

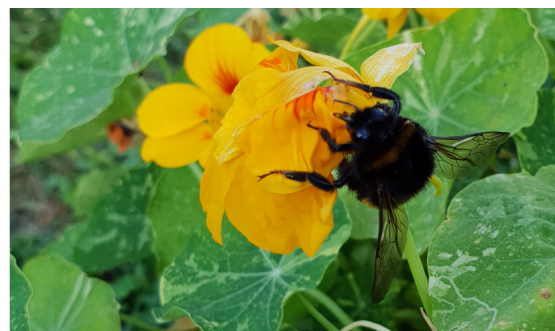
Developed by Australians Bill Mollison and David Holmgren in the 1970s, permaculture is founded on three core ethics and a set of principles that guide its application. Find below some permaculture ideas that the Icelandic GLOBUS team offers urban gardeners to consider.

The Core Ethics of Permaculture is grounded in three principles. The first one, **Earth care**, postulates a recognition of the interdependence of all living things. The philosophy of permaculture emphasizes sustainable practices that promote the health and well-being of the Earth.

The second principle declares **People care**, focusing on meeting human needs while fostering cooperation and mutual support within communities.

The third one is about **Fair Share** (or Return of Surplus) and encourages the fair distribution of resources and the reinvestment of surplus back into the ecosystem or community.

Doing urban gardening in line with the permaculture principles, communities must thoroughly observe the natural patterns and processes of a site before implementing any design. This includes understanding climate, water flows, and existing ecosystems. Integrated design elements must serve multiple functions, increasing efficiency and productivity. For example, a tree might provide shade, produce food, and act as a windbreak. Energy might be harvested and stored in various forms, such as sunlight, water, or wind, to meet the needs of the system.



Designing systems where different elements work together, promoting synergies and reducing the need for external inputs, can enhance biodiversity and ecological resilience. Special attention goes to the use of renewable resources and ecosystem services rather than depleting finite resources. This includes harnessing solar energy, wind power, and natural processes. Using landscape features like swales helps to capture and slow the movement of water, preventing erosion and enabling efficient water absorption.

Permaculture also aims to create closed-loop systems where waste from one element becomes a resource for another. This principle promotes recycling, composting, and reusing materials.

Implementing small-scale, slow, and manageable solutions rather than large-scale, fast ones, lays at the bottom heart of the permaculture philosophy. This allows for better observation, adaptability, and integration of feedback, and encourages diversity in plant and animal species to enhance ecosystem resilience. Diverse systems are often more resistant to pests and diseases.

Permaculture areas are being designed with an awareness of edges, where different ecosystems meet. These areas tend to be more productive and can be utilized for increased biodiversity, adapting to evolving conditions

Application of permaculture includes so-called **Food Forests** that mimic natural forest ecosystems with layers of edible plants, trees, and shrubs to create a sustainable and productive food system; **Keyhole Gardens**, i. e. circular gardens with a keyhole-shaped path for easy access, incorporating composting systems and maximizing planting space; **Hugelkultur**, a raised-bed gardening technique that involves creating mounds filled with organic matter, which decomposes over time, providing nutrients to plants.

Permaculture is a flexible and adaptable design philosophy that can be applied to various scales, from backyard gardens to larger agricultural systems. It emphasizes the importance of working with nature rather than against it, promoting sustainability, resilience, and harmony with the environment.

## §2. Preventing pests in an ecological way

**Prevention of pests in an ecological way involves using sustainable and environmentally friendly methods to manage pest populations without relying heavily on synthetic pesticides or chemicals that can harm ecosystems.**

By adopting ecological pest management practices, urban gardeners can effectively control pest populations while promoting biodiversity, soil health, and overall environmental sustainability. Find below a few ecological ideas that the Latvian GLOBUS team offers urban gardeners to try.

Integrated Pest Management (IPM) is a holistic approach that combines multiple strategies to prevent and manage pests while minimizing harm to the environment. It typically involves four main steps:

- **Identification** of the pests present and understanding their life cycles, behaviors, and vulnerabilities;
- Implementation of **preventive measures** such as maintaining proper sanitation, sealing entry points, and using pest-resistant plant varieties;
- Regularly **monitoring** of pest populations to detect any signs of infestation early;

- A combination of physical, biological, and cultural **control methods** to manage pests. This includes practices like crop rotation, habitat manipulation, introducing natural predators, and using traps or barriers.

Natural predators such as birds, ladybugs, spiders, and certain beneficial insects that feed on pests can serve as biological controls in the urban garden. Introducing of such controllers as nematodes or bacteria that specifically target pest species can also be beneficial.

Nematodes are microscopic roundworms that parasitize insects. For example, *Steinernema feltiae* is effective against fungus gnats, cutworms, and certain beetle larvae. *Heterorhabditis bacteriophora* targets Japanese beetle grubs, root weevils, and other soil-dwelling pests.

Single-celled organisms that can cause disease in insects are called bacteria. For example, *Bacillus thuringiensis* (*Bt*) produces toxins that kill specific insects, like caterpillars (*Bt kurstaki*) or mosquito larvae (*Bt israelensis*). *Bacillus popilliae* causes milky spore disease in Japanese beetle grubs.

Planting a diverse range of crops to reduce the risk of pest outbreaks can also be a solution. Pests often target monoculture crops, so mixing different plants can disrupt their life cycles. Companion planting by growing plants that support each other's growth or repel pests can also be beneficial. Find several good practice tips by GLOBUS contributors below.

- **The Three Sisters** is a classic Native American planting method that involves growing corn, beans, and squash together. The corn provides a stalk for the beans to climb, the beans fix nitrogen in the soil, and the squash shades the soil to retain moisture and suppress weeds.
- **Marigolds** planted alongside tomatoes can repel nematodes, while basil can deter flies and mosquitoes.
- Planting rows of **onions** between rows of **carrots** can confuse onion flies and carrot root flies, reducing damage to both crops.
- Alternating crops each season can disrupt pest life cycles and prevent them from building up in the soil.
- Planting a variety of herbs, flowers, and vegetables in borders around the garden can attract beneficial insects that prey on pests.

Other natural repellents and barriers may include neem oil, garlic spray, or chili pepper spray to deter pests. Physical barriers like row covers, netting, or fences are also useful in protecting plants from pests like birds, rodents, and insects.

Proper irrigation techniques help to avoid creating favorable conditions for pests, such as standing water which can attract mosquitoes. Overwatering is another complicated condition, as excess moisture can lead to fungal diseases and attract certain pests.

