

“Next Generation” 2nd prize 2008 Asia Pacific

Realizing solutions for the redevelopment of Dharavi, Mumbai, India

Project data

Type of project Architecture (research/development)
Estimated start of construction Not applicable

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Comment of the Holcim Awards jury Asia Pacific

This project deals with informal settlements in Dharavi north of Mumbai, the biggest slum in Asia covering an area of approximately 220ha and housing some 600,000 inhabitants. Due to the exponential growth of Mumbai, the informal settlements at Dharavi shall be cleared and transformed into modern business and housing districts. Therefore it was intended to sell the land in its current state, leaving the new owners to invest in infrastructure and buildings, and implying the relocation of the current inhabitants and their businesses. This project aims at an inverse approach by paying respect to the existing social fabric. First, the public shall invest in the infrastructure such as sanitation, electricity, roads and public transport and then each neighborhood will be rehabilitated within its ancestral location and at the expense of the present dwellers, protect the current residents from the need to relocate. This project has been commended due to its unique and robust strategy which is based on a sound and astonishingly mature in situ analysis.

Project description by author

Mumbai, probably the most densely populated city world-wide, has a cosmopolitan and diverse society, created by migrants from all over India. Half of its population lives in informal settlements due to an enormous deficit of affordable housing. But on its way to a world class city, in Mumbai – like in any other city – these slums should disappear from the cityscape.

Dharavi located to the north of Mumbai’s island city is the largest slum in Asia covering 220ha. Without any central planning, 600,000 inhabitants created their own environment. But due to Mumbai’s urban growth, Dharavi the former swamp became a high value site in the heart of the city. Mr. Metha, an Indian architect came up with a plan to auction Dharavi to international investors. First responsible to construct flats for the inhabitants, they can make their profit by additional buildings on more than half of the land area. However the extreme densification makes it impossible to create an adequate environment for Dharavi’s citizens. In our opinion, Mumbai should maintain Dharavi as home for its present residents. History proved that unsuitable housing evicts slum-dwellers and results in new slums elsewhere.

Situation: For generations, Dharavi’s residents have created a heterogeneous city adapted to their lives. It consists of varied communities characterized by their different origins. Dharavi is also the basis of their survival with 80% of its inhabitants also working in the slum too. Commonly houses consist of durable materials containing upper stories. Available space is directly used to generate income. Its usage depends on location and interaction to open space, a cluster of small lanes and yards. This cluster evolved from a deductive process, where the community concerned determined the value of open space in relation to new buildings.

Strategy: Due to the size of Dharavi and existing open grounds, we suggest to invert the regular process. Thus, required funding can be generated in advance to drive sanitation as a public project without financing costs. In the manner of a domino effect each neighborhood will be rehabilitated within its ancestral location. Deduction of land will be minimized and slum dwellers will become owner/builders.

Design: In contrast to standardized rehabilitation units previous spatial resources of each household gets reflected and individual expansions at subsidized rates are possible. Adapted to each distinct community, linkages of private and open space get transformed within the new environment. Sanitation is seen as one step in a dynamic building process, which allows future extensions combined with further differentiation of open space. We think a debate on alternatives is essential for the development process precisely as Dharavi will be a role model of global importance.

Relevance to target issues by author

Quantum change and transferability
 Our strategy modifies Mumbai’s applicable law for slum sanitation especially for Dharavi the huge slum on high-value land. Instead of redesigning the area, sanitation is understood as transformation, as one step in an ongoing development process. High public interest makes Dharavi’s sanitation seminal for future slum sanitation projects. This process can be adapted to other comparable settlements.

Ethical standards and social equity
 By our strategy, responsibility to redesign Dharavi is not given to only a few investors. Funded by the money generated in advance Dharavi’s existing communities will be owner/builders of their own future environment. In cooperation with local NGOs they form cooperative housing societies and engage their architect. A step-by-step transformation reduces accommodation in transit camps to a minimum and makes a mutual learning process of the communities possible. The citizens of Dharavi are meant to be the subjects driving the transformation process, not objects of a redevelopment plan. Thereby existing communities as well as socioeconomic networks can be maintained and strengthened.

Ecological quality and energy conservation
 The redevelopment strategy supports Dharavi as mixed zone and manufacturing location and keeps suitable livelihoods to all previous inhabitants. Thereby the project prevents an increased number of commuters within the traffic-choked city of Mumbai. Furthermore the project prevents displacement and proximate squatting on environmental zones within the city.

Economic performance and compatibility
 By our intention, Dharavi’s sanitation will be a public project. The right to build some of the buildings for sale on the open market can be auctioned in advance. Thereby the major part of the required capital will be generated. Thus sanitation can run without public money and without financing costs. The opportunity for inhabitants to purchase additional floor space at subsidized rates reduces the area for buildings for sale to the needed minimum. Moreover small building companies from Dharavi may fill orders of the construction. Vitrally important, Dharavi as production location is maintained throughout the whole period of transformation and can even be strengthened by options of further expansions.

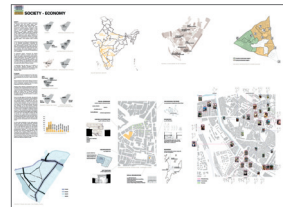
Contextual and aesthetic impact
 The building structure breaks with predominate standards of social housing. Private and public space is intensively linked. On the one hand access-landscapes within buildings provide yards dedicated to households, on the other hand a hierarchy of yards links the building’s interior with the urban surrounding. These linkages serve existing intensive and dynamic usages of living and working spaces.



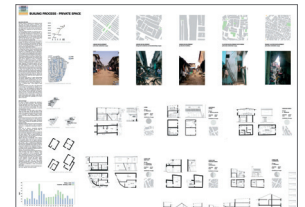
Evaluation of the situation.



Initiative for the transformation.



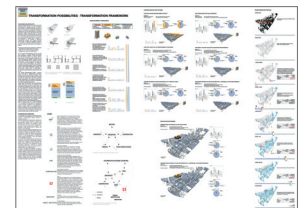
Society and economy.



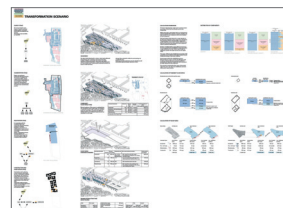
Urban growth and private space.



Open space.



Transformation framework.



Transformation scenario.



Urban design.



Hindu area.



Muslim area.