NICE TO HARVEST

THE DEVELOPMENT OF A PROTOTYPE FOR THE AIEST CONTEST OF FRESH IDEAS: TOURISM SYSTEMS FOR A SUSTAINABLE FUTURE

PROJECT REPORT

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1. Problem definition

This contribution focuses on the question of how to solve the problem of land consumption in the accommodation sector. In addition, the concept presented below addresses further questions like how to increase the exchange between tourists and residents and how tourism can act as an agent of change towards a more sustainable society.

2. Justification of the importance of the questions dealt with

According to the German Environment Agency, land use is the problem with the greatest environmental impact in the accommodation sector (Umwelt Bundesamt, 2020). The vast land consumption of tourism infrastructure in general contributes to landscape change in rural regions and to the scarcity of public spaces in urban areas. Number eleven of the United Nation's sustainable development goals addresses a development towards resilient and sustainable cities and communities. The UN states that globally only 16% of land are allocated to streets and open places. Furthermore, it is mentioned that access to open and public spaces is important as it increases productivity and health (United Nations, n.d.a).

Goal number twelve targets responsible production and consumption (United Nations, n.d.b). It is important to understand that one cannot simply blame all responsibilities on companies. Instead, everyone must be held responsible and question its consumption patterns. Even though the UN states that the food loss on the consumer level is not able to be estimated yet (United Nations, n.d.b), the WWF claims that in Germany alone 10 million tons of food could be saved every year (WWF, 2017). Our concept aims to raise awareness and to improve the understanding of what responsible production and consumption means on a personal level.

According to the World Tourism Organization's definition, sustainable tourism should "contribute to intercultural understanding and tolerance" (United Nations Environmental Programme; World Tourism Organization, 2005, p.11). To fulfill this, the exchange between locals and tourists has to be promoted. Therefore, it is important to build platforms and opportunities for tourists to approach the local culture and way of life in a respectful way.

3. Assumptions

Unused, valuable land can be used more sustainably if enough accommodation providers implement the concept explained below. The prerequisite for this is that many accommodation facilities have such unused spaces, which could be transformed into usable areas for the project. Interest on the part of the companies is also assumed.

The local population must also be involved to ensure the success of the project. This requires a certain interest in participation among the residents.

4. Project „Nice to Harvest"

Using the Business Model Canvas, we developed our project "Nice to Harvest".
The main idea is that urban hostels implement an urban gardening concept. Locals and tourists can engage in gardening activities, harvest, and use plants as well as food. Furthermore, hostels organize events linked to the urban gardening concept.

The key partners of the project are hostels (hotels), tourists/ guests, locals, gardeners, volunteers (e.g., from schools) as well as food sharing/ saving organizations.
Key activities are to get hostels on board, to network, to transfer knowledge and to exchange with the key partners.
As mentioned before, the key propositions are that we want to solve the problem of land consumption in the accommodation sector. Also, we want to encourage the exchange between tourists and residents and provide both locals and guests with self-harvested products. Furthermore, with this project we can also promote the concept of social entrepreneurship.
To strengthen the customer relationships, we want the interaction between partners to be dialogue oriented with a high involvement of all. Sustainable partnerships are to be formed out of this.
Customer segments are firstly urban hostels. Those are mostly led by a more open-minded concept and live from the interaction between the staff and guests. They are also open to local guests from the area and even offer events for everyone (This is based on pre Covid-19 regulations). Possible examples include lectures on sustainability in everyday life, workshops in which skills for growing one's own food are taught or seedlings are exchanged. The Tourist/Guests of the hostel are our second customer segment. People who decide to stay in a hostel are often backpackers, who travel alone or in small groups and are looking for new contacts. Thirdly we want to include the locals. Everyone that is interested in such a project and lives in the area. Those urban gardens can offer a welcome platform for interaction for all three segments.
The main key resource to make this project possible are unused (outdoor) areas that can be formed into valuable and utilizable spaces. Besides there is material needed like plants, tools, soil, water, pots, wood and later on materials for workshops. Additional key resource without which the whole project would not be possible are human resources.
Channels to reach all of those who want to be involved are on location, social media, word of mouth, online booking platforms, online platforms (e.g., of hostels). Moreover, it would be great to be displayed in the local event calendar of a city.
The cost structure is very flexible. It consists of development costs. Those are initial costs that must be spent by a hostel. For the other expenses we created a building block kit. Here, interested parties can choose certain elements which they want to

have in their urban garden suitable to their cost range. Ongoing maintenance costs should be funded by the hostel or contributions.