## §3. Recycling Milk Cartons for urban garden use



Photo credit: Morningchores.com

**Lithuania recycles an impressive 56% of its generated plastic waste. According to Eurostat data from 2020, Lithuania, along with the Netherlands and Slovakia, leads the way in this area within the European Union, where the average for recycled plastic waste is only 38%.**

Milk is a staple in many households, and by creatively reusing empty milk cartons, we can further contribute to environmental sustainability within our urban gardens. Find below a few DIY ideas that the Lithuanian GLOBUS team offers urban gardeners to try.

### DIY Waterproof Planters

Empty juice or milk cartons make excellent containers for seedlings, as their material is already water-resistant. With a few simple steps, you can transform them into attractive and surprisingly sturdy planters.

**Prepare the Carton:** Mark a cutting line on the exterior of the carton for a clean, even cut. Use a sharp knife or scissors to cut along the line.

**Decorate the Carton:** Apply a thin, even layer of glue to the outer walls of the carton (excluding the bottom). Place the carton on a newspaper-protected surface. Starting from the bottom, wind jute twine or string around the glued carton. For a more even finish, rotate the carton rather than the spool of twine. Apply more glue as needed. Press the twine rows firmly together to minimize gaps.

**Finish and Drainage:** Apply glue to the top edge of the carton and press the twine against it. Use clothespins to secure the top rows while the glue dries. Finally, create drainage holes in the bottom of the planter.

### Bee and Butterfly Waterer

Bees and butterflies, like humans, need water to thrive. Providing a safe water source in your urban garden will help them stay healthy and contribute to pollination. This simple project is a great way to help these vital pollinators:

- 1. Prepare the Carton:** Thoroughly wash and dry empty milk cartons.
- 2. Decorate:** Decorate the exterior of the carton with non-toxic paints.
- 3. Create an Entrance:** Once the paint is dry, cut a sufficiently large opening near the bottom of the carton to allow bees easy access.

4. **Provide Water:** Place plastic bottle caps filled with a sugar-water mixture (a 30% sugar, 70% water solution is recommended) on the bottom of the carton.
5. **Placement:** Place the waterer in a raised location in your garden or hang it from a tree branch.

### Fun Craft for Kids: Carton Houses

This is a perfect afternoon activity for children, using readily available materials:

1. **Materials:** Gather empty milk or juice cartons, various colors of acrylic paint, and scissors.
2. **Paint and Decorate:** Paint the cartons in bright colors and let them dry. Paint the cap area a darker color to create a "chimney." You can add cotton balls to create a smoke effect.
3. **Add Details:** Let children use their creativity to design the "facades" of their houses. They can draw windows and doors directly onto the cartons with acrylic paints or markers or cut them from colored paper and glue them on. Older children can use scissors to cut out the windows themselves.

## §4. Fertilizing with banana peels



Fertilizing with banana peels is a natural and sustainable way to provide nutrients to plants, particularly potassium, which is essential for their growth and overall health.

Banana peel fertilizer is a simple and environmentally friendly way to provide potassium and other nutrients to your plants, promoting their growth and vitality. Whether through composting, direct application, or liquid fertilizer, banana peels can contribute to healthier soil and more robust plant growth in your garden. Find below a few DIY ideas that the Estonian GLOBUS team offers urban gardeners to try.

**Composting** is one of the most effective ways to use banana peels as fertilizer. Chop or shred the banana peels into smaller pieces to speed up decomposition. Layer the banana peels in your compost pile along with other organic matter, such as vegetable scraps, coffee grounds, and yard waste. Ensure proper aeration and moisture levels in the compost pile to facilitate decomposition.

Alternatively, you can **bury** chopped banana peels directly into the soil around your plants. Dig a small trench or hole near the base of the plant and bury the banana peels. Cover the banana peels with soil to prevent attracting pests and to promote decomposition. Over time, the nutrients from the banana peels will leach into the soil and become available to the plants' roots.

You can also create a **liquid fertilizer** by steeping banana peels in water. Place chopped banana peels in a container filled with water and let it steep for several days to a week. Strain the liquid and dilute it with water before applying it to your plants as a nutrient-rich fertilizer. This can be done as a foliar spray or directly to the soil around the plants.

**The benefits** of using banana peels are multiple. Banana peels are high in potassium, an essential nutrient for plant growth, flowering, and fruit development. Potassium helps regulate water movement within the plant and supports overall plant health.

Banana peels decompose slowly, releasing nutrients gradually into the soil over time. This provides a steady supply of nutrients to plants and promotes long-term soil fertility. Using banana peels as fertilizer is a natural and sustainable practice that reduces waste. Instead of throwing away banana peels, you can repurpose them to nourish your plants, minimizing the need for chemical fertilizers.

The organic matter in banana peels helps improve soil structure and fertility. As banana peels decompose, they add organic material to the soil, enhancing its ability to retain moisture and nutrients. Banana peels are readily available and cost-effective, making them an accessible source of plant nutrients for home gardeners. This reduces the need to purchase commercial fertilizers, saving money in the long run.

## §5. Plant box by TagTomat

**Two planters can start the transformation of every backyard into a patio, a good kick-start for local urban gardening initiatives. It is easy to buy planter boxes in the DIY market, but apart from the fact that it is fun to build a planter yourself, the homemade one lasts much longer and can be moved around.**

Plant boxes work for things that grow above ground, such as tomatoes, cucumbers, beans, lettuce, spinach, chillies, squash, radishes, and flowers. In the roof garden, Danish urban gardeners have also successfully grown beetroot and carrots. Cabbage plants grow beautifully, and it takes a lot of fertilizer to grow pumpkins. Regardless of the crop, you should add some fertilizer during the season.

The self-watering plant boxes, called capillary boxes, are the idea that Danish initiative TagTomat started. They have learned that because of using plant bags directly on the polystyrene foam box –instead of fibre cloth–the water smells rotten during the season; therefore, they now use fibre cloth.

The planters can contain approximately 40 litres of water; they must be watered 2-3 times per month – when the plants get big, up to 4-6 times per month. Water the box in one of the corners by pulling the fibre cloth aside. For the first week or two, you should also water the box from above until the roots take hold.

