

NEW NBS NOVA GORICA

Based on:
URBiNAT D2.7 Healthy Corridor
Urban Plans for Follower Cities





Healthy Corridor urban plan. Visualized by Ribal Aman Eddine.



Territorial NBS





Credits: GroenSafariLand_Utrecht_©Daan Bleichrodt



<https://www.miya-forest.de/>

Description

The Wildlife Park is part of the URBiNAT NBS catalogue, defined as green space designed according to sustainability principles where natural dynamics and ecological succession are a central concept and part of the design. The ecology of the site, its plants and habitats are expected to change over time, a process that can be integrated into the site's planning and design.

Special care is given towards the promotion of urban biodiversity, natural regeneration, habitat development and ecological succession, through specific planting design and management. It can be a cost-efficient solution able to provide a deeper connection between recreational uses and nature. In the case of Nova Gorica, it will be assimilated to the theorised and often applied Miyawaki or Tiny or Pocket Forest, to accelerate its growth and increase biodiversity and its ecosystemic impact.

1. Wildlife Park or Tiny, Miyawaki, Pocket Forest

Positive aspects/challenges

The NBS is allowing fast growing forest. This NBS favours a high density of biodiversity. This NBS has a very impactful educational character. This NBS permits a fast regeneration of brownfield.

Participation process to use the NBS

CO-DIAGNOSTIC

The tiny forest and wildlife park was mentioned several times during the co-diagnostics although participants never insisted on its application due to the large presence of forests and woods in the city.

CO-SELECTION & CO-DESIGN

The use of this solution is partly transversal and was considered by the task force and by some participants as a very communicative NBS. Its application was mostly imagined in the buffer towards the railway network and in the surroundings of the Pensioner bar, at the beginning of the core area. It also resembles the little forests already present in the core.

Best Practices and References

There are numerous organisations in Europe replicating this approach for a fast reforestation of urban areas also adopting crowdfunding. See also the www.Weforum.org, <https://www.miya-forest.de/>, and the theory <https://daily.jstor.org/the-miyawaki-method-a-better-way-to-build-forests/>

2. Green Roofs

Description

Green roofs serve several purposes for a building, such as absorbing rainwater, providing insulation, creating a habitat for wildlife, increasing benevolence and decreasing stress of the people around the roof by providing a more aesthetically pleasing landscape, and helping to lower urban air temperatures and mitigate the urban heat island effect. The roof of a building, a parking lot or some other build structure can be covered by vegetation that grows over an impermeable membrane and a soil substrate. Intensive green roofs are suitable for human use and flow of people. Extensive green roofs are not suitable for human use but require low maintenance and can have major ecological and economic benefits.

There are three types of green roofs, depending on the structural capacity of the roof, ranging from extensive to intensive. Extensive green roofs are the simplest solution, with less thick layers and a light vegetation on top, while intensive green roofs are thicker and meant to host higher vegetation, including trees.

Positive aspects/challenges

The green roofs are appropriate in Nova Gorica for the numerous flat roofs existing in the socialist housing. They could provide insulation to the buildings with thermal reduction and energy conservation, water management improvement in case of heavy rains, enhanced biodiversity and larger pollination surfaces, higher carbon sequestration, as well as improve the landscaping and views, as shown in the NG Koren park renderings.



Credits: ZinCo Green Roof, source <https://zinco-greenroof.co.uk/>



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Participation process to use the NBS

CO-DIAGNOSTIC

The green roofs have been considered a must since the beginning and were not even discussed because all participants were willing to see them applied more in the city.

CO-SELECTION & CO-DESIGN

The talks about the green roofs in the co-design phase were opening up to flat and inclined roofs, as well as asking for the technologies and the costs. Other discussions were about their combination with energy production systems, thus joining green surfaces with solar/photovoltaic panels or micro wind turbines.

Best Practices and References

The technology is extremely well developed and adopted. Suggestion would be to use okm and sustainable materials for the structure, thus no plastics.



Credits: ZinCo Green Roof, source <https://zinco-greenroof.co.uk/>



©SLA URBiNAT

Description

Traditionally, the management of storm water has relied on pipes and sewers. Due to limited storage capacity, these systems are susceptible to overflowing during storm events, presenting risks of harmful contamination to the environment, and causing damages on buildings. Nature based rainwater management is designed to collect run-off water and relieve the pressure on sewer systems. This is done by handling the water on the terrain surface and including the hydrological performance of nature. They are based on retention and infiltration principles, which mitigates flood problems, improve quality of water and recharge underground watercourses as well as promoting and improving both biodiversity and the well-being of people. These NBS are very flexible and include various possibilities for site specific adaptation, in terms of scale, technical solution and combination with other programs. In The Koren NBS park, the rain water management has been mostly considered in the neighbouring area, by replicating the swales principles applied by SLA URBiNAT partners in Copenhagen.

3. Rainwater Management

Positive aspects/challenges

The rainwater management needs integrated design, thus thinking from the green roofs to the green facades and finally the ground swales. It is meant not to waste water and permit natural infiltration in the soil, reducing flooding risks.

Participation process to use the NBS CO-DIAGNOSTIC

During the co-diagnostic's issues about water management, focusing on the Koren, came from the statistical data, as the area is considered a flooding zone for several reasons.

CO-SELECTION & CO-DESIGN

During the co-design, citizens were keen to understand the importance of having an integrated water management concept that could be applied to the entire neighbourhood for more intelligent and efficient sustainability.

Best Practices and References

The reference examples have been from the URBiNAT cities, mainly Sofia, Copenhagen (through SLA works) and Nantes (with the reopening of the stream).

4. Green Walls

Description

Vertical green systems represent vertical surfaces with living plants. There are two main types of vegetated wall: traditional direct covering of a vertical surface and indirect vertical surface using an additional support system to ensure air gap between the vegetation and the wall. An option to plant vegetation in planter boxes is implemented when the ground planting is not possible. Green walls have the potential to improve urban microclimate and visual site characteristics. They affect urban heat island by direct sunshade and by increasing air quality and humidity, improve acoustic environment and biodiversity. Green walls are relevant for compact city structure and areas with properties flanked by high solid fences. They can be used as noise and air pollutant screens, living elements in spatial organisation of places, and for improving the aesthetics of a site. Green walls are traditional gardening practices across Europe and part of vernacular housing architecture in many countries. Contemporary green walls use additional support systems to ensure air gap between the vegetation and the wall. Freestanding or attached to wall planter boxes are used when the surface is sealed or vegetation height is required.

Positive aspects/challenges

The green walls, either developed in the traditional or more technological form, provide insulation and energy preservation to the buildings, especially on sun exposed facades. They also increase biodiversity.



©UASG_URBNiNAT partner



Modernist building in the Nova Gorica corridor

Participation process to use the NBS

CO-DIAGNOSTIC

During the co-diagnostic's issues about water management, when focusing on the Koren, it was learned from the statistical data that the area is considered a flooding zone for several reasons.

CO-SELECTION & CO-DESIGN

During the co-design, citizens were keen to understand the importance of having an integrated water management concept that could be applied to the entire neighbourhood for more intelligent and efficient sustainability.

Best Practices and References

The reference examples have been from the URBINAT cities, mainly Sofia, Copenhagen (through SLA works) and Nantes (with the reopening of the stream).



©URBiNAT_Nantes



©TasteGarden_Laquenexy

Description

The Tasty Garden of Learning is a “growing classroom” in the yard of a kindergarten or school where children, teachers and parents unite their efforts to grow herbs, vegetables and fruits; there they all get valuable lessons and inspiration directly from their experience with nature. It is a multi-dimensional educational tool with a potential to address real-life challenges in an integrated manner and to organise educational activities in an easy, inclusive, and inspiring way. A Tasty Garden of Learning brings together all participants in the educational process in a life-enriching relationship and leads them to a creative process of learning by experiencing that supports the development of the physical, intellectual, emotional, and social intelligence of the pupils; it also unites local communities and supports their sustainable development. In the Koren NBS park there are 2 locations for tasty gardens of learning, close to the Green Houses and the Community gardens, as well as mixed with the Orchard and the trees of forgotten seeds.

5. Tasty Gardens of Learning – Fruit Gardens

Positive aspects/challenges

They take Positive integration and shared responsibility of parents and local community in the educational process, Inclusive and experiential learning to develop multiple intelligences and basic competences such as creativity, team working, and risk management; developing skills for healthy living in harmony with oneself, other people and Nature; increase the ecosystem services with higher biodiversity and pollination opportunities.

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics highlighted the capacity of the city to work on educational practice involving nature, but nothing specifically designed in this direction, despite initiatives in the urban agglomerate about autochthonous species.

CO-SELECTION & CO-DESIGN

During the co-design the location of this NBS came immediately by citizens and other stakeholders in association to the green houses and the terraced orchard, also thanks to the EPK strategy. Other initiatives o+about quality of food are consolidating these concepts.

Best Practices and References

Referrals from URBiNAT, inspirations from local NGOs.

6. Vertical gardens and Living Walls

Description

Green facades and living walls are vertical greenery systems for growing plants with less or without soil on a vertical surface. Living walls are relevant for interior and exterior vertical surfaces to be vegetated with a wide range of plant species, herbs, and vegetables. All public buildings and public spaces can take advantage of the positive effects of a vertical garden implementation as they improve urban microclimate and visual site characteristics. They affect urban heat island by direct sunshade and increasing air quality and humidity, improving acoustic environment and biodiversity. They could have a positive effect on mental health through biophilia – a psychological orientation of being attracted to all that is alive and vital. Living walls are relevant for compact city structure locations and areas with properties flanked by high solid fences. In the Koren NBS park living walls have been suggested for outdoor, building facades, and indoor walls in schools for educational and quality of space purposes.

Positive aspects/challenges

Living walls provide important ecosystem services in areas with sealed urban structure with no space for conventional urban greening; improve air quality, heat island effect reduction, energy cost reduction, noise level reduction, visual benefits, increased biodiversity by creating habitats for birds and beneficial insects; and indoor enhance quality of environment and of concentration of pupils, that are challenged to let the wall grow at best.



