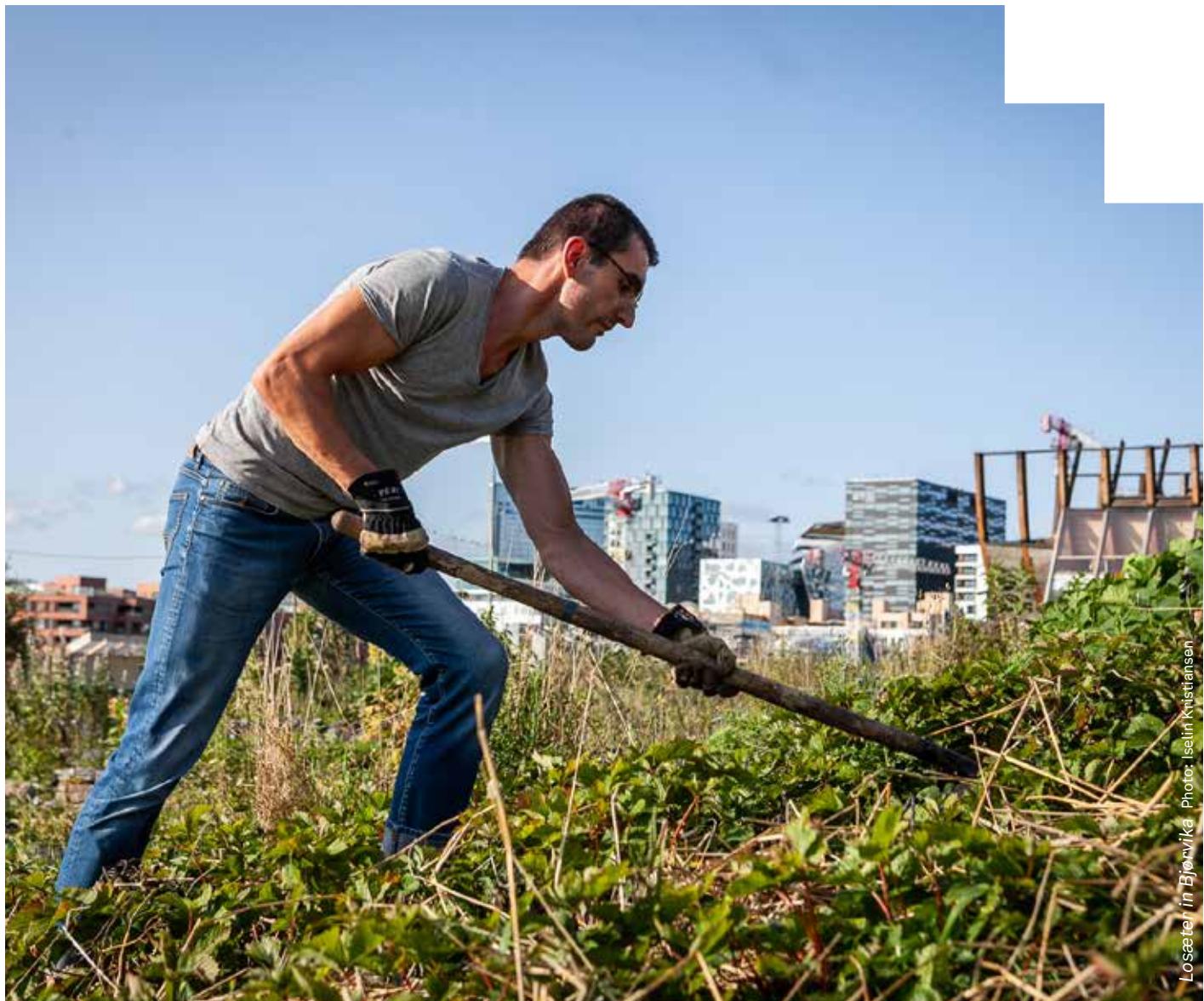


Sprouting Oslo

- Room for everyone in the city's green spaces

A Strategy for Urban Agriculture 2019–2030

Adopted by the City Council in Oslo 13.11.2019
(Proposition 336/19)



Losseter i Bjørvika Photo: Isetin Kristiansen

Item 336/19 Sprouting Oslo – Room for everyone in the city's green spaces
– A Strategy for Urban Agriculture 2019–2030 – City Government Decision
205/19 of 01.08.2019, City Council Decision of 13.11.2019

The City Council made the following decisions:

