

# Coming up for Air: A Tale of Protection, Sacrifice and Trade off

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## Context:

Excessive and unchecked mining of the limestone mountains in Mandalay, Myanmar by Apache cement factory have provided a trade off for the local people where clean air, water and food is traded in exchange for their aspirational goals. The thesis in turn follows the narrative of Buddhism as a driver for the Redemption, Recuperation and Re-emergence of life in the eroding landscape through a time based urban masterplan strategy focusing on an architecture of protection, sacrifice and trade off.

## Abstract:

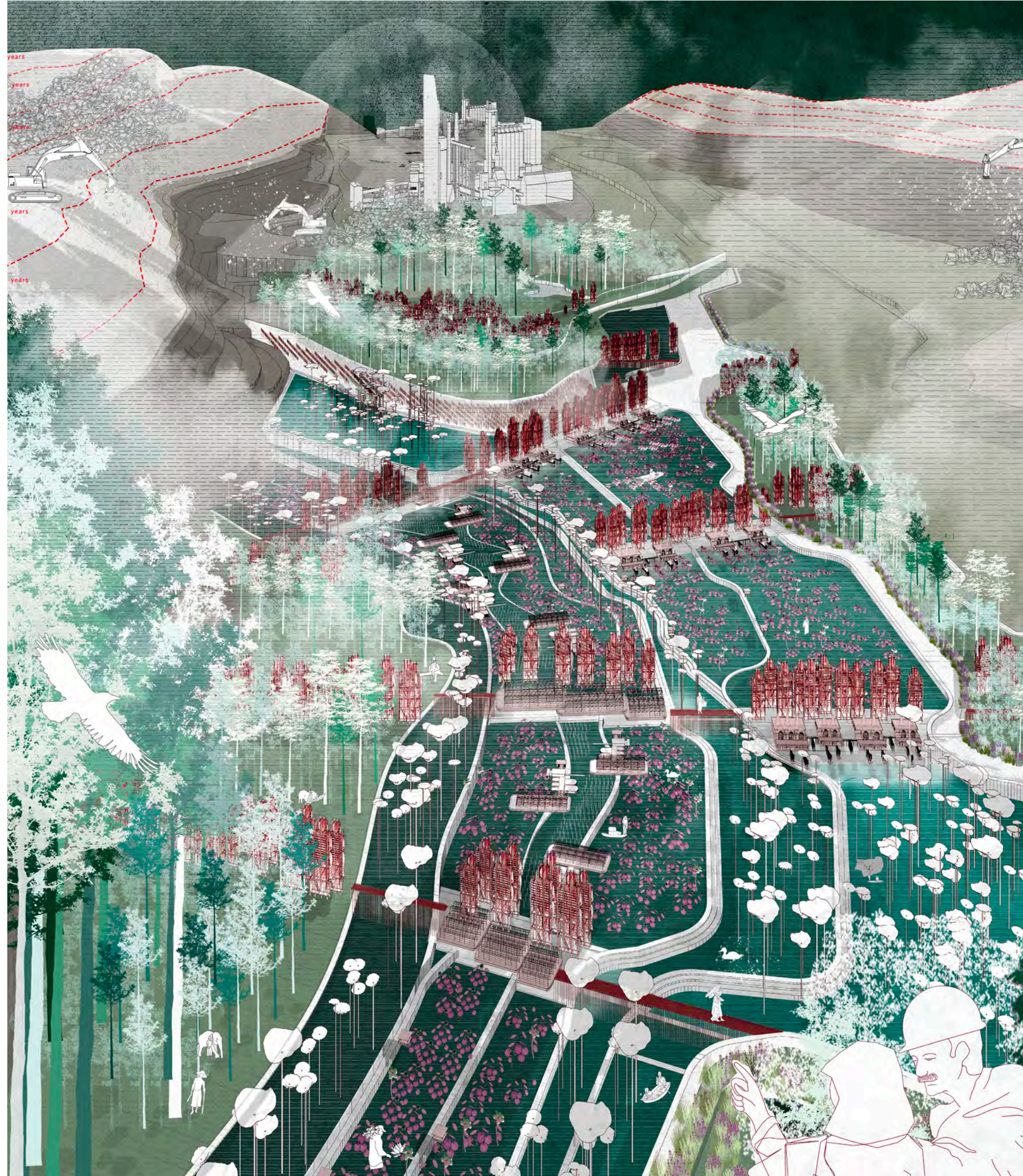
The Apache Cement Factory (est. 2012) in Mandalay, Myanmar, exploits natural, non-renewable limestone mountains, as extraction of raw material for cement manufacturing. Excessive mining has depleted the mountain range, resulting in a land-form that is rapidly dematerializing into dust which affects the people, the environment, and nearby teak forest and water bodies. Yet the industrial exploitation and degradation of the environment and the landscape has continued unchecked and unhindered, with the local villagers succumbing to the Apache Corporation's promises of economic growth and provisions of lifestyle amenities for them. In short, the villagers have traded off the necessary conditions for biological health – clean air, water, and food – for short-term aspirational gains afforded by working in the mines.

