

An aerial photograph of a city, likely Ahmedabad, India, showing a dense urban landscape with a large, irregularly shaped lake in the center. The lake is surrounded by greenery and some buildings. The city extends to the horizon under a hazy sky.

# FDP 105: Archiving the Times Mapping Neighbourhoods



Ahmedabad  
University

## Group - 3

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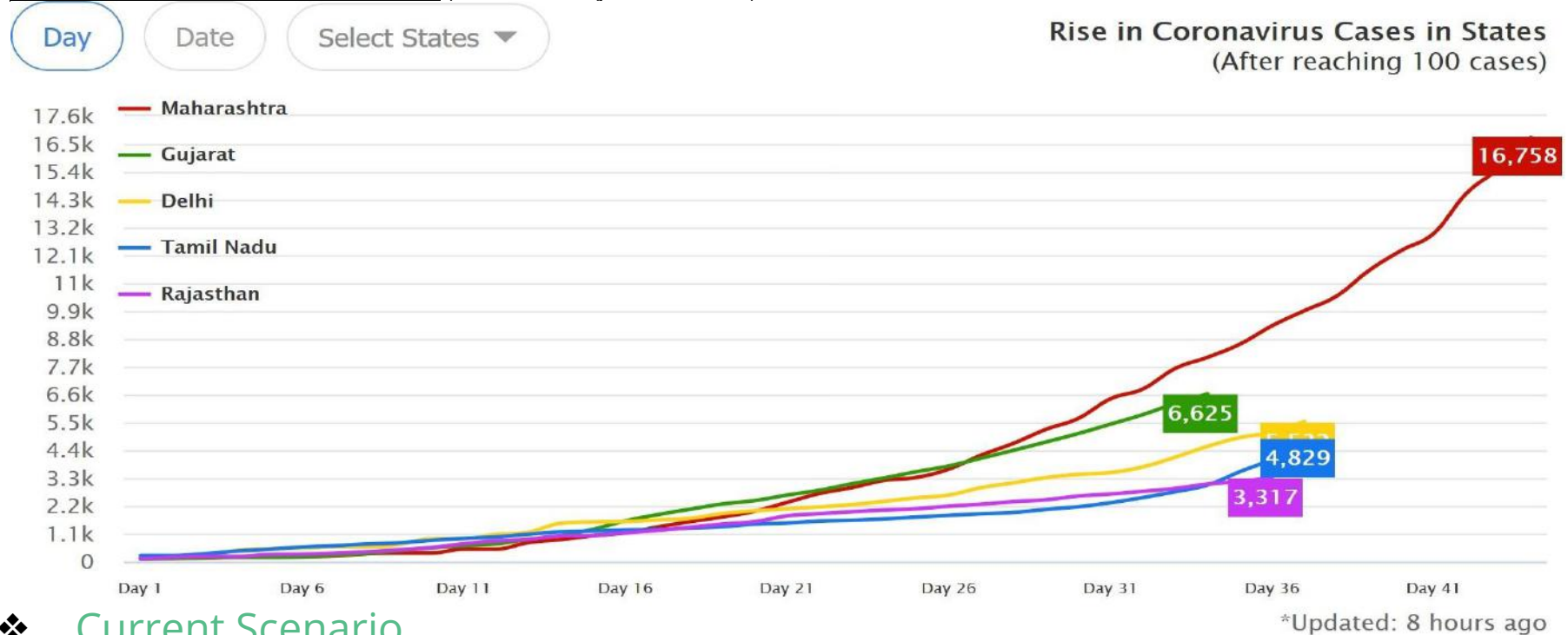
# Preface

- ❖ The disease called COVID-19, caused by novel SARS-CoV-2, originated from Wuhan, China. Since 31st December, the day this news came out, the virus has spread rapidly across the entire world. About **4 million cases** have been reported from [across the globe](#), along with **2,82,244 deaths**, as of May 11, 2020.
- ❖ These astonishing numbers were reached in a period of 5 months only. The contagiousness of the virus has forced almost all the countries to go into complete lockdown till an effective vaccine is made.
- ❖ With massive disturbances seen in our economies as well as the increasing number of deaths everyday, we are indeed going through the ***worst pandemic of this century***.

# Outline

- ❖ Representation of the number of cases, recoveries and deaths across India via graphs
- ❖ Analysis of the responses generated from the Google form along with images from our own neighborhoods
- ❖ Impact on Environment
- ❖ Mental health analysis
- ❖ Impacts on job opportunities
- ❖ Looking at the current scenario of Ahmedabad using geo-spatial analysis and interviews
- ❖ Plight of migrant workers
- ❖ What next?