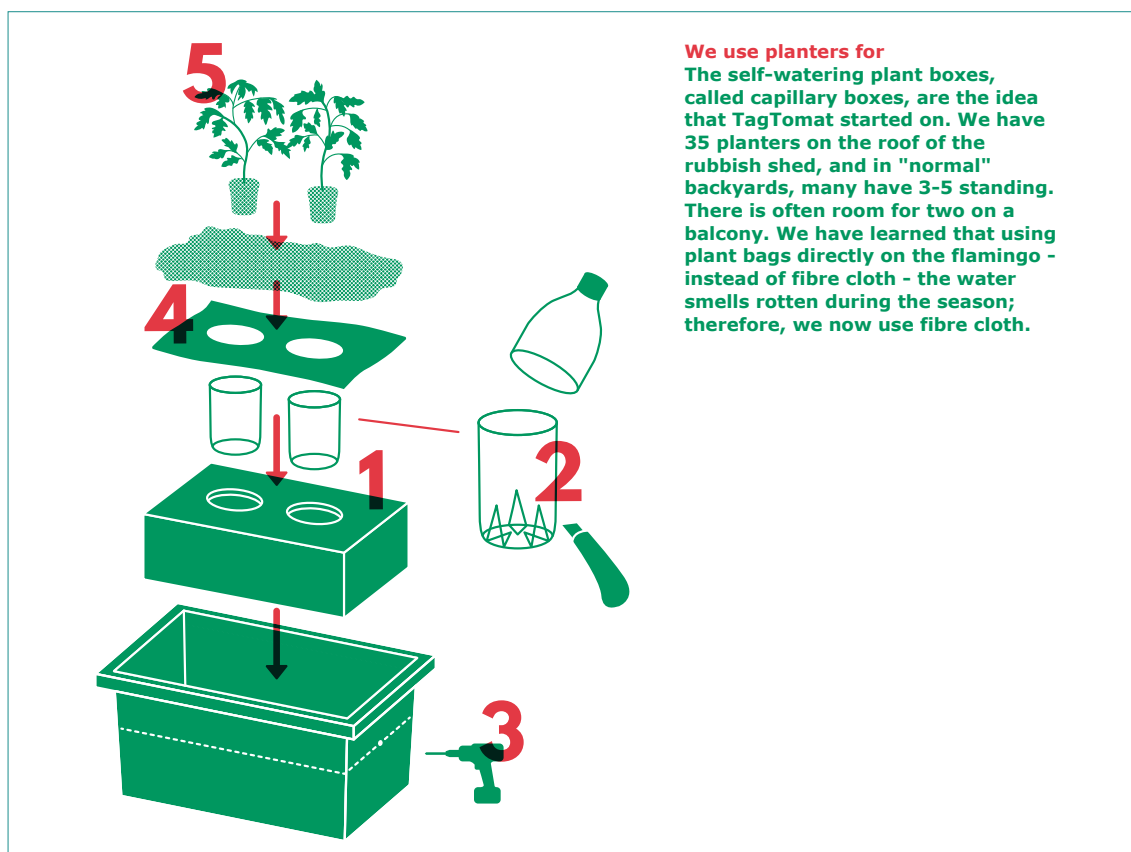
If you or your urban garden community think the black mason tubs are ugly, you can make a plant box hider or buy a Klik-Kasse from TagTomat. Also see videoguide at [www.tagtomat.dk/guides](http://www.tagtomat.dk/guides)

## Materials needed

- A plastic tub (Danish urban gardeners mainly use 65-litre mason tubs)
- A piece of fibre cloth cut to the size you can lay the soil
- Two 1½ litre bottles
- A large polystyrene foam box or 1½ of the small ones
- A hobby knife
- A drill and a screwdriver to make the overflow; alternatively, it can be cut with the hob-cutter
- Two tomato plants and seeds
- A 40-50 litre plant bag or equivalent nutrient-rich potting soil

## How to do it

- Place the polystyrene foam boxes in the mason jar, cut holes for the two bottles and adjust their height.
- Cut three A-shaped slits in the bottom of each bottle, fold them toward the centre, and fill the bottles with soil.
- At the upper edge of the polystyrene foam boxes, drill or cut a few holes in the box for overflow.
- Moisten the soil with a few litres of water, put your plants and sow your seeds in the soil. You don't have to put the plants right on top of the bottles. Fill up with water.



**Urban garden community**  
**EVENT MARKETING PLAN**

**Urban gardening thrives on community engagement. To ensure its sustainable and long-term success, integrating the community is essential. This not only streamlines efforts but also cultivates a sense of place and neighborhood identity, creating valuable spaces that leave a lasting and unique impression. These spaces and their impact are not accidental; they are the result of deliberate and systematic action. Based on existing projects, creative placemaking is a proven and highly effective methodology. By engaging the community through this approach, a dynamic, open, and constructive dialogue emerges, uniting people around a shared purpose.**

A key aspect of building community around urban gardens is organizing engaging events. When initially designing our project, we envisioned these events aligning with traditional calendar festivals, believing this would naturally draw people together. However, during the pilot phase, this assumption proved inaccurate. We discovered that urban gardeners, particularly those new to the practice, were far more interested in practical workshops and training sessions than calendar-based celebrations. Many participants lacked prior gardening experience and were eager to acquire hands-on skills and knowledge.

Furthermore, we gained firsthand experience of how climate change is reshaping the traditional agri-cultural calendar, adhered to by our ancestors for centuries. In recent years, we've observed earlier springs and extended autumns, consequently lengthening the outdoor work season. This shift in weather patterns makes adhering to fixed calendar dates for garden-related events less practical and relevant. The focus shifted from celebrating predetermined dates to responding to the actual needs of the garden and its cultivators. Practical workshops on topics like soil preparation, pest control, and seasonal planting became far more valuable in fostering a thriving gardening community. This adaptation underscores the importance of flexibility and responsiveness in community-based projects, especially those connected to the natural world.

Community engagement should begin by addressing the following key questions:

- Is the proposal and idea authentic to the chosen location?
- Will the involvement of diverse social groups be ensured? How?
- What outreach and communication strategies will be used to maximize engagement?
- Have key community members been identified who can act as local ambassadors for the project?
- Are the needs and expectations of all community groups being considered equitably?
- Has the community's potential been assessed: what activities are people involved in, and what unique contributions can they offer?
- How will a sense of shared ownership be fostered within the community? When is the most effective time to do so?
- What physical barriers might prevent community members from participating in meetings and how can these be best addressed?
- What physical and social infrastructure can be utilized for consultation and collaboration?

# GLOBUS piloting

## Copenhagen, Denmark

### Fostering Community Through Gardening

By Anna Sigurborg Högnadóttir  
Danish project leader

**The #GLOBUS project piloting has been conducted from February to October 2023–2024 at the community garden located between the residents at Gårdlauget Mysundegade, Istedgade, and Valdemarsgade, at matr. 5 in Copenhagen, Denmark. This initiative aimed to implement out-door community-building activities, engage local communities in urban gardening and land-scaping projects, and collect data and feedback to evaluate the initial impact and identify areas for improvement.**

The Danish GLOBUS community garden group aimed to connect residents, strengthen bonds, and improve communication within the above-mentioned apartment complex. We strived to achieve this by:

- Increasing participation in gardening activities.
- Enhancing the shared backyard's beauty and ecological value.
- Building stronger social connections.
- Creating a replicable model for sustainable urban gardening.