The thesis questions the idea and image of 'the good life' that is presented by the mining corporation to the villagers. It re-imagines in its place, an alternative vision that reinstates clean air, water and food, to be in fact the true aspirational goals that sustain biological and environmental health. Projecting 25 years in a time-based masterplan, the quickly depleting landscape around the mining site is progressively recuperated in three phases. The protagonists are a primarily local lotus-weaving and lotus-tea-making cooperative who work with the existing ground of degraded conditions. Ultimately their activities transform the dust-polluted landscape into an idyllic image of lotus-covered river full with fish, and a bustling cottage-industry of lotus-related products, rivaling the aspirational facade portrayed by the mining corporation.

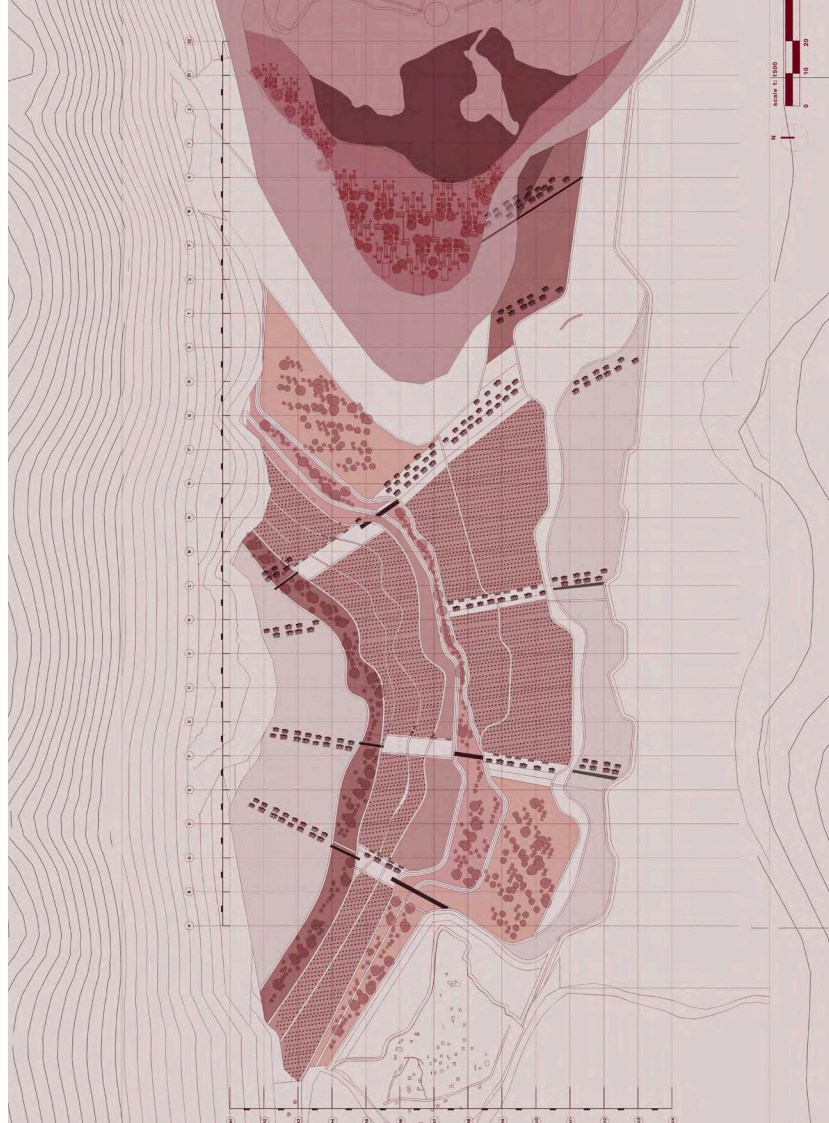
The thesis explores the notion that architecture and landscape can combine to work as sacrificial layers forming a series of defensive mechanisms that purify the air and filter the water, and in turn sustaining the growth of the lotus-related cottage industry. A Buddhist narrative of 'the will to redemption' underlies the time-phased re-emergence of 'life' from the eroding landscape.