# Scenario in India (as of May 6, 2020)

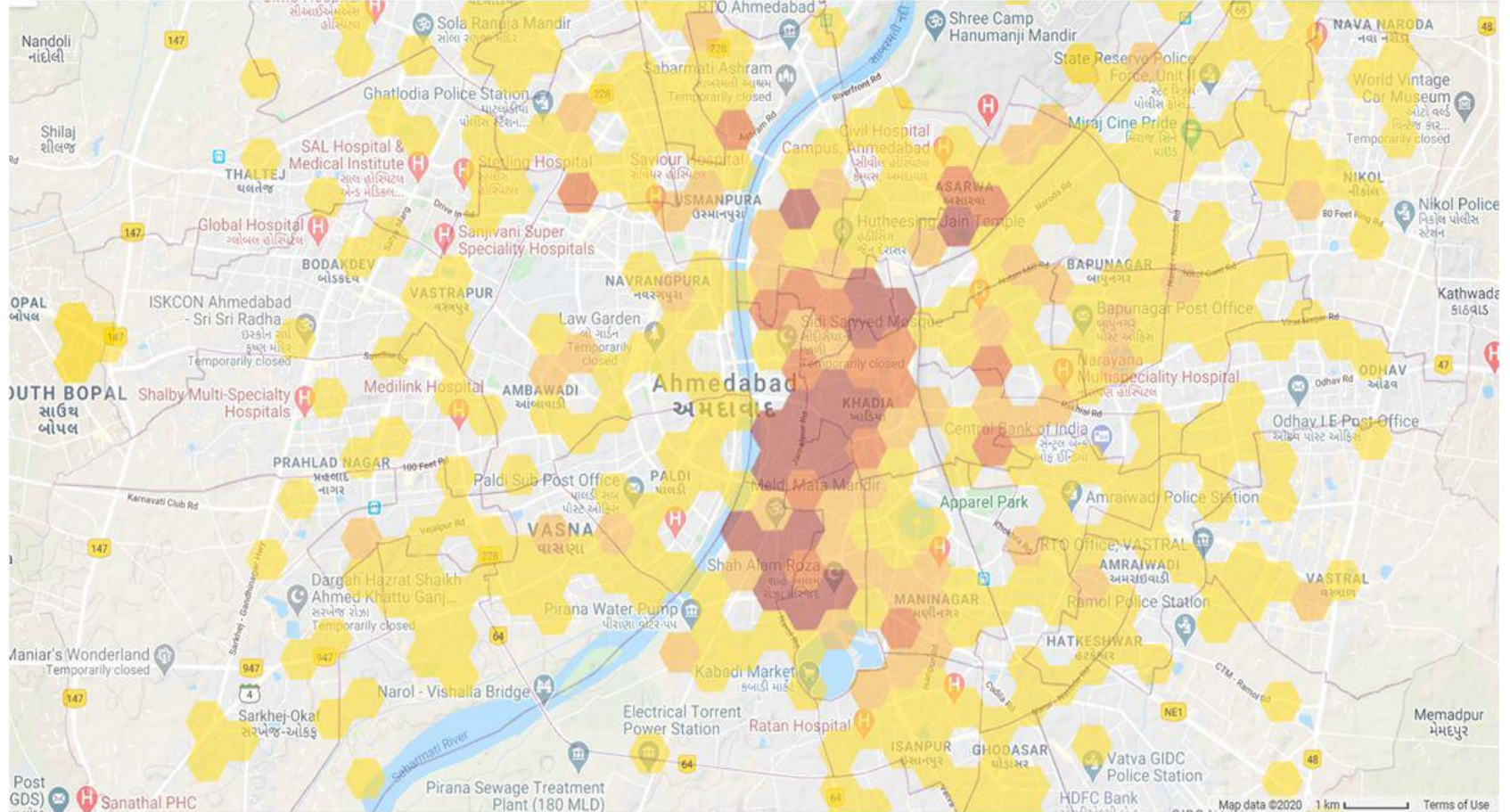


- ❖ Current Scenario.
- ❖ Increase in cases (state wise).
- ❖ Number of days for doubling of cases in India : 12
- ❖ Ahmedabad

Source: [https://www.ndtv.com/coronavirus/fullcoverage?pfrom=home-coronavirus outbreak coverage](https://www.ndtv.com/coronavirus/fullcoverage?pfrom=home-coronavirus%20outbreak%20coverage)



## Map depicting red, orange and yellow zones of Ahmedabad



As of April 30, 2020.

# Questionnaire analysis: Response statistics

Country	Number of responses
India	107
Abroad (USA, UK etc)	30

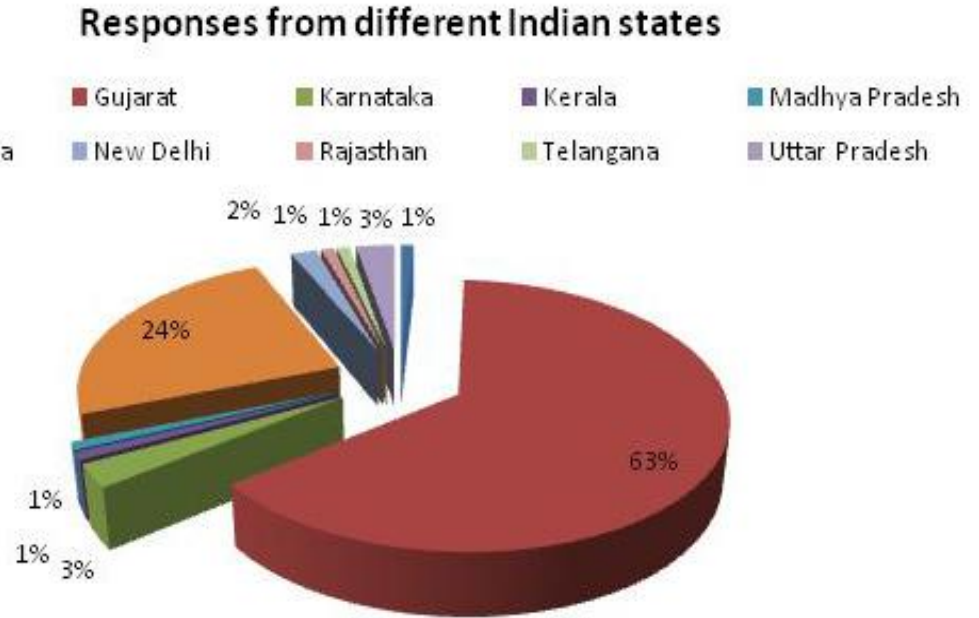
Responses were collected from April 22, 2020 to April 27, 2020.

Age group- 18 to 70 (approximately)

Number of Female respondents- 67;

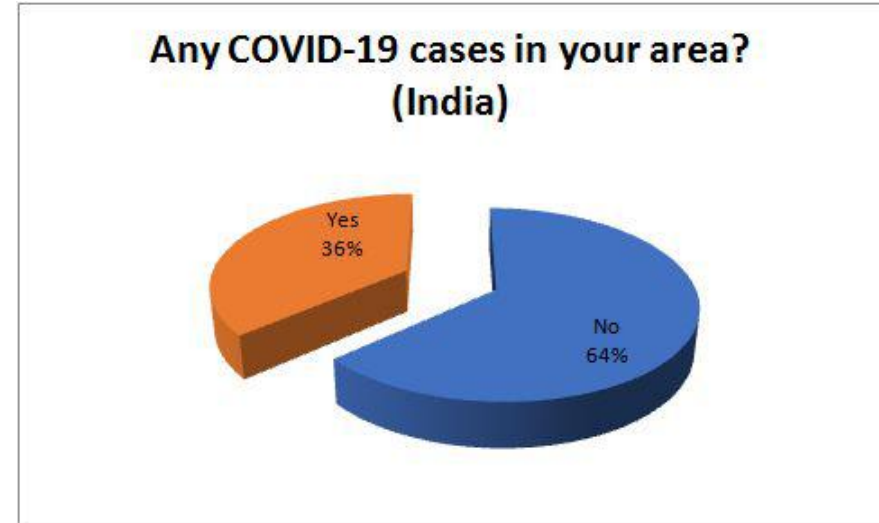
Number of Male respondents- 70

All respondents belong to urban households. They include friends and relatives of the members of group 3.



# Any cases around you? How alert are the citizens?

- ❖ **68** of the 107 respondents opted for '**No**' and remaining **39** opted for '**Yes**'.
- ❖ As alert citizens, all of the citizens from affected areas are ***just quarantining themselves***.
- ❖ "All individuals or cars are ***allowed to enter only after they sanitize at the gate***. Only those people who are in medical or essential services are allowed to go out if they have sent a mail to the managing committee beforehand." states a resident of Andheri, Mumbai.







