

BUILDING CONDITIONS IN LOWER PAREL

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ABSTRACT

The research was initiated by the question: How old are the buildings in the Lower Parel area which are around the B.D.D. Chawls? What are their conditions and how many times have they been repaired? Who maintains them (departments)? We used a survey to test this question around the residences in our community. We surveyed a total of 20 buildings and asked each tenant eleven questions. Our most important findings were that 20% buildings are more than 70 years old. 16% buildings are more than 50 years old. 28% of buildings are more than 30 years old and 36% are less than 30 years old. 58% buildings have developed cracks and 48% buildings have leakage problems. Most of the buildings do not get proper inspection, so that has resulted in the buildings being in horrible and dangerous conditions to live in. Our hypothesis was wrong because we believed that most of the buildings were constructed after 1962 and that they were being repaired at least three times per year. This research applies to our city because most of the buildings in our community are very old and they can collapse at any time, which applies to the people in our area, because since they live in these buildings and they are susceptible of their homes falling on them and dying. Since we did not gain official information from PWD, we researched on the internet which institutes take care of the buildings, and we found out that they were PWD and MHADA.

INTRODUCTION

RQ: How old are the buildings in lower Parel areas which are around the B.D.D. chawls ? What are their conditions and how many times have they been repaired the? Who maintains them (departments)?

PR: We were interested in the buildings of our community. The BDD “Bombay Development Department” constructed many Chawls in Bombay which were supposed to alleviate industrial development. We wanted to conduct this research project because we were curious about why so many buildings were deterioratingadequate housing for approximately 50,000 people.

Internet Rational:

-Many buildings in Mumbai have collapsed because they are very old and because, “Critics say construction projects often lack proper oversight and safety controls”(Pokharel).

“A spokesman for the Municipal Corporation of Greater Mumbai said the building was 117 years old and had been deemed unsafe years ago, raising questions over why it was still inhabited.

‘The building was served an 'unsafe to live' notice in 2013,’ said the spokesman, Vijay Khabale-Patil.” This is a vey risky living situation, and it is the reason for so many innocent deaths. Many other buildings in Mumbai are most likely also like this (Pokharel).

““The authorities should have evacuated the tenants a long time back as this building is unsafe. An inquiry should have instituted under a retired high court judge about this collapse”” (HT Correspondants).

Even as MHADA ensures the repair and maintenance of around 14,000 cessed buildings in the city, the housing authority's own headquarters in Bandra (East) is crumbling.. Its headquarters in Bandra (East), which was built in 1970, needs urgent repairs.

<https://mumbaimirror.indiatimes.com/mumbai/civic/those-who-work-here-repair-other-buildings/articleshow/60370198.cms>

Hypothesis:

Our hypothesis was that all the buildings were constructed after the year of India's independence (1947). Our hypothesis was wrong because some buildings were constructed before 1947 and the rest of the buildings were constructed after.

We have concluded that many of the buildings in BDD Chawl are unsafe because they are very old and the institute does not do their job of maintaining them and checking if they meet the standards of them being a safe living environment.

Methods

The methods that we used to conduct our research was survey of the status of the buildings of our community. We also used internet research to further understand the topic of our research. These are the best methods to conduct our research because we need the survey in order to gather data, gather more concrete information that strictly applies to our community only. The internet research is important in order to further understand different information and perspectives from our city.

The details about our survey method are that we surveyed 50 buildings. We selected this sample size because we wanted to obtain the most accurate information.

Our data was collected by gathering data from the survey. We asked the tenants of the buildings questions such as how old is the building, does it need repairs, how often do people come and fix the repairs, and who comes to fix the repairs. We asked the same questions for 50 different buildings.

We used basic materials to conduct our research. We used our notebook and pencil to write notes and the rough draft of our survey. We used our laptop to finalize our research report.

It took us 1.5 months to finish survey because we also had to do other different school work in between.

When we were trying to gather information of the buildings for our survey data collection, we asked the people who live inside the buildings, many people told us to leave them alone, stating that they don't have the time to answer our questions. Also, sometimes the tenants would give us wrong information, because when we went to the PWD to ask the same question, they said we were given the wrong information.

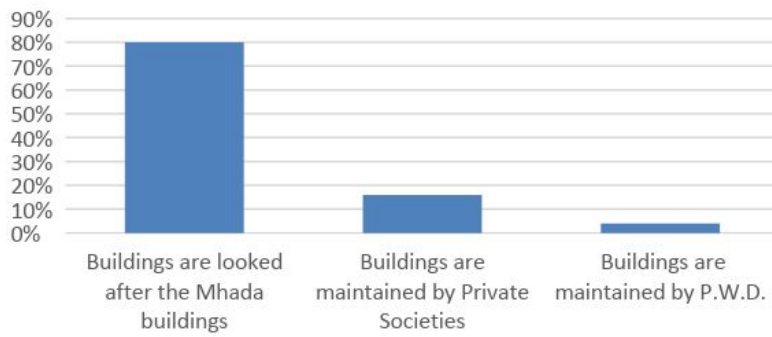
Findings

In most of the buildings in our community, the government does not look after or maintain the quality and safety of the buildings. They do not repair problems such as cracking of the walls and leakage of the pipes.

