



# DESIGN FOR RURAL INTERACTION

THE AGRICULTURAL FORUM KATHMANDU VALLEY NEPAL

Masterthesis: Landscape Architecture

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# 0. ABSTRACT

This thesis deals with the topic of Urban Agriculture (UA) in the context of current urbanization trends in metropolitan regions of the global south. Therefore, the principal global trends that create the framework of these processes are described in chapter 2, before coming to the introductory discussion of UA. Here the focus lies specifically on the contribution UA can make to the so called cities of the southern hemisphere and a current megacity research project of the German Federal Ministry of Education and Research (BMBF) is given as a current example. In chapter 3 the reference area of the Kathmandu Valley (KTMV) in Nepal is analyzed in greater detail and after an analysis of the site specific circumstances in chapter 4, a specific spatial design is developed in chapter 5 to demonstrate how UA can interact with the overall urban fabric in the KTMV. The design will accentuate the “cultural surplus” that can be created by UA in a rapidly growing city such as Kathmandu.

This thesis seeks to illustrate the potentials of UA as a current tool of open space planning and as a contribution to a sustainable urban development in an increasingly urbanized world. Through the final work of this thesis, which will be the design of the “Agri-Cultural-Forum” (ACF) the discussion will move from a theoretical and abstract planning level to a site specific and spatial solution.

The design of the ACF has to be seen in this context. Based on the theoretical analysis and a further examination of the KTMV in which the knowledge, wishes and needs of local stakeholders are considered, the ACF is designed as a multifunctional space where education and training on agricultural practice, communication and interaction concerning common problems, needs and interests as well as the production and consumption of agricultural goods will be coordinated. It is a forum in which agricultural and horticultural practices can be studied, tested and exchanged either by professional farmers, hobby gardeners or visitors. Through the cultivation of modern and traditional plants, the ACF will function as an agricultural reservoir while at the same time demonstrating the potentials of monoculture fields, green houses and organic farming. Last but not least, the ACF and the cooperating farmers will create an open space that provides multiple ecosystem services to the city and its population. (see chapter 5.1).

## 6. CONCLUSION

This Master thesis demonstrated the potentials of UA as a current tool of open space planning and as a contribution to a sustainable urban development in an increasingly urbanized world. Through the final work of this thesis, the design of the ACF as a part of the strategy “Design for Rurban Interaction”, the discussion moved from a theoretical and abstract planning level to a site specific and spatial solution. The theoretical discussion of UA and the analysis of the area of reference, the Kathmandu Valley in Nepal, illustrated the step from research to design. So the thematic context for the design of a valley wide strategy for the Kathmandu valley including the ACF, a multifunctional park, was shown.

To adjust the design to the conditions of the reference area, the field trip in April 2012 helped a lot to analyze the three potential areas for this design of the ACF. The mappings and information from the macro-, meso-, and micro level were used to finally choose one design area, based on first hand information. Even if the previous analysis of the situation in the Kathmandu valley was a helpful method to preselect the potential areas, the findings of the field trip broadened the analysis and personal expertise. Due to that the world heritage site of Bhaktapur, where the historic interaction of the city with agricultural activities was conceptually picked up, could be chosen as the final design area.

In light of this method, the design strategy and the ACF was able to accentuate the „cultural surplus“ that can be created by UA in a fast growing city like Kathmandu. In that way, a medium term implementation of the ACF into the urban fabric of the Kathmandu valley becomes feasible, even if the political circumstances do not allow an “ordinary” land use planning.

The research question, how UA can be a strategically conceptual as well as a spatially specific approach for the sustainable development of urban-rural dominated habitats, was not just theoretically described, but also visually illustrated in this thesis.

Furthermore the strategy “Design for Rurban Interaction” outlined UA as a strategy for the urban-rural linkages by unleashing socio-economic and cultural growth for both the urban and rural. The strategy therefore functions as a region-based urban development plan that uses the potentials of UA as a connector of the urban- and the rural sphere. It is extremely helpful that the strategy of the Asian Development Bank “Unleashing Urban Growth” (ADB, 2010) exists. The strategy “Design for Rurban Interaction” will be connected to that one and thus extend it by the topic of UA.

The design of the ACF should be viewed in this context. It was designed as a multifunctional space

where education and training on agricultural practice, communication and interaction about common problems, needs and interests as well as the production and consumption of agricultural goods can be optimized. Paying attention to the tradition and current importance of agriculture in Nepal, a wide set of agriculture was chosen as the parks program. Agricultural and horticultural practices can be studied here, tested and exchanged either by professional farmers, hobby gardeners or visitors of the park. Through the cultivation of current and traditional plants, the combination of small terraces, bigger monoculture fields, test areas and fruit tree plantations, the ACF will function as an agricultural reservoir while at the same time demonstrating the potentials of modern and organic farming. Finally the ACF and the cooperating farmers will create an open space that provides multiple ecosystem services to the city and its population.