© URBINAT_DTI



© GSKy's Versa Wall® Indoor Living Wall at the new Biomedical Sciences & Engineering (BSE) facility at Universities at Shady Grove.

Participation process to use the NBS CO-DIAGNOSTIC

The co-diagnostics did not highlight the necessity of this NBS, although its importance in terms of education became especially clear during the photovoice sessions with kids, thinking about those with special needs.

CO-SELECTION & CO-DESIGN

The co-design process introduced this NBS thanks to the task force and was taken as an important asset by participants for its educational impact, both outside and inside.

Best Practices and References

Referrals from URBiNAT and from literature about increase of students' performance.



©UniversityofPorto_PauloFarinhaMarques_City of Porto



© NovaGorica-Vrtojica stream

7. Watercourse restoration

Mixed solutions that combine man-driven watercourse control while respecting the riverbank ecosystem offers greater success at short and long term, while promoting biodiversity, ecological connectivity and a major increase in water purification. In Nova Gorica and its NBS park the Koren stream will be partly reassessed in its banks, especially to reduce water speed and to host the second water regime created with the phytodepuration pond/swimming pool.

Positive aspects/challenges

The Koren stream area is considered to be one of inundation, due to the lower fields as well as the reduction of the river flow from almost 30 cubic meters per minute to 14 cubic meters when entering Italy and its recent underground channelling. This means that all actions put in place to prevent flooding are important.

Participation process to use the NBS

CO-DIAGNOSTIC

During the co-design the inspiration from other case studies came from UNG and the task force and experiences by the participants.

CO-SELECTION & CO-DESIGN

Since the early stage of co-diagnostics, the problem of the water regimes and the incongruence between the flow capacities in Slovenia and Italy, with needs to improve the water management. Also, the territorial mapping has highlighted retention areas that could inspire the water management works.

Description

Watercourse restoration concerns rivers/streams that have been degraded by the urbanisation process or by heavily engineered water management solutions: contained underground watercourses, channelled rivers, concrete banks, embankments, dams, among others. Despite being necessary solutions, excessive containment of waterflow means that a man-imposed limit on volume and flow might not be sufficient, offering lower flexibility to behaviour changes over time.

Best Practices and References

Nova Gorica has experience in water management and the Vrtojica stream is an example.

8. Groasis Waterbox

Description

One of the increasing problems in reforestation is the provision of sufficient water for saplings to grow. With Groasis, trees are planted in a way that mimics nature, requiring minimal water usage and custodial management. Given proper preparations and knowledge how and what to plant, survival rates are yet extremely high (above 90 percent). Plantations are undertaken using a box, either Waterboxx or Growboxx according to the land requirements. A drip-mechanism channels water to the root slowly. Atmospheric humidity is attracted during night, resulting in natural refilling, without any use of drip irrigation and minimum other irrigation. In Nova Gorica and Gorizia this NBS will be used for educational purposes, to introduce children and teenagers to nature and its care.

Positive aspects/challenges

The NBS was never used in the co-diagnostic phase. It was proposed to schools for educational purposes by the task force

Participation process to use the NBS

CO-DIAGNOSTIC

The NBS was never used in the co-diagnostic phase. It was proposed to schools for educational purposes by the task force.

CO-SELECTION & CO-DESIGN

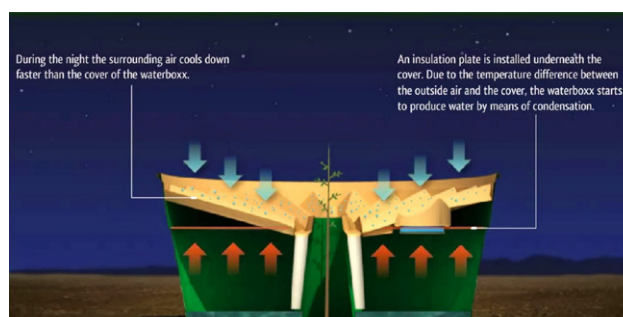
Even during the co-design, the solution was not adopted directly, but its application was confirmed during the partners visit in March 2023.

Best Practices and References

The NBS is a consolidated solution and was already implemented in all continents including Africa and South America. In the URBiNAT project it has been used in Siena with educational goals.



©IKED_Groasis



©groasis.com



Educational Beehive in the Elementary school in Nova Gorica, Core area.



© K-Abeilles Hotel for Bees-AtelierD, France

Description

“Beehiving” offers a man-made replica of the natural environment, aimed to produce honey (the term is used interchangeably with “bee keeping”). The focus here is “beehiving” in urban areas, a relatively recent phenomenon. Such beehiving must be complemented by other functions, i.e., “side-activities” capable of supporting “harmony” with the surrounding urban dwellers and context. Getting that relationship right is a core task which incorporates revitalising urban ecosystems, awareness creation, mindset change, distribution chains, and social innovation. Success in that regard supports the well-being of citizens while also increasing access to the healthy products produced by bees. Beehives are also promoted as bee hotels and located anywhere (sometimes also along the highway). Harvesting honey is not necessary as it feeds the bees themselves.

9. Beehive provision and adoption

Positive aspects/challenges

Innovation is inherent to the inputs, processes and outputs as well as to the relationship between bees and urban dwellers. In fact, in Nova Gorica the beehive has been located inside the school garden to permit a normal coexistence of insects and children with no fears. Innovativeness is also important for achieving commercial and social gains, even though harvesting of honey is not necessary. Related innovations are found in the development of special gift certificates and or new ways of delivering honey to adopters.

Participation process to use the NBS

CO-DIAGNOSTIC

The NBS was already in place in the corridor area. Hosting the autochthonous Carniola bee

CO-SELECTION & CO-DESIGN

Given the idea of using the wild gardening and the importance of enhancing the population of bees it was decided to multiply these beehives as much as possible.

Best Practices and References

The beehive in the school is already a very good practice.

10. Stormwaters Bioswales

Description

The bioswales are channels designed to convey the water runoff from passages, streets, squares, etc. They are called bio because they can be made by a simple earth remodelling using clay as an impermeable surface. The bioswales were very common in the past for landscape and cultivation management and have been slowly eliminated worldwide for the wrong conviction that underground channelling would have been a better solution. They consist of a sealed drainage with gentle slope, that may guarantee a slower runoff that could be enhanced by phytodepuration by filtering the waters, especially if coming from streets with cars. Often these swales are integrated with check dams that permit artificial distribution of retained waters. In fact, bioswales can be created around the edges of parking lots to treat stormwater runoff before releasing it to the watershed. In Nova Gorica they are part of the integrated management system and have been proposed in the parking lots and the edges of the street that crosses the core area. They have been proposed in many other street networks of the city.

Positive aspects/challenges

The bioswales represent a traditional technology to deal with water management in agricultural and urban areas, and as such sustainable per definition. They carry the positive aspect of being traditional in concept, not invasive, multifunctional (i.e., retain waters, host biodiversity, generate buffer zones, eliminate traditional maintenance, using natural materials and components, contributing to heat effect reduction), fight pollution and green.



©Designyourtown.org



©SLA_Copenhagen

Participation process to use the NBS

CO-DIAGNOSTIC

The static analysis showed that the area of Koren is flooding risk, thus requiring all possible measures to prevent problems.

CO-SELECTION & CO-DESIGN

All participants understood the importance of implementing new aesthetics in urban management, especially concerning mobility (and its pollution) and biodiversity increase.

Best Practices and References

The SLA example in Copenhagen, St. Kjeld's Square & Bryggervangen.



SmallCampus_BurroHarro_Netherlands



BioNova® Germany

Description

Natural swimming pools are a sustainable solution to private and public water enjoyment and swimming facilities. Natural swimming pools are so called for their capacity to simulate natural ponds and small lakes and use natural assets to clean waters to make them safe for bathing. They use plants and other natural components to filter the water and keep the ecosystem of the pool balanced. They also tend to attract wildlife, making them a good spot to relax and enjoy nature. Natural swimming pools should be created with relatively low sunlight to reduce algae growth, and require little infrastructure, excavation of the basin, and use of low energy consumption water pumps to improve the water circulation through the phytodepuration plants. Natural swimming pools admit the coexistence with other living beings, especially animals such as fishes, frogs, insects, etc. with no harm for humans.

11. Natural Swimming Pool (with Phytodepuration)

Positive aspects/challenges

The natural swimming pool is a sustainable alternative to traditional swimming pools that require chemicals and energy consuming pumps for water treatment. Natural swimming pools contribute to the ecosystem enhancement as well as the increase of biodiversity. They have a special function also in educating more sustainable forms of using the environment with respect to other living beings. In the case of Nova Gorica this pool would add bathing and refreshing spots, taking advantage also of the habit of the population to swim in natural environments, as presently happening along the Isonzo River (IN Gorizia this is called "Isonzo Beach")

Participation process to use the NBS CO-DIAGNOSTIC

Proximity to water and having fun and enjoyment of water was openly asked during all co-diagnostic's meetings. The Need was to reach the water of Koren, in general to have contact with water.

CO-SELECTION & CO-DESIGN

In the co-design phase several ideas to get closer to the waters of Koren were made and this swimming pool became the most ambitious for its extension.

Best Practices and References

There are more and more implementations of this solution in private and public contexts. We report the SmallCampus, BurroHarro in the Netherlands and the Bionova Company.

12. Green Parking

Description

Green parking is not a novelty in itself, given it has been implemented extensively in many cities during the last 30–40 years, replacing the wrong habit of asphaltting or paving all urban and private areas to reduce maintenance. The green parking could be implemented in different forms and techniques, from the most basic, consisting in specific tiles positioning to let grass grow in between, to more complex and integrated solutions that accompany grass growing to bushes and trees to improve biodiversity, provide shade and enhance pollution absorption. Cement or clay tiles are preferred to plastic ones. Integrating trees in green parking requires preventing the roots from coming to the surface, thus preparing systems for in depth irrigation in the initial stages.