The empty Commerce Six Roads, Navrangpura,  
Ahmedabad  
Image taken on April 17, 2020.



May 1, 2020.

Physical distance being  
maintained; Navrangpura.



# Role of local authorities

- ❖ Sanitization of the surroundings every 2-3 days is being carried out in areas of Ahmedabad. **Strict police patrols.**
- ❖ In the walled city area (Ahmedabad- Manek Chowk, Kalupur, Lal Darwaja) and Gandhinagar, the police are keeping a check on the gathering of crowds via **surveillance drones.**
- ❖ A resident of Aundh, Pune stated that officials from Pune Municipal Corporation are going house to house, asking whether **any family member** is **showing symptoms** of the disease.
- ❖ “Local authorities have **drive through testing** available for those who are in need” reports a citizen of New Jersey, USA.

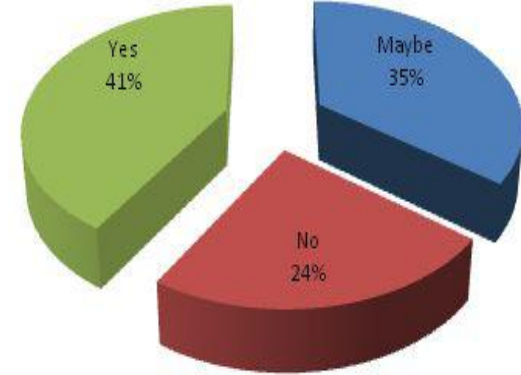


Surveillance drones in action

# Essential services

- ❖ Groceries and essentials are ***delivered to society gates***, hence many were not aware of the fixed timings.
- ❖ Most of the timings range from ***6 AM to 2 PM***.
- ❖ “Grocery shops have been allotted ***special time frames*** during which ***only senior citizens*** can enter” reports a citizen of Boston, USA.
- ❖ In spite of lockdown, about **24%** of the Indian responses state that shops in their area are open the entire day.

Any fixed timings for grocery and provision stores?  
(India)





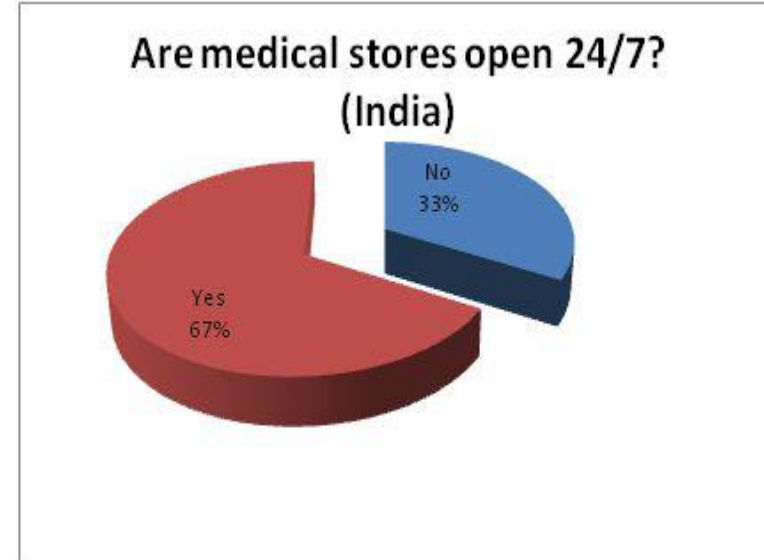
Essentials being delivered in societies.



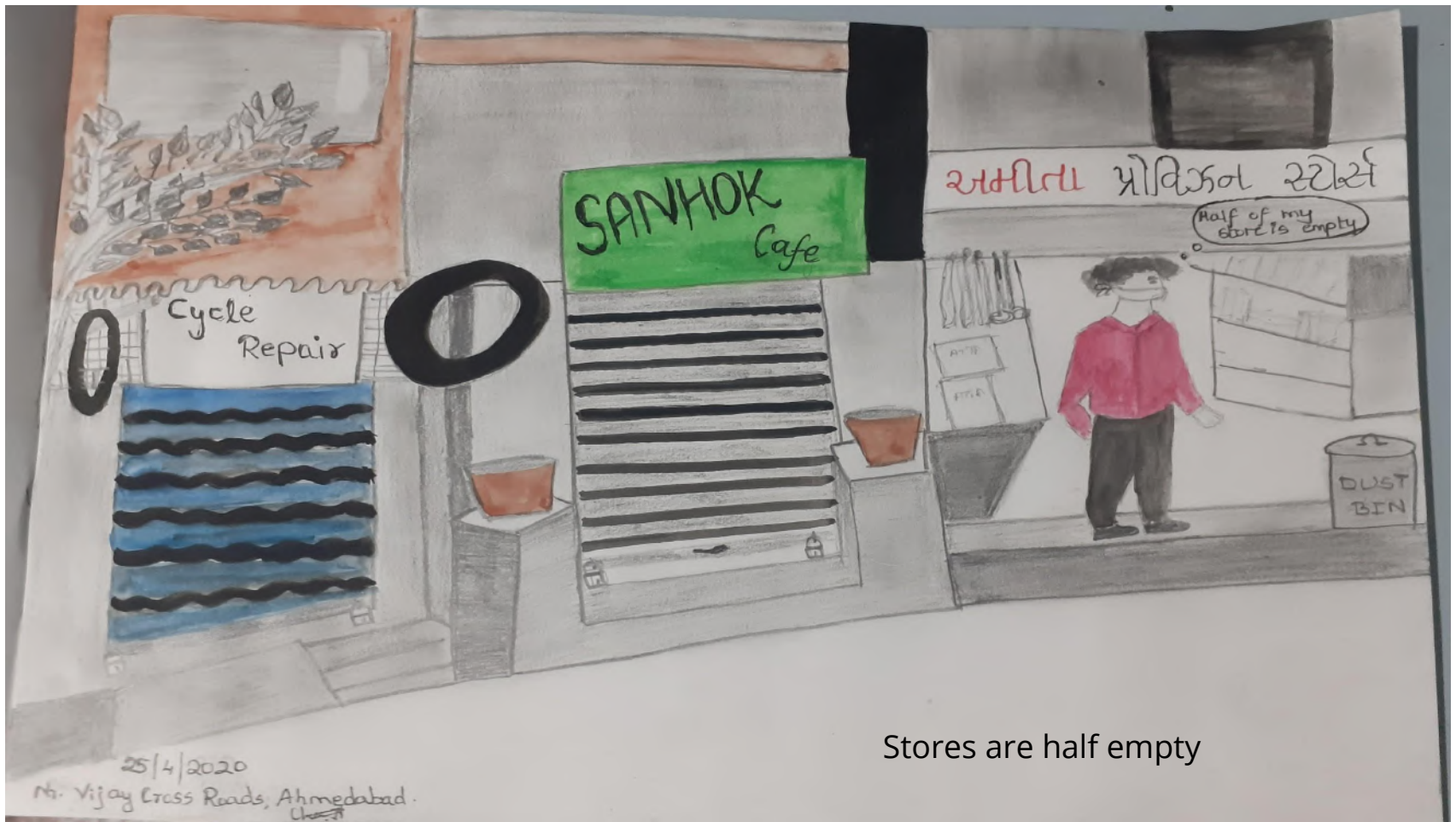
Source- Society in Pimple Saudagar, Pune  
Clicked on April 25, 2020.

