

IRFICYCLE DHARAVI AVIK BANERJI. B.ARCH THESIS. HAJO NEIS. JUNE, 2013.







India is one of the world's most densely populated countries with nearly one and a quarter billion people. Nearly a fourth of this population currently resides in the country's urban centers. The extremely high population density of India's cities poses major stress on the urban environment. The city governments have adopted a policy of denial when it comes to providing the basic garbage, water, sewage and social infrastructure required to support such enormous populations. The country produces nearly 188,000 tons of waste a day and nearly 68 million tons of waste per year, with the large majority of the waste being produced in the country's cities. Without a system of managing the waste, garbage gets shoved in every available corner of the city and particularly to the areas occupied by the urban poor.

In India's financial capital, Mumbai, the informal settlement known as Dharavi is home to nearly 2 million people who are packed into small and crowded living settlements. Dharavi's people both live and work within the confines of this neighborhood. The settlement has developed an illegal recycling industry that feeds its economy. The thousands of recycling industries in Dharavi coupled with the numerous textile industries account





for nearly 1 billion dollars of annual revenue. These industries are housed in informally constructed industrial buildings in the 13 Compound of Dharavi.

This thesis project strategizes incorporating a formal system that can work with the existing informal recycling system to help the community to repair the areas of the neighborhood that have deteriorated due to a lack of a proper waste management system.





MITHI RIVER REVITALIZATION







PHASE ONE: REMOVE PHYSICAL TRASH FROM Mithi River Edge

DISTRIBUTION CENTERS



RECYCLING PLANT

RESEARCH INSTITUTE

This proposal also includes a new research facility that aims to develop innovative recycling technologies and to discover new practical means of applying recyclable materials. The layout of this building is flexible to accomodate for the ever changing spatial requirements of a research institute. The facade of the building integrates steel frames that are filled with crushed aluminum cans. This facility will attract scientists from around Mumbai to begin strategizes new solutions for a cleaner future.

