

PRINCE TENKORANG ABOAGYE

LIVING CANOPY

- Integrating Greenery into Public Space with Canopy Structures



URBAN CHALLENGES

Supervisor: Emilio Da Cruz Brandao

Examiner: Joaquim Tarraso

MT'21

Today large number of people leave in urban areas and it is estimated that over 68 percent of people in the world will be living in cities ten years to come. Increasing population in urban areas tends to reduce the amount of green spaces due to new buildings and infrastructures that accommodates new inhabitants. There has been ongoing reduction in green areas urbanites enjoy in public spaces, being it for leisure or play. Although urban structures serves as a vital role in our everyday life either for shelter or work, it could also be used as a tool to maximize green areas in public spaces.

Green surroundings are known to foster social interaction, engage people in physical activities or serve as a place for relaxation. This spaces largely connect the general public and helps to creates dynamic engagement between people and the environment. Integration of greenery in the public realm comes with a great benefits for it users and generally improves the microclimate, it serves as a buffer for noise and purifies the surrounding air.

These spaces also enhance and support biodiversity in our built environment. In addition it helps to boost the economic value of spaces and bridges the social gap in communities. Other researches has also proven the health benefit of being in a green surroundings..

The purpose of the thesis is to critically look into ways of densifying urban public space with greenery through the use of canopy structure systems. The study tends to look into various design iteration of canopy structure systems that can support and integrate greenery for public benefit. The research will further look into urban horticulture, focusing on vertical greening systems and vertical gardens as a subject of interest and it support for biodiversity.

Keywords: green densification, canopy structure, public space, urban horticulture, biodiversity.