# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

# **Graduation Plan: All tracks**

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-BK@tudelft.nl</u>), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Sara Seifert
Student number	6082580

Studio			
Name / Theme	Dwelling Graduation Studio: Global Housing		
Main mentor	Dick van Gameren	Architecture Design	
Second mentor	Ludovica Cassina	Building Technology	
Argumentation of choice of the studio	In recent years, my studies and work experience have focused on urban planning and housing. Among the different architectural typologies, housing has always stood out for me because it focuses strongly on the interface between space and people's daily lives. Housing, especially social housing, has the potential to significantly improve people's lives by creating spaces that promote their well-being and opportunities. I think the studio is a great opportunity to broaden my perspective and hone my skills to tackle complex housing challenges.		

Graduation project				
Title of the graduation project	Densifying Traditions: Housing Solutions for Tea Garden Communities			
Goal				
Location:		Lakkatura Tea garden, Sylhet, Bangladesh		
The posed problem,		The situation of tea garden workers in Bangladesh is a matter of significant concern, with many living in poverty and earning a daily income of just \$1, which is inadequate for supporting a family. In the Lakkatura tea garden community, the issue of overcrowding is further compounded by the fact that the high population density limits opportunities for expansion and leaves little space for private and semi-public outside areas.		

	The situation is further exacerbated by the fact that many young people who are working in the city and earning more than the workers have to leave due to the density despite their desire to remain in the community. Furthermore, the lack of privacy, both within homes and shared outdoor spaces, further diminishes the quality of life. The housing provided to permanent workers is substandard. Located within
	the tea gardens, these accommodations are characterised by their small size, poor maintenance and lack of basic proper sanitation facilities. The corrugated sheet housing is in a poor state of condition, leaving homes vulnerable during heavy rains, causing water leakage and exacerbating living conditions. The intersecting challenges faced by the tea garden communities in Bangladesh, particularly in Lakkatura, are indicative of the urgent need for structural improvements and support.
research questions and	How can strategies for housing dentification be designed to preserve the traditional special and social structures of tea garden communities?
design assignment in which these result.	The tea garden community is experiencing a shortage of space for its essential needs, necessitating the densification of the settlement to accommodate these requirements. The primary focus is on preserving current patterns at the urban, neighborhood and dwelling scale, while concurrently making improvements. Secondly, the identification of financing solutions and their subsequent integration into the design process is imperative. In addition, a strategy for the redevelopment of an existing settlement must be formulated.

### **Process**

# **Method description**

Literature Review

The initial phase of the research constitutes a literature review, the objective of which is to identify preliminary information regarding tea garden workers in Bangladesh. A number of reports by NGOs have been published on the living conditions, working conditions and social exclusion of these workers. In addition, there is literature concerning the history of the workers and the factors that led to their migration to Bangladesh. The literature review thus facilitates the identification of research gaps and the extent of existing studies.

# Ethnographic research and fieldwork

However the informations available in literature and online is severely limited. Consequently, the central investigation of the daily lives of the workers and architectural and urban patterns will be conducted through ethnographic research conducted on the field trip. The data will be documented through the use of video and photographic methods. In order to redesign and improve the tea garden workers' accommodation and neighbourhood, it is first necessary to gain an understanding of the workers' needs. This can be achieved through ethnographic research, which involves conducting interviews and surveys. The objective is to ascertain which spatial patterns should be retained and which additional spatial needs the workers have. The findings of this study will serve as the basis for the design of a housing solution for the workers employed in the tea garden.

# **Literature and general practical references**

Ahmmed, F., Hossain, M. I., & International Labour Organization. (2016). *A Study Report on Working Conditions of Tea Plantation Workers in Bangladesh.*Al-Amin, M., Hossain, M. I., & Perveen, S. S. (2017, July). *Social Exclusion & Poverty among Tea Garden Workers in Bangladesh.* 

Boschmann, Sanne, Gideon Bolt, Ronald van Kempen, and Frank van Dam. n.d. "Mixed Neighbourhoods: Effects of urban restructuring and new housing development."