**Keywords:** Myanmar, Cement mining, Aspirations, Dust-catching, Lotus industry.

**Film:** <https://youtu.be/05tDpRH02h4>



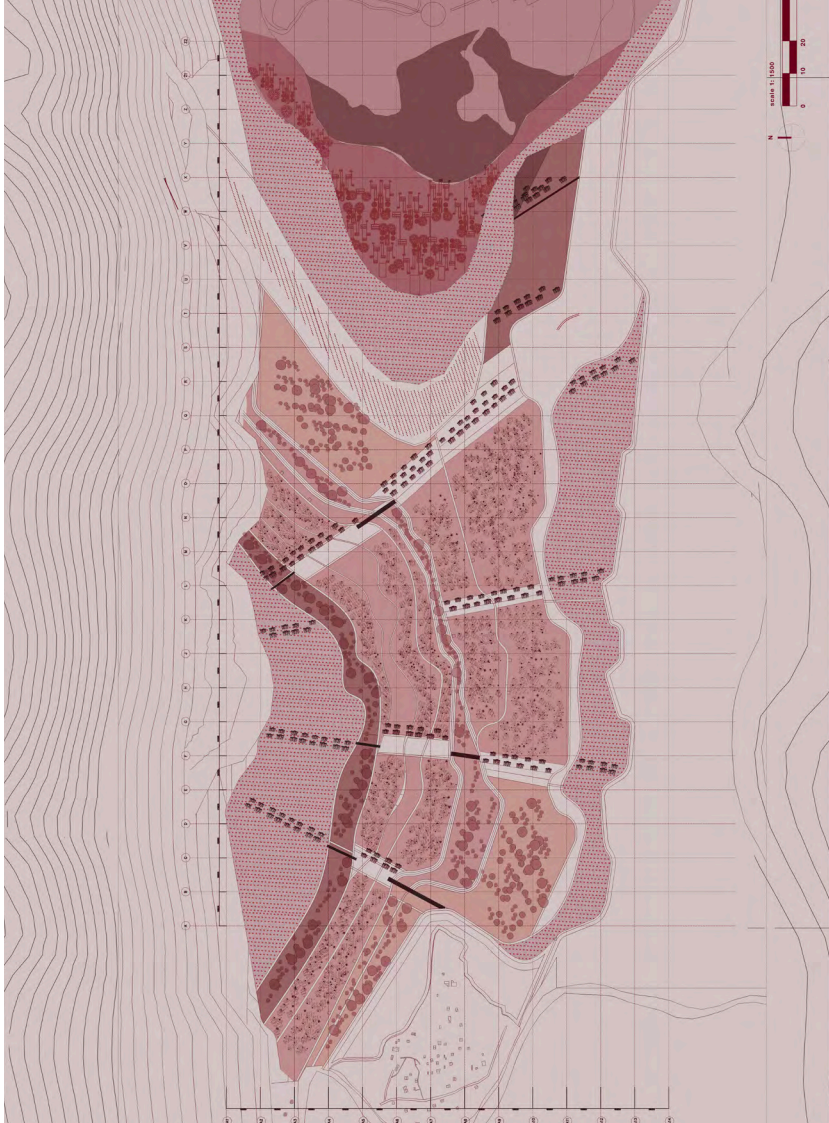




**Phase 1 : 2020 - 2022**

Confession

Aspirational



**Phase 2 : 2022- 2025**

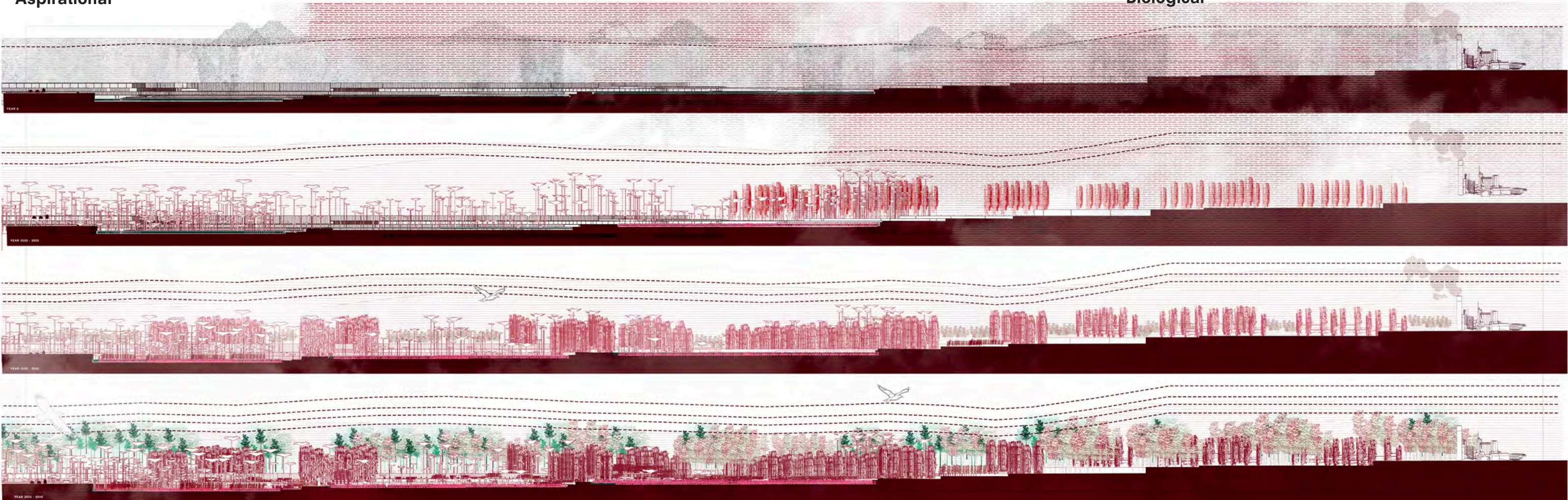