Since Spring 2023, we've engaged in several key activities. We launched a project with a formal meeting, presented by com&train, outlining goals and methods. We also attended Copenhagen Municipality biodiversity pool meetings, gaining valuable funding insights. To engage residents, we held public meetings, gathered input, and launched a social media campaign. Despite initial permit delays, collaborative garden design and bed construction commenced in Spring 2024. Finally, we partnered with local businesses for resources and worked with a gardener for upkeep.

Already the first piloting round of the GLOBUS project provided valuable insights into the potential and challenges of establishing and maintaining a community-based urban garden. While the project successfully fostered community involvement and laid a solid foundation for future endeavors, several key challenges and lessons emerged. Firstly, **legal and regulatory issues** challenged the obtaining of necessary permits for constructions like flower beds. It presented a significant obstacle, causing considerable delays. Ensuring compliance with local regulations, particularly regarding fire safety and temporary structures, also demanded substantial effort.

**Diverse opinions among residents** regarding garden design and plant selection proved challenging when striving for consensus. Balancing preferences for ornamental versus edible plants required careful negotiation. Maintaining cooperation and clear communication between residents and the farm guild board was crucial but not without its difficulties. Diverging preferences and priorities regarding garden design and maintenance created challenges in achieving unified goals.

**Maintenance and volunteer engagement** was another challenge to overcome. The initially limited scope of the hired gardener's contract, which did not include community garden tasks, created resistance and hindered cooperation when residents

attempted to use tools or plants. Sustaining long-term interest and active participation among residents, particularly among those renting their properties, proved difficult. Moreover, the construction of new balconies, requiring both space and resources, posed a threat to the garden's development by potentially encroaching on green areas. However, despite these challenges, the urban garden community-building demonstrated several key strengths. Property owners exhibited a greater sense of ownership and responsibility toward the shared backyard space. Regular meetings and an active social media presence fostered stronger community bonds and improved communication among residents.

These strengths present significant opportunities for future development based on better stakeholder engagement. There is potential to engage more decision-makers and stakeholders to secure broader support and resource allocation now.

The pilot phase of the GLOBUS project demonstrated the potential of community urban gardening to build social connections and promote sustainable urban living. After two years of community-building effort, we can proudly say we believe the GLOBUS initiative can be expanded with diverse activities, such as educational workshops and cultural events, to enhance and maintain community interest. While challenges related to permits, community dynamics, and maintenance were encountered, the project successfully increased community involvement and established a strong foundation for future growth. By addressing the identified weaknesses, leveraging strengths, and capitalizing on opportunities, the community garden can evolve into a vibrant and integral part of the neighborhood.

### **Acknowledgments:**

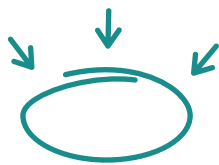
We extend our sincere gratitude to all residents, volunteers, and partners whose dedication and support were invaluable to the success of this pilot phase. We look forward to continuing this collaborative journey.

**Follow our Facebook** [Page for our Gårdlaug](#)

Here are some of the activities from our events in the group, where we planned activities to seek information and ideas for financial support for the garden.







## Practical tips

Defining why you want to develop a community garden helps to create a vision for a newly established urban garden project and identify goals and tasks. This template can be used in recruiting new garden members.

**1. List three aspects of what excites you about community gardening and why your group wants to develop a garden.**

- a.
- b.
- c.

**2. What activities do you envisage happening in the garden? Who will use the garden and what will they use it for?**

EXAMPLES:

- a. Our primary goal is to produce fresh nutritious food for our families and our neighbors.
- b. We want clean up our neighborhood block and create a beautiful garden where people can come together.
- c. We want to educate youth about gardening and the importance of environmental stewardship.

**3. List three goals your garden group wants to accomplish and then prioritize.**

- a.
- b.
- c.

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**TIP: Use your garden goals to create a brief mission statement that unites the group to a larger purpose.**

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By answering these questions, or actively seeking answers, the process will help to identify community goals and expectations, develop an understanding of the community's vision and potential, connect individuals through shared values and interests.

## GLOBUS piloting

### Vilnius, Lithuania

## The Challenge of Time: Aligning Community Gardens with Nature's Pace

By Laura Petruškė

Lithuanian project leader

Originally, our project GLOBUS envisioned structuring urban community garden events around traditional calendar feasts. However, this approach proved impractical. Gardeners operate on field-based routines dictated by seasonal tasks, not fixed dates.

Traditionally, in Lithuania, gardening activities began around April 25th, St. Mark's Day, with carrots being the first seeds sown. It is a pity climate change increasingly disrupts natural cycles, rendering ancient calendar festivals misaligned with current growing conditions. That's why many urban gardening events were mainly organized based on real weather conditions and the practical needs of gardeners.

The 2023–2024 seasons were a vibrant tapestry of individual cultivation and engaging community activities within our urban garden. Inspired by GLOBUS transnational meetings and site visits to Iceland, Estonia and Denmark, we achieved significant milestones, we embarked on several enriching experiences.

In May, we traditionally enriched our garden with five new species: forsythia, lilac, jasmine, kerria, elderberry, and aronia. These additions not only enhanced biodiversity but also created a green buffer from the street. Although we had planned to split our planting work party into two sessions, the enthusiastic turnout allowed us to complete all the planting in one go!

The same month we assisted colleagues in establishing another urban garden in the city. What began as a mere idea in February blossomed into reality with the help of 17 dedicated individuals. This demonstrates the power of community collaboration in bringing green spaces to urban environments.

Our Midsummer celebration, coinciding with St. John's Eve (Joninės), each year becomes a highlight. This magical time, when nature is at its peak and herbs are believed to possess special powers, provided the perfect backdrop for a unique learning opportunity. Guided by naturalist Edita Medeina, we explored the local flora surrounding our urban gardens, venturing into nearby woodlands. We learned to identify various plants, discovering their beneficial and poisonous properties and delved into ancient herbal lore. Each participant crafted their own Kupolė—a traditional Midsummer wreath of herbs believed to hold special powers—and explored its symbolic meaning. This experience connected us to ancient traditions and provided practical knowledge applicable to our urban gardens, highlighting the role of wild plants in supporting local biodiversity.

As the gardens burst into full bloom, we invited community members to delve into the fascinating world of urban insects. An entomologist and researcher from the Nature Research Centre, shared his expertise on the diverse insect life inhabiting our gardens and their vital ecological roles. Inspired by this insightful presentation, the community enthusiastically supported the installation of an insect hotel, created by "Vabzdžio pastogė" (Insect Shelter), providing crucial habitat for beneficial insects.

