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Modernizing Dharavi: If you build, will they come?

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Modernizing Dharavi: If you build, will they come?

Looking outside from his office at West Bandra overlooking the Arabian Sea, Mr. Mukesh Mehta sighed; he recalled when he first had the dream of creating a modern Dharavi – free of slums, where the poor, hardworking people will finally be able to enjoy a better quality of life and be integrated with the mainstream citizens. Throughout the history of the world, migrants have moved to the urban areas in search of a job so as to provide for their families. In most cases, they can find work, but not a place to live. Hence, without help from either developers or the government, they are forced to become squatters, building for themselves on undesirable and illegal properties. Dharavi, at the heart Mumbai, with 600,000 residents, is one such place and one of Asia's largest slums¹.

Mr. Mehta's goal is to provide a decent standard of living to the people of Dharavi. He established himself as a celebrated realtor by building expensive custom homes for the rich in Long Island, New York, and now longed to build homes for the poor in the slums. He shared this dream with his family too. His son, Shyam, was very enthusiastic and regarded him as a "versatile" person who is capable of serving both the rich and the poor, while his wife considered him a "confused" person². He is, however, dedicated to pursue his dream of seeing that his heroes are living a far better life in a revamped Dharavi, free of slum.

Mr. Mehta has been the management consultant for Dharavi Redevelopment Project (DRP)³ for more than seven years to date. The project was supposed to break ground long time ago. However, there were many stakeholders related to this project and several issues needed to be resolved. This has caused unavoidable delays in every step of the way. Mr. Mehta has already overcome many hurdles presented by different governmental and nongovernmental organizations. However, the toughest resistance has come from the slum dwellers and their leader, Mr. Jockin Arputham, the Director of National Slum Dwellers Federation.

How can Mr. Mehta convince them that this redevelopment plan is radically different from the many other earlier plans which haven't improved the lives of slum dwellers significantly? The media has been following up all news regarding Dharavi's redevelopment plan over the years. They are watching the progress of DRP not just in Mumbai, or in India, but throughout the whole world - waiting, and expecting it to materialize soon. Will Mr. Mehta's dream of a modern urban center at Dharavi come true? Will it be possible that the slum dwellers would enjoy a better life style and integrate with other citizens of Mumbai? Is it possible to re-create sustainable urban developments from the existing slums around the world? Only time will tell...

Historical background of Dharavi:

Dharavi competes with Karachi's Orangi Township to be the largest slum in Asia⁴. It is located in the middle of Mumbai, the largest metropolis which is the financial, commercial, and industrial center of India. Mumbai generates approximately 5% of India's GDP and contributes to approximately 23% of the country's tax revenues⁵. Furthermore, it accounts

for 25 % of industrial output, 70 % of the maritime trade in India and 70 % of the capital transactions in India's economy⁶. It is home to the major financial institutions of India such as the Reserve Bank of India, the Bombay Stock Exchange, the National Stock Exchange of India, as well as the corporate headquarters of most of the Indian based multinational corporations. The city is home to the sixth most number of billionaires in the world, more than that of Shanghai, Paris or Los Angeles.⁷ Furthermore, the city is also the home to the largest film and television industry in the world, popularly known as "Bollywood."

In the past few decades the people from surrounding rural areas came to Mumbai to make a better living and contributed to the fast growth of the economy and make the city a potpourri of a kaleidoscope of communities and cultures. Current population of the city is more than 13 million and predicted to reach 27 million by 2020, to become the second largest city after Tokyo⁸. The real estate prices in Mumbai are among the top five in the world. Mr. Mukesh Ambani, one of the top five richest people⁹ in the world has recently built the world's first billion dollar home in this city. However, more than 60% of the Mumbai residents live in the slums¹⁰.

Dharavi was originally a mangrove swamp by the creek, formed by the Arabian Sea. It was first settled by Koli¹¹ fishermen in the early 20th century¹². However, the creek dried up over time and new immigrants started to build on the lands emerged from the dried out swamps¹³. It is surrounded by two of the Mumbai's main train lines, the Western and Central railways along its borders and the river, Mithi on the north. It is so close to the city's airport that the passengers from the airplane could see the tin roofs of Dharavi while landing.