Redemption



**Phase 3 : 2025-2045**

Enlightenment

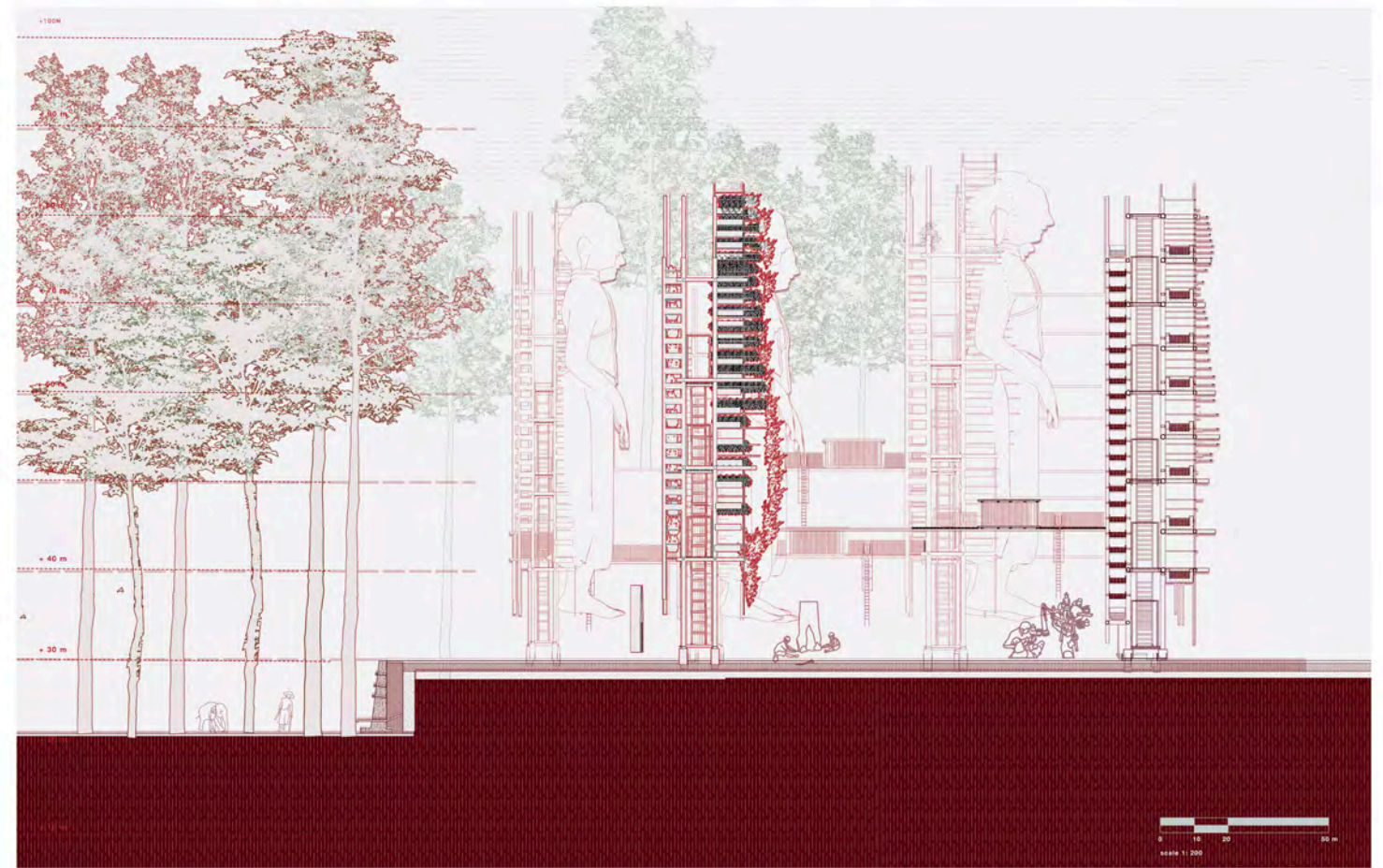
Biological



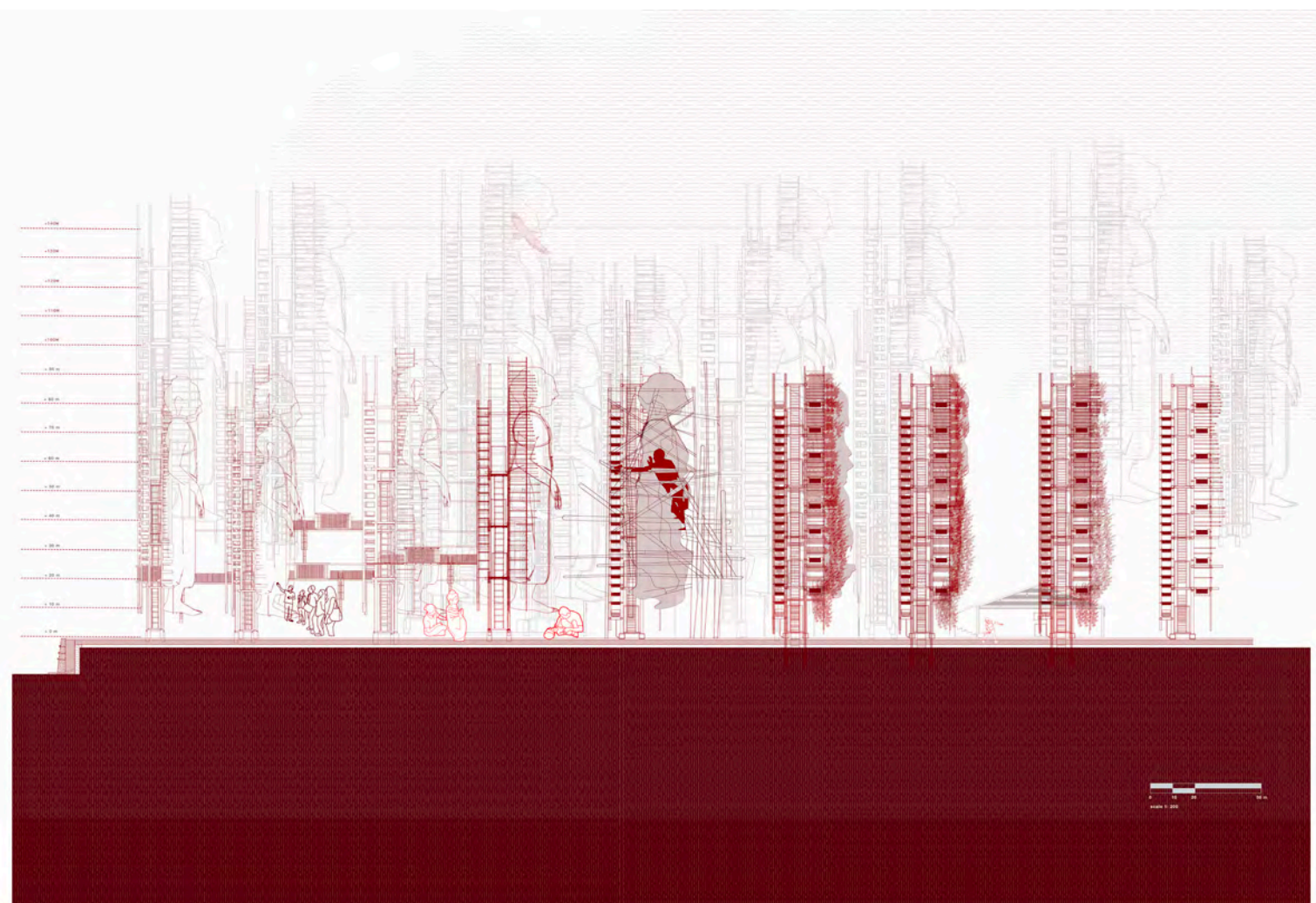