# Essential services

- ❖ As the pie chart clearly suggest, majority of the medical stores around India are open. Those which aren't open 24/7 are **open for at least 12 hours**.
- ❖ Summarizing the responses for this question, in areas where medical stores are not open for a longer time, citizens are turning towards **home delivery** offered by these stores or visiting the stores whenever they are open.
- ❖ **Conclusion**- Milk products, vegetables and fruits are sufficiently available, although at slightly higher prices. Lately, **stocks** of various products seem to **finish off sooner** than expected as people have started **buying** everything **in bulk**.





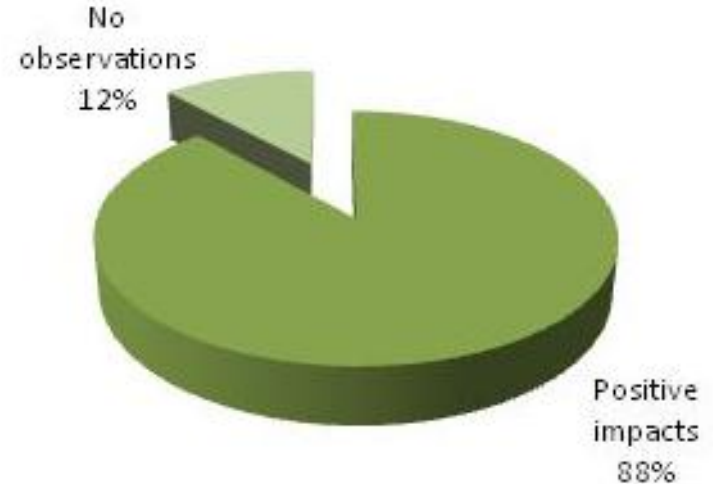


Stores are half empty

## Environmental changes observed

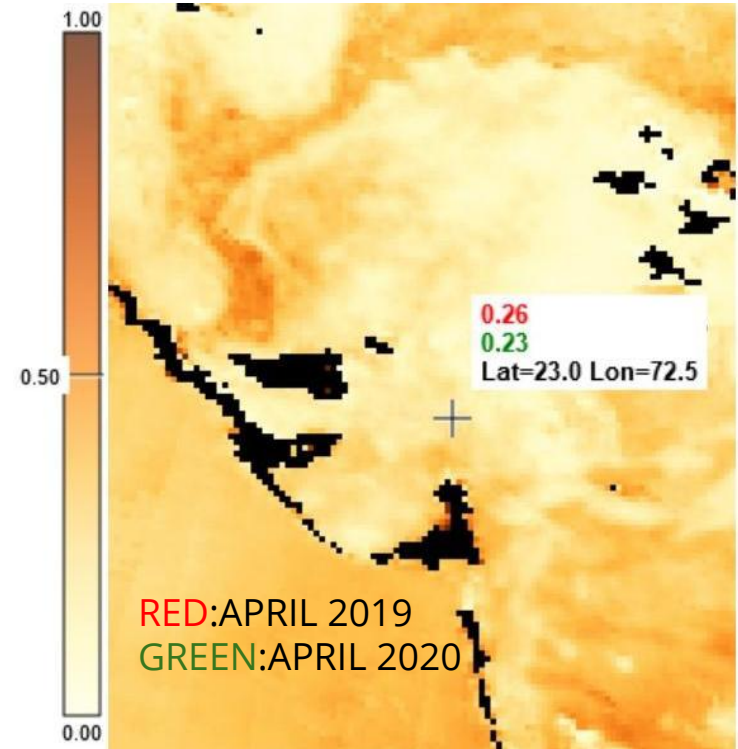
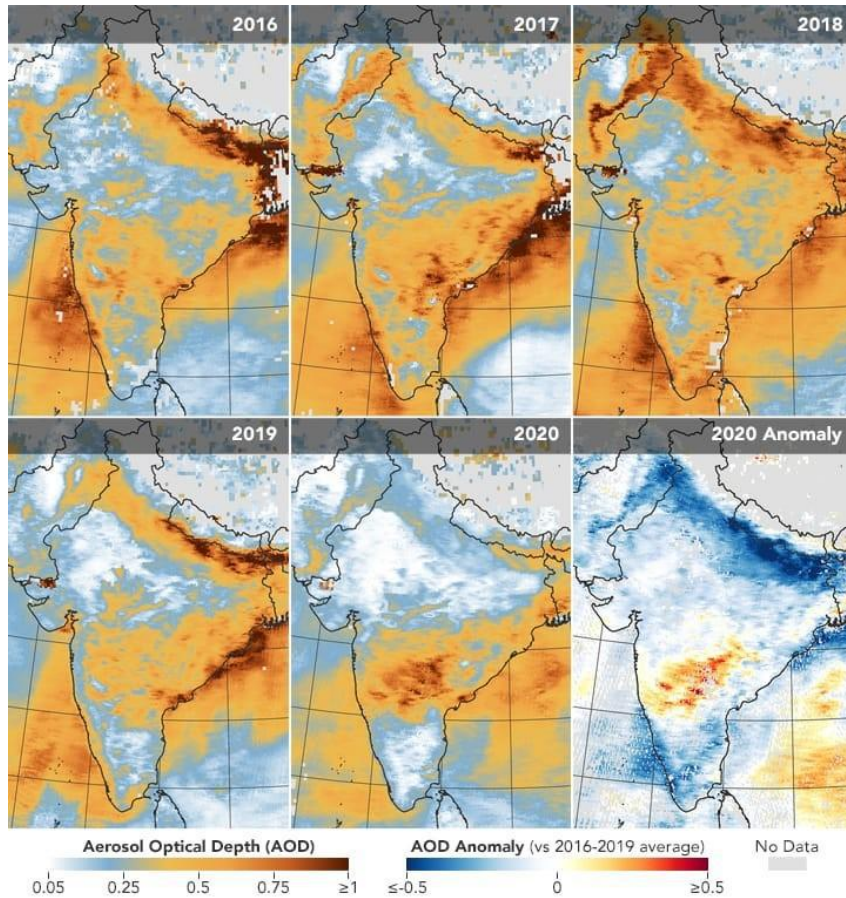
- ❖ The most commonly witnessed observations, in India, include ***decreased noise and air pollution*** due to reduction in number of vehicles on the roads.
- ❖ Due to this, people are actually able to ***hear the birds chirping*** every day.
- ❖ Other changes spotted by the respondents include clear skies during the day, cleaner streets and an ***overall peaceful atmosphere***.