[Insert Exhibits 1 & 2 about here]

The new financial center at Bandra- Kurla is located only a mile away from Dharavi. The central location and availability of transportation made Dharavi a highly desirable place for slum dwellers to live and work. A total of 535 acres¹⁴ of Dharavi, which is approximately the two-thirds the size of Central Park in New York, is residence of about 600,000 people. Rural immigration from different parts of India made Dharavi a truly diverse community. Artisans from Gujarat in potters' colony, Muslim tanners from Tamil Nadu, embroidery workers from Uttar Pradesh and many other different groups have been contributing significantly to the financial growth of Mumbai.

Numerous vendors and artisans opened their shops in this self-sufficient neighborhood. The average household income in this community is between Rs. 3,000¹⁵ and Rs. 15,000 per month. The small businesses of these slum dwellers are generating \$700 million to \$1 billion in revenue annually. An estimated number of 15,000 single room factories are recycling a major portion of city waste, such as plastics, car batteries, computer parts, food processing, garments and other materials to create new products for the markets. Their products are sold not only in Mumbai and other Indian cities, but also in international markets. The residents here enjoy more income and prosperous lifestyle compared to the rural life they

had before. Not only do they support the backbone of the overall economic growth, but also feed into the middle class of the city.

[Insert Exhibit 3 about here]

Access to clean water and public sanitary system are unavailable in Dharavi, since the whole area was built illegally on government land. The locals have no choice but to buy the essential amenities, such as water and electricity mostly from illegal sources by paying a premium price. Stealing electricity from public utilities is a common practice in this neighborhood. There are a few public toilets available; however most of them are broken or filthy. Other public services such as medical office, hospital and post-office are also unavailable. Its location and poor drainage system made it susceptible to floods during rainy seasons. The narrow allies are always dark. The dirt and garbage are dumped here every day. The pollution generated from some of the local industries, such as tanneries, and potteries are causing a very unhealthy living condition here.

[Insert Exhibits 4 & 5 about here]

However, these garbage and pollution creating small factories are the sources of their income. Many communities with different culture and religious beliefs continue to live together in Dharavi rather peacefully. There are 27 temples, 11 mosques and 6 churches for the local residents. Recently, an ATM from a major bank has opened here. There are about a dozen of schools exist for local children. Most of the children start earning income as soon as they are able to do so. However, some parents have high aspirations for their children, even in the adverse conditions. They continue to pursue higher education in order to enroll in esteemed professions such as medicine and engineering.

[Insert Exhibit 6 about here]

Over the years different projects were funded by the World Bank, and Bombay Urban Development to solve housing problems for the poor slum dwellers. Different schemes such as PMGP (1985), SRD (1991), and SRS (1995)¹⁶ were introduced by the government agencies, NGOs, and public donors liked UN and World Bank. In mid 1990's, the Maharashtra state government established a new organization called Slum Rehabilitation Authority (SRA), headed by the Chief Minister of Mumbai. It gave the slum dwellers protection for their homes against private developers, who were encroaching upon the slum areas to make a profit from the highly priced real estate of Mumbai. Meanwhile, the World Bank attached the conditions of requiring proof of rehabilitation and resettlement of slum dwellers in exchange of monetary aid to slum development. In 2004, the Chief Minister of Maharashtra declared its mission to "transform Mumbai as a world class city with a vibrant

economy and globally comparable quality of life for its citizens” by 2013. The Mumbai task force was formed and a detailed report on “Transforming Mumbai into a World-Class City” were prepared jointly by a local organization called Bombay First and international consulting firm called McKinsey Company. Their report listed the strategies for the next 10 years, with short and long term goals. The project was divided in five sub groups and the total cost of the project was estimated to be at \$40 billion over ten years.

[Insert Exhibit 7 about here]

The past Prime Ministers of India have always been sympathetic to the slum dwellers in Dharavi. In 1985, Mr. Rajiv Gandhi, the Prime Minister at that time allocated Rs. 350 million to state government to improve the housing, sanitary and public services in Dharavi as a report documented that only 162 water taps and 842 toilet seats were available for nearly 300,000 residents. It took more than a decade to provide better housing with improved facilities to a limited number of lucky residents in Dharavi. After a few changes in political party in India, another Prime Minister Dr. Manmohan Singh in 2004 aspired to transform Mumbai to a modern city with a good quality of life similar to Shanghai in China. To convert his vision to a reality, he committed to pay \$2 billion over five years to rebuilt Mumbai as a traffic and pollution free, world class city without slums. With the full support from central government, the state Government and the Mumbai Task Force established the Mumbai Development Fund, which was financed by the public donors such as, World Bank, IMF, USAID, AILSG, Urban Management Program for the UN, UN-INHABITAT etc., Civic Societies, such as, Bombay First, AGNI, etc, and private sectors like national and multinational corporations. The state and central government have been working together to attract capital for investments from the financial/capital markets, private sector, civil society and the donor community.

