Organizing Chaos – How is Dharavi organized to be a sustainable model

Artifect 1: Aerial view of Dharavi, located at the heart of Mumbai, India (http://www.jonasbendiksen.com/National-Geographic/Dharavi/4)

Overview. Located at the heart of Mumbai with about 1 million people living in merely 1 square mile of land, Dharavi houses one of the biggest slums in the world. Despite atrocious hygiene conditions, extremely dense population, and income levels that are well below the poverty line, Dharavi houses an industry which is worth over a billion dollars and is the most productive slum in the world. Given the inhumane restrictions, what makes Dharavi such a sustainable model?

As per an article by The New York Times, Dharavi could be called a self-created special economic zone for the poor. This inspires the focus of the case study, that is to understand the nature of the exclusive symbiotic relationship between the industry and the people at Dharavi that creates a unique thriving economic model.

What is being organized? The scope of this case study is to understand the organizing system of the billion-dollar industry at Dharavi. The resources of this organizing system are the industries/businesses and the working population of Dharavi. We will look at the different categories of industries at Dharavi and how each of them adapts in the organizing system. This organizing system is designed to manage a collection in which resources are continually maintained or curated. The industry is organized such that it accounts for the need and availability of labor of the given skill, thus providing the right kind of interactions for the unskilled yet dedicated population of Dharavi. 90% of these industries are unofficial in nature which makes the interactions they support unique only to Dharavi.
Why is it being Organized? Most people living at Dharavi have a basic primary purpose of making enough money to feed their families and send their children to school, which is why they bear with the atrocious conditions at Dharavi as living expenses are cheap. The limited motivation and cheap living conditions mean that people are available to work at extremely low wages. The organizing system at Dharavi is designed to serve a social goal of employing people, who may not necessarily be employable in the outside world, and an institutional goal to make Dharavi a self-sustained economic model.

At an abstract level, two factors establish the need for industries and its organization in Dharavi. Firstly, there is an abundance of unskilled but cheap labor, and secondly, being based in the heart of Mumbai, one of the most expensive cities in the world, Dharavi and its industry has a huge potential market to serve. On a more granular level, given the extreme lack of space, technology and basic infrastructure like roads, water and sanitation, it is imperative for the industry at Dharavi to organize itself to adapt to the limitations of the slum.

How much is it being Organized? The organizing principles across industries at Dharavi is governed by the lack of basic amenities. Each industry at Dharavi is organized with high granularity to make the most of the limitations of the slum. In the trade-off between maximizing profitability and offering superior infrastructure to the employees, the industries choose an extreme version of the former. Interestingly, the workers are also satisfied with this deal since the net money they make is still sufficient to fulfill their basic life goals. This leads to an organizing model that is decentralized, labor heavy, home grown and low on technology.

Cultural norms at Dharavi dictate men to be the bread earners of the family while women are supposed to stay at home and take care of daily chores. This impacts the taxonomy of industries at Dharavi. Since women cannot step out of home, they are primarily involved in smaller home-based service oriented industries like food catering or private tuitions. Men, on the other hand, are involved in the manufacturing and recycling industries which require them to work 12-16 hours a day 6 to 7 days a week. Another cultural factor that impacts the workforce at industries is the community of the workforce. For example, the pottery industry is dominated by the Gujarati community since its inception since the industry owners majorly employ people from the state of Gujarat.
When is it being organized? Industries at Dharavi have primarily been organized on the way out. They have been set up depending on the demands of the city of Mumbai and the availability of labor in Dharavi. Some of these industries are now permanent, like the recycling industry, and some exist only as long as there is demand. The unofficial nature of 90% of businesses means that businesses can be set up and taken down on an ad-hoc bases. The labor requirement of industries is also dynamic, meaning that people switch between industries based on demand, thus organizing themselves on the way out.

How or by whom is it being organized? Primarily industries are organized by their respective owners. Manufacturing or recycling industries, where there is a male dominated workforce, are set up in the day as factories with labor intense human assembly lines. There is little provision for basic safety amenities to avoid potential workplace hazards. In the night, these factories double as dormitories for the workers to sleep. The organization of home grown service industries is even more constrained in space and is organized at the discretion of the industry owner.
Where is it being organized? Across Dharavi there are about 20000 single roomed manufacturing/service units which cater to about 6000 different industrial units. Due to the severely dense population of Dharavi, industries are extremely space constrained. They are organized in shanties, and in most of the cases, there could be 3 or 4 businesses running per shanty. Industries that require good road connectivity tend to be located on the edges of Dharavi where there are wider roadways to service the businesses.

Other Considerations. The Municipal Corporation of Mumbai and the State Ministry of Maharashtra have designed the Dharavi Redevelopment Project. This project includes demolishing the shanties and setting up concrete residential and commercial places. The project plan also promises most of the residents and industries (official and unofficial) relocation in the newly built structures. While this sounds good at face value, critics argue that this will raise the living cost for residents and operational costs for industries. The unique nature of the economic
model which made Dharavi so sustainable will cease to exist. If the plans do go through, it would be interesting to see how the dynamics of the industries at Dharavi would change.

References
2. http://www.slideshare.net/2997v8/mumbais-dharavi-slums
3. http://www.academia.edu/23846690/Case_Study_-_Dharavi
9. YouTube Dharavi Tour Videos:
   a. https://www.youtube.com/watch?v=Ea9b_STmro4
   b. https://www.youtube.com/watch?v=gGdCX1lqVM (in Hindi)

Artifacts
- Artifact 1 : Aerial view of Dharavi (http://www.jonasbendiksen.com/National-Geographic/Dharavi/4) :
  o The artifact shows how Dharavi is located at the heart of Mumbai. We see small, densely populated and poorly constructed shanties surrounded by tall skyscrapers of Mumbai

- Artifact 2: Snapshot of laborers working at a factory at Dharavi (http://static.flickr.com/46/111326574_f4701f82d1.jpg)
  o This is a typical set up of local single roomed factories at Dharavi
  o Here we see a closely packed room full of male workers working at a garment making family.
  o The entire compact space of the room is occupied only for business purposes only
  o We see that the workers remove their shirts to deal with the hot and humid conditions of Mumbai
  o We also see a lack of hygiene or safety equipment as the laborers are going about their jobs

  o The image how’s an outline map of the entire dense settlement of the Dharavi slums
  o It also details what industries are located at what parts of Dharavi
It can be seen how most of the industries are organized along the roadways, particularly towards the outer edges of Dharavi. This is particularly to enable easy connection with the city of Mumbai.