Any environmental changes observed?  
(India)



# Reduction in pollution

There is considerable decrease in pollution (aerosol level) over India (left). Aerosol level in Ahmedabad (below).



Source:

<https://earthobservatory.nasa.gov/images/146596/airborne-particle-levels-plummet-in-northern-india>



# Videos



Male purple sunbird, happily chirping away. Location- Bharuch, Gujarat



Increased number of deer in the foreign neighborhoods  
Location- Monroe, New Jersey



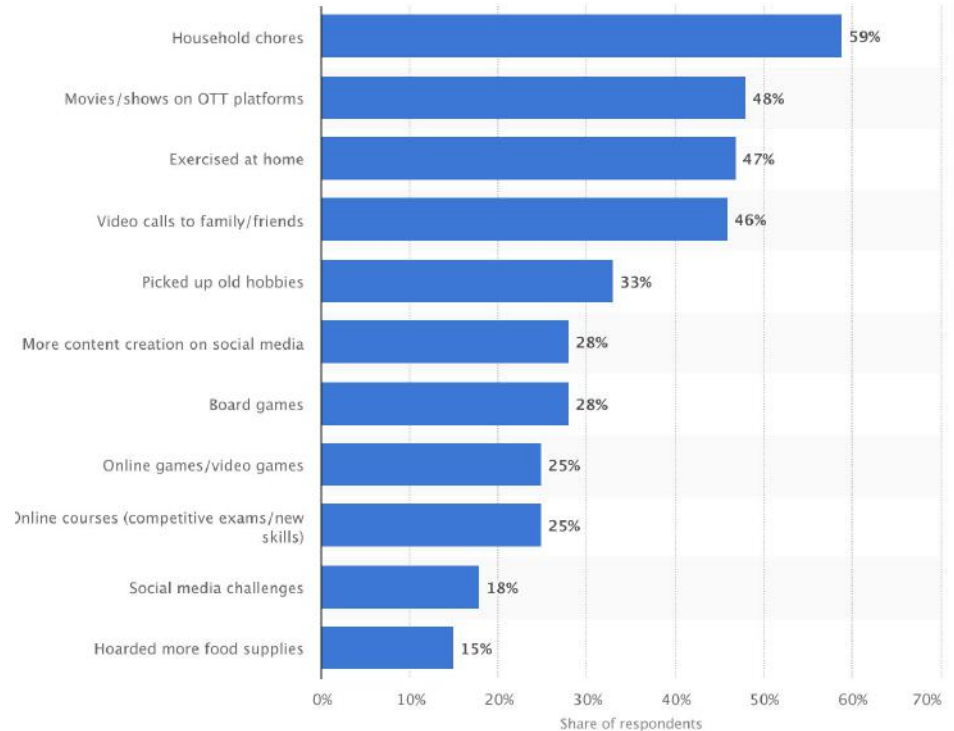
# Comparison between the different neighbourhoods

- ❖ In the USA, stores have fixed timings for *senior citizens only*, which is not observed in any other neighborhood (at least from the small amount of data generated from the form).
- ❖ States like New Jersey are also offering 'drive through testing', which is not observed in the Indian neighbourhoods.
- ❖ Some restaurants in the foreign countries are still providing a 'take out' or 'drive through' facility. Whereas, almost all restaurants in India have shut completely, as the responses indicate. Very few restaurants are offering home deliveries via apps like Zomato and Swiggy.
- ❖ Another difference seen is that the grocery and provision stores are open in countries other than India for longer hours.
- ❖ In India (especially streets of Ahmedabad), municipal corporations are spreading awareness using speakers fitted into auto rickshaws so that the citizens are always alert. This is something which is not observed in the foreign countries.

# Mental Health Analysis

## TOTAL NUMBER OF RESPONSES: 137

- ❖ **7%** of the total respondents feel trapped inside their homes and face ***anxiety, loneliness, restlessness and frustration.***
- ❖ **35.4%** of the total respondents have ***started valuing the time*** and are spending it with their family members.
- ❖ **36.2%** of the total respondents have started exercising more and they have realised how ***nature is important for their mental health.***
- ❖ **42.5%** of the total respondents have been ***consuming healthy diet*** to maintain their physique and boost up their immunity.
- ❖ Usually, household activities are managed by women. But in this lockdown period, **59%** men have started ***helping women in household chores.***



Source: <https://www.statista.com/statistics/1111152/india-coronavirus-lockdown-activities/>

# Mental Health Analysis

- ❖ Reading more and more about the virus and getting updated continuously has increased ***fear and is causing panic attacks*** amongst people.
- ❖ **During the lockdown, 38.6%** of the total respondents have been pursuing hobbies like drawing, graphic designing, reading, writing etc. Companies like ***Udemy, Coursera, Great learning*** have made their courses free for the users.
- ❖ **38.6%** of the total respondents have been using video streaming(Netflix, Amazon Prime), social media and gaming sites.
- ❖ Before the lockdown, social media usage was, on an average, 150 minutes per day. However, in the first week of lockdown, ***Indians spent 4 hrs on Facebook and Whatsapp per day.***



Source-<https://www.who.int/westernpacific/news/multimedia/infographics/covid-19>

# Work from Home

- ❖ **19.7%** of the respondents face *irregular sleep cycles* because working from home is stressful.
- ❖ People have been sleeping longer but due to the change in work schedule they do not sleep peacefully.
- ❖ This is primarily due to absence of work-like environment and separate workspace in home especially in India.
- ❖ **25.6%** of the respondents who have a job believe working from home is more *stressful* because of the reduced social interaction with fellow colleagues.
- ❖ **Nicholas Bloom**, an economics professor at Stanford University extensively researched on a Chinese Travel company and found out that *working from home made employees more productive*.