Dharavi Redevelopment Plan and Mr. Mehta:

Dharavi's prime location¹⁷ and its contribution to Mumbai's economy made it an ideal slum redevelopment project. Government of Maharashtra hired Mr. Mukesh Mehta, an architect and project management consultant to radically redesign Dharavi. His proposal, called *Dharavi Redevelopment Plan (DRP)* has three main objectives:

- First and foremost, to improve the living condition of the slum dwellers and to maintain their occupation, unless it is hazardous for the environment
- To create a radical plan in which Dharavi will be rebuilt as a whole, instead of earlier piece-by-piece approach. This plan tried to avoid moving the slum dwellers to a multi-storied building without making any significant change in the overall planning of Dharavi. It was done before, but those housing turned out to be vertical slums. The holistic approach of assimilating other citizens, businesses and service providers from Mumbai to co-exist, to live and work with slum dwellers, is the backbone of this

plan. The new urban center of Dharavi will provide a better and sustainable way of life for the citizen of Mumbai as a whole and will be an exemplary slum redevelopment project to the other cities of the world.

- To make a feasible scheme that will benefit all stakeholders of Dharavi. Its central location, proximity to the financial district of Mumbai, commuting access to many areas by two main train lines, and proximity to the main airport made it an asset to many people and organizations. The *DRP* was planned to provide future benefits to each of the stake-holders to create a win-win situation for all.

The master plan for *DRP* presented an eco-friendly, self-sustainable, and modern development, which incorporated the five principles of HIKES (health, income, knowledge, environment and socio-cultural development). Mr. Iqbal Chahal, one of the state official commented that once this \$2.1 billion project is built, it would be the best place to be in Mumbai.

Mr. Mukesh Mehta was born in Mumbai in a wealthy family. He was the youngest son and was predicted by an astrologer to be the most successful person in his family. His parents raised him lavishly. Later, as an adult, he was sent to the USA for higher studies. Mr. Mehta studied architecture at *Pratt Institute* in Brooklyn. He managed his father's steel business successfully and later decided to open his own real estate development business in the most expensive North Shore area of Long Island. He lived among the affluent in Long Island and built private multi-million dollar homes for them. When he was hired as a consultant for the first slum development project at Dharavi, he considered it as a financial opportunity for him. He was aware of the few extremely rich people, who lived in mansions with a life-style of the rich world, and too many poor lived in *zopadpatti*, with awful living condition in the same city. However, after he stayed in his office in Dharavi for six months to have a first-hand idea about the project, his mental set-up about it changed. He remembered that his father like the poor people in Dharavi came to Mumbai from a little village, in search of a better life. His father also shared a small room (*chawl*) with others in his early days in the city. He empathized with the hard working and honest people of Dharavi, who work sometimes 15 hours a day to make a living- they suddenly became his heroes. He wanted to make a difference in their lives; to give them the opportunity of better lives they deserved.

Mr. Mehta's argument against past failures of slum improvements is that this was not only the housing problem – it was also about the human resources. Unless the development projects are planned with a holistic sustainable approach as described by HIKES to find ways in assimilating slum dwellers with the mainstream people, the plan would bound to be a failure. He compared how the immigrants in the USA start mostly as financially poor and struggle hard with a strong belief that one day they'll achieve a piece of the American dreams. Over time they integrate in the melting pot of the American society. He wanted to provide the same opportunity to the slum dwellers, not to be looked down upon, but to gradually be a part of the middle class society in Mumbai.

His master plan includes 535 acres of land to be re-built in five sectors over seven years. The eligible slum dwellers, whose names were established in the electoral roll by the year 2000

will receive 225 sq. ft housing unit per family, free of cost, and will have option to buy more at the construction cost. 35% of the total 325 acres of building construction will be sold to outside businesses and service providers, while 65% will be used for providing free housing to approximately 57,531 families. Temporary residences will be provided to these families during the construction phase. To improve transportation, the existing roads will be widened and new roads will be built. The train line will be connected to this community to facilitate the commuting process. The plan has provisions for hospitals, schools, colleges, post offices, police stations, shopping malls, parks, art galleries, theater, a cricket museum and more. The state government has provided an incentive for developers as FSI index (the ratio of total floor area to the plot size) of 4 for the free housing, compared to 3.1 for municipal and government land and 1.3 for private lands. The projected cost was estimated to be \$2.3 billion will be divided in five contracts for five sectors. Winning bidders will receive the development rights from the government by paying a “premium”. According to Mr. Mehta, the “premium” may be as high as \$1 billion, which will be collected by the state government from developers’ profit.