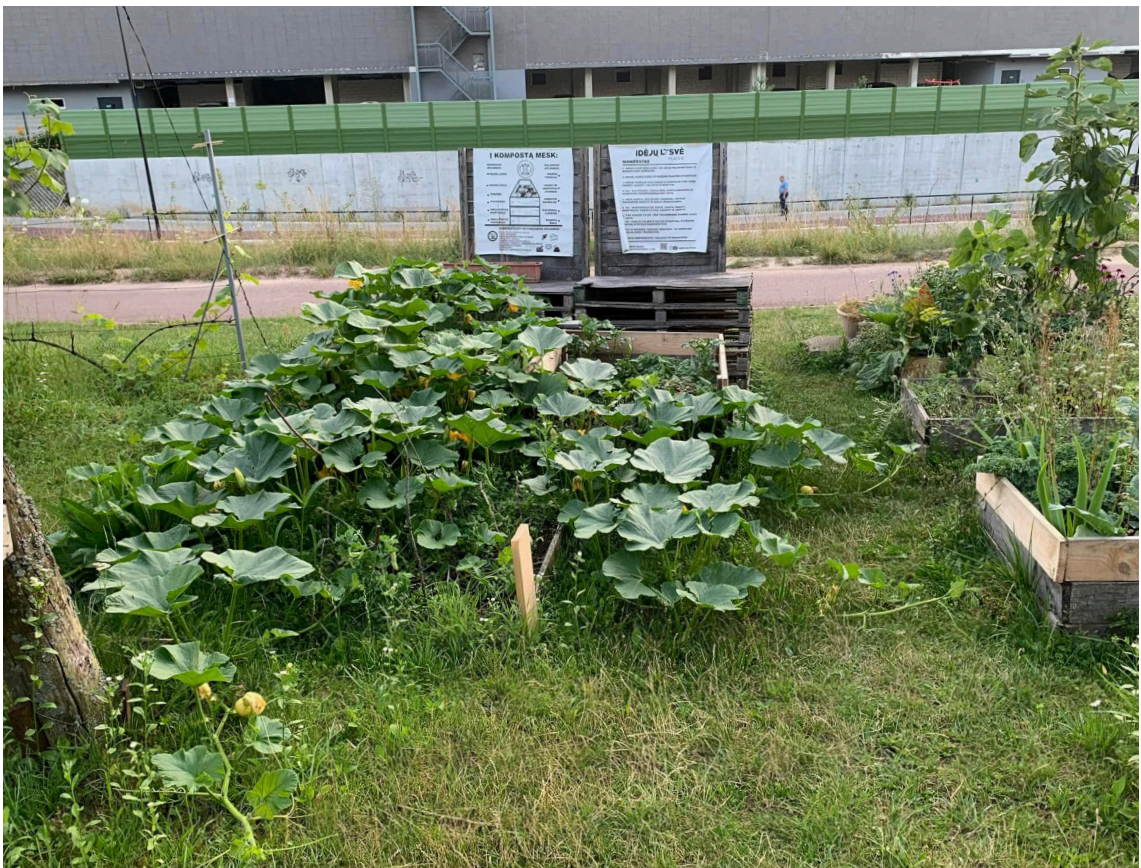
Throughout the season, energetic work parties brought the community together for collaborative tasks. We implemented a bed numbering system, bringing greater organization and clarity to the garden layout. Following this, we created a map of the garden area featuring the names chosen by the plot holders, fostering a sense of ownership and personal connection to the space.

To promote urban gardening to a wider audience, we established six perennial plant beds, each representing a '1m<sup>2</sup> of Biodiversity' initiative, across the city. These diverse micro-habitats were established in key locations: two in Pilaitė, and one each in Northern Žvėrynas, Rasos, Verkiai, and Naujoji Vilnia, demonstrating the potential for urban green spaces to support local ecosystems.

We celebrated the season's culmination with traditional stew gatherings, fostering a sense of community and shared accomplishment. The most rewarding aspect was connecting with everyone involved and sharing not only our time and efforts but also a delicious meal prepared with locally grown produce. Cooking a stew over an open fire in the city, using pumpkins grown just steps away, was a truly special experience. A few weeks later, we held an autumn cleanup to prepare our urban gardens for winter.

Our year with the GLOBUS project was filled with memorable moments. We are deeply grateful for our partners' and participants' contributions, their smiles, and the warm sense of community they helped create.





## Practical tips

### Assessing Community Readiness Exercise

When a group of community members comes to an agreement that a community garden complements their vision for their neighborhood, the community must assess their readiness to support and sustain a community garden.

#### ENGAGING LEADERSHIP METHODS

To foster engagement and cultivate a dialogue-based culture, relevant Art of Hosting methods can be employed. One such method is The Circle Way.

The Circle Way is a powerful practice used to begin and conclude meetings, fostering immediate engagement and active participation among attendees. It's particularly effective in community garden settings for building connection and shared understanding.

##### **Process:**

- Participants sit in a circle. This arrangement promotes equality and open communication.
- The facilitator takes a "talking piece" (only the person holding the talking piece has the floor) and briefly shares: "Who am I?", "Why are we gathered?", and "What are my hopes for this meeting?"
- The facilitator then passes the talking piece to the person next to them, who answers the same questions (excluding "Why are we gathered?"). This continues around the circle.
- Once the talking piece returns to the facilitator, they offer thanks to the participants for sharing and then proceed with outlining the meeting's agenda and objectives.

##### **This requires a community to affirm that there is:**

1. A critical mass of committed participants (we recommend a core group of at least 6-10 individuals to being the planning process)
2. Broad-based support
3. Agreement from the participants on the need for the garden and the multiple purposes it may serve
4. An available, sustainable, long-term site.

##### **We encourage groups to answer the following questions:**

1. Is there a demand for the garden, by whom?
2. Does a broad base of support reflect the demographic makeup of the surrounding neighborhood?
3. Do you have partnerships to strengthen the connection between the community garden and the surrounding community? (Examples may include culinary arts program, service learning programs, youth education organizations, and senior centers)
4. Is there a local group or organization that can benefit from a partnership with your community garden? (Examples may include schools, food pantries, and organizations that prepare meals for people in need)

5. Have individuals/local organizations been contacted to help with day-to-day support with various activities? (Activities may include storing of equipment, help with snow removal and grass cutting, and teaching gardening classes)
6. Is there any skilled and/or unskilled local labor to support garden construction, financial management, material donations, art installations, etc.? (Local support may include connecting with a local hardware store, service organization, or corporate or college volunteer program.)

**When considering potential support, it's important to understand the resources available from various stakeholders:**

- The municipality and local council can provide information about local infrastructural and human resources, facilitate connections between businesses and communities, assist with securing funding, and offer guidance on permits, recommendations, and other formal documentation.
- Public institutions (schools, libraries, museums, etc.) can provide insights into the local context and population, promote the project through their networks, and facilitate the involvement of diverse community groups.
- Businesses can offer financial support and assist with project promotion.
- Non-governmental organizations (NGOs) can share expertise in project writing and offer valuable ideas.