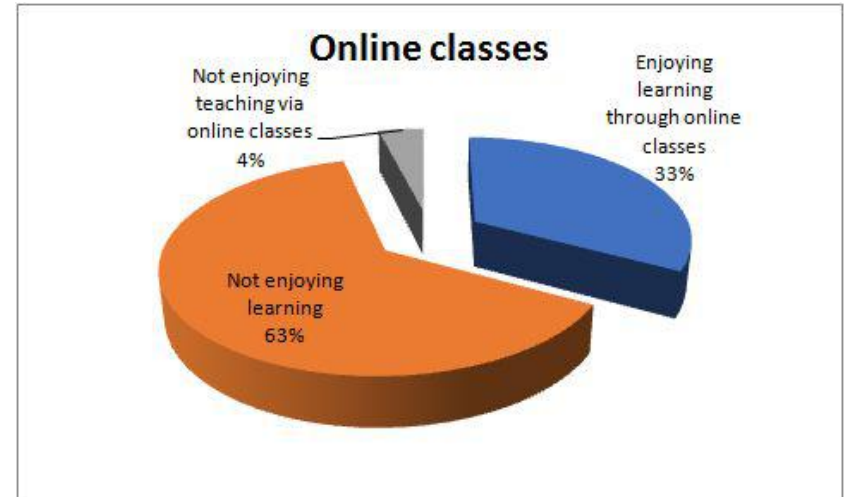
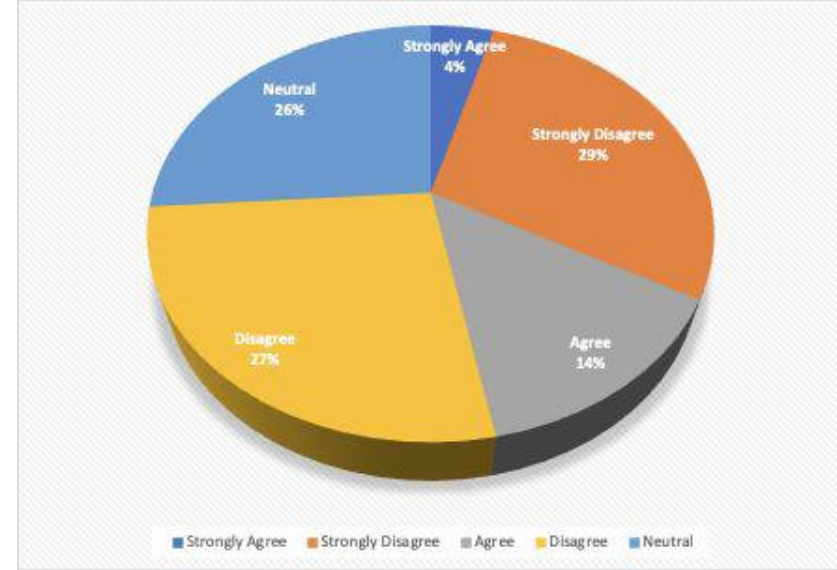
Source-<https://www.sciencemag.org/careers/2020/03/it-s-ok-feel-anxious-how-professor-china-faced-coronavirus-disruptions-and-fears>



# Mental Health Analysis

## Learning during the lockdown: good or bad?

- ❖ **76** responses of the total are from **students(73)** and **teachers(3)**. Out of these, roughly **67%** of respondents are **not enjoying** learning, as well as teaching, via online classes.
- ❖ Most of the time, it becomes **difficult to understand** and explain particular subject on an online platform.
- ❖ It becomes **difficult for the teaching staff** to organize an online class .
- ❖ **22.6%** of the student respondents find online assignments stressful. **31.5%** of the student respondents have a neutral opinion as they get **sufficient time** to complete the assignments.



# Change in lifestyle of Senior Citizens

- ❖ “I am the senior citizen. **Exercise and walk inside home**. Have to adjust timing to do cleaning work” states a resident of Vapi.
- ❖ The senior citizens who exercise regularly (walking, yoga etc) have **shifted to indoor exercising**.
- ❖ HelpAge Survey- 6% senior citizens in India live alone. This part of the population seems to be facing difficulties as they have to **manage housework, buying groceries** and medicines all **on their own**.
- ❖ However, **volunteer groups** are being formed across cities like Bengaluru which are effectively catering to the needs of senior citizens.



Source-<https://www.deccanherald.com/metrolife/metrolife-your-bond-with-bengaluru/volunteers-doing-their-bit-for-home-alone-elders-817182.html>

# Placement Trends

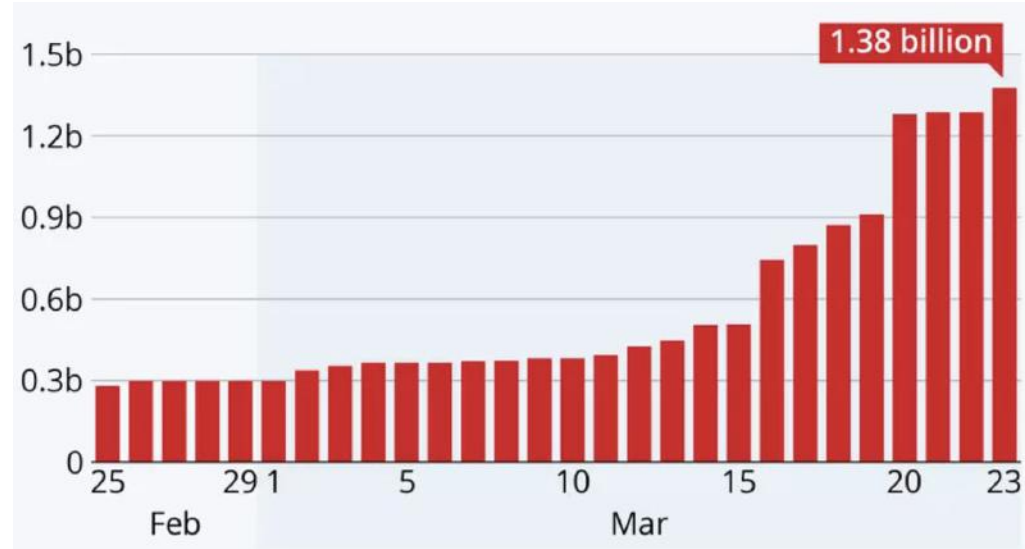
- ❖ Many technology companies like **TCS**, **Wipro**, **Google** have started offering placements.
- ❖ Other major companies like **Godrej**, **Kotak mahindra**, **ICICI bank** have started recruiting students.
- ❖ Cognizant will recruit **20,000 freshers** despite the financial loss due to pandemic.
- ❖ Most of the companies are **depending on technology** to increase productivity. Thus, it will result in minimum job opportunities.
- ❖ Many companies have started **delaying the placement offers** while some have withdrawn them, making it difficult for the graduate students.