Positive aspects/challenges

Green parking has though recently been requiring more infrastructural works due to the understanding of the danger caused by leaking oil to the environment, thus asking for underground canalization systems to collect brown waters. This constraint makes the green parking less sustainable than expected, although it still provides advantages in terms of sustainability. The use of eclectic vehicles, that use much less oil, would certainly improve its efficacy and efficiency, as well as complexity.



Green Parking in the social housing complex in Nova Gorica, Corridor Area

Participation process to use the NBS

CO-DIAGNOSTIC

The green parking was signalled to the co-diagnostics during the territorial observation. It is a good practice in Nova Gorica, also developing in Gorizia.

CO-SELECTION & CO-DESIGN

During the co-design session the green parking has been often recalled by the task force as an important solution and citizens have endorsed its constant adoption.

Best Practices and References

In Nova Gorica there are several examples. More should be made in Gorizia.



©HenninLarsenArchitects_Pitea_Sweden



Section of the Designed Multifunctional Garage/Square in the Koren Park Corridor Area

Description

The Multifunctional (wooden) garage/square has been conceived ad hoc in Nova Gorica NBS Koren park as a hybrid between parking space, leisure and relax space, as well as facility for community events organisation. The specific NBS is designed to replace a simple, green parking in the proximity of the kindergartens and the primary schools. The idea behind it was to create an upper space for enjoyment, giving view on the NBS Koren park as a belvedere terrace, keeping the advantage of parking below. Nevertheless, the parking has been seen as a multifunctional space because beyond parking it can be used temporarily (with a weekly calendar) for events, local market, flea markets, etc., as well as for other venue opportunities. It should be made in wood, respecting the existing trees, permitting light and rain penetration to enhance the air quality inside.

13. Multifunctional Garage/square

Positive aspects/challenges

This solution is to be explored, given that they may be different challenges although approved and supported by the population. The advantage is certainly to add, to the existing parking, new functions in a sustainable form, namely belvedere, relaxing space and venue space. However, static calculations should be properly made in the executive project, studying in detail the movement of cars and the risk of collision with supporting columns.

Participation process to use the NBS CO-DIAGNOSTIC

The co-diagnostics highlighted the need for more communal spaces.

CO-SELECTION & CO-DESIGN

The idea came from the task force, suggesting an upgrade of the existing space to give value to the NBS Koren park through a Belvedere terrace. It has been welcome and appreciated by citizens, with the request to respect existing facilities and green (especially trees)

Best Practices and References

The solution seems quite innovative. Something similar was built in Pitea, Sweden, by Henni Larsen Architects

14. Water/Fountain Square

Description

Water/Fountain square are pretty common worldwide and represent a very dynamic, low cost, refreshing solution for urban areas. They are always photographed with children playing in summer time, showing their importance for local well-being. They consist of normally paved squares, with multiple nozzles spraying water intermittently or constantly, creating different water games. The provision of water is guaranteed by underground pipes and pumps that may recycle the water, filter it and can be powered by renewable electricity (i.e from photovoltaic panels or within an energy community context). Water games can be adopted also in winter time, where climate permits. Introducing this solution in the Koren NBS park would benefit families with children mainly, but also others, especially in hot summers.

Positive aspects/challenges

Nova Gorica has already successfully experienced the benefits of such a solution, as it has been constructed in the main city square, Bevkov Trg, with a lot of fun for children playing in summer time and parents enjoying sitting on a bench or in a bar. The positive aspects are linked to the aesthetic effect of water and the refreshment it gives in hot summers. The technology is so perfected that there seems not to be challenges. Only suggestion could be to provide less paved area and more natural green spots.



Water games in the main square in Nova Gorica, Bevkov Trg.



Water/Fountain square in Villaggio S. Francesco, Caorle, Italy, @formedacqua.com

Participation process to use the NBS

CO-DIAGNOSTIC

All citizens insistent on the need to have more opportunity to benefit of the presence of water along the Koren.

CO-SELECTION & CO-DESIGN

The idea to replicate the water/fountain in the main square was a constant thought in all participants' contributions.

Best Practices and References

We should mention the Bevkov Trg in Nova Gorica is a successful story.



Example recently built in Nova Gorica, Delpinova Ulica, even though with no terraced hillsides.



Rendering of the proposed intervention in the Koren NBS park showing the terraced soccer grand stands

Description

The terraced hillsides are a solution that has been used for centuries all over the globe. They permit an easier use of space and soil, either for cultivation or for leisure, with positive impacts also in the hillside's erosion limitation and the reduced water runoff. This solution, very simple to implement, has been adopted to reshape most of the Koren area of Nova Gorica, to create spaces for people to move, sit, enjoy, talk, etc. It is made by simply levelling the hillside and can be done with solid only or with containing stone/brick/wooden structures. It has been adopted for the grandstands of the soccer/rugby field, obtaining a more sustainable and resilient solution for sport entertainment. These terraced grandstands, as well as terraced loops, torrent banks, etc. will allow people to sit and use the space either individually or in groups enjoying nature, weather, activities.

15. Terraced sport and leisure

Positive aspects/challenges

This NBS offers numerous flat surfaces, improving the natural environment thanks to the possibility to easily maintain grass, flowers, plants and trees on the terraces, with easier mobility also for disabled people.

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics highlighted the need of more gathering spaces.

CO-SELECTION & CO-DESIGN

This solution, suggested by the local team, was immediately welcomed by all participants, who asked for its adoption almost everywhere as a leitmotif of the park.

Best Practices and References

As an example, Parque Bicentenario in Ecatepec, State of Mexico by Taller Capital (Rafael Gamo), made a proposal with much heavier in terms of materials to be used, but aligned with the concept.

16. Animal Farming

Description

The solution is simply organising spaces for domestic and less domestic animals to live in cities. This means spaces for day and night recovery, where animals could be taken care of by citizens, users, local companies, children, professionals for the maintenance of the green areas, etc. animals that could be hosted here are hens, ducks, geese, owls, pigs, goats, sheep, donkeys, cows, but also cats, dogs, as well as deer, hedgehogs, etc. The design phase, which needs to include specialists such as vets, breeders and lawyers, will determine the extension, conditions, feasibility of large integration and coexistence of animals. In principle the animals should not stay full time in an enclosure, but could be, at least some of them, be allowed to move freely in the area (such as hens, goats, etc.) either independently or accompanied by users.

Positive aspects/challenges

This NBS offers numerous advantages, although the most important aspect is education. Talking about regreening, a very important step is making citizens aware of biodiversity and the existence of other living beings. With this NBS people can be closer to animals and learn about them as inhabitants of the world. In addition, this NBS takes biodiversity, tourism, alternative leisure, as well as medical treatment opportunities, given the demonstrated effect of animals for the treatment of depression and other mental diseases. Challenges are about the feasibility (health impacts, combination of animals, space needed etc.) and about maintenance/care costs.



©UrbanAgriculture101



©MarcoAciri, Urban Animal farm in Auronzo di Cadore

Participation process to use the NBS

CO-DIAGNOSTIC

In one meeting of photovoice and in the survey people asked for more interaction with animals, recalling the pleasure of having the ducks in the Koren.

CO-SELECTION & CO-DESIGN

The idea of including the animal farm close to the community gardens and the green houses came from the local task force team to increase the attractiveness of the site for families.

Best Practices and References

There are not many examples, but the animal farms aiming at recovering animals and educating people, are growing, in some cases called sanctuaries (even though in this case extensions are much bigger).



©novagorica, Community Garden in Nova Gorica, already regulated



©MarcoAcri, Community Garden in Nova Gorica, Koren Area, not fully regulated

Description

Community gardens are a very diffused phenomenon worldwide that has clearly ancient origins. If we look at Mediterranean civilization, especially those living today in extreme conditions, this practice is still fully in place as an essential traditional knowledge shaping the relationship between urban and agricultural areas. Today it consists in a regulated practice by which local authorities allocate plots of public land for the private use of citizens, usually for self-cultivation of goods. The regulation of these plots and their use often include a size, management rules, monthly or annual fees and contracts. In Slovenia and Former Yugoslavia having accessibility to a plot of land for private cultivation was common and this remained in practice today. Nova Gorica has presently formal and informal areas for community gardens. The formal ones are regulated with selection calls, annual rent, services and dimension/geometry of the plot.

17. Community Gardens

Positive aspects/challenges

Community gardens have several positive externalities, such as the leisure and education for elders and youngsters, production of 0 km food, with less carbon print, seasonal production in parallel with natural cycles, as well as protection of green areas in highly dense, urban real estate pressures. Community gardening, especially in urban areas can be though not efficient and demanding in terms of aesthetics, making areas sometimes alienating for non-direct users. This is why it needs regulations for democratisation of public land use, as well as impact on the aesthetic quality of the common goods.

Participation process to use the NBS

CO-DIAGNOSTIC

The Koren park area contains a large plot of community gardens, dating back to the 50's, and discussions highlighted the will by non-users to have it better organised.

CO-SELECTION & CO-DESIGN

In the co-design phase mostly, the municipality asked for a regularisation of the plots, in line with other urban areas.

Best Practices and References

Almost all URBiNAT partners have community gardens. However, Nova Gorica has a consolidated practice that may perfectly work for the NBS Koren park.

18. Green and blue theatre

Description

Adopting the *leitmotiv* of the terraced landscape in the Koren park area, the local task force in Nova Gorica, jointly with the EPK, Culture Capital group and the citizens, have imagined a very ambitious project, which consists of a cultural, open-air facility theatre, overlooking the water of the Koren stream in a green environment. Green terraces are created to offer stands for people, either to attend events or to enjoy the weather and nature, while a water regime is made to surround the theatre with water, especially around the stage. The theatre will be characterised by a wild gardening, sitting facilities (moving chairs and benches such as in Jardin de Luxembourg in Paris). The terraced platforms of the theatre should be large to let people have several kinds of recreational gatherings and the present trees will be kept giving a natural scenario to the stage.

Positive aspects/challenges

A Green and Blue Theatre has very few examples, although benefits can be easily grasped considering the positive impact of having nature, trees, waters as surrounding atmosphere for cultural events. This theatre would be a fantastic scenery for the Culture Capital 2025, being located very near the border between the two cities.