Similar creative initiatives can facilitate best practice exchanges and share specific project implementation experiences.

Local creators can be a source of creative ideas and help ensure project sustainability.

## **FACILITATION TECHNIQUES FOR COMMUNITY ENGAGEMENT**

To foster deeper understanding and encourage collaborative action in community garden settings, consider utilizing these facilitation techniques:

### **APPRECIATIVE INQUIRY**

Appreciative Inquiry is a powerful method for exploring a situation by minimizing preconceived notions. It helps participants shift their perspective from "what is" to "what could be." This positive framing encourages creative problem-solving and shared visioning.

#### **Process:**

- Participants pair up.
- One person chooses a topic related to the meeting's objective.
- The other person asks questions and records the answers in the following sequence: "What are you grateful for in this situation?" -> "How could it be different, better?" -> "What needs to be done to make it better?" -> "What steps are needed to implement this?"
- The second person summarizes what they heard (using their notes).
- Roles are then reversed.
- When everyone returns to the larger group, they share their impressions and insights, which are recorded by the facilitator.
- The facilitator summarizes the collected information and presents it to the group.

## WORLD CAFÉ

The World Café is a dynamic method for gaining a richer understanding of community perspectives and ideas on specific topics. It facilitates inclusive dialogue by allowing participants to hear diverse viewpoints and share their own. This format promotes cross-pollination of ideas and encourages collaborative thinking.

### Process:

- Participants are divided into small groups of more than two people, with more than two groups in total.
- Each group has a designated space (a large sheet of paper is recommended) to record their emerging thoughts and ideas.
- The facilitator introduces the first question.
- The groups discuss the question for a set period (no more than 15 minutes is recommended).
- One person remains at the table as the 'table host'.
- The host briefly summarizes the previous discussion for newly arriving group members.
- The facilitator introduces a new (related) question.
- The discussion continues in the new groups for the same amount of time.
- Concluding the World Café and Sharing Insights
- Once the relevant questions have been thoroughly discussed, each table host presents the collected information and key insights from their group's discussions.
- The hosts' presentations are then enriched by comments and insights from other participants, providing a broader perspective.
- The facilitator synthesizes all the findings and presents a comprehensive summary of the results and emerging insights.

## COMMUNICATION STRATEGIES FOR COMMUNITY GARDENS

In the context of urban gardening, it's crucial to understand that communication should primarily focus on fostering internal community engagement. Therefore, the chosen communication model should be tailored to the local community's behavior and available resources. The key is to ensure that community members receive information effectively and can easily understand it. This might involve using local notice boards, community newsletters, or informal gatherings.

External communication, aimed at informing the wider public and inviting stakeholders to participate, can take a more creative approach, thus spreading awareness of the urban gardening concept itself. This could include social media campaigns, local newspaper articles, or community events.

## PROJECT READINESS CHECKLIST

### Do we have

- A map of local resources?
- Stakeholder understanding of project goals and processes?
- Community support?
- Approval from local authorities (secured project funding)?
- The necessary financial resources?
- The necessary human resources?
- Sufficient time for implementation preparation?

## Practical tips

### Reykjavik, Iceland

## GLOBUS at Lækjarbotnar: Cultivating Community and Gardens

By Hafdis Hrund,  
Icelandic project leader

At the Waldorf school in Lækjarbotnar, a vibrant community of 100 children and their teachers actively engaged in cultivating their garden. Their year-round activities included, among others, starting seedlings indoors in the greenhouse, preparing garden beds in spring (cleaning and enriching the soil), tending to the seedlings (watering and ensuring proper ventilation), planting outdoors in early June when the weather is suitable, weeding and watering throughout the summer (a task shared among families, though often falling to teachers), harvesting produce for the school kitchen, and preparing the beds for winter with manure. They also preserved excess produce through pickling and drying.

The GLOBUS project's aimed to involve parents and school supporters in urban gardening activities, establishing additional garden plots so families can grow food for their own households. This hands-on experience was incredibly valuable for the children and the school. Many families already have been renting garden plots elsewhere in the city; the goal was to encourage them to participate in the school garden instead, working alongside teachers and reaping the benefits of shared harvests. This strengthened the children's connection to their school, allowed them to participate in food production, and fostered valuable intergenerational learning. The intention was for families to collaborate on initial preparations and then manage their individual plots throughout the summer.

In Iceland, key events throughout the year included Seed Starting, Bed Preparation for Summer, Transplanting, and the Harvest and Winter Preparation. The urban gardening year followed a natural rhythm:

- **March/April (Seed Starting):** Families gathered to start seeds indoors, with teachers coordinating seed selection and providing necessary materials in collaboration with parents.
- **Spring (Bed Preparation):** Families worked together to prepare the garden beds, clearing them and adding enriching materials.
- **Spring/Early Summer (Transplanting):** Families collaborated with each class to transplant seedlings outdoors, both for the school and for their own plots.
- **Summer (Maintenance & Harvest):** Families tended to their plots, watering, weeding, and harvesting as needed.
- **August/September (Harvest Celebration & Winter Preparation):** Families gathered for a harvest celebration, sharing the fruits of their labor. They also prepared the beds for winter by adding manure.

## Exemplary GLOBUS Event at Lækjarbotnar

### Preparing the Beds for Summer (May 6, 2023)

This event, hosted by Hafdis Hrund of Fargufa, focused on preparing the garden for planting. Tasks included cleaning beds (removing old plants and composting debris) and enriching the soil with a mixture of compost and manure.

**Feedback.** The event was a resounding success, with both parents and children expressing high levels of enjoyment (rated 5/5). Participants appreciated the opportunity to work together and see the tangible results of their efforts. The beautifully prepared beds were ready for new plants in June. A suggestion for future events was to ensure an adequate supply of tools and potentially ask participants to bring their own.

**Organization, Content, and Networking.** The event organization received a rating of 4/5, with simple and manageable tasks and excellent teamwork. The content and presentations on the importance of soil nutrients (presented in small groups by Ívar) received a rating of 5/5. The event also provided ample networking opportunities for participants to share ideas and knowledge.

**Facilities, Promotion, and Overall Success.** The outdoor facilities were rated 4/5. The event promotion and communication were excellent (5/5), ensuring participants were well-informed. Overall, the event achieved its objectives and was considered a great success (5/5), with positive feedback and a strong sense of community.

**Suggestions for Improvement.** Holding events during favorable weather is crucial for enjoyment and productivity. It was suggested to postpone events if poor weather is forecast. Sharing a meal together was also highlighted as an important element for fostering community.





