



THESIS REPORT

# BAMBOO IN URBAN ENVIRONMENTS

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## Synopsis

Once called the Garden City, Bangalore has now been rapidly turning into a concrete jungle. According to a study conducted by IISC scientist, Dr TV Ramachandra and his colleague Dr Bharath H Aithal, Bengaluru in the space of 34 years has seen a jump of 1005% in concrete area or paved surface. Dr Ramachandra says that if rampant urbanization continues unchecked, the city would be uninhabitable by 2020. This transformation is the real cause for heat island effect, climate change and overall Global warming. The city, already facing scarcity of water, is hugely dependent on ground water which as per the study, is receding at a fast pace. The water table has declined to 300 m from 28 m, and 400 m to 500 m in a highly urbanized area. This is a really huge problem and has to be looked at in order to bring the city back to its original garden state. Hence, alternative construction materials have to be used in the construction field to reduce this increasing concrete jungle.

As an architect we should be responsible towards the environment that we live in. We need to look at a bigger picture of the world and try to come up with various construction methods and design ideas to reduce the harmful impact towards it. There has to be a change in the materials used in the industry. The selection of material used in the project affects not only the user but also the environment around it. Hence, there has to be a change in the mainstream construction industry for the betterment of the future.

This report is an attempt at recording the determinants, the processes and the evolution of the outcome of the Final Thesis Semester of the Undergraduate Programme in Architecture at Acharya NRV School of Architecture, Bangalore.

## Aknowledgement

I have been very grateful to have been guided and nourished by such a great faculty of Acharya NRV School of Architecture. All these five years of learning have an unforgettable journey to the start of my career.

This thesis has also been a step forward for myself. This would not been the same if it wasnt for my guide, Prof. Priya Joseph who actually took her time guide me to the right direction. All the support and encouragemnt from your side has added a lot to this thesis.

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Also thanking each and every person who has provided me with the light whenever darkness started to come around.

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## Declaration

*14th August, 2020*

This Thesis titled **Bamboo in Urban Environments**, a requisite of the Bachelors Program In the Department of Architecture, **Acharya NRV School of Architecture, Bangalore- 560107, India**, under the supervision of Ar. Priya Joseph,

The undersigned hereby declares that this is his original work and has not been plagiarized in part or full form of any sources. Furthermore, this work has not been submitted for any degree in this or any other University.

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## Certificate

We certify that the thesis titled Bamboo in Urban Environments, was carried out during the candidate's tenth Semester (January - August 2020) in the Department of Architecture under our guidance. Therefore, based on the declaration dated 14th August 2020 by candidate, the work was placed in front of Jury held on 17th August 2020. On the successful completion of jury process and completion of the Report in all respects by the candidate we provisionally accept the Thesis Report and forward the same to the Dean.

Prof. Priya Joseph

On successful completion of the course by the candidate I hereby accept this completed report on behalf of the Head Of Department to be placed in the library of Acharya NRV School of Architecture, Bangalore.

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