©UniversityofNovaGorica. Rendering for the Green&Blue theatre



©MarcoAcri, Area where the theatre should be located

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics highlighted the will of people to get closer to water and have more gathering facilities. The co-diagnostics also picked the Capital of Culture Bid book axes to merge nature with culture.

CO-SELECTION & CO-DESIGN

During the co-design citizens asked for a cultural facility in the area, and the possibility to have enlargements of the Koren stream to have some natural basins. The Local task force then, jointly with ECOC (European Capital of Culture) office, imagined a new theatre concept.

Best Practices and References

To the best of our knowledge, there are no direct precedents for a 'Green and Blue Theatre.'

However, green theatres have proven to be very successful. For instance, one can refer to the Green Theatre in Bristol (details can be found at www.thetraditionalco.co.uk).



© Cuzco Centro Investigación Agrícola



©UniversityNovaGorica, rendering of the green terrace's loops, gardens in the Koren Park project

Description

This NBS is pretty connected to the previously described Terraced Sports and Leisure. In that case the narrative was associated with the creation of a different form of sport stadium, while in this case the focus is about creating more in time, loop shaped little gardens for people to meet. Such gardens could be also cultivated with flowers, trees, etc. in addition to the wild gardening technique adopted for the rest of the park. Such loops will be accessible by people with different abilities and will be located close to the greenhouses, the animal farm and the community gardens to enhance the ecosystem effects and have a constant mobility of people in the area. It can be realised by simple soil movement and in the traditional settlement this was done by the community itself. Same could be proposed for Nova Gorica.

19. Terraced Gardens

Positive aspects/challenges

Having terraced spaces gives easier access and use to citizens. The terraces provide sitting space, as well as easy management of the green.

Terraced

loops are like little amphitheatres where groups of people can gather, alone or with others and have their own time sharing. By being green these spaces are also favourable to ecosystem services, especially in winter when use by people is less frequent.

Participation process to use the NBS

CO-DIAGNOSTIC

This solution is related to the photovoice and health survey data gathering when people asked for more meeting facilities, open air and in rooms.

CO-SELECTION & CO-DESIGN

The design was proposed by the task force, using the architect's experience in organising the space in low-cost works.

Best Practices and References

We have reported the case of Cuzco in Peru, which looks similar to the one proposed even if made for agricultural purposes.

20. Food Forest

Description

“In layman’s terms, a food forest is a type of garden where you grow many different fruits, nuts, herbs, and even vegetables. It is designed to mimic a natural forest and has many different layers, from trees to shrubs, ground cover plants, vines, and more. These plants all work together, help each other grow, and create a balanced ecosystem that provides an abundance of food and resources for you and an ideal habitat for your wildlife helpers.” (source www.permacultureapprentice.com). Creating a food forest in the Koren NBS park means integrating it with the Tasty Garden of learning (the locations may also coincide to make a unique NBS) in the terraced orchard above the Green&Blue Theatre. In that position in fact people will have an orchard combined with other kinds of edible products, with benches and tables to sit and eventually taste. Moreover, in the same location the local task force of URBiNAT, jointly with the ECOC office, have already planted the “orchard of forgotten seeds”, namely a selection of old autochthonous fruit trees.

Positive aspects/challenges

Introducing permaculture is fundamental for a change. Permaculture is a practice that makes a holistic vision of an area’s transformation to improve ecosystem services and biodiversity for food and good production. Implementing the principles of Permaculture will give additional value to the Koren NBS park in terms of education and knowledge, offering a space to people to know more about this consolidated approach. Beyond this, the benefit will also be getting food and fruits available to anyone. The NBS is a challenge because it needs some investments and time, given that the full functioning of the orchard and food forest takes some years (5 to 7) to be fully circular.



A wide view of the Atlanta Food Forest at Browns Mill.
(Photo courtesy of AgLanta)



©Permaculture_FoodForest_Artwork by Kt Shepherd

Participation process to use the NBS

CO-DIAGNOSTIC

This solution is related to the photovoice and health survey data gathering when people asked for more meeting facilities, open air and in rooms.

CO-SELECTION & CO-DESIGN

The design was proposed by the task force, using the architect’s experience in organising the space in low cost works.

Best Practices and References

There are plenty of examples of Food Forests worldwide. For guidelines we may refer to, as an example, <https://permacultureapprentice.com/creating-a-food-forest-step-by-step-guide/>.



ORIGIN Tree House / Atelier LAVIT. Image © Marco Lavit Nicora



Tree platform in Allai, Italy

21. ECOC Treehouse

Description

Tree houses are in the imagination and dreams of all in their childhood. They represent the immersion in nature, adventure, safety and independence. The tree houses or tree platforms were suggested in Nova Gorica in the Bid Book for the Candidature to the Capital of Culture 2025, that was approved. In this light the URBiNAT project, that was mentioned as a referential capitalization for the bid book on this project, proposed their implementation in the corridor area, taking advantage of the numerous existing trees and forests. The design has not yet been imagined, but will take advantage of existing experiences and shared with the population.

Positive aspects/challenges

The NBS is included in the GoGreen Axe of the Culture Capital 2025 Bid Book, thus will be implemented soon. It represents one of the most common natural projections of human beings, thus will certainly be welcome by all.

Participation process to use the NBS

CO-DIAGNOSTIC

The idea comes from the Bid Book and as such the co-diagnostics mainly looked for the appropriate place to locate it.

CO-SELECTION & CO-DESIGN

The definition of the NBS mainly happened within the ECOC and municipalities office. The University of Nova Gorica will elaborate the proposal.

Best Practices and References

There are plenty of examples as this is an historic practice. We have reported 2 pictures from Atelier Lavit and Allai municipality, displaying traditional and modern concepts of tree housing.



URBiNAT_Kiosk in the Koren Area, Summer 2022,
©Prostorož Nova Gorica, Photo Marco Acri



URBiNAT Wagon in Hoje Taastrup, Photo Marco Acri

Description

This NBS is an ad-hoc evolution/alternative of the multifunctional wooden structure that is included in the URBiNAT NBS catalogue. It consists in a movable structure that takes missing services to the community in a natural environment and follows the principles of sustainability. It has been inspired by already existing similar initiatives, namely the Mobilet in Nova Gorica, a kiosk, the Wagon in Hoje Taastrup and the community bus in Nantes. In the case of Nova Gorica, the Mobilet is a wooden kiosk located in an existing little forest, serving non-alcoholic drinks and ice creams and works as a nucleus of initiatives especially targeted for kids, such as games, competitions, educational gatherings, etc.

22. Kiosk/Wagon

Positive aspects/challenges

This NBS has the advantage to create a service where it is missing, by simply locating a little structure. The effect is of community gathering and letting people experience an area previously underused. There are no challenges in the implementation of this very simple solution that can be integrated with other NBS oriented technologies, such as photovoltaic or green roof, organic food provision, etc.

Participation process to use the NBS

CO-DIAGNOSTIC

This solution was in Nova Gorica already experienced in a different parish.

CO-SELECTION & CO-DESIGN

In a single meeting with citizens the decision was taken to locate the mobilet in the Koren area for testing and feedback.

Best Practices and References

As said, examples come from URBiNAT front runners and followers.

23. Greenhouse

Description

Greenhouses are an historic concept and solution. They consist of glassed structures meant to recover and grow plants and saplings in cold winter times. There are astonishing examples of such structures worldwide, with famous ones such as Jardins des Serres in Paris, although similar solutions used to host human activities had become very frequent in the 19th century such as Les Halles in Paris, Grand Palais in Paris, Kew Garden in London, etc. In this light, inside a greenhouse there were historically activities of all kinds, tree nurseries, shops, expositions, restaurants, etc. In this perspective goes the idea of one or more greenhouses in the Koren NBS park, namely offering different services to the community, filling the existing gap of bars and restaurants in the area to keep people in.

Positive aspects/challenges

The proposed green houses in Nova Gorica will be of medium dimensions, but more than one in a row, to be constructed/positioned in different steps according to the needs and in an inclined slope. They will be having infrastructures such as heating and sewage, and will host different facilities such as bar or catering, meeting spaces, permanent/temporary exposition solutions, etc. Their construction needs funds and detailed design, even because it is associated with the soccer fields and the community gardens and the animal farm (the greenhouse could also give shelter to animals).



Greenhouse in Mukross House park, Ireland, Photo Marco Acri



Greenhouse in Tivoli Park, Ljubljana, photo Marco Acri

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics highlighted the need for gathering spaces and bars, also in winter time, due to the lack of them presently.

CO-SELECTION & CO-DESIGN

The co-design solutions were found in the proximity of the soccer field, considering also the need to build dressing rooms for sportsmen, thus with water, sewage, electricity, etc.

Best Practices and References

Good example merging tree nursery and bars and restaurants and cultural facilities is the Serra dei Giardini in Venice, <https://www.serradeigiardini.org/it/>.



The ceramic Greenwall in a rendering, how it could look like, ©URBiNAT_IAAC



The ceramic tile to compose a ceramic wall, ©URBiNAT_IAAC

24. Ceramic Greenwall

Description

It is a 3D printed ceramic green wall composed of 3D printed ceramic pots that contains soil, plants and a bio photovoltaic system. This system harvests the energy produced by bacteria living near the plants' roots, which is used to activate the irrigation system, making it energy self-sufficient. It includes sensors detecting the moisture in the soil, minimizing irrigation.

If vegetables are planted in it, it can also be used as a vertical vegetable garden. The green wall can be specifically designed and adapted to different spaces, local needs, and climatic conditions. It provides several urban ecosystem services, such as: energy production, flood reduction (increasing porosity in cities), air quality enhancement, and heat island effect mitigation.

Positive aspects/challenges

This NBS is extremely flexible thanks to 3D printing (its shape can be adapted to respond to size, climatic and social needs). It requires a small amount of energy which is self-produced making it self-sufficient. It can be adapted to several ecosystems, thus enabling the selection of autochthonous plants.