Source: <http://lawgyaan.in/job-site-india/>

# Impact on education

- ❖ Due to lockdown, **12th grade examinations are getting delayed**, making students frustrated as they have been studying the same thing over and over and don't know when they will be able to secure admission.
- ❖ Universities which heavily relied on traditional way of teaching and communication have been forced to adapt to online learning .
- ❖ UG Final year students are facing uncertainty in finding placements. They feel they should have opted for further studies.



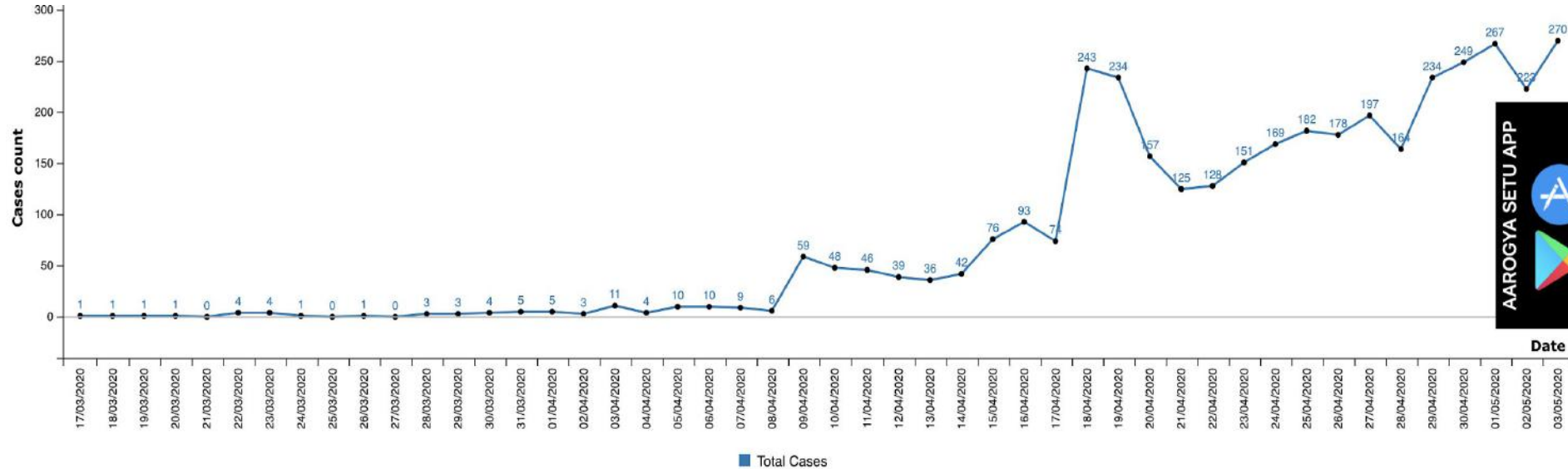
Figures refer to learners enrolled at pre-primary, primary, lower-secondary, and upper-secondary levels of education, as well as at tertiary education levels.  
Source: UNESCO

Source: <https://economictimes.indiatimes.com/industry/services/education/future-tense-for-indian-students-as-us-campus-s-shut-down/articleshow/74629998.cms>



# Analysis of Neighborhoods in Ahmedabad

- ❖ Total positive cases: 3771
- ❖ Total active cases: 2955
- ❖ Total Recoveries: 612
- ❖ Total number of tests: 30180
- ❖ Total number of people in quarantine: 17551

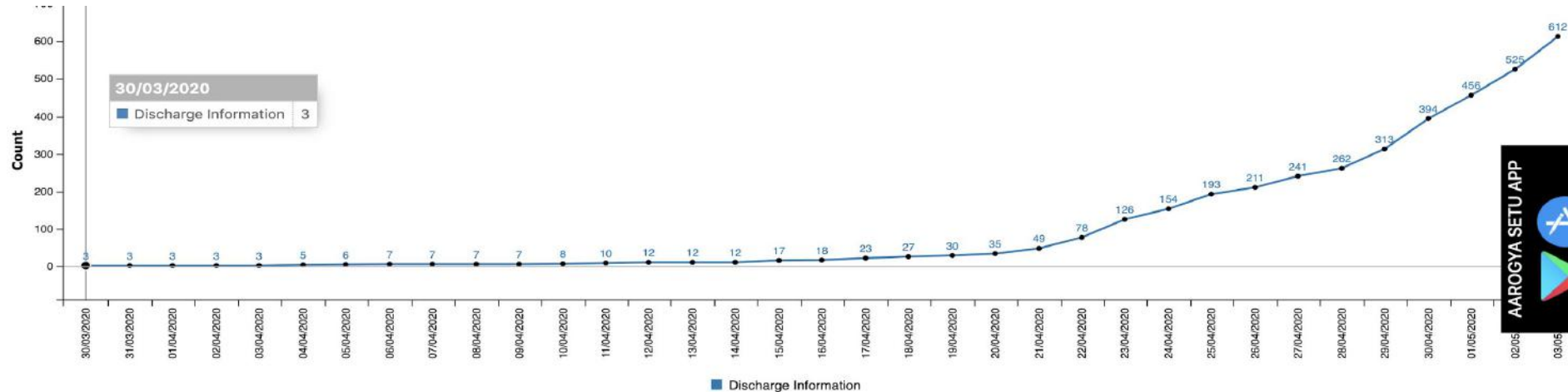


Source- <https://ahmedabadcity.gov.in/> Updated till: May 3, 2020

# Slow Recovery and High Mortality in Ahmedabad

## Total Casualties : 204

- **Comorbidities:** Heart and lung disease, hypertension, diabetes.
- **90%** patients who passed away belong to an age group of 60 or above, below 5 or are pregnant women.
- **L-Type strain** of Coronavirus.
- Prominent in Wuhan, Italy, Spain and Gujarat.