Development of the Buddha Landscape over 25 years

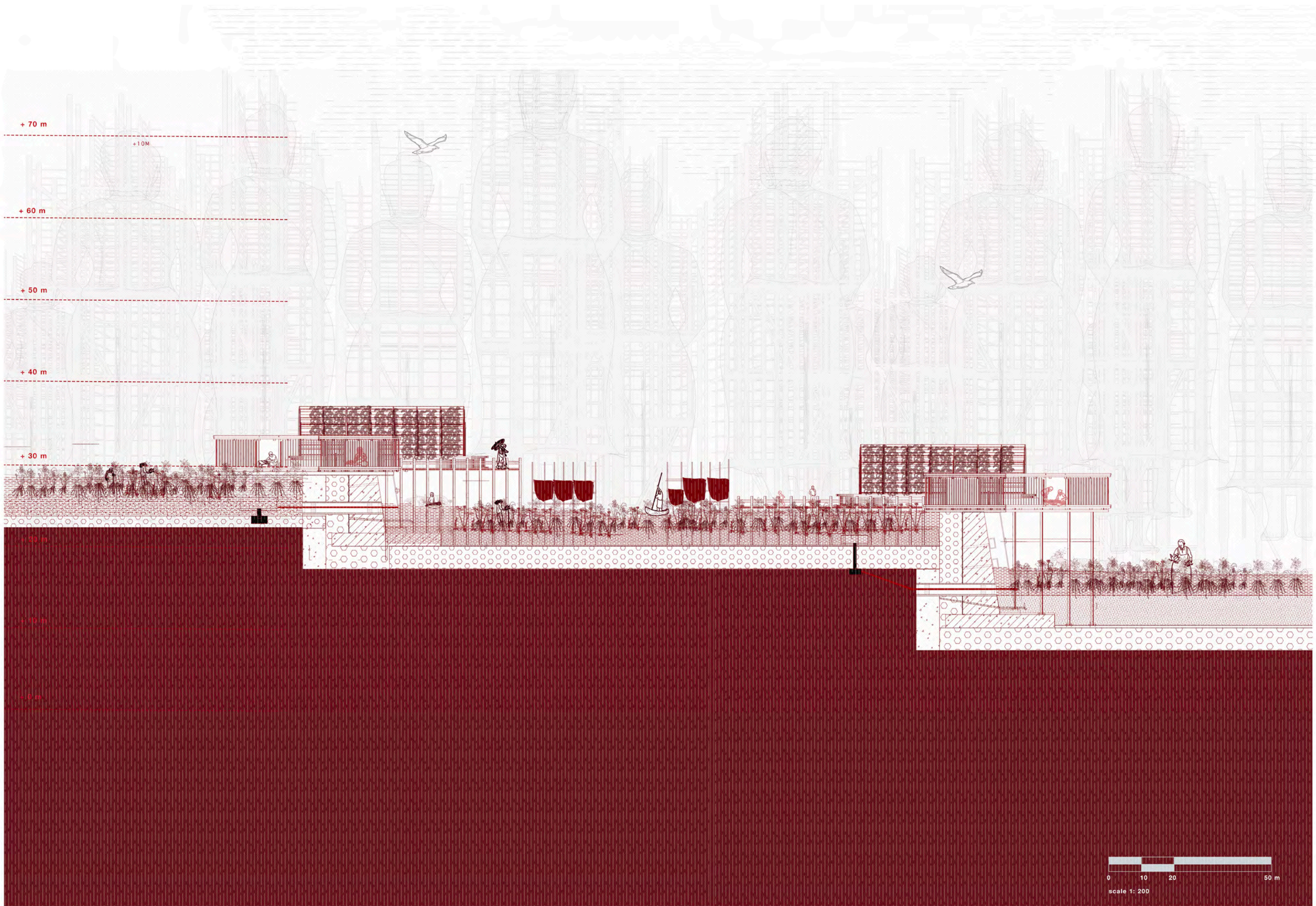


AIR FILTER PLANTATION BUDDHA & TEAK