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics did highlight the opportunity to use several informal facades to improve energy performance of buildings.

CO-SELECTION & CO-DESIGN

The solution was proposed to inhabitants and the municipality and was accepted as accepted. Possible modifications to the design were asked.

Best Practices and References

The living green walls are inspiring this solution.

25. Urban Mushroom Farm

Description

The urban mushroom farm is a modular system developed to grow edible mushrooms in the urban environment, producing both food and construction materials. The solution is composed of modules that are designed with two main aims: allocating the substrate needed to grow mushrooms and shaping the construction material that can be obtained from it. The surface of the modules is designed according to the climatic conditions of the installation site (e.g. solar radiation and humidity) to provide the optimal environment for the substrate to grow the mushrooms. With the aim of being as sustainable as possible, the modules can be also fabricated with ecological or recycled materials. In addition to producing food and construction material, the solution acts as a demonstrator, creating a 'culture of caring' for locally produced food and awareness about the potentials of mushroom farming in cities. This solution is integrating the food forest that by definition may grow mushrooms, in addition to other edible natural products.

Positive aspects/challenges

Beyond the evident benefit of producing mushrooms, including the educational process, this technology offers the substrate, once the mushrooms are grown, that can be used as a sustainable construction material (e.g., bricks or insulation panels). It promotes farming in general, as well as the mushroom production in cities, as a practice that is still not widespread, with several benefits also for sustainable medical industry given the benefits of mushrooms for health. In addition, the solution is also a tool for social inclusivity since it can be maintained by local communities.



The Mushroom module prototype by ©URBINAT_IAAC



Paddestoelen Paradijs exhibition, Urban mushroom cultivation, in Amsterdam

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics did not highlight a need for such a solution.

CO-SELECTION & CO-DESIGN

Considering the benefits and the extremely low cost the solution has been immediately accepted by the citizens and stakeholders.

Best Practices and References

<https://urban-farm-it.com/mushroom-growing-consultants/>



Raised vegetable garden in Nova Gorica, in front of the Municipality



The mobil2 module prototype by ©URBiNAT_IAAC

Description

Raised vegetable gardens are a practice that is very common in cities (with historic traditions) with the advantage to facilitate cultivation for all, including elders and people with disability, as well as keep cultivation safer from “aggressive” animals, such as rats, etc. An upgrade of raised vegetable gardens is the combination with benches or similar to make them multifunctional, as well as make them movable. The mobile vegetable garden is a modular solution for growing food and plants with the option to dislocate them according to the needs of plants and the owners. In fact, beyond getting the best climatic conditions, it can be assembled and moved by users in order to customise open public and private spaces according to their desires.

26. Raised and/or Mobile Vegetable Garden

The solution can be complemented with an augmented reality app that citizens can use to get information about the plant’s species and that can support awareness raising and educational activities.

Positive aspects/challenges

The benefits of raised gardens are in their comfort for all and safety. By making them movable, there are options of customization in several configurations according to users’ preferences and space’s needs, offering the opportunity for social interaction in the public space. The “mobility” allows to change the place of installation and therefore it creates a dynamic space (e.g., by moving benches from sunny spots to shadows).

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics did not highlight a need for such a solution.

CO-SELECTION & CO-DESIGN

Considering the benefits and the extremely low cost the solution has been immediately accepted by the citizens and stakeholders.

Best Practices and References

This is an historic solution, thus very successful by definition. About mobility the IAAC proposal seems very successful in potential.

27. Pedestrianization

Description

The process of pedestrianisation is one of the NBS per definition, giving it restitution to humans their ability to walk and be car independent. This means covering medium distances (3-6 kilometres per day, 10.000 steps, 1600 k/cal) to carry out normal daily duties. This happens in open air, in a semi-natural environment and with low impact carbon print. Its implementation consists in closing fully or partly streets and squares to vehicles, providing alternative solutions for public mobility (buses, trams, bike sharing, etc.)

Positive aspects/challenges

This NBS takes an enormous set of advantages, such as fitness and improved health for citizens, less pollution (light, noise, smog, etc.), enhanced ecosystem, more green, better business opportunities (people walk, look at shops, buy more sustainable in quantity and quality), more social interaction, better urban landscape (with no stable obstacles given by cars and vans). The only challenge is the mental change needed to avoid citizens questioning evident improvements.



Pedestrianized area in Nova Gorica in the Koren NBS park border



Approved project for extensive pedestrianisation of Champs-Élysées in Paris

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics often highlighted the danger of the streets along the Koren area. Citizens interviewed, in the Slovenian side, are favourable to pedestrianisation, the Italians much less so.

CO-SELECTION & CO-DESIGN

The proposal was made by citizens to slow down car traffic in the West Area of the Park by making a hybrid square-street, similar to the Parisian one, with physical or 3D painted traffic bollards.

Best Practices and References

The case of Paris is a global one, but Ljubljana did it successfully from 2007 to 2020 with outstanding improvements in the quality of the core urban area.



©URBiNAT_University of Coimbra



©URBiNAT_IAAC (NBS called Food Production and Leisure)

Description

It's a modular pavilion with multiple uses or purposes: safety light, on low density space; a warm protected place to sit or just a collective place to compost the agriculture rests from the communitarian vegetables gardens; these structures can exist as landmarks or just flexible and enclosed community spaces.

28. Multifunctional Wooden Structure

Positive aspects/challenges

This NBS takes an enormous set of advantages, such as fitness and improved health for citizens, less pollution (light, noise, smog, etc.), enhanced ecosystem, more green, better business opportunities (people walk, look at shops, buy more sustainable in quantity and quality), more social interaction, better urban landscape (with no stable obstacles given by cars and vans). The only challenge is the mental change needed to avoid citizens questioning evident improvements.

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics stressed on the need of meeting spaces.

CO-SELECTION & CO-DESIGN

The solution was found interesting and easy to implement. It can be combined or assimilated to the Territorial Multifunctional Wooden Theatre/ Garage as well as the Kiosk or Wagon.

Best Practices and References

The Multifunctional Food and Leisure production is going to be implemented in Sofia and will certainly be a success.

29. Birds/Bats/Insects Housing

Description

If bees deserve at present a specific attention for their role in feeding the ecosystem, efforts have been also made in the years to support the preservation and maintenance of all other living beings, in particular birds, bats and other insects that contribute to the ecosystem balance. Birds, bats, insects, houses or hotels, are thus welcome in urban environments and should be seen as an initial step of renaturing. Birds control insects' number growth, in specific bats for their capacity to eat mosquitoes on summer nights, but also insects as bugs, crickets, butterflies, etc. that support pollination, soil regeneration, etc. Nova Gorica, thanks to its experience with bees, has opened the future to augmented biodiversity, especially welcoming mosquitoes eating animals and foreseen the increase with new water games. Other problems may be augmenting ticks for the presence of forests, wild animals, warmer winters, and birds may be of help in this regard.

Positive aspects/challenges

These numerous houses and hotels are low cost (i.e., bat houses could also be purchased individually and placed on the facade) and positively impact the ecosystem. These solutions have also an important educational purpose, as seen for the beehive in Nova Gorica.

Participation process to use the NBS

CO-DIAGNOSTIC

The questions about mosquitoes and ticks were very frequent.

CO-SELECTION & CO-DESIGN

Solutions were investigated to counter mosquitoes and ticks and these are natural ones.



Richter Clyde Perky Bat House against mosquitos built in 1929



<http://www.boredart.com/2016/12/fascinating-land-art-installations.html>



Bugs hotel

Best Practices and References

As shown in the picture, the Bat House of Richter Clyde Perky was built already in 1929. However, traditionally bats were not kept out of houses for their beneficial role.

Socio-cultural NBS



30. Cultural Mapping

Description

Methodological tool in participatory planning and community development, it makes visible the ways that local cultural assets, stories, practices, relationships, memories, and rituals constitute places as meaningful locations. Process of collecting, recording, analysing and synthesising information to describe the cultural resources, networks, links and patterns of usage of a given community or group, also strategically used to bring stakeholders into conversation. Flexible according to the objectives, purpose and what one wants to map. E.g. facilities, organisations, stories of places, historical sites, for the past (memories and landmarks) or for the future (aspirational mapping), for the community or for outsiders. It can be combined with approaches such as footprint of women (gender), forbidden cities (safety), asset-based community development (community assets), arts.

Positive aspects/challenges

Specific focus on cultural aspects and elements of a place, both tangible and intangible, that bring meanings to places. Focus on bottom-up processes for making visible the knowledge of citizens/residents. Allied with deep mapping, community mapping, participatory asset mapping, counter-mapping, qualitative GIS, and emotional mapping.



Cultural mapping exercise, Porto, URBiNAT



Cultural mapping exercise, Porto, URBiNAT, Photo GUDA

Participation process to use the NBS

CO-DIAGNOSTIC

Interviews were made and stakeholders consulted about the existing activities.

CO-SELECTION & CO-DESIGN

The Culture Capital 2025 initiative facilitated work about the existing practices, although provoked an explosion of new ones.

Best Practices and References

Cultural mapping protocol and general guidelines for implementing participatory activities: annex 1 of URBiNAT's deliverable D3.1. Participatory activities for mapping: methodologies applied in the 2nd stage of local diagnostics, URBiNAT's deliverable D2.1 Cultural Mapping Toolkit by the Creative City Network of Canada (English & French).



Community workshops organised in Porto



Preparatory sessions for a community Workshop in Gorizia Nova Gorica during the EU days in 2022

Description

Open meetings facilitated and organised in small groups in which participants are invited to debate a specific theme. This method allows us to explore and develop bottom-up and grass-roots community development skills for people within their own communities. Participants can identify their most pressing social determinants, with positive and negative aspects of their environment, bringing social justice and environmental sustainability. The method also assists people gain a clearer understanding of the principles of community development and community capacity building, increasing awareness and understanding of the main themes, terms and definitions.

31. Community Workshops

Positive aspects/challenges

It is a method that involves citizens in solution-based actions around neighbourhood issues. That is not only essential, but smart, because they are experts in that area and for sure have innovative ideas for solving long term problems. The method assists to arise this invisible wisdom and create a collective view for the community's future.