Regarding revenue streams, we want this project to be a non-profit project. It should be financed and supported by all key partners who want to support a sustainable idea. A possibility is crowdfunding.

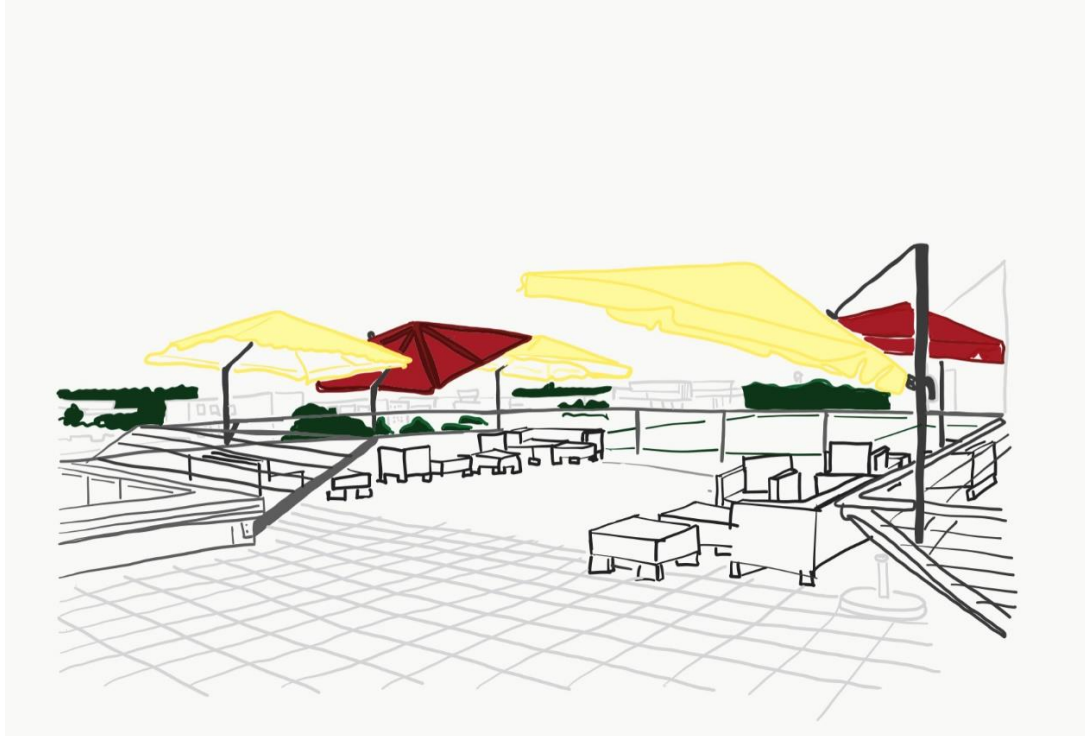Figure 1: a roof terrace example in need of improvement: the low budget hostel in Munich

