

# Urban Cultivation Cubed

The world's population is at present claiming more than 80% of the soil usable for farming. In just forty years the population is calculated to reach nine billion - a massive 40 % raise - demanding a cultivation area far beyond the earth's potential. At the same time people in large numbers are moving to urban areas, away from the source of their food.

To meet this new demand and halt long food transportations we have to reinvent the way we produce our food. The *Urban Cultivation Cubed*-project is an answer to how we can combine local food production within urban areas.

The history of allotments

in Sweden goes back approximately 100 years - when cities were overcrowded and the range of fruits and vegetables were in short supply. The basic idea was that the allotments would work as a substitute for the new urban citizens' lack of a garden.

Fifty years later, Sweden had become a different country with higher welfare. The allotments had transformed as well, functioning more as a recreational garden, than a place for growing your own food.

Today we are back at square one; people are demanding food from local producers and are even keen on growing themselves. With *Urban Cultivation Cubed* the citizens can reclaim

the possibilities of growing their own food within urban areas.

The *Urban Cultivation Cubed* is reinventing the basic thought of the allotment. A cube measuring five meters in each direction makes up an allotment. By combining several cubes, a complex structure can easily be created. These structures are highly area efficient and several interests can share the area simultaneously; industrial agriculture, public space, educational cultivation, private allotments, etc.

The simplicity of the structure makes the *Urban Cultivation Cubed*-project exceptionally flexible. Depending on the surface or the surroundings, the

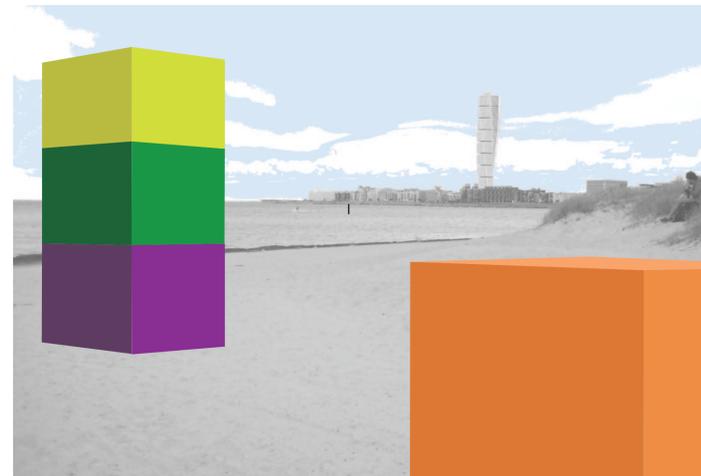
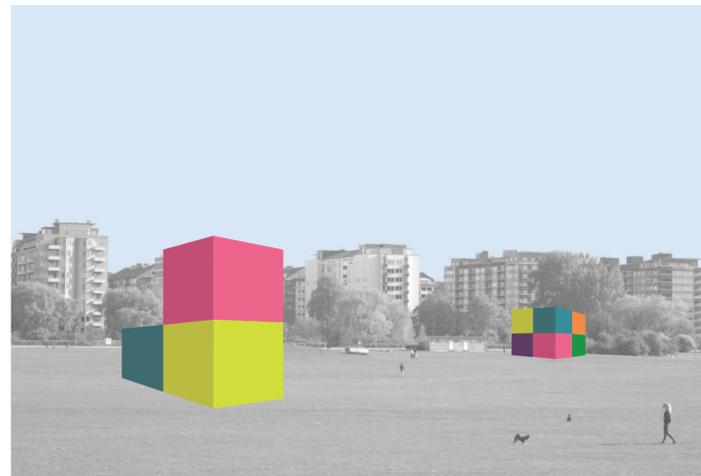
cubes can form different arrangements. They are also easy to construct and deconstruct which makes the cubes ideal for semi-permanent purposes.

Compared to conventional agriculture the highly compact structure in *Urban Cultivation Cubed* in many ways eases the conditions for growing organically. Great examples of this are the highly efficient process of collecting, distributing and recollecting water and communal composts.

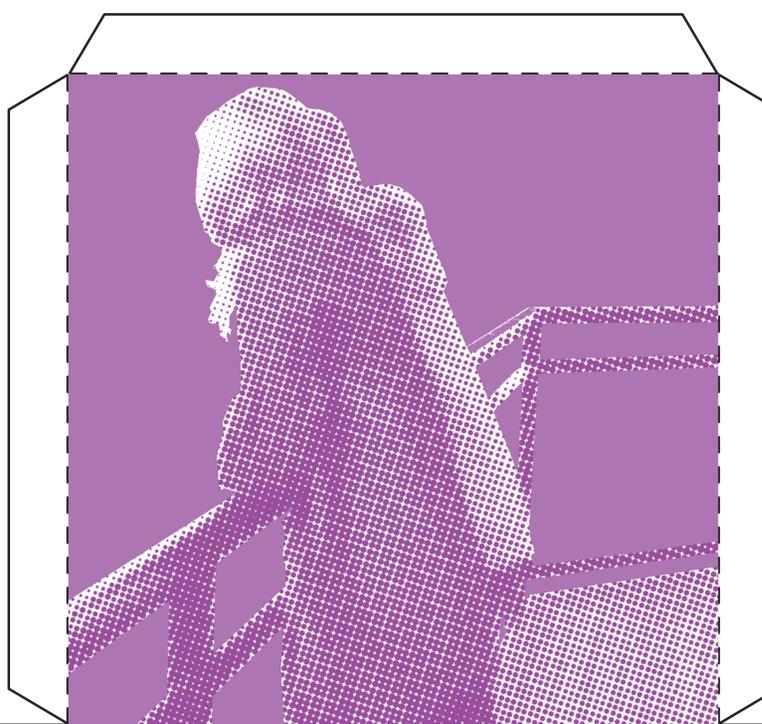
The *Urban Cultivation Cubed*-project makes up a unique configuration that is both social and ecological sustainable. Form and structure are brand new but the ideas are firmly grounded in Swedish tradition.