## PRACTICAL TIPS

### A Year in the Urban Garden: Social Activities in Nordic Way

By Lyng Brøndum Dyrholm

In Iceland, particularly challenging weather necessitates adapting gardening activities to prevailing conditions. While unifying piloting activities across diverse partner countries presented a challenge, we successfully adjusted each pilot round to reflect local needs and environmental realities, ensuring relevance and engagement. This almanac offers inspiration for cultivating community and connection within urban green spaces throughout the year under unfriendly weather conditions. It presents a seasonal guide of activities designed to bring people together through gardening, shared meals, and creative outdoor experiences.

As nature awakens, **spring** is a time for new beginnings in the garden and within the community. **Seed Swaps** is a great way to encourage biodiversity and sharing among community members. Exchanging seeds and discovering new varieties, helps to learn from each other's gardening experiences. It's a fantastic way to start the growing season with a diverse selection of plants adapted to the local environment.

Celebrating the arrival of spring with a **Community planting day** is another collaborative effort that brings everyone together to prepare beds, sow seeds, and plant seedlings. It's a hands-on learning opportunity for gardeners of all levels and a chance to build camaraderie while transforming shared spaces.

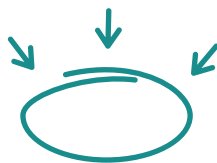


Short Icelandic **summer** is a time of abundance in the garden, a perfect opportunity to celebrate the fruits (and vegetables!) of our labor. Apart from traditional harvest picnics featuring fresh produce from the community garden, we suggest transforming the garden into an openair **cinema**. Set up a projector and screen, invite neighbors, and enjoy a movie under the stars! This provides a relaxed and enjoyable social experience in a unique setting.

As the growing season draws to a close, **autumn** offers opportunities for reflection, learning, and preparation for the coming year. It is a great time to educate community members on effective composting methods, turning garden waste into a valuable soil amendment. This workshop promotes sustainable practices, reduces waste, and enriches the garden's soil for future seasons. As the weather turns colder, many put away their bikes. Autumn is the perfect time to organize a **bicycle repair workshop**. Community members can learn basic maintenance skills, such as fixing flat tires, adjusting brakes, and lubricating chains, ensuring their bikes are ready for the next cycling season. This promotes sustainable transportation and encourages community members to share their skills.

Even in the colder months, the garden can remain a focus of community activity and planning. Host informal meetings to discuss plans for the upcoming growing season. This is a chance to brainstorm ideas, share knowledge, and collaboratively shape the garden's future. It keeps the community engaged and builds anticipation for spring. Utilize natural materials from the garden, such as dried flowers, branches, and pinecones, to **create festive decorations**. This workshop fosters creativity, teamwork, and a connection to the natural world, even during the winter months.

Preparations for winter sports, such as skiing and snowboarding, often begin with community gatherings. These events bring people together to wax skis, inspect equipment, and share valuable tips on local trails and cross-country skiing tracks.



## Practical tips

### Building of a mobile sauna by a middle-aged woman

By Hafþís Hrund

Owner at Fargufa saunamobile

Driven by a passion for bathing culture and the magic of the sea, I founded Rjúkandi Fargufa (Steaming Steam) in the fall of 2019. Having managed the Geothermal Beach in Reykjavík (2005-2016), experienced Copenhagen's winter bathing culture, and studied *saunagus* (a European sauna ritual involving towel movements to manipulate heat) in Denmark and Sweden, I dreamed of bringing this unique experience to Iceland.

Rjúkandi Fargufa offers immersive experiences centered around a specially designed mobile sauna, complemented by cold dips in the sea or open water and a deep connection with the natural environment. We also host events featuring shared food and drink. Our *saunagus* sessions, inspired by German traditions, involve multiple rounds of intense heat, aromatic essential oils, towel movements, and music. These sessions are believed to have cleansing effects, lower blood pressure, and boost the immune system.

The project began with the discovery of the perfect caravan. Securing a loan and permission to store it in my garden, I embarked on a year-long renovation, transforming it into a mobile sauna with the help of friends and family. This hands-on process became a mindful project, a way to disconnect and fully immerse myself in the construction. These collaborative work sessions fostered a strong sense of community, with friends and family continuing to support the project.



After passing vehicle inspection, Rjúkandi Fargufa hit the road. Initial sessions with friends and family helped refine the experience and understand the nuances of the stove, the space, and heat management. Setting up by the sea in West Reykjavik proved incredibly popular, creating a vibrant atmosphere across ages and backgrounds, demonstrating the unifying power of shared experiences.

Ideally, we envision combining the sauna experience with other activities like vegetable gardening, boating (weather permitting), and shared meals. The contrast of the hot sauna with the surrounding nature, especially a cold sea dip, enhances the overall experience.

While we've sought longer-term permits from the city to establish more permanent locations, we've found success operating as a mobile service. This "come-and-go" approach has allowed us to build a positive reputation and demonstrate the value we bring to different communities.

Rjúkandi Fargufa offers a unique three-round sauna experience featuring intense heat, aromatic essential oils, towel waving, and music. When by the sea, we incorporate seaweed for its skin benefits. Each session, lasting about an hour with cool-down breaks and refreshments, is uniquely tailored to the specific context. We prioritize seaside locations, allowing for invigorating cold plunges between rounds and a deeper connection with nature.

Essential oils play a key role, chosen by the *saunagus* master to complement the time of day, day of the week, moon phase, or group's intentions. Inside the sauna, the outside world fades away, focusing attention on the sensations of heat, scent, and music.

We've operated in various locations, each with its own charm: Ægissiða, with its fishing sheds and strong neighborhood spirit; Álfanes, offering stunning ocean views, especially during volcanic eruptions; Kársneshöfn, providing an adrenaline rush with its high and low tide jump options; and Skarfaklettur, a hidden city paradise where the sauna sits in intriguing contrast to the industrial surroundings, leading to a beautiful white beach.

Our future goal is to secure permanent locations with city approval, enriching community life and fostering stronger connections within neighborhoods.

## Installation and Equipment

Setting up and using a mobile sauna involves several important considerations. Mobile saunas are typically built on trailers or skids, allowing for easy transportation. They come in various sizes, accommodating from a few to several people. Essential equipment includes:

- **Sauna Structure.** This can be a traditional wooden structure or a more modern design using insulated panels.
- **Heating Source.** Wood-burning stoves are common, providing an authentic sauna experience. Electric heaters are also available, offering convenience but requiring a power source.
- Wooden **benches** inside the sauna to provide seating.
- Proper **ventilation** is crucial for safety and comfort, ensuring fresh air circulation.

A properly installed **chimney** is essential for venting smoke safely.

## Legal Considerations and Parking

Regulations regarding mobile saunas vary by location. It's crucial to check local ordinances before setting up your sauna. Parking a trailer with a sauna may be subject to restrictions, especially in residential areas. Check local parking laws regarding trailer parking, time limits, and permit requirements. Consider the size and weight of the trailer and ensure it's parked safely and legally.