1. The City Council takes note of Sprouting Oslo - Room for everyone in the city's green spaces - A Strategy for Urban Agriculture 2019-2030.
2. The City Council requests that the City Government protect informal or self-organised activities from displacement, when so-called residual areas are being used for urban agriculture.
3. The City Council requests that the City Government cooperate with colony gardens, allotment gardens and immigrant organisations on how to use urban agriculture as an arena for integration and learning, and report back to the city council in an appropriate manner.
4. The City Council requests that the City Government explore the possibility to establish district cafes associated with local district gardens, where cultivation and café operation are part of the municipality's measure to include people who today stand outside of working life, and report back to the city council in an appropriate manner.
5. The Geitmyra school garden is strengthened as a municipal competence centre for school gardens.

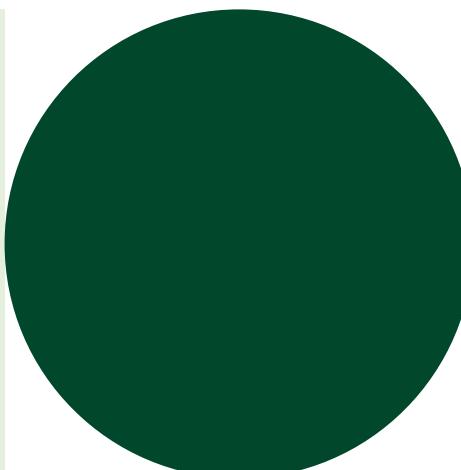


Photo: Iselin Kristiansen

Spouting Oslo

- Room for everyone in the city's green spaces

A Strategy for Urban Agriculture 2019–2030

Sprouting Oslo is built around five main goals with associated objectives. The objectives have been developed with a time perspective lasting until the year 2030. Achievement of the goals depends on implementation of the City of Oslo's own measures in addition to facilitating measures to be implemented by commercial actors, voluntary organizations, housing cooperatives, research institutions and private individuals. This will require networking and communication and use of the funding scheme for urban agriculture.

The strategy consists of the following main goals, with their associated objectives and follow-up points:

Main Goal 1:

A greener city

Main Goal 2:

Local food production

Main Goal 3:

Meeting places in a sprouting city

Main Goal 4:

Green educational arenas

Main Goal 5:

A collaborative city of knowledge



Main Goal 1:

A greener city



*Establishing a wild flower meadow
at the Environmental Centre in
Sofienberg park*

Oslo's green spaces will be further developed and the city's nature will be better connected to a variety of public areas. Urban agricultural activities will contribute to Oslo becoming a greener city, with a diversity of green spaces containing different natural, recreational and agricultural qualities. Residual spaces, unused areas and "Grey" areas will be planted so that the city has more green stopping points to safeguard biodiversity, become more self-sufficient with edible plants, and create more beautiful urban spaces and social meeting places. Everyone should have access to green spaces and recreational areas in their neighbourhood.

In a city with limited land area, multi-functionality and sharing must be prioritized. On underused surfaces in the city, green infrastructure should be established for the purposes of urban agriculture and recreation, for contributing to storm water management, and for securing biodiversity. At the same time, new spaces for cultivation need to be selected in a way that does not interfere with other interests and purposes.

The historic, meadow related biodiversity in Oslo can be increased, e.g., by using residual spaces to plant flower meadows. Residual spaces are especially useful for wild, pollinator friendly plants as well as berry bushes and fruit trees in areas that are not located near busy roads. Larger areas with natural flower meadows, combined with better facilitation for cultivation and edible plants, are an important factor in increasing the numbers of pollinating insects (such as bees and bumblebees) and in securing food production.

By cultivating a diverse range of plant species, we can reap the benefits of edible plants, pollinator friendly plants and aromatic plants. When planning green areas, knowledge of ecosystems will be essential to ensure selection of appropriate solutions to promote the local biodiversity. Undesirable, invasive alien species will be avoided when cultivating and planting. Oslo will also help to establish habitats for pollinating insects, e.g., by setting up more insect hotels in suitable places. Care will be taken to facilitate biodiversity, edible plants and pollinators in the operation of the city's graveyards.

The city's allotments, colony gardens and school gardens represent important urban green areas. Over 20 allotment garden areas have been established in Oslo. These are spread over the entire city and include a total of over 1000 individual allotments. The average size of an allotment is approximately 50 m². 17 of the 20 allotment garden areas are

owned by the City of Oslo. The allotments are operated by various allotment gardening associations. Oslo has nine colony gardens with 1000 contracted lots. There is considerable demand for allotments and colony gardens, and waiting lists are long. School gardens and school allotments in Oslo account for a total area of 93 000 m². In addition, the City of Oslo manages ca. 20 meadows and 13 pastures in the city's built-up area.