This is an example of what *Urban Cultivation Cubed* could look like. The illustration shows the contents and interrelatedness between Education<sup>3</sup> and View<sup>3</sup>. Both Education<sup>3</sup> and View<sup>3</sup> are open to all visitors. Stairs and paths help to ensure access to all the functions that comes with the cubed volume. A wide range of different experiences and impressions are made possible by the diversity amongst the small units that make up the *Urban Cultivation Cubed*.



# Urban Cultivation Cubed



## VIEW<sup>3</sup>

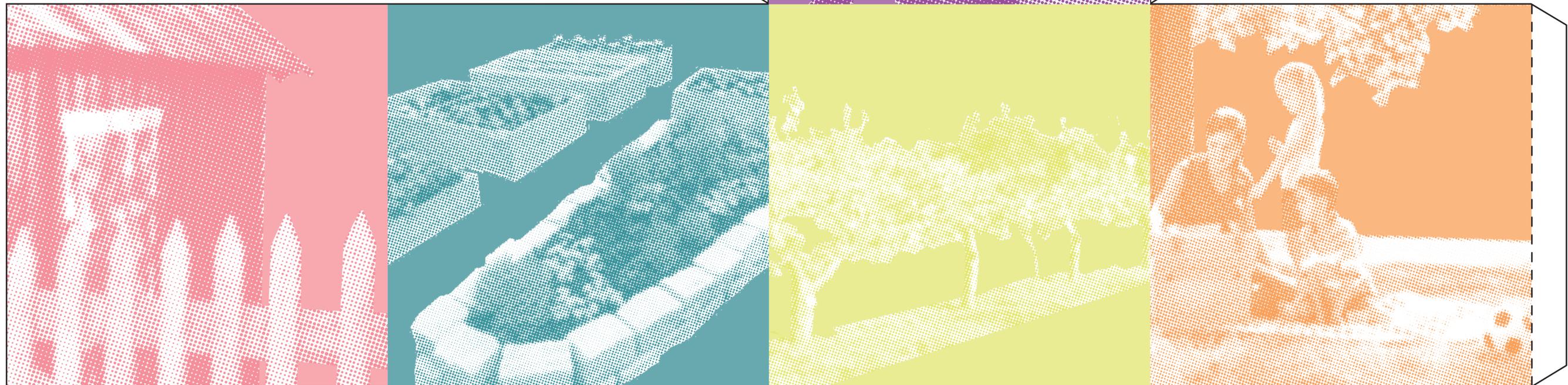
These cubes serves as meeting places as well as attraction sites, where you can get nice outlooks of the surrounding landscape. By reaching higher levels in the cube constellation, you can read the structures

of the landscape and get an awareness of the surroundings. The View<sup>3</sup> may take various forms: with wooden deck, seating, or encased for protection against different weather conditions.

## PARK<sup>3</sup>

The *Urban Cultivation Cubed* will function as a large park, but in the constellation there will be smaller parks with for example playgrounds, greenery and seating. It's a park

with a new form that creates unusual and varied recreation for the citizens. The Park<sup>3</sup> is a public space that makes it possible for the citizens to visit, socialize and stay in the area.



## COTTAGE<sup>3</sup>

The Cottage<sup>3</sup> represents the traditional Swedish allotment cottage, but may take various forms. These cottages can contain restrooms, meeting areas

and storage for tools, used in the allotment cubes. The cottages are managed by municipalities as parts of the public places in the cube constellation.

## ALLOTMENT<sup>3</sup>

Just as the notion for the *Urban Cultivation Cubed* – the Swedish classic allotment – the Allotment<sup>3</sup> represents a private space to grow your own food and provide high recreational

values. The cube system gives the citizens opportunities to take the cultivation to new levels like growing without soil substrate in hydroponics or growing vertically.



## AGRICULTURE<sup>3</sup>

The Agriculture<sup>3</sup> is a small scale organical industrial farming, where for example fruit can be grown and sold locally. In Agriculture<sup>3</sup> there are also great opportunities for industrial farmers to

apply the latest technology to develop an organic and locally produced farming. Since the Agriculture<sup>3</sup> will be partly open to visitors, it will have both commercial and educational aspects.

## EDUCATION<sup>3</sup>

The purpose of the Education<sup>3</sup> is to draw attention to the production of food. The Education<sup>3</sup> is operated by municipalities, but are available to the public throughout the year for recreation as well as for studies of agriculture and ecology. Most of the crops

are grown in plant beds, but vertical farming may also occur along the cube walls. Citizens are invited to participate in the cultivation and management of the plants. In this way, interest, involvement and awareness of agriculture, can develop in urban environments.