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OUR CITIES CAN FIGHT COVID-19 Proactively



he largest Covid-19 lockdown of the world is in its sixth week. As of 30th April 2020, India had reported a total of over 33,000 cases. Seven of the ten cities worst affected are also amongst the ten most populated urban agglomerations and some of the largest economic hubs of the country. Although the lockdown has managed to slow down the rate of transmission, giving our cities and health services time to prepare for any impending surge in the weeks to come, it has been devastating for the nation's economy and has affected daily livelihood sof millions across the country.

It is likely that these large cities, and many others that are designated as hotspots of the transmission, will continue to adhere to current restrictions even as the country initiates the process of relaxing the lockdown after 3rd May. But, for how long can this status quo be extended? It would soon be imperative that a balance be found between containment of the spread of Covid-19 and restoring economic activity within towns and cities.

In early April, the Ministry of Health and Family Welfare [MoHFW] released the *Containment Plan for Large Outbreaks*, *Novel Coronoavirus Disease* [*Covid-19*]. This Plan proposed geographic quarantine, calling for 'near absolute interruption of movement of people to and from a defined geographic area where there is a single large outbreak or multiple foci of local transmission'. However, the proposed geographic quarantine applied to large areas spread over multiple blocks of one or more districts that are contiguous. This approach is not applicable to cities. Exceptionally large areas of an agglomeration should not be quarantined. Blanket restrictions and surveillance measures should not be applied across localities that are not affected to enable efficient allocation of resources available with Municipalities and allow these unaffected parts of the city to resume economic activity.

What our urban agglomerations urgently need is a more nuanced and granular approach to containment and monitoring of Covid-19. The recommendations of MoHFW's *Containment Plan* need to be extended and contextualized for implementation at the scale of easily identifiable zones within a city. The Geographical Area for containment most appropriate for urban agglomerations is the scale of a residential locality within a city Ward. These can also be easily aligned with the Municipal list of colonies used for Property Taxation purposes. Residential Areas, or RAs, are zones of 'origin' of all movement as city-dwellers typically make their daily journeys for various needs from here. These are also areas where current Covid-19 cases are being tagged i.e. cases linked to the residential address of the patient. Therefore, restrictions on movement to break the chain of spread must be adopted at the level of RAs in a city.

Simplified and clear Monitoring and Containment [M&C] Protocols for RAs can empower Municipalities to put in place responsive and pre-emptive measures to stop all localities in their cities [even those with zero or lesser number of cases] from transitioning to higher levels of spread. These Protocols must align with the goals of the Containment Plan and ensure social distancing, early detection of cases, testing of all suspect cases, isolation of cases and quarantine of contacts, risk communication to create awareness among public, and enhanced active surveillance. This will not only assist in smoother implementation but also help streamline reporting structures.

Typically, one can identify seven different RA Types within an Indian urban agglomeration based on parameters such as population density, dwelling and household size, existence of mixed-use, street widths, levels of amenity etc. These include 1] Slums; 2] Rehabilitation Colonies, Urban Villages, Small Sized Plotted Housing, old city and other traditional villages; 3] Government Housing / Low-rise Group Housing; 4] Cooperative Group Housing Schemes, Integrated Townships; 5] Medium Sized Plotted Housing ; 6] Large-sized Plotted Housing, and 7] Villages on the city periphery.

M&C Protocols must vary for each RA Type in response to their specific socio-economic context and built environment. For instance, home isolation and home quarantine are just not effective in RAs such as slums or unauthorized colonies due to household sizes and existence of common bathing and toilet facilities. In RAs such as Integrated Townships and Medium and Large Scale Plotted Housing, Residents Welfare Associations [RWA] can contribute significantly towards monitoring and, therefore, protocols need to acknowledge this. In alignment with MoHFW's Containment Plan, the notion of color-coding geographical areas as Red / Yellow / Green, based on





ABOVE 'World within a World' GRAPHIC CREDIT: Geeta Wahi Dua & M. Shah Alam

the intensity of the outbreak must also be continued. However, this should be applied to a significantly smaller area i.e. at the scale of an RA. It is also critical that M&C Protocols are laid out for Yellow and Green Zones in addition to the hotspots or red zones to put in place pre-emptive measures and stop these from transitioning into higher levels of transmission. At present the MoHFW's Containment Plan does not specify protocols for these two zones.

Areas of economic activity such as industries, commercial uses, retail, etc. are the Non-Residential Areas [NRA] within a city. These are 'destinations', areas where residents commute to for various needs. As lockdown is relaxed, NRAs should be allowed to operate partially or fully within a city as per the National / State directives because movement of employees and users to the NRAs can be effectively restricted at the RA where cases originate. This approach enables cities to open economic activity within it while ensuring targeted restriction on movement at the point of origin. M&C Protocols for the premises of NRAs should be put in place by the owner or company, based on guidelines and directives issued by the National and State Governments/ Ministries.

Public Transport and Intermediate Public Transport facilities and services are the primary facilitator between the 'origin' and 'destination' i.e. Residential and Non-Residential Areas. These must also be managed and regulated by Municipalities and their Transport Departments through incremental and complete relaxation of lockdown.

Based on the opinion of experts, it would be safe to assume that we are months, if not a couple of years away from returning to 'normal'. However, it would soon become inevitable to open towns and cities across the country for socio-economic reasons. In the relaxed state of lockdown where most people would resume their regular lives to varving degrees, the key to fighting Covid-19 would be a nuanced spatial approach linked to a significantly smaller residential area for geographical quarantine, early detection through constant monitoring of all areas and preparation of simple protocols that are easy to implement and roll back. These very principles will enable us to minimize spread and overcome the pandemic area by area, city by city. Early identification of the spread and continuous monitoring and containment would give us, as a country, the confidence to resume economic activities even if cultural and social engagements are restricted for much longer. This approach, if adopted and spatialized through GIS based mapping, would also guide cities and states to learn from success stories of different types of localities, helping us to pre-empt surges and spikes and contain possible future waves of Covid-19.