The city is not entirely without challenges as regards urban agriculture. In many urban spaces it is neither possible nor desirable to plant directly in the ground. Much of the city is covered by hard surfaces, often with underlying infrastructure. Contaminated soil makes many areas unsuitable for the cultivation of edible plants. Roadside areas, for instance, can be unsuitable spaces for food production due to high levels of lead. In the case of poor soil quality, good quality soil may be added or raised beds can be used.

The use of soil and plants should follow organic principles as much as possible and the City of Oslo will work to reduce the use of peat in soils. Composting will be encouraged, such as the use of Oslo Compost and compost from the city's farms. The use of biochar, coffee grains and vermicompost as alternative ingredients in soil products should be explored. There is also a potential for livestock-based land management, in collaboration with relevant actors. Where common areas are cultivated, the use of synthetic chemical pesticides will be reduced and eliminated. No synthetic chemical pesticides are allowed in the City of Oslo's parks and recreational areas.

Farms in Oslo contribute to active management of cultivated land and cultural landscapes, thus securing the protection of the soil and enhancing biodiversity. The farms play a central role in maintaining a living, cultural landscape in the City of Oslo and create well-being for the citizens.

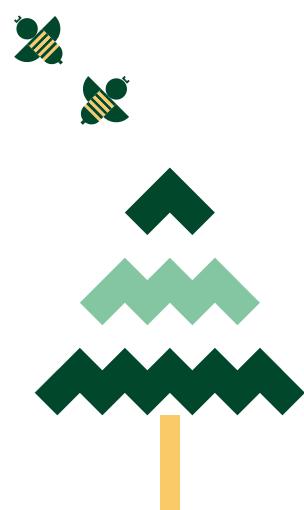
In urban spaces the use of materials is especially important. Thoughtfully chosen materials and standardized elements ensure reuse if a project has to be discontinued. During the development or renovation of green urban spaces it may be necessary to make allowance for infrastructure such as electricity, water, drainage and accessibility. At the same time, it is important for the city to develop resource efficient urban spaces where opportunities are explored for innovative solutions within water and electricity usage. Examples include recycling of greywater and rainwater harvesting.

Objectives:

- › Grey areas are converted to green urban spaces, both as temporary and permanent solutions.
- › The city's biological diversity is enhanced by combating selected invasive alien species, and establishing more flower meadows and green corridors.
- › Insect hotels and good habitats for pollinating insects are established.
- › More edible plants are planted and environmentally friendly soil is used.

Therefore, the City Government will:

- › Survey and make available areas that are suitable for urban agricultural activities or flower meadows.
- › Restore and manage biodiverse flower meadows in Oslo.
- › Establish more flower meadows, insect hotels and connectivity in the pollinator network, as well as combat invasive alien species.
- › Contribute to biodiverse cultivation and planting of edible and pollinator friendly plants.
- › Increase the share of urban trees that are fruit trees.
- › Spread information about how to reduce the use of chemical pesticides and synthetic fertilizers, avoid the use of peat and invasive alien species, as well as encourage cultivation based on organic principles.
- › Include requirements in subsidy schemes for cultivation based on organic principles.
- › Examine and evaluate current zoning provisions to ensure preservation of allotments, school gardens and colony gardens.
- › Facilitate better rotation of unused allotments and inclusion of underrepresented groups.
- › Encourage new housing developments to include allotments in their planning processes.
- › Facilitate the establishment of allotments in existing housing cooperatives, e.g., through the subsidy scheme for urban agriculture.
- › Consider the possibilities of establishing more temporary, growing-box allotments in urban development areas.
- › Collaborate with relevant research institutions and others in the expert community on evaluating the true scale of contamination problems associated with food grown in urban areas. Determine which areas are suitable for planting directly in the soil and which that require a physical barrier (for example through use of a growing box).
- › Consider possibilities for establishing better systems for delivery of garden waste to reduce littering and the spread of unwanted species.
- › Consider possibilities for improving the infrastructure in certain areas: Access to water and materials can enhance citizen participation.