Participation process to use the NBS

CO-DIAGNOSTIC

It supports the engagement of the citizens and stakeholders in new projects, as URBiNAT. Depending on the goal, participants share knowledge, express needs and perceptions. It was associated with different tools, such as 3D model thinking. In Nova Gorica a workshop was done jointly with Italian citizens to talk about the border.

CO-SELECTION & CO-DESIGN

The usual technique adopted has been the World Cafe, after an assessment made by experts sharing the state of the art with citizens.

Best Practices and References

URBiNAT Community workshop in Porto, Nantes, Sofia, Brussels, Siena, Nova Gorica.

Porto – Community workshop to present the healthy corridor preliminary plan.

Sofia – Community workshop to present the Local diagnostic.

Nantes – Community workshop to play superbarrio.

32. Walkthrough/ Thematic Walks

Description

The Walkthrough may be included in the sphere of the heritage walks, somewhere also called Jane's walks, in URBiNAT also part of the Urban Trekking Initiative by Siena. Walkthrough is a method of analysis that combines observation in situ with an interview simultaneously. It creates an accepting environment that puts a small number of participants at ease allowing them to thoughtfully answer questions in their own words and add meaning to their answers. It also identifies the negative and positive aspects of the analysed environments. It allows identifying the perception of the residents in the place where they live. In this technique, they are invited to appropriate the neighbourhood and evaluate the territory, its inadequacies, surplus or missing furniture, barriers and potentialities, among other important elements. Walkthrough is a participatory method and solution (NBS) that creates awareness while participants walk and discuss what they feel, see and know.

Positive aspects/challenges

It's a participatory nature-based solution, with a human-centred approach, to engage citizens in environmental and social challenges of their territory. It can be either virtual or physical, although the physical presence makes a difference. It puts the focus on the community collective vision that offers a positive and useful view for the future, at the same time motivating people to go on together. In addition, it enables knowledge of hidden stories of the site, coming from participants, giving info of reconstruction, important for regenerative efforts.



Walkthrough in Gorizia, May 2022



Urban trekking in Siena, 2021

Participation process to use the NBS

CO-DIAGNOSTIC

It supports the engagement of the citizens and stakeholders in new projects. Participants express needs and perceptions related to NBS. Participants say what they like, they don't like and what they would like to change while they walk in the territory. In Nova Gorica it has been often used.

CO-SELECTION & CO-DESIGN

Participants can discuss solutions and design it in situ in direct contact with the challenges that need to be addressed. It also can generate creative thinking and motivate people to look for a solution.

Best Practices and References

URBiNAT cities have widely used it. Also, the Urban Trekking Initiative from Siena as an alternative.



Rose garden of the Kostanjevica Monastery, that is also including an old library, Koren area, Nova Gorica



Interpretation house for nature in Koserski Bajer, Ljubljana

Description

The concept of educational spaces is merely to assign a specific importance to a function, in this case education. There is a need in fact to support the green transition by informing, educating, teaching, discussing. Schools are important, but too often they rely on traditional forms of communication that may be integrated by others, maybe more collaborative and involving other tutors than teachers and professors. In Nova Gorica the idea came from little wooded spots to talk about nature and renaturing, animals, co-living, etc. Similarly, to what has been done in Ljubljana in Koseze with little interpretation boxes. Nevertheless, in Nova Gorica the idea enlarged to imagine more options and spaces, detaching the education from a physical space by giving it an important role to be played anywhere.

33. Educational Spaces

Positive aspects/challenges

The need to tell stories, especially to children, is fundamental. Today the electronic devices are taking youngsters out of the natural environment and local histories. This NBS is meant to reconnect the younger generation to the site, also by means of elders and their life capital.

Participation process to use the NBS

CO-DIAGNOSTIC

People in the diagnostics referred to the case of Ljubljana as a desired one. The inspiration came during community workshops and walkthroughs, even if the task force itself had this practice in mind since the inception of the project.

CO-SELECTION & CO-DESIGN

The concept has been associated with several places, including the schools, kindergartens and the teenagers dormitory in the area

Best Practices and References

We list here the inspiration, the Koserski Bajer educational interpretation spots. However, Nova Gorica has several options, including the big central library

34. Community Kitchen

Description

The Community Kitchen concept addresses a communal form of managing food to save resources in terms of logistics, waste, energy, as well as creating more inclusive environments. The community kitchen in fact is meant to share goods and services, with the aim to create a collaborative group of individuals, usually living in the same area, with sustainability goals. The community kitchen often refers to a building that is the location of activities, where people may cook together, share food and recipes, as well as donate these two others in need. This approach, which may in the long run be extended to other broader concepts of communal living, may heavily reduce the waste of food that is shared and/or purchased in common, reduce the energy consumption given there is only 1 kitchen with connected devices, and build connections among people. In Nova Gorica the NBS has a very tangible asset, namely an open-air kitchen, maybe protected by a wooden structure, inside one of the terraced loops, available to citizens for communal eating, using potentially also the produce coming from the community gardens.



Park Turn et Taxis in Brussels

Positive aspects/challenges

There are plenty of advantages in this approach, that may be enlarged to many more common services. The objective may be the model of the “Contrade” in Siena, where a community shares food, time, voluntary work as well as baby care.

Participation process to use the NBS

CO-DIAGNOSTIC

During the co-diagnostics people mentioned the need for communal spaces in the area, also for food consumption sharing, namely Barbecues.

CO-SELECTION & CO-DESIGN

The idea of the community kitchen came from examples taken by the local task force from Siena, Nantes, Brussels and other references in Europe and globally.

Best Practices and References

Good examples are La Cocotte Solidale in Nantes, The Contrada in Siena, Community Kitchen in Munchen (<https://community-kitchen.com/ueber-uns/>) and Park Turn and Taxis in Brussels, <http://www.sustainable-everyday-project.net/urbact-sustainable-food/?p=5212>

The “Contrade” system in Siena, with weekly dinners organised by members



Agence APS, Ville de Grâne

<https://www.agenceaps.com/realisations-aps/theatre-de-verdure-grane-drome/>



Mural painting in Ravenna, photo by Marco Acri

35. (Community) Arts Projects

Description

A community-based arts project is where one or more artist's work with a community to facilitate a creative process that enables participants to express their needs, aspirations, inspirations, identity or sense of place. Such activities are also referred to as community arts, artists in the community or community cultural development (CCD). However, the project could be also imagined by the community and created by the artist as the "operating hand" of a group. Community based arts projects are increasingly being used because they are able to reach people more deeply, to create bonds between all stakeholders and have a meaningful impact on their lives: their success is also on the capacity to create intangible heritage, like live performances, oral productions, video and music works that enable rapidly community cohesion. This method allows the co-creation and participatory processes participants to "build" objects together and helps people to better understand their common values, system of beliefs and their collective sense of belonging to the places / communities.

Positive aspects/challenges

It engages and involves citizens in co-design processes simultaneously to co-creating real life objects or interventions in their neighbourhoods. Moreover, it reinforces the "implementation" orientation since the citizens "see" tangible collective achievements during the process itself. It can test solutions developed in the co-creation process.

Participation process to use the NBS

CO-DIAGNOSTIC

The Culture Capital candidature happened during the co-diagnostics.

CO-SELECTION & CO-DESIGN

The Culture Capital Bid book insists much on live performances and art projects with communities.

Best Practices and References

URBiNAT Community Based Arts Projects in Porto, Høje-Taastrup, Nova Gorica and Brussels

36. (Community) Sport projects

Description

A healthy active life, based on basic sports activities, is always on the list of doctor's suggestions for improvement. Sports are among the few human activities that better connect health, nature, sharing, respect and sustainability. This makes sports a perfect intangible NBS. Slovenia is already known as a country that invests in sport and Slovene people are very sporty and active. Nova Gorica is also known as a city where sport is important, in fact much of the pushes for the healthy corridor were insisting on sport facilities, for soccer, tennis, bike, etc. The healthy corridor has been imagined also in this respect, improving the soccer field, now open to the citizens and multifunctional uses (hosting 1 regular large match 11 vs 11 or 3 regular medium matches 8 vs 8 for organisation of tournaments), reorganisation of the sport facilities in dormitory, a new swimming pool (the NBS called Natural Swimming Pool), improved bike lanes and better connection to the sport stadium. All these physical facilities will be organised efficiently with a coordinated calendar of sport events, where education on well-being will be the focus.



Šempeter pri Gorici sport area



Fitness initiatives in Nova Gorica connecting sport and energy

Positive aspects/challenges

Improving sport, thus health and body care, is a very positive investment.

Participation process to use the NBS

CO-DIAGNOSTIC

Improving sport facilities was always at the top of all participants' requests (citizens and stakeholders, including the municipality).

CO-SELECTION & CO-DESIGN

Important in the co-design was making free access to the soccer field.

Best Practices and References

URBiNAT, Hoje Tarstruup has also important sports facilities that create community empowerment



©Pakhuis_de_Zwijger_ WeMaketheCity Festival, a poster



Bauhaus Fair EU 2022

Description

“WeMakeThe.City is a festival that makes cities better. For five days in a row, we will tackle urgent everyday challenges in the urban environment, together with audiences and experts, spread across different locations in the Amsterdam metropolitan area” (Source UrbanEurope). The Initiative in Amsterdam, that became very successful and helped considerably the city towards a Circular economy transition, could be replicated as a fully participatory experience also in the area of Nova Gorica and Gorizia, as it has been made in other cities, for example Bruges through EnEntrepot. The most important aspect of this festival is the kind of model put in place by the organisation, Pakhuis de Zwijger, that enabled people to have open discussion every night about problems and potential solutions in their city, creating a ferment of interest about collaborative practices for urban sustainable development.

37. WeMaketheCity (Festival)

Positive aspects/challenges

During the co-diagnostics, identifying the X-Center and acknowledging the need of people to discuss and share ideas, the Task Force went in touch with the Dutch organisation, realising its model replicability.