Dharavi’s Stakeholders:

DRP has been a very high profile redevelopment project which is being watched at national as well as international level. There are many stakeholders also who are involved with this project over the years. They are as follows:

- Dharavi Slum Dwellers
- Political leaders, Government officials and ministers at central, state and local level such as Mayors, Members of Parliament (MPs) , Members of Legislative Assembly (MLAs) etc.
- The Planning Commission and other Government Agencies like *MAHADA*, *MMRDA*, *MCGM*
- Civic Societies such as Citizen Action Groups, and many NGOs
- International donors such as *World Bank*, *IMF*, etc.
- Builders and Developers involved in this project.
- The citizens of Mumbai
-

Mr. Mehta’s philosophy for creating a successful development project is to meet the interests of all stakeholders involved in the project. It is hardly possible to build anything without benefitting all parties involved. Hence, he provided particular interest to make sure that this project, once built will create a win-win situation for everyone involved. For example, the slum dwellers will get free housing and public services such as clean water and sanitation system – an overall improved quality of life. The builders and developers on the other hand will make enormous profits by selling 35% of the building facilities to other interested buyers

at an extremely high real estate price of Mumbai. The citizens of Mumbai will have a new modern suburb with modern facilities to explore and enjoy. The local and state government will be benefitted by obtaining a modern urban center at Dharavi and also will obtain different types of premiums and taxes from the developers and future users of the facilities. The political leaders will be able to keep their vote bank, since the slum dwellers will not be moved away. The civic societies and NGO's mission of uplifting poor slum dwellers from their inhuman living conditions will be accomplished. The international donors will be satisfied, since success of this project will provide them with proof that their monetary aids are helping to improve the quality of lives of many poor and they will be able to use this project as an example to upgrade human living conditions of other cities in the world. Even the *Mumbai Airport Authority* and the passengers will enjoy a beautiful skyline, instead of the images of tin roofs, while landing. Mr. Mehta's son, Suman, considers Dharavi as a pilot project for upgrading slums in a sustainable way. So, its success will promote similar redevelopment project for urban slums all around the globe.

Hurdles on the way...

The extremely high budget and radical design of this project created many questions and confusions for its stakeholders. Maintaining communications among them and resolving personal conflict of each individual and organization have turned out to be a very lengthy process. Mr. Mehta communicates with 14 different organizations in the Government and distributes many posters and pamphlets to all related parties. However, different organizations for slum dwellers, such as *NSDF (National Slum Dwellers Federations)*, *Mahila Milan*, and NGOs such as *SPARC¹⁸ (Society for the Promotion of Area Resource Centers)* are actively involved to protect the interest of slum dwellers. Some of the slum residents are also ambivalent about the project.

Many slum development projects had been planned over the years. They failed to improve the lives of the slum dwellers significantly. This may be another of those projects, concocted by political leaders, government and developers to fulfill their own interests. Mr. Mehta have met personally with the slum dwellers in Dharavi to present his plan in details and listened to their objections and worries. For examples, the *khumbers* or potters represent the soul of Dharavi, where people make new things out of thrown out rubbish. They worry that their business will be harmed if they have to move to small place of 225 sq. ft area, in one of the floors of a multi-storied building; they won't have enough space or sunlight for drying their pots in the sun. They have been living there for generations and think of themselves as rightful owners of the land. However, Mr. Mehta tried to convince them that they lost the ownership since 1974. The brick kilns they use for their work are also causing pollutions – a nearby hospital has started complaining that the smoke is causing harms to the patients with pulmonary ailments. The leather tanners are also not happy about the fate of their future. Since the tanneries produce pollutants, they will not be allowed to continue their business at that location.