Main Goal 2:

Local food production



Members checking the crops
at the Tveten Community
Supported Agriculture

Oslo's citizens should have the opportunity to enjoy local and sustainable food production. Increased food production will be facilitated so that Oslo can be a positive contributor to national food provision. Local food producers include small scale growers, livestock holders, manufacturers and producers of different products. Oslo lies in the heart of the country's best agricultural land, with a history that is thousands of years old. A sustainable food culture will be encouraged, with local food, seasonally based resources and circular processes. The City of Oslo will facilitate local food production on both land and in water.

Animal husbandry is an important element in urban agriculture. It includes conventional livestock management, but also chicken farming, beekeeping and production of insects as a protein source for both animals and people. The challenges surrounding urban, animal husbandry include safeguarding animal welfare, space limitations, management of smell and noise, as well as limited knowledge and experience of keeping animals. Regulations, e.g., for keeping chickens, vary from city district to city district and are handled by each district's Chief Medical Officer, under the guidance of the Norwegian Food Safety Authority. Urban animal husbandry can be an important contribution to sustainable and local food provision.

Hydroponics and aquaponics are two food production methods based on cultivation in water rather than in soil. The food is produced in a closed system where resources are well utilized and energy and water usage are low. Hydroponic growing is extremely space efficient and can also be carried out vertically. In a cold climate, production usually occurs indoors; however, the method can be a good supplement to locally produced food and is frequently requested by

restaurants. The production consists mostly of leafy greens, but may also be specialized in fresh herbs and edible flowers.

Oslo is a "blue and green" city with the potential to produce food on the shoreline and in the sea. Urban seafood production entails working with nature and facilitating good ecosystem development in urban marine landscapes for the establishment of various plants and organisms. With the right management, edible species such as Sea Kale and Mussels can thrive. Currently, the natural conditions for urban seafood production in the inner Oslo Fjord are not satisfactory. Research should be considered to assess whether or not this type of production is possible, which types of marine organisms are suitable and which marine restoration measures can be initiated. Seafood production, in general, places considerable demands on environmental conditions, such as water quality and salt content in the water. Suitable areas for this type of production should be surveyed prior to further project development.

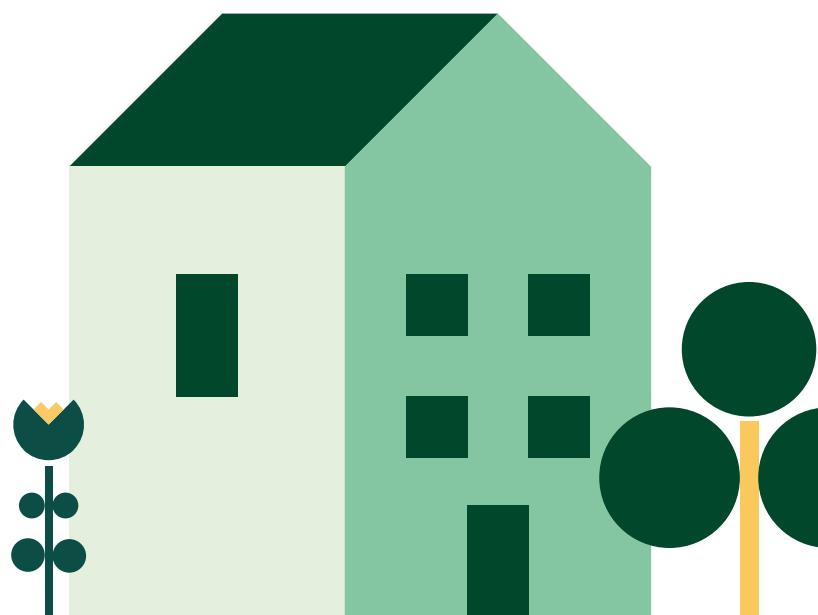
It may be advantageous to link urban agricultural activities to farms in Oslo. Traditional agriculture, through both farming and gardening, can deliver goods and services directly to the city's inhabitants. This could be in the form of, e.g., horticultural therapy farms, community supported agriculture and visitor farms near the city. Farms develop business models, in the form of goods and services, which create value for the urban population. Farms owned by the City of Oslo will be managed with particular consideration for the future, nature and the interests of the urban community, preferably by practicing organic principles and promoting animal welfare. One example is Bogstad Farm, which is run 100 % organically.

Objectives:

- Projects are facilitated that aim at large scale food production.
In this regard, possible areas for community supported agriculture, and similar agricultural models, have been assessed.
- Urban, animal husbandry has been facilitated.
- Possibilities for hydroponics, aquaponics, urban seafood production and other innovative methods to increase food production have been researched.
- The creation of more areas for urban agriculture has been facilitated and existing areas, such as allotments, colony gardens and school gardens, have been preserved.