Participation process to use the NBS CO-DIAGNOSTIC

During the co-diagnostics, identifying the X-Center and acknowledging the need of people to discuss and share ideas, the Task Force went in touch with the Dutch organisation, realising its model replicability.

CO-SELECTION & CO-DESIGN

The X-Center, URBiNAT Living Lab, is made for such participatory, open discussion. Anybody was considering this successful story, the WeMaketheCity, as suitable for the X-Center aim.

Best Practices and References

The WeMaketheCity is a Pakhuis de Zwijger in Amsterdam, <http://wemakethe.city/>, but there are other examples, as the Entrepot organisation initiative in Bruges, <https://hetentrepot.be/>

38. Superbarrio

Description

SuperBarrio is a video game designed to gather citizens' opinions about public space design and programmes. It allows citizens to visualise, navigate and interact with their neighbourhood that is represented as a detailed three-dimensional model. With a simple and intuitive interface that any user can understand, the solution gives users the possibility of playing with URBiNAT NBS or urban elements (e.g., smart urban furniture, benches, trees, markets, micro-windmills, etc.) in the public space. The user can drag the NBS in the 3D model and can visualise data about their impact on the urban environment such as data regarding accessibility, productivity, economy, ecology and social interaction for the neighbourhood. Data about the solutions proposed by citizens are collected in a repository and statistics about their preferences can be created.

Positive aspects/challenges

As an online tool, it widens the potential audience of participatory processes, overcoming the limits of conventional methodologies. It enables the collection of a consistent dataset about citizens' preferences, allowing designers and municipalities to thoroughly investigate the decision-making process of the user and to potentially find user patterns.

Participation process to use the NBS

CO-DIAGNOSTIC

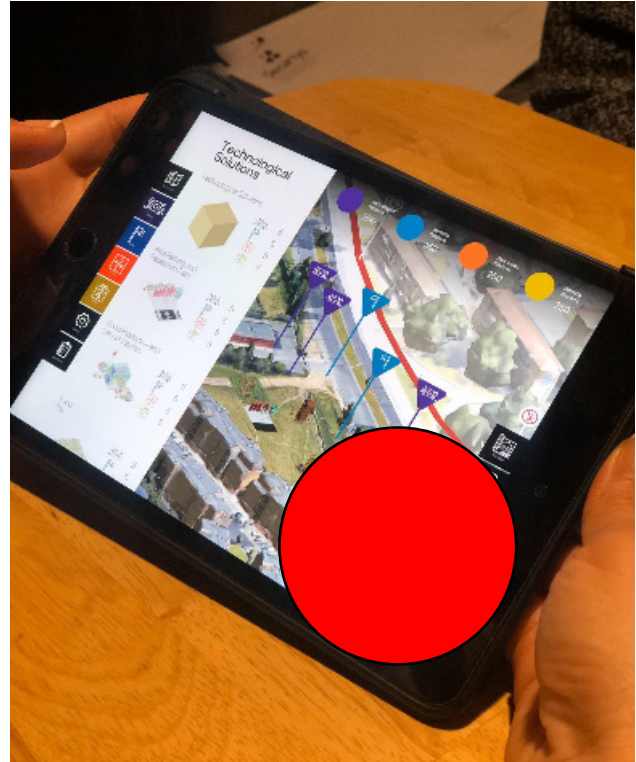
Superbarrio can be used to identify needs and preferences of residents in the local communities and study areas of URBiNAT. However, for the cross-border peculiarity of the area a management, cross-border tool (with images more than words) appeared important.

CO-SELECTION & CO-DESIGN

The solution can be used as a digital enabler during the co-selection process. It can support decision-making processes by providing data on game sessions.



©URBiNAT_IAAC, Superbarrio 3d visualisation



©URBiNAT_IAAC, Superbarrio app. For device

Best Practices and References

Superbarrio has been developed by IAAC and already tested in Barcelona, Genova and Favara. More info can be found at: www.superbarrio.iaac.net

Solidarity NBS



39. Solidarity Markets

Description

The exchange markets are examples of practices that promote new ways of consuming goods and services based on reciprocity, solidarity and justice. They can strengthen a more adequate perception of public space as a space for everyone. The markets allow pedagogically to work with the detachment of children in relation to toys and various goods consumed, unravelling the sense of fun from the idea of accumulating objects that are always new (Lucas dos Santos & Caitana, 2014). Associating elements such as generational sustainability and the socialisation of children in the context of urban regeneration further enhances the markets in their transformative role, since: it makes the child aware of the relationship between finitude of resources, the recognition of urban spaces as a space that must integrate everyone without discrimination and the reconstruction of consumption as a collective act.

Positive aspects/challenges

Solidarity markets promote new ways of consuming goods and services based on reciprocity, solidarity and justice, as well as no-waste goals. These markets contribute to the change of individual and collective behaviours based on other consumption criteria already experienced since childhood. If children are involved, this NBS helps raise children's awareness about limits and scarcity of natural resources, urban inclusion, and consumption as a collective act.



©URBiNAT_Catalogue



Solidarity market in Gorizia, ©associazionenuovolavoro

Participation process to use the NBS

CO-DIAGNOSTIC

The co-diagnostics activities highlighted this need, and the existence of similar initiatives, both looking at the statistical data (the poverty, immigration rates) and local, participatory mapping.

CO-SELECTION & CO-DESIGN

The design of a new NBS park in Koren was offering many new spaces for people aggregation where markets could have been constant. In fact, there are other ones, as the flea market, food markets and the alternative currency.

Best Practices and References

URBiNAT solidarity market for children in Porto called CampMarket. The Exchange Market for Children in Coimbra Portugal, <http://nacasadaesquina.blogspot.com>. Several local NGO run shops in Gorizia and NOva Gorica, i.e. Associazione Nuovo Lavoro, <http://www.associazionenuovolavoro.org/wordpress/>



©Beyond Bric-a-Brac Flea Market Brussels



Flea Market in Gemona, Friuli Venezia Giulia Region (same of Gorizia)

40. Flea Markets

Description

The flea markets could also be defined as solidarity markets whenever the financial outflow of the events has a social impact. In general flea markets are seen as positive initiatives because they guarantee a little gain for people selling or purchasing goods, by reducing their personal footprint and prolonging the life of second/thirdhand objects (which also means keeping historical traces). These flea markets attract numerous people, either for selling or for buying, including enthusiasts of the second-hand markets, offering occasions of conviviality, meeting, debates. These markets are very developed in Italy; in fact Gorizia has a monthly market in the centre in their yearly calendar, and the opportunity to have them in the Koren park would give a significant message about sustainability through circular economy and solidarity.

Positive aspects/challenges

Flea markets prolong the life of objects through very limited monetary flows, so reducing the consumption of new, as well as the individual expenditure. They contribute to the circular economy and to some extent also to the historic identity of a place.

Participation process to use the NBS CO-DIAGNOSTIC

The co-diagnostics activities highlighted this need, and the existence of similar initiatives, both looking at the statistical data (the poverty, immigration rates) and local, participatory mapping.

CO-SELECTION & CO-DESIGN

The design of a new NBS park in Koren was offering many new spaces for people aggregation where markets could have been constant. In fact, there are other ones, such as the flea, food markets and the alternative currency.

Best Practices and References

Flea markets are very common. One of the most famous and largest is Beyond Bric-a-Brac in Brussels

41. 0 waste Kitchen/Market

Description

Food waste is one of the major challenges of our society. Often, food is wasted in all the steps of production. While little can be done for the production, many people and entrepreneurs are taking steps not to waste it in the end, relying on the circular economy and traditional principles. The 0 Waste Kitchen that was proposed in Nova Gorica is meant to collect food that remained from the market or local food shops, or that are close to expiration date, and prepare daily or regular catering service for social purposes. The kitchen may be based on a profit or non-profit organisation (copying several initiatives worldwide) or staffed by volunteers, such as youngsters, the elderly, mothers, etc. The NBS Koren park in Nova Gorica will offer new spaces for new activities, such as the green houses in proximity to the community gardens and urban orchard. The URBiNAT experience has successful stories to tell, and the investigation on Digital Enablers may contribute to the implementation of such innovative ideas.

Positive aspects/challenges

The two main positive innovations are the drastic reduction of food in the city and the creation of a new communitarian form of self-support.



La Cocotte Solidaire, Nantes



Zero Spreco Campaign, offering Last minute food purchase

Participation process to use the NBS

CO-DIAGNOSTIC

The topic of food was often raised when dealing with nature and organic solutions.

CO-SELECTION & CO-DESIGN

During the co-designed the local task force has seen the presence of a daily market in the core area and proposed to connect the healthy corridor to a new system of sustainable local food.

Best Practices and References

We can mention here some initiatives in this regard by La Cocotte Solidaire in Nantes, <https://www.lacocottesolidaire.fr/page/1251740-presentation-de-la-cantine> and ZeroSpreco as good campaign including use of digital enablers, <https://www.sprecozero.it/>



<https://moedamor.pt/aderir/perguntas-frequentes/#como-comprar-mor>



<https://vilawatt.cat/es/la-moned-vilawatt/>

Description

Social currencies could be created with physical (or virtual) support and managed by a community with the objective of promoting local economy, especially in places where there are vulnerabilities. Its use is voluntary and the purpose is not to replace the official currency or to seek the accumulation or capitalization but they are primarily intended to expand exchanges between people with products of different use value, facilitating exchanges that would hardly occur from direct exchange. The necessary basis for its circulation is the democratic management and the mutual trust relationship. Despite its restricted circulation, this currency may have a political meaning, as it results from a community process of construction and decision, strengthening the symbolic autonomy of the subjects and the communities (Lucas dos Santos and Caitana, 2014).

42. GO!2025 Community Social Currency

Positive aspects/challenges

It's linked to simple methods for their implementation, with significant effects and changes in the communities. The social currencies expand access to goods and services, and to the bonds of mutual trust. It alters the local economy with the population's adhesion and allows to keep wealth in neighbourhoods. It may include important segments of the population with no purchase means as the elderly, children, immigrants, the unemployed.