Calavita, Nico, and Alan Mallach, eds. 2010. *Inclusionary Housing in International Perspective: Affordable Housing, Social Inclusion, and Land Value Recapture*. N.p.: Lincoln Institute of Land Policy.

Chaskin, Robert J., and Mark L. Joseph. 2015. *Integrating the Inner City: The Promise and Perils of Mixed-Income Public Housing Transformation.* N.p.: University of Chi cago Press.

Fuster-Farfán, Xenia, Voltaire Alvarado Peterson, Javiera Gómez, and Ignacio Zenteno. 2024. "Social mix or social integration? Conceptualising new horizons of housing policy in Chile." Journal of Housing and the Built Environment, 08 19, 2024.

Galster, George. 2007. "Neighbourhood Social Mix as a Goal of Housing Policy: A Theoreti cal Analysis." European Journal of Housing Policy 7 (03).

Md Nazrul Islam, & Md Al-Amin. (2019, May). Life behind leaves: capability, poverty and social vulnerability of tea garden workers in Bangladesh.

Minority Rights Group International. (2016, November). *Under threat: The challenges facing religious minorities in Bangladesh.* 

Sah, P. (2023, January 11). A house of cards: West Bengal scheme for tea workers gives a roof over heads but not land rights. 101Reporters. Retrieved October 8, 2024, from https://101reporters.com/article/development/A\_house\_of\_cards\_West\_Bengal\_scheme\_for\_tea\_workers\_gives\_a\_roof\_over\_heads\_but\_not\_land\_rights

Boschmann, Sanne, Gideon Bolt, Ronald van Kempen, and Frank van Dam. n.d. "Mixed Neighbourhoods: Effects of urban restructuring and new housing development."

Sampson, Robert J. 2024. *Great American City: Chicago and the Enduring Neighborhood Effect*. N.p.: University of Chicago Press.

Interviews conducted with:
Tea garden workers
Retired tea garden workers
Family members of tea garden workers:

Houswives

People who who work in the city (CNG Driver, Private Driver, Rickshaw Puller, office)

### Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The overarching theme of the present year's graduation studio, entitled Global Housing, is the subject of architecture in transition, with a particular focus on cities such as Dhaka and Sylhet, which are experiencing rapid urbanisation. The necessity for the project to concentrate not only on the present, but also on strategies that are future-proof, is a key aspect of the theme. The project will entail the identification of issues currently faced by the tea garden community and those that are expected to arise in the future. This will be followed by the exploration of strategies for future-proof and densified housing. The design will focus on social and cultural patterns exhibited by the workers, whilst also addressing different scales: The Urban, Neighbourhood, Architecture, Dwelling and Details.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

My graduation project addresses the critical housing challenges faced by tea garden communities in Bangladesh, focusing on the Lakkatura tea garden. These challenges include overcrowding, substandard housing conditions, and the lack of privacy. From a social perspective, the project aims to improve the living conditions of marginalized tea garden workers. By addressing overcrowding and enhancing privacy and housing quality, the design fosters better quality of life, stability, and community cohesion. Furthermore, the focus on preserving traditional social and spatial structures ensures that cultural identity and communal ties remain intact, even as densification strategies are implemented.

From a professional standpoint, the project engages with complex architectural and urban challenges, such as designing for high-density settlements in a resource-constrained environment. The emphasis on integrating financing solutions into the design process makes the project a practical model for tackling similar housing crises globally. Moreover, the work contributes to the field of architecture by developing strategies that balance immediate needs with long-term sustainability, aligning with the principles of future-proof urban development.

Scientifically, the project contributes to the knowledge on housing design in vulnerable and rapidly urbanizing contexts. The exploration of strategies for densification, preservation of social and cultural patterns, and integration of sustainable practices provides valuable insights for addressing global housing challenges.