Therefore, the City Government will:

- Contribute to the gathering and spreading of information about urban, animal husbandry, and make use of peri-urban areas for grazing.
- Promote hydroponics, aquaponics, urban seafood production and other innovative methods for food production.
- Consider the possibilities for establishing community supported agriculture in the city, as well as make unused areas available which are suitable for this type of activity.
- Use the urban agriculture subsidy scheme to support projects that promote local food.



Main Goal 3:

Meeting places in a sprouting city



A green oasis in between
apartment blocks at Sinsen

Urban agriculture will contribute to the creation of social meeting places for Oslo's citizens. Urban agricultural activities can create spaces for meeting that traverse age and cultural backgrounds, over growing boxes in the neighbourhood, in communal gardens or in other green urban spaces. In this way, urban agriculture can contribute to making Oslo a warmer and more inclusive city. Different forms of green meeting places make spaces for a variety of types of participation, and a diversity of activities in the city. Good meeting places are important arenas for urban living and should be experienced as safe and friendly. Cultivation on public spaces can create community, ownership, safety and aesthetically inviting gardens.

Oslo's parks and recreational areas are natural and frequently used meeting places for city dwellers and visitors. Parks can be provided with orchards and berry bushes. Unused areas can be utilized for urban agricultural activities that increase the inclusion of different groups. This can also form the basis for a meeting place traversing age groups and social groups. A greater variety of activities provided can also make an area more attractive for a larger range of different groups. Both temporary and more permanent areas are possible to use for this purpose.

Effecting a change in focus from being an observer to a participant in the city's green areas, requires the creation of a sustainable, inclusive and people friendly urban environment. The City of Oslo's ambition is to fill its green areas with activity. In addition to providing beautiful surroundings for its inhabitants, a greater number of the city's green spaces will be designed to encourage active participation. By facilitating various forms of activity, the function of parks and recreational areas as social meeting places can be enhanced.

The city's green spaces should be multifunctional, with room for different types of activity. Urban agricultural activities allow people to get to know each other and, through activity, create community, affiliation and local identity. Contact between different social and cultural groups contributes to inclusion. When neighbours feel ownership to their green spaces they feel responsible for these areas. In this way, the development of a beautiful city with attractive living and recreational areas may be facilitated.

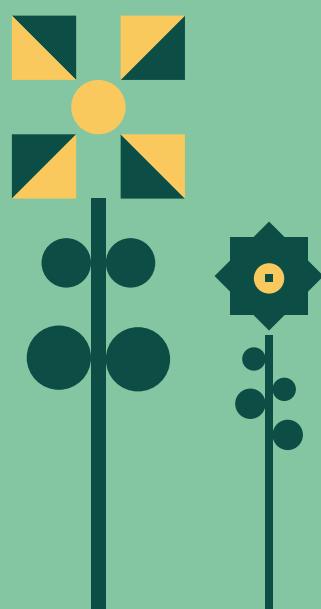
Urban agriculture can contribute to public health and have a positive effect on both physical and psychological health amongst participants. Urban agriculture is a valuable learning arena for diet and nutrition as well as for physical activity since the body is used actively in a productive garden. Cultivation of food can promote wellbeing and be socially beneficial in preventing and treating lifestyle diseases and other ailments within physical and psychological healthcare. Urban agriculture has the potential to provide a health-promoting arena for both private and public sector initiatives. Nature can induce calm, rest, harmony and positive experience, thus increasing the wellbeing of citizens.

Objectives:

- Municipal institutions have tested urban agricultural activities as solutions in their service portfolios.
- By using urban agriculture, green meeting places have been created in the city's common areas which transcend age, culture and social strata.
- The use of urban agricultural activities increases the life quality and enhances public health for citizens in their neighbourhoods.
- Urban agricultural activities are utilized as arenas for work experience and training.

Therefore, the City Government will:

- Consider opportunities for using gardening and the establishment of green meeting places at institutions such as care homes, asylum reception centres, drug treatment centres, psychiatric and child welfare institutions.
- Contribute to exchange of knowledge and experience between the different institutions.
- Consider options for providing more areas for food preparation, activities and events in selected green areas, as well as ensuring tidiness and maintenance of existing areas.
- Participate in increasing the numbers of housing projects and residential buildings that can realize urban agricultural activities, in collaboration with external project partners.
- Consider opportunities for establishing more places for work experience and training within urban agriculture.
- Consider establishing borrowing and sharing schemes for gardening equipment.
- Consider whether the municipality can contribute to the establishment of a scheme for loaning out common equipment, such as tables, benches, campfire pans and tents, in order to facilitate events. In addition, consider options for establishing adaptable furnishing in selected areas.