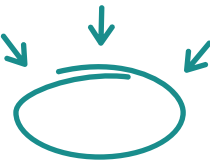
Sauna's wood-burning stoves pose a fire risk. Ensure adequate clearance around the stove and chimney, and have a fire extinguisher on hand. Follow local fire safety regulations for open fires and chimney installations. Dispose of ashes responsibly and avoid burning treated wood.

In some cases, setting up a mobile sauna for extended periods may require a temporary building permit. Check with your local authorities.

**WC and Sanitation**

Mobile saunas typically don't include built-in toilets. Consider renting a portable toilet, it is a convenient solution for longer periods of time. If setting up the sauna near existing facilities (e.g., a campsite or private property), utilize those restrooms. Ensure proper disposal of wastewater from washing or rinsing, avoiding direct discharge into the ground or water sources.

If using a wood-burning stove, source wood from sustainable forests. Be mindful of the sauna's impact on the surrounding environment, minimizing noise and light pollution.



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## Looking ahead

### Shared humanity: a mobile sauna in the urban garden

By Skaidrē Vainikauskaitė-Tomaševičienė  
GLOBUS Project manager

The GLOBUS project, a collaborative effort connecting urban gardening communities across Baltic and Nordic countries, has always sought to cultivate more than just plants. It aims to nurture understanding, empathy, and a sense of shared humanity. During one of our gatherings, a story shared by our Estonian partners from Tallinn profoundly impacted us, sparking a vital conversation about social responsibility and the role of urban gardens within the broader community.

The Tallinn urban garden, nestled near residential apartment buildings, had become a focal point for the watchful eyes of its elderly residents. These observant neighbors, everpresent and keenly aware of their surroundings, brought a concerning issue to the gardeners' attention: a homeless individual was using the garden's water tank, intended for irrigation, for bathing. The gardeners, understandably concerned about hygiene and the shared resource, promptly installed a lock on the tank, preventing further access.



This seemingly straightforward solution, designed to protect the community's resources, resonated with the GLOBUS members in complex ways. On the one hand, it highlighted the practical need to safeguard shared property. On the other, it exposed a deeper, more troubling issue: the lack of compassion and support for the vulnerable members of our society. The image of someone driven to bathe in a garden's irrigation tank, seeking respite from the elements and a basic human need for cleanliness, was deeply unsettling.

The story became a catalyst for reflection. We asked ourselves: what is the true purpose of a community garden? Is it solely about cultivating plants, or does it extend to cultivating a sense of belonging and care for all members of the community, even those on its fringes? Could urban gardens become spaces of not only ecological but also social sustainability?

This reflection gave birth to an idea: what if urban gardens could host mobile saunas, funded by municipalities or social organizations, offering a dignified and accessible way for homeless individuals to bathe at least once a week?

This concept addresses several crucial needs. Firstly, it provides access to a basic human necessity: hygiene. Cleanliness is not only a matter of physical health but also of dignity and self-respect. Providing a safe and private space to bathe can have a profound impact on an individual's sense of worth and well-being.

Secondly, the mobile nature of the sauna offers flexibility and adaptability. It could be rotated between different urban garden locations, ensuring wider access and minimizing the burden on any single community. The sauna could be placed in a more secluded area of the garden, away from residential buildings, respecting the privacy of both the gardeners and those using the sauna.

Thirdly, a scheduled booking system could be implemented to ensure order and provide a sense of personal space and control. This would also allow for appropriate cleaning and maintenance of the sauna, maintaining hygiene standards for all users.

This proposal is not merely about providing a place to bathe. It's about recognizing the humanity of those experiencing homelessness, acknowledging their basic needs, and offering a tangible expression of compassion. It's about transforming urban gardens into spaces of genuine inclusion, where the community extends beyond those who tend the plots to encompass the most vulnerable.

We understand that implementing such an initiative would require collaboration with social service organizations and careful planning. Issues such as staffing, security, and integration with existing social support systems would need to be addressed. However, we believe that the potential benefits far outweigh the challenges.

We also recognize the valuable expertise of our Icelandic partners, who have extensive experience with sauna culture and the practicalities of setting up and maintaining them, even in challenging weather conditions. Their insights could be invaluable in designing and implementing a mobile sauna program.

This idea, born from a story of hardship and a desire for a more compassionate approach, has the potential to transform the role of urban gardens in our cities. It's an opportunity to create spaces that not only nourish our bodies but also nurture our shared humanity. We sincerely hope that organizations dedicated to assisting those experiencing homelessness will consider this proposal and explore the possibilities of creating a more inclusive and supportive urban environment for all. This is not just about building saunas; it's about building bridges within our communities.

# Acknowledgements

We extend our sincere gratitude to all participants who played a vital role in the successful implementation of this project.



## Lithuanian Partner Verslios Mamos

- Applied for project funding and coordinated all aspects of the implementation.
- Led the piloting of recommendations developed by Latvian and Estonian academic partners.
- Collaborated with Danish and Icelandic partners to create a comprehensive event marketing strategy.
- Produced a practical toolkit in the form of videos, charts, slides, and other resources.
- Ensured all project materials were translated into Lithuanian.
- Hosted the 2nd Transnational Project Meeting (TPM) and seminars for project result dissemination.
- Designed layouts for all downloadable project materials.

## Icelandic Partner Fargufa

- Led the piloting of recommendations developed by Latvian and Estonian academic partners.
- Collaborated with Danish and Lithuanian partners to create a comprehensive event marketing strategy.
- Contributed to the development of the Practical Toolkit and Event Marketing Plan.
- Hosted the 4th Transnational Project Meeting (TPM) and multiplied the project results in numerous events.

### **Danish Partner Com&Train**

- Led the piloting of recommendations developed by Latvian and Estonian academic partners.
- Collaborated with Icelandic and Lithuanian partners to create a comprehensive event marketing strategy.
- Contributed to the development of the Practical Toolkit and Event Marketing Plan.
- Hosted the 1st Transnational Project Meeting (TPM) and multiplied the project results in numerous events.

### **Estonian Partner: Tallinn University of Applied Sciences (TTK)**

- Contributed to the development of recommendations for urban gardening community building.
- Provided external evaluation of the Event Marketing Plan and Practical Toolkit.
- Ensured all project materials were translated into Estonian.
- Hosted the 3rd Transnational Project Meeting (TPM) and multiplied the project results in university events.

### **Latvian Partner: University of Life Sciences and Technologies (LLU)**

- Contributed to the development of recommendations for urban gardening community building.
- Provided external evaluation of the Event Marketing Plan and Practical Toolkit.
- Ensured all project materials were translated into Latvian.
- Hosted the 5th Transnational Project Meeting (TPM) and multiplied the project results in university events.

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