

Impact of Covid-19 Pandemic on Future Architecture Scenario

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Abstract - The aim of this research paper is to consider the probabilistic approach towards future scenario of various fields of Architecture after the pandemic COVID-19. Though it can't be exactly said what the future will look like, but the current trends, tactics and concepts can be examined to predict the change that might appear in the upcoming years. The easy access to connectivity between the countries of the world has led to rapid spread of the virus across the globe. Though the preventive measures are being taken there is a need to analyze the probable scenario of the situation in the future and take design considerations of building a safer environment.

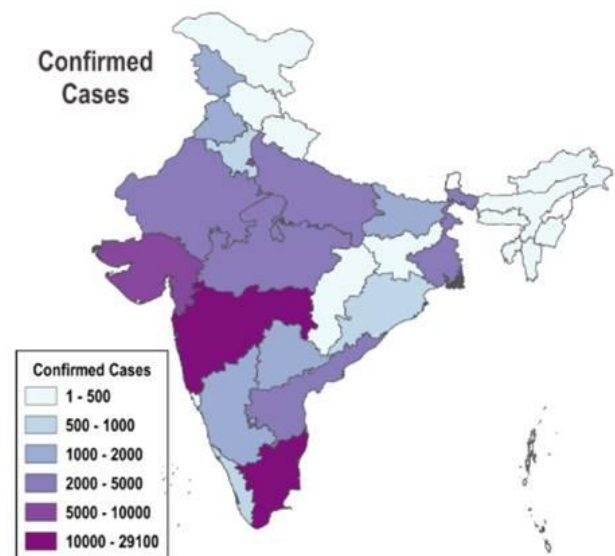
Key Words: COVID-19, future, Architecture, automation, indoors, technology, innovation, strategies.

1. INTRODUCTION

The World Health Organization officially characterized COVID-19 as a global pandemic on March 11. The covid-19 pandemic has largely affected the lives of the people around the world. World has been most affected now after the World War I and World War II. People are constantly facing problems including financial, social, physical, psychological, cultural and political challenges. Social distancing and precautionary measures are of a prime importance in today's context. Policies are being updated on daily basis due to rapid change in the environment around. Near about whole world had been in lockdown for a major time of the year 2020. Overall the primitive vaccine to the crisis has been in the field of architecture that has provided safe indoor building environment and had isolated people from the neighbouring COVID-19 affected world.

The main aim of the research paper is for the awareness of the people to the prevailing and future situation to prevail in the world and thus considering solutions for the same. The problems faced by today's generation are taken into consideration to cope up with the futuristic problem solving approach. This won't be the first time in history that cities and buildings will be reimagined to an increased understanding of disease. Indoor environment is playing a major role in well-being of human as most of the time is being spent at home. Measures need to be taken to make the indoor environment more comfortable and healthy

thus witnessing safety of people. Architecture impacts the indoor environment of a building majorly.



Source: Ministry of Health and Family Welfare & ICMR

Fig -2: COVID-19 affected areas in India on 16 May 2020

2. LITERATURE REVIEW

Marianne McKenna, founding partner of KPMB Architects says "This is an opportunity to rethink everything, including how we build cities and communities to be even more resilient, healthy, beautiful, green and creative. As architects this is our time to come together and not just imagine but ideate and advocate for a future where the world is in harmony with nature, and where innovation and imagination is valued for solutions that enhance the quality of life."

Joe Yacobellis, associate and director of design at Greenvale, N.Y.-based Mojo Stumer Associates, believes public spaces will change. Some of the general planning standards for the design of public space will shift to better reflect a new way of pursuing life that will greater personal space. He says "Seating layouts will likely become much more spacious. Furthermore, design will favor touch less tech features."

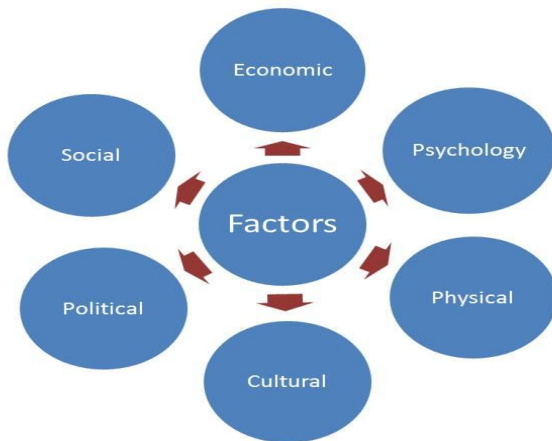


Fig -2: Factors affected by COVID-19 pandemic

Samantha Allen, International WELL building Institute Asia’s director of Business Development said “We often don’t realize that our health and well-being are influenced by, and sometimes a direct result of, our immediate environment. Since we spend 90 percent of our time indoors, our buildings can greatly influence our health and well-being; perhaps without us even knowing. Buildings, therefore, have the potential to act as public health tools. The WELL Building Standard is the first comprehensive rating system focuses on occupant health and well-being in the built environment.”

“Green buildings alone are not enough to create a sustainable future, as there needs to be whole ecosystems solutions that are scaled up to have a greater impact on mending the planet. Occupants need to change their behavior and mindset for change to be effective; building better will see greater returns in the social and economic sense because the cost of not doing so will be higher than any monetary or opportunity cost,” commented Candice Lim, editor in chief, BCI Asia.

3. METHODOLOGY

The methodology adopted here includes the consideration of analysis of the present situation, need of automation to mitigate contagion, working out strategies to bringing a change to previously standardized geometry of spaces and implementation of design ideas that can lead to anti-bacterial spaces. The idea of remaining isolated for an undefined period of time, along with the general sensation of anxiety has brought a variety of disruptions to usual work flow, demanding an additional layer of communication. Social networking methods have helped maintain synergy among team members. The absence of barrier between domestic and professional life seems concern to many people recently. Emerging technology has facilitated social life of the people in world as well as brought up new limitations in socialising personally.



Fig -3: Flow chart of methodology adopted

4. IMPLEMENTATION

Speeding up development of all types of touch-less technology-automatic doors, voice-activated elevators, cell-phone-controlled hotel room entry, hands-free light switches and temperature controls, self-cleaning bathrooms, ample ventilation in public spaces, reduction in number of flat surfaces to limit germ layers on surfaces, anti-bacterial materials and finishes for construction, automated luggage bag tags, and advanced airport security check-in security.

Upcoming system of work from home for employees and online classes for students has greatly encouraged the need of separate workplaces and study places at home thus enabling a need while planning. Webinars and online meetings are largely benefitting the people to learn as well as work within the safety boundaries of their home. As the world is getting more and more isolated the need for mental well-being is a major concern so the vibes in the indoor environment is to be seriously considered that are greatly affected by proper lighting, ventilation and special dimensions. Future concerns might encourage architects to design with an eye toward open spaces that enable and encourage people to spread out.

Implementation of various strategies will gradually create habit of living a lifestyle that can avoid furthermore contagious diseases in future up to a certain extent. Research on the vaccine of COVID-19 being the priority, it is also essential to take long lasting steps such that there will be prior experience relating to dealing with pandemic.

5. CONCLUSION

Here it can be seen that there are numerous impacts of the prevailing COVID-19 situation in the world and precautionary measures are being implemented in all the fields. Futuristic approach towards changing lifestyle and mindset is being looked forward to. Also solutions with respect to advances in automation, technology and innovations are being made. It can be further concluded that change will certainly make things better and will help to cope up with upcoming unknown hurdles and challenges.

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