Another person, who already owns 400 sq. ft does not see any gain from getting 225 sq. ft free of cost, since she earns monthly rent by subletting part of her property to a furniture

maker and rented out her basement. Hence, some of the slum dwellers are asking to raise the area from 225 sq. ft to 400 sq. ft. Many of them are not comfortable thinking of living in a floor away from ground in a multistoried building, where they have to ride an elevator and may be forced to pay a fee for riding it. The notion of having personal toilet is not exciting to Dharavi dwellers, who currently share the toilets with many others. One of the residents pointed out that Mr. Mehta is dreaming his own dream, which he and other Dharavi residents may not want to be a part of it. Even, Dharavi Development Authority's chief executive Mr. Gautam Chatterjee is apprehensive about the future of the slum dwellers in new development. He is afraid that they will lose their identity of entrepreneurs and will end up being the peons, drivers and maid for the rich people who will pay premium prices for rest of the development.

The most outspoken person in this debate is Mr. Jockin Arputham¹⁹, who is a life-long slum activist and an expert on Dharavi. He is the Founder and Director of National Slum Dwellers Federation (NSDF) and represents the interests of the slum dwellers in Dharavi. He was born in a wealthy family and lived a good life as a young boy. He went to a school run by Catholic nuns. However, his family was faced with financial difficulties, when he was teenager. He taught himself to become a good carpenter and moved to Mumbai in search of a better life. He started a school for the street children. Slowly over time he emerged as a leader of the poor slum dwellers. He gave them a voice, and helped them organizing protest in fighting back against eviction from their settlements by local and state authorities.

His main objection was that the local residents were not informed about the Dharavi Redevelopment Plan (DRP). He is a supporter of bottom-up approach of redevelopment, rather than top-down approach, as has been the case in Dharavi²⁰. He pointed out that the tender has been called and the bidders have submitted their bids without any initial survey statistics- this is not a standard norm. Mr. Arputham is concerned about the eligibility issue since according to his estimate only 35% of the current residents are eligible for free housing as per government plan. He is apprehensive about the rest of the Dharavi residents who are currently renting the lofts and the basements. His other complaint is that that Mr. Mehta's plan does not mention the future of many Dharavians such as, rag pickers, who are helping in recycling the city garbage and keeping the city clean, or idliwallahs - who make more than half a million idlis²¹ each day in Dharavi, and sell them all over the city. Another of his concern is that will the builders be trustworthy to provide what is promised? The developer may just give them a hallway with a toilet at the end for everyone to use instead of their own apartment. Will the slum dwellers be charged with some kind of monthly fees in future, and does Mr. Mehta have any idea how much is that going to be? He reflects the concerns of the Dharavi residents towards the powerful and rich builders and developers who so far have not build any goodwill from their earlier housing projects for the poor. He mentioned that the developers required obtaining 60-70% consensus from people according to Slum Development Authority (SRA). He is demanding to obtain 80% consensus instead, in order to make any progress on this project. He also wants to see that slum dwellers get a fair share of the profits that the developers will make, considering the current estimate of Dharavi's real estate is \$10 billion^{22,23}. At this point, neither slum dwellers, nor Mr. Arputham are convinced that this project will bring them many of the publicized facilities in their life. The slum dwellers would like to see improvement in their living conditions, however they are not

ready to accept this proposal, since so many of the issues still remain unresolved. They demand appropriate social justice and will not compromise for anything less.

Rebuttal and Conclusion...

Mr. Mehta denies that allegation of not communicating with slum dwellers. He had an office in Dharavi and he met many of the residents to present his plan and listened to their complaints. He also had been communicating with 16 different agencies to get his projects approved and provided many pamphlets and posters have been passed around about the project. He also mentioned that the local, national and international media have been provided information since the beginning of this project. Regarding the 80% consensus demanded by Mr. Arputham, the state government²⁴ claimed that consensus is not required for Dharavi, since it is a government sponsored project. However, a window of 30 days was given to register any complaints. Exhibit 8 shows the time line for this project. Mr. Mehta is communicating with all interest groups including 14 agencies from Government and NGOs as well as the residents of Dharavi to get to the next step - selection of the bidders for this project.

[Insert Exhibit 8 about here]

However, he knows in his heart that it is the slum dwellers and Mr. Arputham, who needed to be convinced that he shares their dream – a better life and a part in the society with their own identity.

Is he the “versatile” individual that his son, Shyam, thinks he is, capable of serving both the rich and the poor, or is his wife’s characterization of him as a “confused” person a more appropriate metaphor? If he rebuilds Dharavi, will the residents come? Can he win their hearts in the end?