PLANTATION AND TEAK WORKSHOP SECTION



Dust Catcher Translucent Section



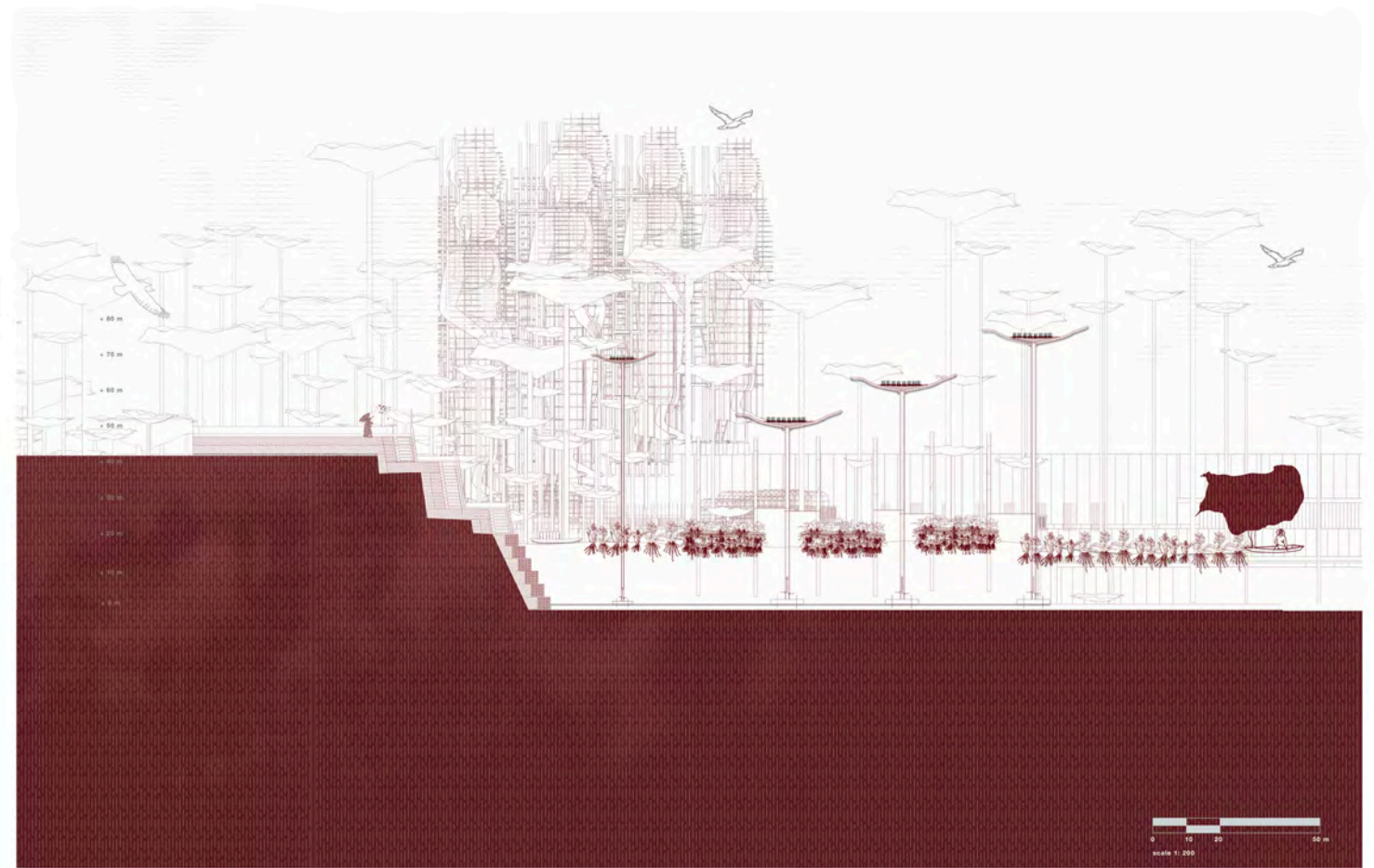


Lotus Weaving Section





Lotus Farms, Lotus tea production and Tea Houses  
Behind the protection of the Buddha ( Dust Filtration Plantation Structures)



Lotus Tea Section