Main Goal 4:

Green educational arenas



Children discover the joy of picking strawberries in the city

School gardens have, throughout their long history, given hundreds of thousands of children their first encounter with plant rearing. School gardens will continue to be important inspirational and educational arenas for children and young people. School gardens can spread information about ecology, circular systems and food production, as well as contribute to new forms of interaction. There has been a significant decrease in the number of school gardens in the last 20 years. At least 60 percent of former school gardens have been reallocated for construction purposes. This is a trend the City of Oslo will halt. In the future, the City of Oslo will further develop school gardens, consider the establishment of more school gardens, and increase the number of schools and after-school programmes that use them.

Urban agricultural activities and food production are interdisciplinary themes that touch upon a range of subjects. School gardens function as practical arenas for learning, where students can gain experience with cultivation, composting and circular systems, and learn about the process of food production from "farm to fork". Through the experience of gardening, students can obtain a better understanding of, and interest for, ecology and the origins of food. The school garden, as a learning arena, can also facilitate practical interactions that help stimulate language training. It is an arena where students, through common experience, can relate to both known and unknown vocabulary and concepts. Using the garden as a classroom helps to increase collaboration between students, and stimulates a feeling of achievement and connection to their surroundings through practical work.

Schoolyards are one of the most important outdoor areas for children in the city, in terms of physical development, learning and social interactions. In addition, schoolyards have an important function as local facilities for the neighbouring community. By establishing vegetation, e.g., through growing boxes or by establishing larger areas for urban agriculture, schoolyards can supplement school gardens. By investing in urban agriculture, including at the level of individual schools, children and young people in Oslo will be better able to follow the development of the plants throughout the year. Schoolyards should have an important, supplementary function in school garden teaching, where students can learn to plan and make use of their crops and produce.

Plant rearing is also educational and fun for kindergarten children. The children can participate in cultivating the kindergartens' own vegetable patches, or through access to allotments, school gardens or visitor farms, etc.

Visitor farms are unique learning arenas and gathering places for the city's inhabitants, both young and old. There are a number of visitor farms in Oslo of which Bogstad Farm, Nordre Lindeberg Farm, Kampen Children's Organic Farm and Søndre Ås Farm are municipally run. Bogstad Farm is run organically and includes an employee with responsibility for visitor operations and educational programs for children. Bogstad Farm hosts guided tours for around 5800 children from schools and kindergartens each year. In 2019, a new visitor farm will be opened at Sørli Farm, near the suburb of Bøler. There are also a number of privately run visitor farms in Oslo.