Figure 2: („Do it yourself") - rain barrel and compost

Figure 3: („Do it yourself") - beehive and storage space for trash cans, which can be planted and easily integrated into the surroundings
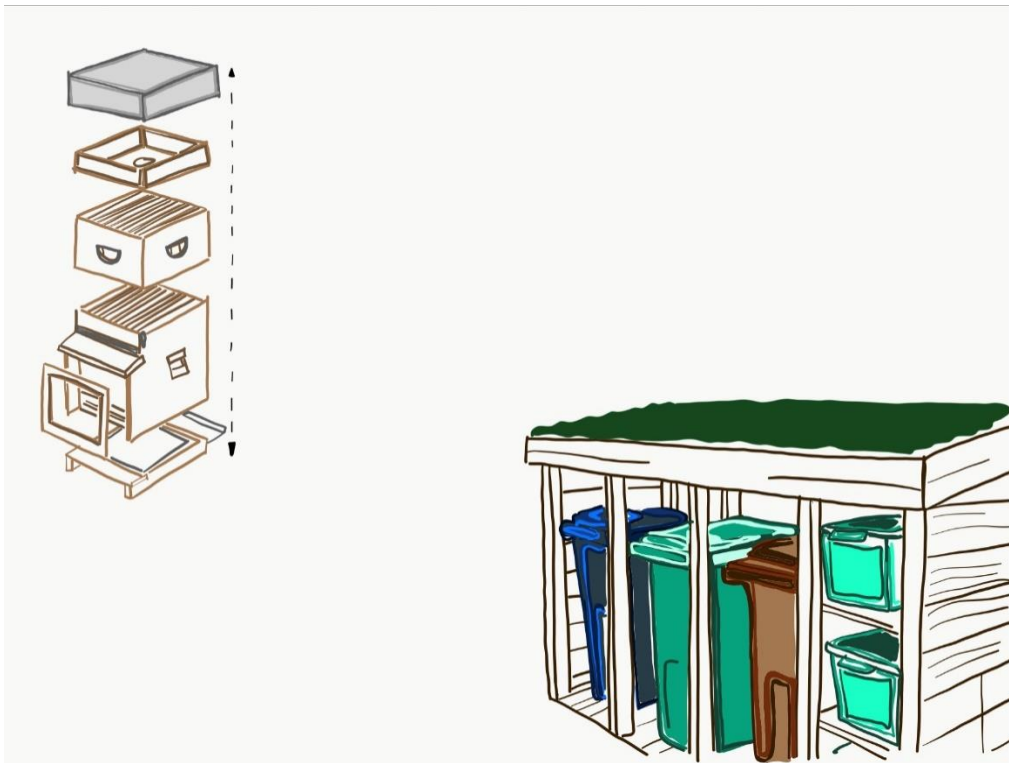

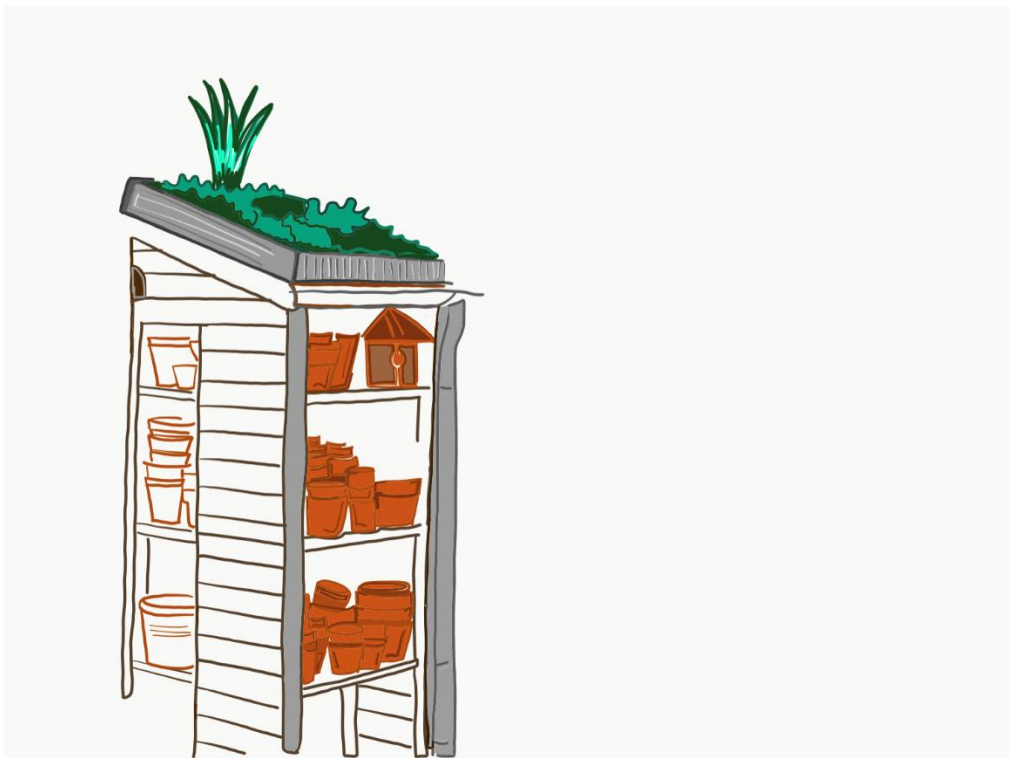Figure 4: Storage for gardening, including surface for planting