Exhibit 1: A Bird's Eye View of Dharavi during the Day



Source:

http://news.bbc.co.uk/2/shared/spl/hi/world/06/dharavi_slum/html/dharavi_slum_intro.stm [Accessed on May 18, 2013]

Exhibit 2: Dharavi at Night



Source: <http://www.journeyidea.com/dharavi-slums-a-diamond-in-the-rough>
[Accessed on May 18, 2013]

Exhibit 3

Examples of current small industries in Dharavi- clock wise from top left (a) recycling computer keyboards, (b) drying bread chips, (c) making plastic pipes, and (d) clay pottery.



Source: http://www.dharavi.org/D._Photos [Accessed on October 15, 2012]

Exhibit 4: Inside view of Dharavi



Source: <http://ngm.nationalgeographic.com/2007/05/dharavi-mumbai-slum/jacobson-text/1> [Accessed on May 18, 2013]

Exhibit 5: Outside Boundary of Dharavi



Source: <http://www.journeyidea.com/dharavi-slums-a-diamond-in-the-rough> [Accessed on May 18, 2013]

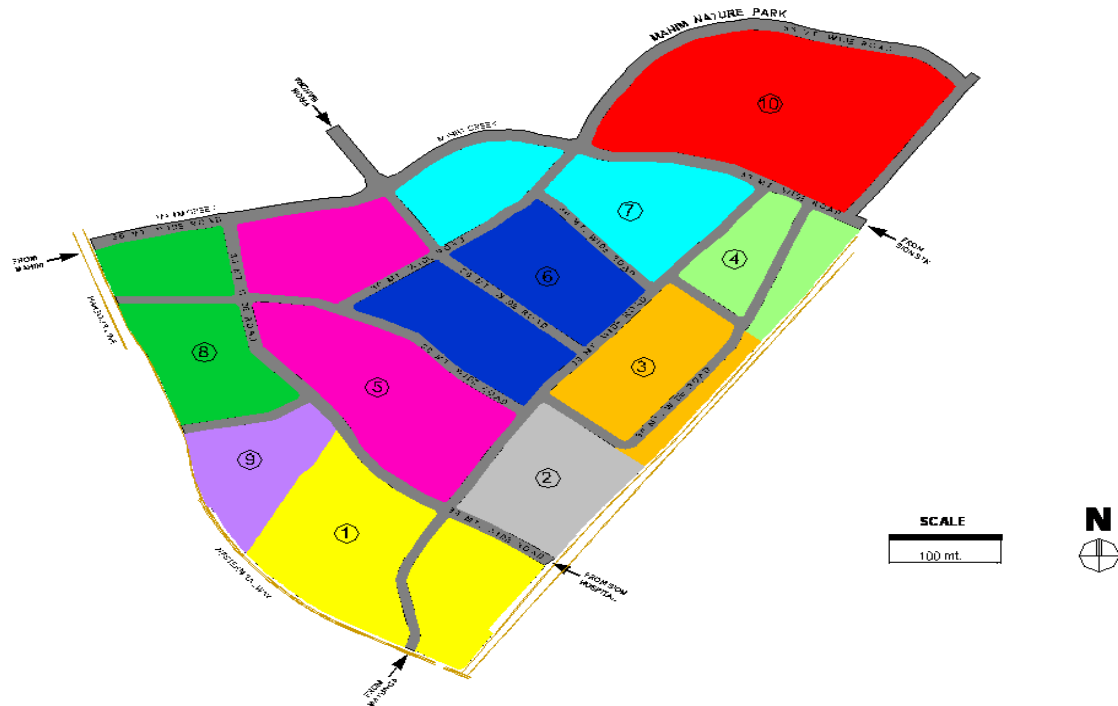
Exhibit 6: Education is valued by many families in Dharavi



Source: http://www.dharavi.org/D._Photos [Accessed on October 15, 2012]

Exhibit 7: Dharavi Development Proposed Sector Map

The number of sectors has now been consolidated from ten to five sectors)



DHARAVI DEVELOPMENT PROPOSED SECTOR MAP

Source: <http://www.sra.gov.in/htmlpages/faqs.htm> [Accessed on May 18, 2013]