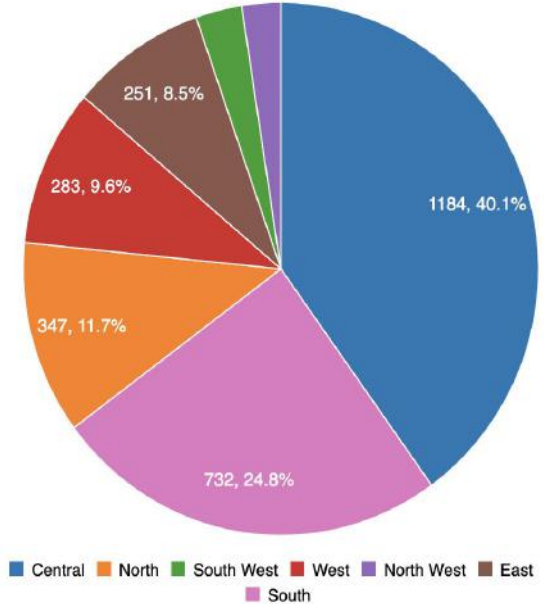
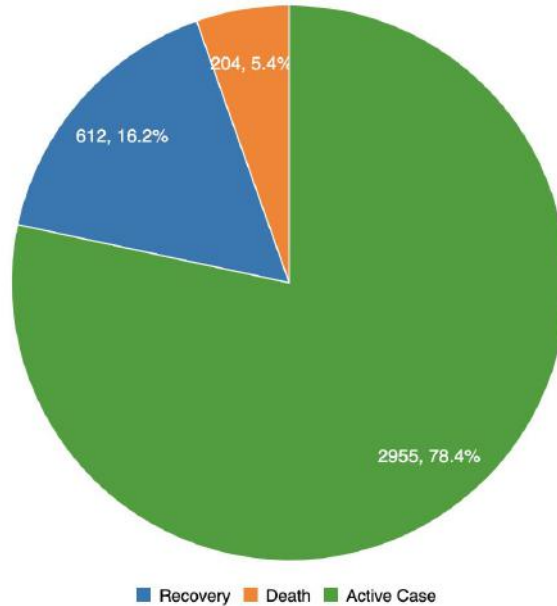


Source-<https://ahmedabadcity.gov.in/> Updated till: May 3, 2020

# Using Online Resources

## ➤ Analysis of 5 neighborhoods in AHMEDABAD

1. Navrangpura
2. Jamalpur
3. Danilimbda
4. Gulbai Tekra
5. Chandkheda



Source-<https://ahmedabadcity.gov.in/> Updated till: May 3, 2020

## Observations Using Online Resources and Interviews

- ❖ **Gulbai Tekra**
- ❖ **Random Testing** is carried out resulting in sharp spike of positive cases.
- ❖ Government follows “**REVERSE STRATEGY**” in congested areas of Gulbai Tekra.
- ❖ AMC and NGO’s are supplying food packets to the poor in slum areas.
- ❖ People are following the guidelines given by WHO (Wearing masks, washing hands and applying sanitizers frequently)
- ❖ Police and Municipalities sanitize the area once in 2-3 days and do not allow any social gatherings to take place.
- ❖ **Chandkheda and Navrangpura**
- ❖ Officials are conducting house to house survey in societies where positive cases have come out.
- ❖ Continuous police patrolling to ensure people stay at home.
- ❖ **Speaker fitted AUTORICKSHAW** to create awareness.



Social distancing followed

Source-<https://timesofindia.indiatimes.com/city/ahmedabad/ahmedabad-lockdown-people-getting-essential-items-no-disruption-in-supply/articleshow/74826482.cms>



# Observations Using Online Resources and Interviews

## ➤ **Jamalpur**

- ❖ Difficulty in **accessing health care facilities**.
- ❖ Government officials do not come regularly to check on the residents.
- ❖ **Non-COVID** patients do not get proper treatment.
- ❖ Social distancing is not followed, despite government advice.

## ➤ **Danilimbda**

- ❖ Vegetable vendors are not allowed in the society. People have to manage with food grains.
- ❖ Method of **Drone surveillance** implemented to check on public as well as delivering supplies.
- ❖ Selected **30 drones** and have started sending them to the walled city areas.
- ❖ Each police station has 3 drones in the walled city.
- ❖ Ahmedabad **rural police arrests 10-12 people** when they break lockdown rules.
- ❖ Video reference-

<https://www.youtube.com/watch?v=ACCRzIO9f9w>



Doorstep vegetable delivery

Source-<https://indianexpress.com/article/india/centres-panel-suggests-replication-of-amcs-vegetable-on-wheels-model-in-other-states-6347940/>



Teen Darwaja before lockdown

Source-<https://scroll.in/article/843299/what-ahmedabad-needs-to-do-beyond-celebrating-its-world-heritage-city-tag>



Teen Darwaja after lockdown

Source-<https://www.indiatvnews.com/news/india/gujarat-covid19-death-case-s-ahmedabad-coronavirus-lockdown-602474>

# Plight of Migrant Workers

- ❖ Ramlal Singh said, "We all feel trapped in the labor colonies. We feel anxious, restless and impatient. We hope to get back to work as soon as possible."
- ❖ Migrant workers are the worst affected people in this crisis. They are completely dependent on their daily wages for their everyday needs.
- ❖ In most parts of India, the migrant workers are provided with food but due to uncertainty of this crisis, they fear this might not last long.
- ❖ That is why many migrant workers want to go back to their hometown where they feel safer as they have food security.
- ❖ Incidents taken place in Anand Vihar, Delhi and Bandra, Mumbai, display how desperate these labourers are to reach home. Brutal measures like lathi charge had to be used to disperse these crowds in Mumbai.
- ❖ Labourers of Surat followed their example and gathered on Vrachha road of the city to demand for arrangement to send them back to their hometown.



Labour colony in Jholwa, Dahej.

# What next?

- ❖ While the data tells us that the planet is healing, experts state that the impact will not be long lasting. Humanity is learning a lesson the hard way.
- ❖ “When the pandemic finally abates, polluting industries may well seek to make up for lost time with even higher production” says François Gemenne, a political scientist and environmental researcher at the University of Liège, Belgium
- ❖ “The declines are sure to be only temporary. To get healthier air for the longer term means shifting to clean energy and transportation, not ordering people to stay at home at drastic economic cost” says Lauri Myllyvirta, lead analyst at the Helsinki-based Centre for Research on Energy and Clean Air.



# What next?

- ❖ There is a further growing fear that the cases will again start to rise exponentially after the lockdown ends, if people do not implement social distancing and proper hygiene in their daily routine . With the vaccine to take about 16 months before being available to public , the practices mentioned above will have to be followed for at least a year and a half.
- ❖ Other practices like measuring body temperature of individuals before entering public places like restaurants and movie theatres is likely to continue.
- ❖ Economies will gradually go back to normal and the daily wagers will start earning their daily bread.

# References

1. Background image

source-<https://amp.scroll.in/magazine/900418/from-the-skies-an-architect-retraces-a-century-old-survey-of-ahmedabads-city-walls>

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Stay Home  
Stay Safe



THANK YOU!