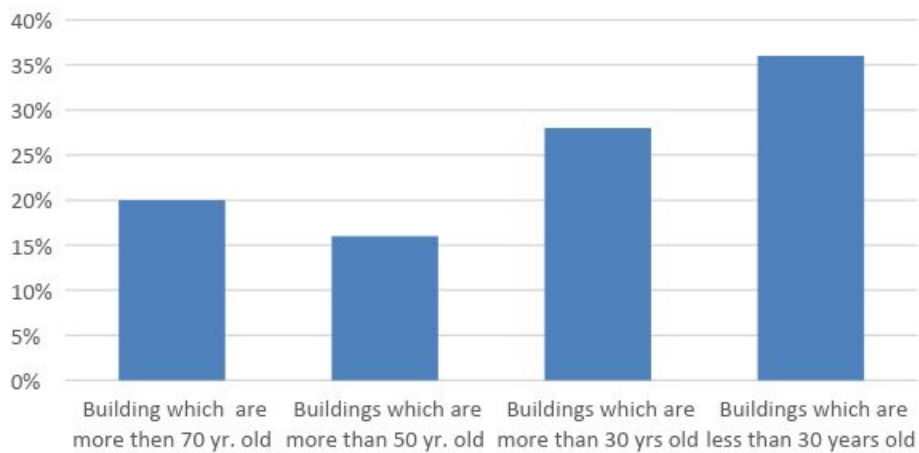
Our survey findings are (%)

1. 58% buildings have developed cracks and 48% buildings have leakage problems.
2. 20% buildings are more than 70 years old. 16% buildings are more than 50 yrs. Old. 28% of buildings are more than 30 Yrs old and 36% are less than 30 Yrs. Old.
3. 80% of the buildings are looked after Mhada. 16% buildings are private societies and 4% buildings are looked after P.W.D. department.

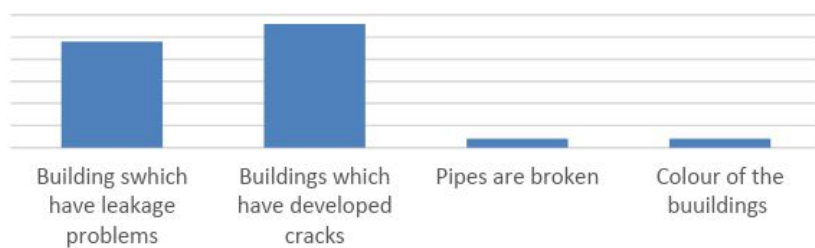
Who looks after the buildings



Age of the buildings



Condition of the buildings



Maharashtra Housing and Area Development Authority MHADA's Mumbai Building Repair and Reconstruction Board :

They take care of the buildings which are in depleted conditions.

At present, MHADA's Mumbai Building Repair and Reconstruction Board gets only Rs 88 crore per year for repairs and reconstruction of the 14,375 cessed buildings in Mumbai, said an official from the Board. The cess is a tax, also called 'repair fund', paid by the buildings.

"The amount that we are getting is very inadequate considering the number of cessed buildings. Due to the shortage of funds, we have to prioritise the repair works of cessed buildings based on the condition of the building and the urgency," said a senior official.

<http://indianexpress.com/article/india/bmc-repairs-of-cessed-buildings-civic-body-state-govt-ow-e-rs-2394-crore-to-mhada-4827248/>

Public works Department.

Construction and maintenance of residential accommodation meant for Central Government Employees.

***** Almost all of the buildings in Mumbai are old which means they all need some sort of repairment. However, only the buildings that are in the absolute worse condition are the ones who are going to be considered first for repairment by the companies since they supposedly do not make enough money. So, only a portion of the buildings get repaired and the rest run a risk to the lives of the tenants of the buildings.

What is redevelopment and why is it needed?

Housing redevelopment refers to the process of reconstruction of a residential premise by demolition of the existing structure and construction of a new one as per approvals from the Municipal Corporation of Greater Mumbai (MCGM). It ideally works best when a society is in dire need of extensive repairs but is starved of the necessary funds for it.

Developers, on their part, are also on the lookout for properties with unused development rights where they can build a new and higher structure where the additional storeys can be sold for a tidy profit.

As per the terms of the agreement between the developer and the society in question, existing members of the society receive new flats in the reconstructed building of an area equal to or more than the area of their existing flats. But redevelopment can only take place if 75 percent of the members tender their consent.

Over 20,000 housing societies, 17,000 cessed buildings and over 3,000 Mhada (Maharashtra Housing and Area Development Authority) structures are waiting for redevelopment proposals.

Guidelines for owners of buildings in Lower Parel Area

We visited P.W.D. department and MHADA department in our area three times but nobody gave information and engineers were always on construction site so it was difficult to carry on the research work so we decided to read different articles and found following guideline for different societies in our areas.

According to the article, structural audit is technique to understand the condition of any existing building / structure. It is mandatory as per municipal authorities.