Exhibit 8: History of Hurdles in the Dharavi Redevelopment Project

Date:	Event
2004	The Maharashtra State plans Dharavi redevelopment project
June 1, 2007	Global tenders for expression of interest in the project invited. Nineteen consortia selected.
March 2009	Following a global recession, five companies exit the project citing lack of clarity and delay in implementation.
July 7, 2009	Expert committee criticizes the Dharavi redevelopment project and calls the scheme “sophisticated land grab.”
October 16, 2009	Only half of the bidders (7 of 14) submit a MoU (Memorandum of Understanding) that they have signed with their foreign partners A preliminary survey report shows that 63% residents of Dharavi are ineligible for houses under the project.
February 2, 2010	A government sub-committee recommends the sector-wise redevelopment of Dharavi

¹ Katherine Boo's (2012) National Book Award winning *Behind the Beautiful Forevers: Life, Death and Hope in a*

Mumbai Under city, New York: Random House, vividly describes life in a similar slum, Annawadi, in Mumbai.

² Urban age India: Mukesh Mehta, Part 1 & 2 Available at:
http://www.youtube.com/watch?v=KWj09_94wR0 Accessed on 18 May 2013

³ Available at:
<http://www.ctbuh.org/LinkClick.aspx?fileticket=NCNpcNOaLPk%3D&tabid=1421&language=en-US> Accessed on 18 May 2013

⁴ Available at: <http://timesofindia.indiatimes.com/city/mumbai/Karachi-is-Asias-largest-slum-not-Dharavi-UNDP/articleshow/4979292.cms> Accessed on 18 May 2013

⁵ Bunsha, D. (2004), 'Developing Doubt', *Urban Development, Frontline*, Vol 21, No 12

⁶ "Navi Mumbai International Airport" (JPG). [City and Industrial Development Corporation \(CIDCO\)](#).

<http://img214.imageshack.us/img214/2299/dscn7619ql4.jpg> Accessed on 18 May 2013

⁷ According to the 2013 report by Wealth Insight available at:
<http://www.guardian.co.uk/news/datablog/2013/may/08/cities-top-millionaires-billionaires#data> Accessed on May 18, 2013

⁸ Available at: http://www.citymayors.com/statistics/urban_intro.html Accessed on 18 May 2013

⁹ Available at: <http://richestmen.info/4.php> Accessed on 18 May 2013

¹⁰ WHO (2002), *Mumbai slums dwellers' sewerage project goes nationwide*, *Bulletin of the World Health Organization*, Vol 80 (8), page 684

¹¹ The Koli people were the local ethnic native residents of the region.

¹² Edwards, S.M. (2001), *The Gazetteer of Bombay City and Island*, Reprint. First published in

1909. New Delhi, Cosmo, 3 volumes, 1396 pages.

¹³ Sharma, K. (2000), Rediscovering Dharavi: Story from Asia's Largest Slum, Penguin Books.

¹⁴ Source: Slum Rehabilitation Authority <http://www.sra.gov.in/> Accessed on 18 May 2013

¹⁵ Rs. 53 is approximately equal to \$1 in 2013.

¹⁶ PMGP : Prime Minister Grant Project : SRD : Slum Redevelopment ; SRS: Slum Redevelopment Scheme;

¹⁷ Available at: [http://wn.com/Dharavi Slum Development](http://wn.com/Dharavi_Slum_Development) Accessed on 18 May 2013

¹⁸ Available at: <http://www.sparcindia.org/docs/alliance.html> Accessed on 18 May 2013

¹⁹ Arputham Jockin (2008), "Developing new approaches for people-centered development", Environment and Urbanization 2008; 20; 319

²⁰ Jockin A. An offer of partnership or a promise of conflict : Slum dwellers' views on development plans for Dharavi and for Mumbai international airport, Available at: <http://pubs.iied.org/pdfs/G02314.pdf> Accessed on 18 May 2013

²¹ "Idlis" are inexpensive South Indian savory cake popular throughout India. The cakes are usually two to three inches in diameter and are made by steaming a batter consisting of de-husked fermented black lentils and rice.

²² Urban age India: Jockin Arputham, Part 1 & 2 Available at: http://www.youtube.com/watch?v=KWj09_94wR0 Accessed on 18 May 2013

²³ Available at: [http://wn.com/Dharavi Slum Development](http://wn.com/Dharavi_Slum_Development) Accessed on 18 May 2013

²⁴ Jacobson, M. (2011), Mumbai's Shadow City , Available at: <http://ngm.nationalgeographic.com/2007/05/dharavi-mumbai-slum/jacobson-text/1> Accessed on 18 May 2013