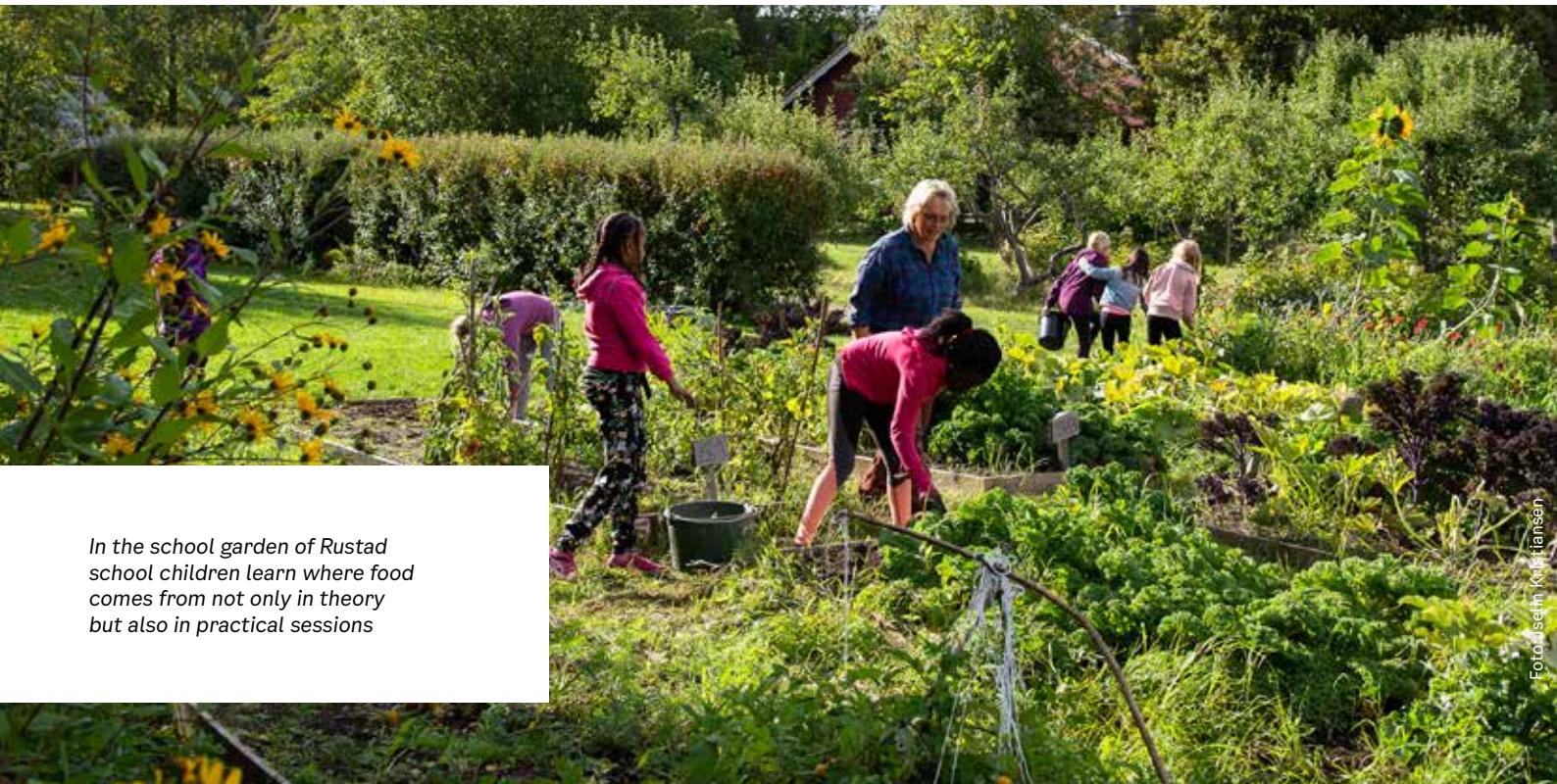
Objectives:

- › School gardens have become attractive outdoor areas for schools and the local community, and collaboration on use and maintenance has been established at a number of sites.
- › More schools, after-school programmes and students make use of school gardens.
- › The number of green schoolyards with edible plants has increased.
- › Kindergartens have increased the diversity of plant growing activities.
- › Continued operation and further development of the visitor farms at Bogstad Farm, Nordre Lindeberg Farm, Kampen Children's Organic Farm and Søndre Ås Farm.

Therefore, the City Government will:

- › Prepare a comprehensive action plan for the development and operation of school gardens in Oslo.
- › Facilitate increased use of municipal school gardens in Oslo.
- › Consider how the Geitmyra school gardens may be further developed to make them more open and accessible.
- › Consider establishing more school gardens.
- › Consider an outreach project for school gardens, including an educational program tailor-made for schools with varying degrees of access to school garden areas.
- › Contribute to the increased usage of school gardens by after-school programmes.
- › Collaborate, where necessary, with actors who can maintain school gardens and schoolyards during the summer, e.g., local seasonal-work projects run by the city districts and summer school programmes.
- › Facilitate the establishment of school gardens and green schoolyards when constructing new schools, and consider how urban agriculture maybe extended to existing schoolyards.
- › Facilitate increased use of urban agricultural activities in kindergartens.

In the school garden of Rustad school children learn where food comes from not only in theory but also in practical sessions



Main Goal 5:

A collaborative city of knowledge



Entrepreneurs explore different types of food production in the city, here oyster mushrooms are grown in recycled coffee grounds

Oslo will be a city of knowledge - a driving force for value creation and new technology to support the green shift. Urban agricultural activities can help citizens gain a closer relationship to the food on their tables by increasing knowledge about food origins, sustainability and ecology. By bringing agriculture into the urban arena, the City of Oslo, in collaboration with diverse local actors, can contribute to the development of new methods and solutions for urban and global challenges.

