



RUB

Fig 1.: Aerial photograph. Source: stockphotos

RUHR-UNIVERSITÄT BOCHUM

ENVISION SKARPNÄCK

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Table of contents

1. **Theoretical part**
2. **Envisioning Nature as Culture**
3. **NBS for the four key challenges**

How did we envision?

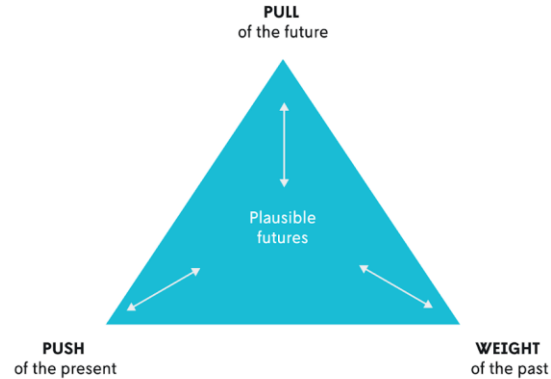


Figure 1 : The futures triangle. Image Source: Inayatullah (2011)

Envisioning Nature as culture

Imagine a future where urban spaces are transformed into vibrant **cultural hubs** that celebrate the harmonious relationship between people and nature. Community gardens bloom with **diverse crops**, fostering social unity and **local food production**. Parks and green spaces reflect the **rich cultural heritage of the city and sport activities**, creating **spaces for people** to connect with nature and each other. Through **inter-generational** learning and farmers' markets, traditional knowledge on nature is passed down, promoting sustainability and **positive human-nature relationships**. This vision embraces the power of cultural **interactions** with nature to create a more vibrant and sustainable future for all.

Green Community Gardens

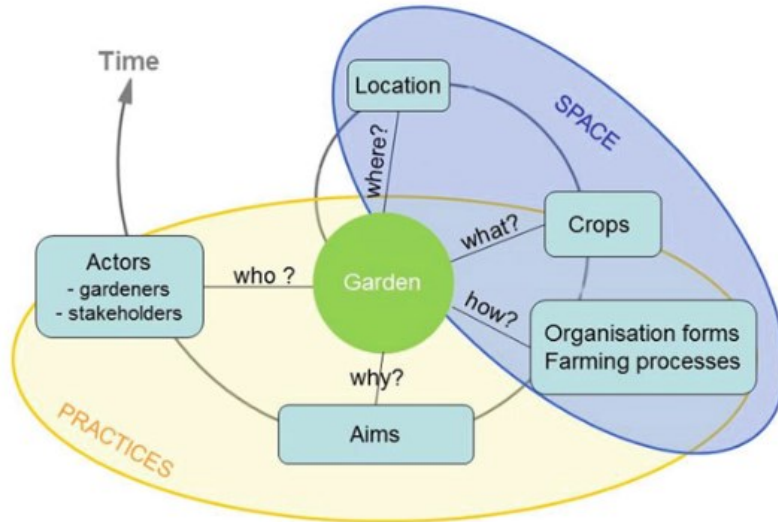
- ❖ **reconnects to nature and gives a place for social interconnections** (Glatron Granchamp 2018: 2)
- ❖ **provides tools for population education** (Glatron Granchamp 2018: 2)
- ❖ **Preserving biodiversity**
- ❖ **Can be constructed on facades, rooftops, town centre squares**
- ❖ **Quality of Equipment, facility, imported soil, funding and governmental support define the quality of the gardens**
(Wesener et. al. 2020: 10)



Figure 2: Community Garden Dome in Cork
(own photo)

Green Community Gardens

Figure .: Community Garden Dome in Cork (own photo)



Green community Gardens also affect:
UHI, Flood Prevention, Loss of biodiversity, social cohesion and quality of life

