

**Summary of the key points mentioned in: “Is India ready for unlocking lockdown?” By Dr. Tanmay Mitra,
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- (1) India needs to take decisions on unlocking lockdown based on projections of the usage of its healthcare capacity.
- (2) Untimely relaxation would jeopardize the achieved targets.
- (3) The present time-dependent reproduction of India and its states projected from time-window of last 10 days suggests that most of the states in India needs well-planned stricter controlled measures.
- (4) Relaxation now would accelerate the epidemic.
- (5) Home-coming of the fellow guest workers necessitates stricter restrictions in the receiving districts.
- (6) It is important to win the trust of our fellow guest workers to minimize the probable surge in the number of undetected cases. Authorities in all levels must consider their condition empathetically and support them to gain their extensive cooperation.
- (7) COVID-19 outbreak trend demands restrictions to be strengthened in all the red-zone districts, the orange-zone districts where the outbreak is scattered and not specific to a limited number of containment zones, and all the containment areas (if any) in the green-zones.
- (8) As per our extensive analysis and the projected healthcare usage in future, Punjab is the only state (among the ones with more than 1500 reported cases so far) which is ready to relax measures except for the hot spots in the state. In addition, Odisha despite showing a growing number of cases can relax measures in the state except for the hot spots, as its healthcare system will not be overwhelmed in the next two months if the state continues to test-and-quarantine the COVID-19 positive individuals with the current efficiency.
- (9) Projections for healthcare demand in India, despite its low mortality rate, are suggestive of the fact that India is not ready for unlocking lockdown.
- (10) Herd Immunity by simple means is unlikely to be achieved without overwhelming the healthcare capacity in India. Due to the social structure which shares multiple generations in a single family, an uncontrolled way of achieving herd immunity will cause gigantic amount of fatalities.
- (11) All religious places, being a major of infection transmission to the high-risk group must remain closed across the country.
- (12) Any thought for opening the schools should be postponed by at least a month and can be decided upon later based on how the trend of the outbreak unfolds in the coming weeks.
- (13) Use home-surveillance to categorize families based on the number of high-risk members in a family: Run economy using the members from low-risk quotient families. *Mark families in four distinct categories:* (i) All family members belong to high-risk group, (ii) Two or more family members belong to high-risk group, (iii) Only one family member belongs to high-risk group, (iv) None in the family belongs to high-risk group. *Issue red cards to all persons living under category (i) and high-risk candidates living in category (ii) & (iii); orange cards to low-risk family members living under category (ii); purple cards to low-risk family members living under category (iii); an green cards to all members living in category (iv).*
- (14) Allow all activity for the green-card holders (see 13) and extensively utilize them as human-resource for running the economy.
- (15) *Divide the official working time into three time-shifts and stagger the activity of the people based on the categories they belong to, e.g.,*

Time-shift 1: Allow all green-card holders (see 13) to move, come to work and commute (mask must).

Time-shift 2: All purple card holders (see 13) to move come to work and commute (mask, face shield, gloves must).

Time-shift 3: Only those orange card holders (see 13) who cannot really work from home because of the nature of the service they do, could be allowed to move, come to work and commute (mask, face shield, gloves must).

The red-card holders (see 13) must stay at home, and others should be encouraged to support them. The office (for example, essential files or any such things) should reach to the red-card holders who work in government offices in important posts.

This minimizes load on healthcare and maximizes working hours. Such activities should now only be allowed in green-zones and to some extent, cautiously, in the orange zones having very clustered disease outbreak pattern. However, green-card holders may be allowed to participate in all activities outside the containment areas of the red-zones.

- (16) Create distinct databases to aid modelling as well as patients to find out availability of specialized care.
- (17) Issue the official guideline for unconditional immediate compulsory leave to those even with minimal flu-like symptoms and any sort of loss of taste/smell to minimize. Do not plan for physical authorization from a doctor (tele-authorizations can replace it if necessary.)

- (18) First prepare the office-premises and public communication places for post-lockdown era. Make engineered changes, e.g., placing glass shields, cubicles and soft-loud speakers. A guideline: <https://www.cdc.gov/coronavirus/2019-ncov/community/office-buildings.html>.
- (19) Use young (<40 years) unemployed human resource on contract basis in the supply chain of essential commodities.
1. On contract basis, utilize the COVID-19 negative and recovered migrant workers local human resource to set up block/municipality/panchayat wise quarantine facilities in their respective locality.
 2. Facilitate the developmental works of closed office premises, schools, colleges, institutions, and universities. Engage the local workforce (who do not need to travel from far) into these actions.
 3. Engage the local workforce into development works at the tourist spots, for making roads, setting up new railway lines.
 4. On contract basis, utilize fairly educated young unemployed human resource for home-to-home surveillance. Even, a portion of such fellow Indians with proper background can be quickly trained for sample-collection and can be utilized as mobile sample-collection teams.
- (20) As of now, based on the current dynamics of the disease-outbreak, we would strongly suggest to hold back domestic flight, trains, and buses (intra-state, inter-state, intra-district, and inter-district) specially when the services contain stoppage in red-zones and orange-zones having with scattered outbreak in the journey route. However, communication between green zones can be allowed. In orange-zones, only if, the disease outbreak pattern is concentrated to very few containment zones, these services can be started in between non-COVID-19 affected areas.

Find relevant details and explanations in the original article: Is India ready for unlocking lockdown? By Dr. Tanmay Mitra, Department of Systems Immunology, Helmholtz Centre for Infection Research, Braunschweig, Germany.