The City of Oslo collaborates with a range of actors on urban agricultural activities in the city, and has a number of roles: As owner and manager of land and properties, as a disseminator of knowledge, and as a facilitator and manager of subsidy schemes. The City of Oslo will stimulate increased agricultural activity in the city by supporting and enabling a greater range of actors that can practice urban agricultural activities. This includes businesses, national institutions, volunteers, organizations, green and social entrepreneurs and peri-urban agriculture.

In recent years, grass roots initiatives, organizations and social entrepreneurs in Oslo have built up considerable competence within urban agriculture. Knowledge, inspiration and ideas are communicated and shared through different arenas, including visitor farms, community supported agriculture, allotments, community gardens and courses. By strengthening urban agriculture in the city's meeting places and facilitating innovative solutions within urban agriculture, knowledge can be created and shared.

Innovation is important for the development of urban agriculture. Green and social entrepreneurs strive to create economically viable models, whilst at the same time, social and environmental results are the driving force behind their work. As is the case in other cities of the world, Oslo must also develop a sustainable food system to reduce the environmental impact of food production, whilst increasing resilience to external pressures. Local food production, distribution and consumption are at the centre of a sustainable food system.

In Oslo, a range of initiatives where urban agriculture plays a central role, are creating new arenas for interaction that connect the green with the social. These initiatives contribute alternative services that may be connected to the city's needs, such as employment and activities for marginalized groups. Social entrepreneurship can help to create physical, green meeting places, spanning different groups, the municipality, volunteers and the private sector.

The Centre for Urban Ecological Innovation "ByKuben" is a facilitator for innovation in urban ecology and communicates good examples, thus promoting new initiatives and projects. Oslo intends to be a showcase for urban agricultural activities and local food production. ByKuben is, through its work with urban ecology and the coexistence between people and nature in the city, an important actor for communicating knowledge, inspiring and creating collaboration within urban agriculture.



Objectives:

- Oslo has become a showcase for innovative solutions within urban agriculture.
- Knowledge created about urban agriculture and crops grown in the city is shared between different actors.
- Collaboration in urban agriculture has been facilitated across municipal, state, voluntary and private actors.
- Measures that facilitate for green social entrepreneurs are in place.
- Unused areas, such as facades and roofs, are utilized for growing.
- Urban agriculture is developed with the aim of increasing food security and resource efficiency.

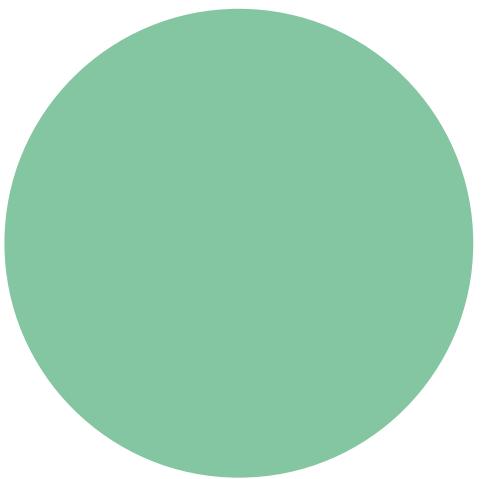
Therefore, the City Government will:

- Collaborate with the city's green actors, experts, international networks and research projects to further develop urban agricultural projects.
- Maintain and develop the network for sustainable food as a collaborative platform.
- Use ByKuben as a rallying point and information provider for the city's urban agriculture projects.
- Collaborate with relevant actors on seminars, training days, workshops, study trips, etc.
- Collaborate with local actors that contribute to knowledge transfer and enthusiasm for wild food, edible plants, mushroom hunting advice, etc.
- Produce information signs for citizens about urban agricultural projects and edible plants in the city.
- Consider opportunities for making larger, municipally owned, residual areas temporarily available for innovative urban agriculture and organic projects.
- Consider opportunities for making suitable, unused, indoor areas available for food producing initiatives.
- Help external actors, such as social entrepreneurs and non-profit/volunteer organizations, to deliver urban agricultural services and activities to selected target groups.
- Facilitate local market days.
- Survey the role in urban agricultural activities of volunteers, businesses and social entrepreneurs.
- Contribute to the initiation of physical and digital platforms that share practical information on the start-up of projects, grant application deadlines and the sharing of experiences.



At Hersleb High School pupils
learn how to grow food indoors
in a hydroponic system





Contact information:

Agency for Urban Environment

Karvesvingen 3, 0579 Oslo

postmottak@bym.oslo.kommune.no

Switchboard: (+47) 21 80 21 80



Photo: Iselin Kristiansen

www.oslo.kommune.no/spirendeoslo