Green Corridors and Urban Forests

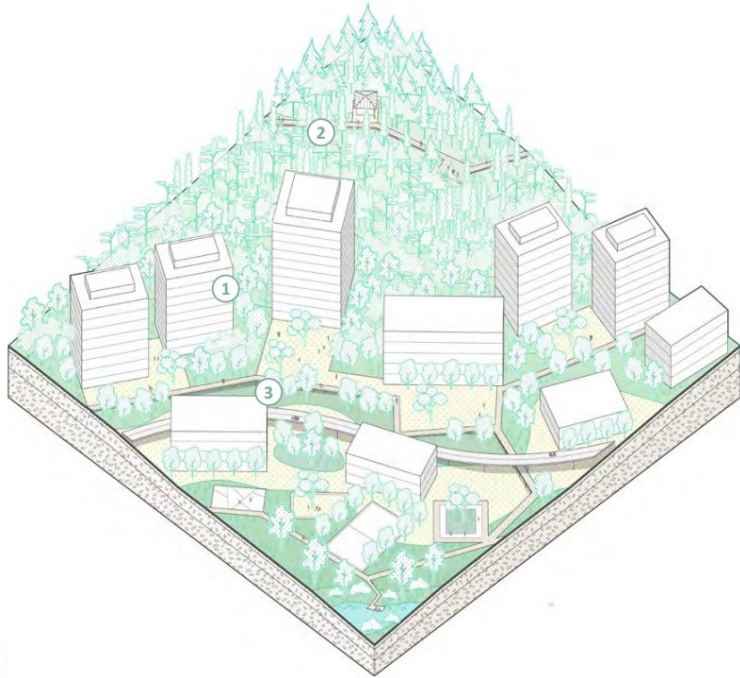


Figure 4: Worldbank (2021): 44

"... they (the Swedish) don't just think about people, they think about those small ants. Sweden is totally green. You don't find the forest between cities, you find the cities between the forest."
(Hassan)"

"and many adults know the flora, they know which trees are which (Adnan)"

Coetzee (2019): 41-42

Enhance biodiversity inside the city

Increased exchange of individuals between the forest, parks and urban gardens

Corresponds to the natural culture with a lot of knowledge and benefits from it

Green Corridors also affect:
UHI, Flood Prevention,
Social cohesion

Green Building Solutions

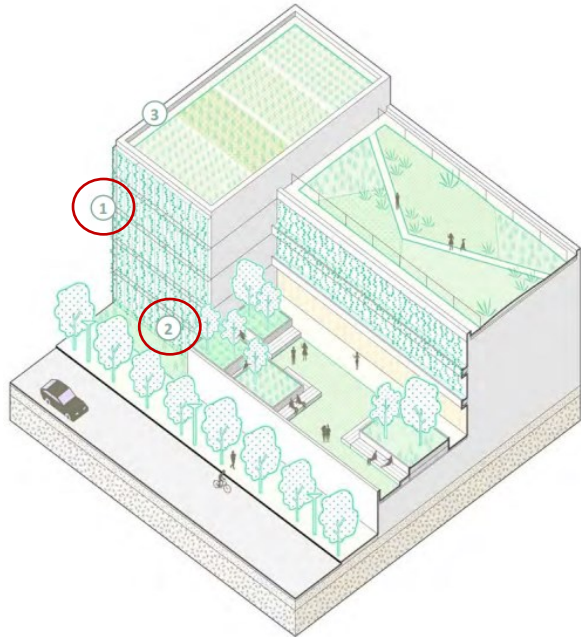


Figure 5: Worldbank (2021): 86

❖ Vertical Greening

Facade-bound greening – uses the facade for fixing panels or makes the plants part of the facade -> intensive use of technology for irrigation & special substrates to reduce weight

Ground based facade greening – made of climbing plants. Need 5-20 years to cover a house facade

15-30% water retention by mitigating runoff

Helps reduce stress on sewer systems in heavy rainfall events

Brings sweden's self image of nature being a part of their identity into the city

Green Building Solutions also effect:
UHI, Loss Of Biodiversity,
Quality Of Life

NBS Technical Handbook – Part II (2019): 19 ff.

Green Building Solutions

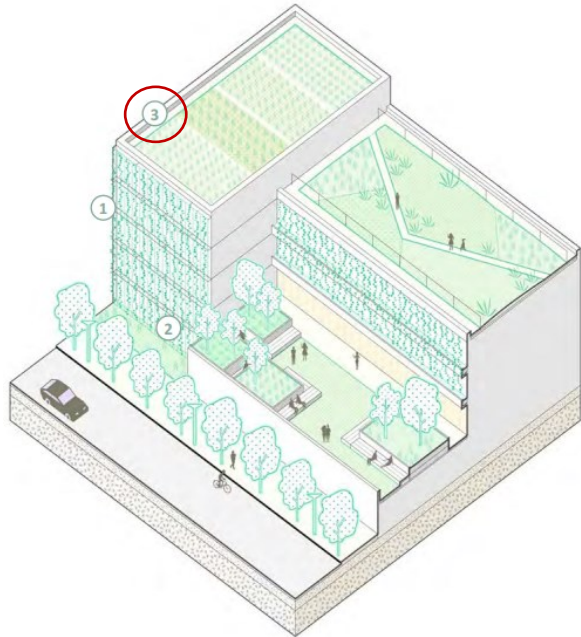


Figure 5: Worldbank (2021): 86

❖ Green roofs

Extensive green roofs:
minimum maintenance &
management -> on roofs that are
not easily accessible

low growing, rapidly spreading
and shallow rooting plants that
are able to live on low nutrition
supply

NBS Technical Handbook – Part II (2019): 19 ff.