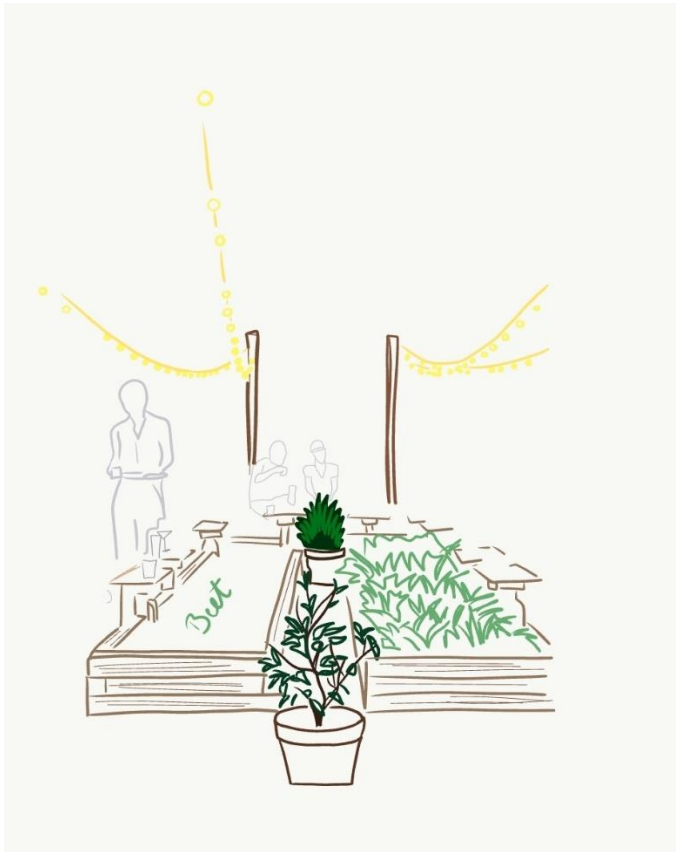Figure 5: Combination of a possible bar station and herb beds

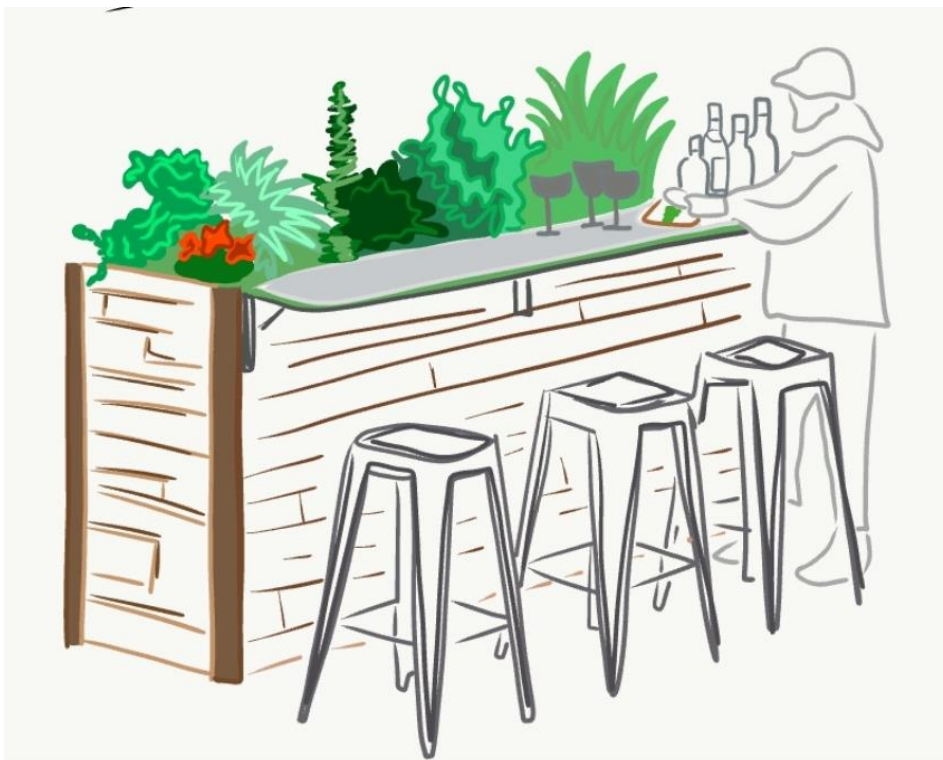Figure 6: („Do it yourself") - bar with a plantable surface