Owners of buildings are not required to take any special permissions for structural audit.

If expenses for repair exceed Rs 100000, then approval of general body needs to be taken.

Further, the directions given in the Maharashtra Cooperative Societies Act 1960 needs to be followed.

The committee and the owners should undertake timely analysis of the building and carry out the required repairs as early as possible. The society may take a loan from the bank if required for the repairs.

A major reason for collapse of a building is

- Not undertaking timely actions like regular painting and inspecting every flat at least once in six months to identify the leakage and stops such leakages.
- Postpone the decision till the building is declared as dilapidated.
- The option of going for redevelopment even when the same is not viable and expecting the government to provide additional incentives.
- Another common thing seen in people is going for low quality and cheap material.
- Regular repairs and renovation and shifting of kitchen, toilets, etc within the flat without having proper drainage pipe also make building structure weak.
- The most important reason is no one wants to own the responsibility and take necessary measure.

If proper preventative maintenance is undertaken, the building can survive at least 60 to 70 years ~~life as against the life of 80 to 90 expected.~~ It is seen that any building nearing 30 years needs to go for redevelopment as the cost of the repairs is beyond their budget. The filling of cracks, carrying out the outer painting or water proof treatment on the terrace and outer of the buildings

once in 3 to 5 years shall increase the life of the building. Any repairs need to be attended as quickly as possible, otherwise water will find its own way and the structure will get dilapidated inside the beams and columns which in the ordinary eye cannot be seen.

Issues faced by the buildings and various types of structural anomalies borne by old residential buildings in Mumbai

- Major concern for every cooperative housing society is to raise the required contribution to carry out the repairs. The residents always feel that the repairs are the additional burden and majority of the members in the general body tend to postpone the same. The tenanted building, the owners who receive very less rent, do not want to spend on the repairs and the tenant think that it is the responsibility of the owner of the building to repair the building.
- The internal leakages between the flat or seepage outside the building is not attended as required from time to time which leads to structural damage. The MCGM officials are many times forced to declare such building as dilapidated and force the residents to vacate the building which is the ultimate goal of many owners of the tenanted building to go for redevelopment.
- The terrace waterproofing is not carried out and always other members of the society or other floor tenants want such expenses to be borne by top floor owners/ tenants who are most affected.

- The attitude of majority of the members in the cooperative society not to undertake timely action and approach of postponing the same is a great concern which every society must address

DISCUSSION

RQ: How old are the buildings in lower Parel areas which are around the B.D.D. chawls ? What are their conditions and how many times have they been repaired the? Who maintains them (departments)?

Our hypothesis was wrong because we thought all the buildings were constructed after 1962. We found out that five buildings were constructed before 1947.

The sectors that influenced our research was that we visited the PWD 3 times, but no engineer was available to give us any answers or guidance.

When were surveying different tenants of the buildings, we did not find any authority of the buildings that were able to gives proper information and data from the actual buildings. We were only able to obtain answers from the people who live there. This could have influenced the data collected from our research.

This is significant to our city because a lot of the buildings were constructed before 1947, meaning that the quality of the construction is very poor and dangerous to the current tenants of the buildings.

We researched some guidelines that were provided for the locals who live in the buildings that state who to go to when there are problems within the building and signs that the building is in bad condition, such as cracks in the columns, leakages, and problems with pipelines.

An action we can take as a group is that we can print the guidelines and distribute it amongst the people in our community so they can be aware if there are any dangers in their homes in order to prevent further collapses of buildings and deaths of the people in the community.

A follow up research question that we are curious about is, how many buildings in Mumbai that are in bad conditions received a letter from the government to evacuate the people in the building? How many tenants actually call the structural engineer when they notice a problem in their buildings?

REFLECTION

Harsh: The most enjoyable part of the research for me was interviewing different people for our survey data.

Something I struggled with personally was not being able to gather more information from credible sources because of time limitations and not always taken as seriously because of our age.

If I were to do the research again, I would try to be more involved and contribute more to my team.

I learned about the statistics of our research project, such as how many buildings have collapsed in our area.

Pranav: The most enjoyable part of the research for me was finding out the data of all the collapsed buildings in our area because I like learning more and more information about out topic.

Something that I struggled with was talking to people about our survey questions and bot having full collaboration into the work from the rest of my team mates.

If I could do the research again I would change by gathering different data because I would be able to gain more general information about the research topic overall.

I learned how to gain more courage when speaking with other people about the survey.

Yuvraj: The most enjoyable part for me was collecting information and the buildings and using the laptop to type up our work.

Something that I struggled with was attempting to balance my research work with my regular school work.

I would change the structure of the project, by speaking with other people to survey. I also learned different strategies to ask people different interview questions for our survey data collection.

I learned that there a lot of different buildings in our area that were constructed before 1947.

Tushar: The most enjoyable part for me was conducting the survey.

Something that I struggled with was interviewing people because I had difficulty approaching people when asking them questions.

I would change by trying to improve my English so writing and understanding the research process would be easier.

I learned how to slightly better my English reading skills and I learned how to improve my time management skills by balancing both my research and school work at the same time.

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