Easier to apply than
intensive green roofs but
don't have as many benefits

Storm water/rainwater
management due to a
drainage layer

Helps reduce stress on
sewer systems

Green Building Solutions also
effect:
UHI, Loss Of Biodiversity,
Social Cohesion

Green Building Solutions

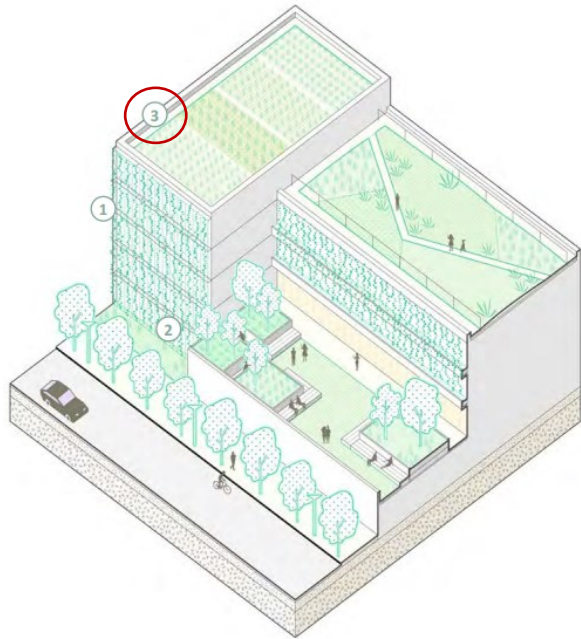


Figure 5: Worldbank (2021): 86

❖ Green roofs

Intensive green roofs:
thicker substrate layer, higher
variety of vegetation & require
more maintenance

Water storage and drainage
layer to mitigate water runoff
while supporting the vegetation

Built on accessible roofs to the
public to create space for
activities and interaction

Iwaszuk et. Al. (2019): 34
Hop & Hiemstra (2012): 3

On average 70% of annual
rainfall on a green
rooftop will be taken up and
evaporated

Widespread application of
green roofs helps reduce
stress on drainage & sewer
systems

Roof gardens serve as
important information about
the environment resulting in
cultural significance

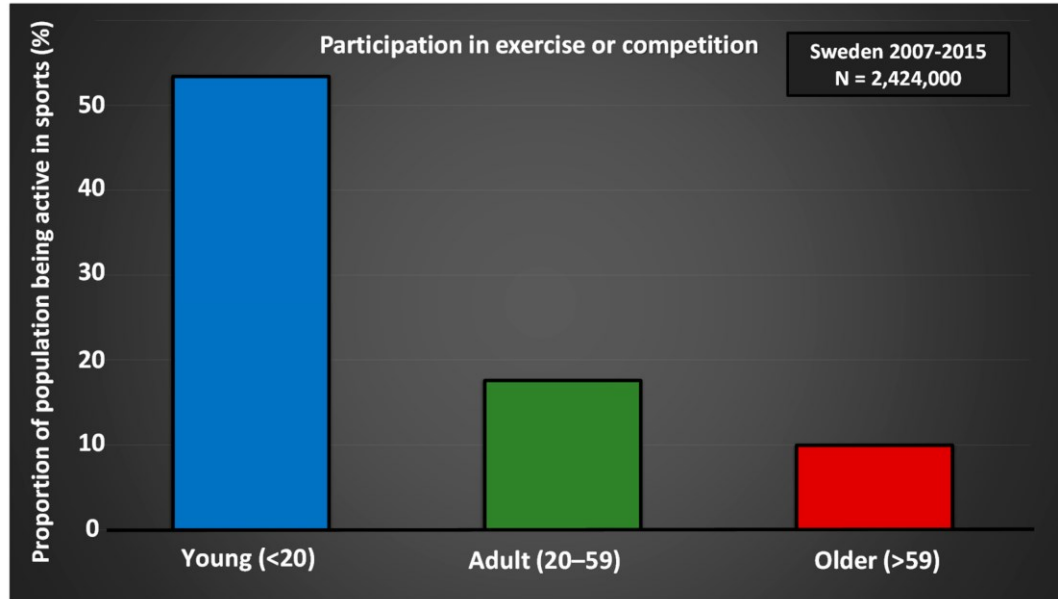
Green Building Solutions also
effect:
UHI, Loss Of Biodiversity,
Social Cohesion

Nature-based Solutions and Health

“We have a project, and there we try to gather Swedish people with new-comers and start to teach each other [outdoors], what is this flora or fauna called in Arabic for example. Here the attempt is also to try to teach Swedish people in other languages, and start to open discussion between Swedish and new-comers [...] then they start to talk about various habits that are found in Sweden, and in the home country.” (Abdullah)

Coetzee (2019): 41-42

Sports in Nature (to whom?)



Source: The Swedish Sports Confederation (www.rf.se).

Sports in Nature

- Meaningful leisure: Summer and winter sports nature-based solutions integrates different groups over 20 years old – including the foreign population
- Since 1950's a new trend in sports: horse riding as culture



Nature-based solutions of sports in nature also effect: UHI, Flood Prevention, Loss of biodiversity, social cohesion and quality of life

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