Calculated Costs

Description	Building kit	Price per piece	Quantity
Herb Garden	Soil	7,99€	20 l
	Basil	1,29 €	1 pack
	Chives	1,29€	1 pack
	Parsley	1,79€	1 pack
	Marjoram	1,79€	1 pack
	Oregano	1,79€	1 pack
	Mint	1,79€	1 pack
	Rosemary	1,99€	1 pack
	Sage	1,99€	1 pack
	Plant boxes	2,99€	1 piece
	Raised garden bed	119,99€	1 piece
Rain barrel	Plastic material	20€ - 50€	1 piece
	High quality material	100€	1 piece
Storage room	Wooden tool house	349,00€	1 piece
Bee hive	Bee colony	150,00€ - 200,00€	1 piece
	Bee box	180,00€	per colony: 15kg of honey or beeswax 750 g
	Equipment	150,00€	
	Utility items	50,00€	
Compost	Wooden posts	7,99€	4 pieces
	Wooden panels	4,40€	Individual
	Wooden slots	12,99€	Individual
	Nails	2,89€	Individual
	Compost worms	18,80	0,5 kg
Bar	„Do it yoursef"	210,00€	Individual

5. Outlook and expansion of the project

This contribution focuses on the implementation of an urban gardening concept for hostels in urban areas. However, it is possible to transfer the system to rural areas

without any problems. It can be assumed that there is even more usable land for the project in such regions. It is possible for all kinds of accommodation providers to carry out the concept of "Nice to Harvest". Consideration was given to limiting the concept in hotels to cultivation for the hotel's own use, as local people coming in and out may detract from the professional ambience of the houses. Workshops could, of course, still be offered and coordinated, for example, through the events department of a hotel. The decision on how to implement the concept is up to the hotels individually.

If the project is well received by all stakeholders, it would be possible to expand through the foundation of a start-up. The idea is to create a website that connects local gardeners with hostels or hotels to encourage interaction and dialogue. This network will make it easier for interested businesses to implement the "Nice to Harvest" concept, as it will provide guidelines and all necessary information. Cooperation between accommodation providers will also be promoted.

6. Open questions

It remains to be seen how the urban gardening concept will be received by the stakeholders. In addition, continuous work is needed to create incentives for the participation in the project. It is important to search for further solutions to lower the land consumption in tourism and find further ideas to use space in a sustainable way, so that as many people as possible can benefit.

Sources

Umwelt Bundesamt (2020): *Nachhaltiger Tourismus.*
https://www.umweltbundesamt.de/themen/wirtschaft-konsum/nachhaltiger-tourismus#bedeutung-des-tourismus [22.12.2020].

United Nations (n.d.a): *Make cities and human settlements inclusive, safe, resilient and sustainable.* https://unstats.un.org/sdgs/report/2020/goal-11/ [22.12.2020].

United Nations (n.d.b): *Ensure sustainable consumption and production patterns.* https://unstats.un.org/sdgs/report/2020/Goal-12/ [22.12.2020].

United Nations Environmental Programme; World Tourism Organization (2005): *Making Tourism More Sustainable: A Guide for Policy Makers.* https://wedocs.unep.org/bitstream/handle/20.500.11822/8741/-Making%20Tourism%20More%20Sustainable_%20A%20Guide%20for%20Policy%20Makers-2005445.pdf?sequence=3&isAllowed=y) [22.12.2020].

WWF (2017): *Das große Wegschmeißen.* https://www.wwf.de/themen-projekte/landwirtschaft/ernaehrung-konsum/lebensmittelverschwendung/das-grosse-wegschmeissen [22.12.2020].

Sources for the calculation of costs

https://bienenkiste.de/doku/erstlesen/kosten/

https://www.dehner.de/

https://www.hagebau.de/beratung-komposter-selber-bauen/

https://www.hornbach.de/shop/Gartenbau-Landschaftsbau/Regenwassernutzung/Regentonnen/S1052/artikelliste.html?

https://miller3bienen.de/preis-und-wert-eines-bienenvolks/

https://www.nordwurm.de/

https://www.obi.de/magazin/garten/gartengestaltung/theke-selber-bauen