Participation process to use the NBS CO-DIAGNOSTIC

Participants will be able to prepare an action plan. The information brought by the participants and discussed in the collective will help to define the best criteria that apply to the context of the territory.

CO-SELECTION & CO-DESIGN

The definition of name, use and scope, implies an intense discussion in the collective. Their implementation involves a strong relationship of trust among all.

Best Practices and References

Currency Mor in Portugal: <https://moedamor.pt>
 Currency "Waste" – Campolide. Portugal: <http://portugalparticipa.pt/News/Details/2095c60c-11fd-4715-bc97-fcb3864f5597>. In Spain, Vila Watts – energy and social currency: <http://www.vilawatt.cat/es/moneda>.

43. Bank of Seeds

Description

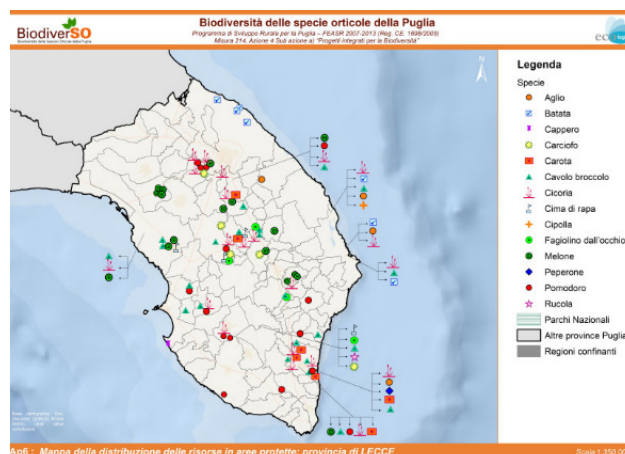
There is a global bank of seeds that has been located in the Lofoten islands in a secret and controlled space. Nevertheless, there is concern about the future of all seeds, not only for their potential disappearance, but also for the copyrighting procedures that too often have seen multinational companies privately owning very traditional specificities. This made a lot of communities organise to gather a memory of their territory, rediscovering traditional knowledge, practices, recipes, etc. The Bank of Seeds is meant to preserve the diversity of plants of a territory, to guarantee a continuation in the future. In Nova Gorica the initiative already started thanks to the effort of the local library, the Goriška knjižnica Franceta Bevka, that has already organised a section of the library containing a closet, open to the public, with selected seeds. In addition, one of the initiatives for the Culture Capital 2025 was to plant, under the supervision of the film director Gregor Božic, a set of “forgotten” fruit trees that was traditional in the area. These trees were planted in the Koren NBS Park a few days before the URBiNAT partners visit in 2023.

Positive aspects/challenges

This NBS is meant to keep authenticity of the territory, memory of the past as well as guarantee that the local biodiversity could replicate. This means maintaining the enormous diversity from territory to territory, reducing the impact of globalised products.



©Kniznica Semen, Nova Gorica, Goriška knjižnica Franceta Bevka



Biodiverso, Map of the distribution of resources in the province of Lecce

Participation process to use the NBS CO-DIAGNOSTIC

There are several initiatives in the area for the protection of autochthonous plants. The proposal of the bank seeds came from the local library.

CO-SELECTION & CO-DESIGN

During the co-design it was imagine to plant forgotten or traditional plants in the Koren Park, as well as recreate a section of the bank of seeds in one of the spaces as the greenhouses that could work as tree nurseries (to distribute saplings to people).

Best Practices and References

The Goriska Library in Nova Gorica is a good practice. Beyond, in Italy for example, we may mention Biodiverso, in Puglia Region, <https://biodiversitapuglia.it/biblioteca/?ids=1569>.



©www.ancoraonline.it



Carnet from the Bank of Time in Rome, Italy

Description

These kinds of organisations appeared in the 80's in the UK named Local Exchange Trading System ("LETS") and replicated a very traditional form of human aggregation based on exchange of services. This concept is based on the following principles 1. the equal exchange of services (goods, services and knowledge of all kinds) intended to satisfy small needs related to everyday life; 2. a residual basis, on the supply, always free, of the same services in favour of people who are not in a position to exchange services but only to receive them (think of the elderly). The goal is to rebuild and strengthen relationships between people, starting from the assumption that time is today a scarce resource for some and too abundant for others. The "time" is the only unit of measurement used for exchanges between members. The value of the service is determined by the time spent on the exchange; therefore the housewife's babysitting hour is equivalent to the mathematics revision hour offered by the teacher, etc. This solution well integrates with others, as the alternative currency or the flea/solidarity markets.

44. Time Bank

Positive aspects/challenges

Efficiency of services exchange. Support for a more tolerant society. Construction of links among individuals exchanging services. Empowerment of trust as a basic human characteristic. Potential increase of inclusion of those with more time to offer.

Participation process to use the NBS

CO-DIAGNOSTIC

This NBS is practised in Gorizia, thus it seemed important to extend its functioning and support it with URBiNAT.

CO-SELECTION & CO-DESIGN

This NBS is practised in Gorizia, thus it seemed important to extend its functioning and support it with URBiNAT.

Best Practices and References

There are huge organisations doing this at the national level in most countries, called time-based currency. In Gorizia it is practised by the Associazione Nuovo Lavoro.

45. Local Farmers Network

Description

The Farmers' market (FM) is an alternative food network that provides shorter delivery circuits of farmers' products to local communities through direct interaction with farmers in the urban environment. This practice enables restoration of the connection of inhabitants of bigger cities to land, fresh and good quality tasty food of healthy origin. It raises people's awareness on nature-friendly farming practices, provides access to good quality local production, thus leading to healthier lifestyles and new social networks and relations. The Farmers' Markets have an additional social value as a community event that may bring additional elements. The farmer-consumer cooperatives or other organisations could operationalize efforts by bringing together farmers and acting as a platform securing farmers meet a set of requirements for access and organise farmer market venues and events. In Gorizia there is already a farmer selling spot promoted by the Italian Fondazione Campagnamica, that sells local organic seasonal products.

Positive aspects/challenges

This NBS builds local social networks taking together farmers and consumers. It shortens the supply chains with much less carbon footprint. This also brings fairer prices of goods and higher gains for farmers. In addition, local farmers' networks also allow sharing and keeping knowledge, practices, and values.



Mercati della Terra promoted by Slowfood



The Local Farmers market in Gorizia, called Campagnamica

Participation process to use the NBS

CO-DIAGNOSTIC

Identification of the socioeconomic profile of the community by analysing the neighbourhood economic data, focus groups, and "cultural mapping. This is needed in the area to promote excellence, especially on Slovenia side for the number of small producers and a little market for them.

CO-SELECTION & CO-DESIGN

Starts with awareness raising and mobilisation of interested local community members and active dissemination of information about the market. Provides opportunities for community members to discuss during accompanying events.

Best Practices and References

For sure the Fondazione Campagna Amica, <https://www.campagnamica.it/> and the Slowfood Presidia are good references, also locally.



CREA LA TUA OASI

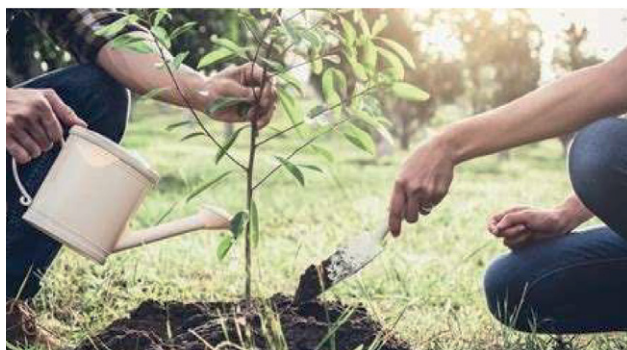
Creiamo oasi per la biodiversità e aiutiamo gli impollinatori.

L'oasi 3Bee è uno spazio virtuale tutto tuo dove compariranno solo gli alberi adottati. Sarà presente anche un riassunto del numero di api che stai nutrendo con i tuoi alberi, i chilogrammi di nettare prodotto, il numero di CO2 assorbita e il grower che supporti.

Diventa un alleato delle api, crea la tua oasi.

Unisciti a 3Bee

Adopt a pollinator friendly tree or a beehive <https://www.3bee.com/adotta-un-albero/?msclkid=6a8ddb5905b61fc2e136bf2c00f85db9>



©www.ohga.it

Description

Adopting trees, beehives, orchards, etc. is becoming more and more important to create a connection between people and nature to improve a more sustainable model of inhabiting the world. The adoption could be either physical, namely offering individuals the opportunity to take care of something (in this case trees, plants or little flower beds) directly, thus guaranteeing the maintenance, or at distance, supporting someone else, as a producer, to carry out the maintenance. Both are very effective in terms of climate change, although the physical adoption can practically improve the surrounding area. Through adoptions it is also possible to benefit from some results, such as little quantity of honey harvested from the field or tree of beehives that was adopted. Adopting a tree may also include the personalisation of the tree itself, for example assigning it a name of someone that was important for the local history, as happened in Ljubljana along the walking path on the former Second World War trench. Any form of adoption implies care and the commitment of people to protection.

46. Adopt a tree

Positive aspects/challenges

This simple initiative, that can be declined towards many more sustainable forms, enhance people's commitment about nature and sustainability, generate forms of crowdfunding (monetary and non-monetary) and in many cases support the work of operators and microbusinesses dealing with organic products or green maintenance.

Participation process to use the NBS

CO-DIAGNOSTIC

Acknowledging the importance of people's commitment to nature can come only through direct talks, community workshops or walkthroughs. In Nova Gorica the need of people to keep the area green was constant.

CO-SELECTION & CO-DESIGN

The initiative can start immediately, by defining the modalities to assign the adoption. UNG, MONG and the European Culture Office are planning this for the entire city.

Best Practices and References

3bee is an organisation promoting trees and beehives adoption, with the possibility to constantly monitor the advancement through an App. We may also mention Ecosia, the Surf engine that plants trees when the contents are searched in the web. Also, Biofarm, <https://www.biorfarm.com/>

