Response to COVID-19

Jharkhand

Response to Covid-19 Jharkhand, India

The state of Jharkhand is located in the eastern part of India, next to Bihar and Uttar Pradesh, with an estimated population of 32.96 million; comparable to that of Canada. The state has a large tribal population, with abundant natural resources, and is known for its natural beauty and abundant waterfalls and wildlife in Betla National Park, as well as some elegant Jain temples, among other elements.

The COVID-19 pandemic has upended health systems, economies, and social support systems around the world. The virus continues to spread rapidly due to its highly contagious nature and has infected a few million people around the globe, resulting in close to 375,000 deaths. As detecting this disease is not easy due to its mild symptoms - in many cases no symptoms at all - and given the absence of any remedial drugs or vaccines so far, it has been recognized that the only way to control its spread is social distancing and isolation of those who are infected.

Given all these constraints, Jharkhand has had to innovate to win the fight against the novel coronavirus. The state has been able to keep the number of cases under control in spite of large inbound migration.

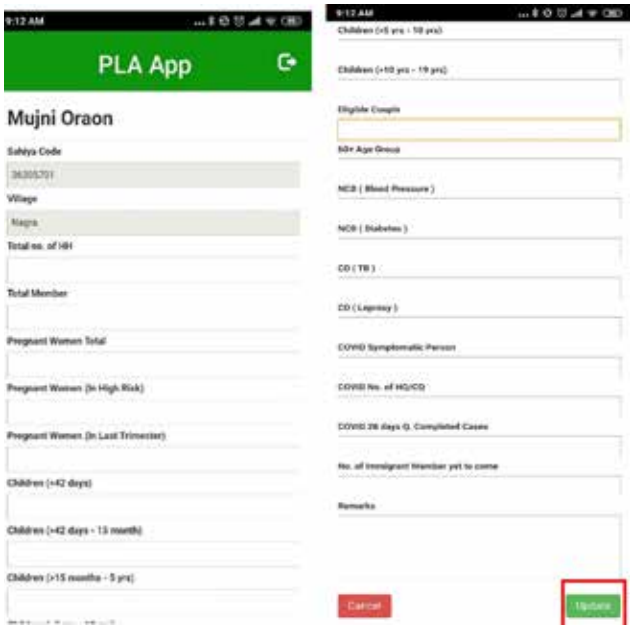
Innovation & Outcomes

1. App-based Essential Health Services Reporting and Social Vulnerability Mapping

Technology has been essential in states like Jharkhand. App-based reporting of essential healthcare services was initiated with the aim of resuming the regular services and care provided by healthcare workers in continuation of Covid-19 response activities. Its data covers over 25,000 villages.

Developed as a new feature of the existing **PLA App** used for the reporting of regular **Participatory Learning Action (PLA)** meetings under community process' Monitoring and Information System (MIS) and nested under the present mode of reporting involving block and district level officials, this new reporting format covers features such as high risk pregnancy, child and adolescent's health, number of individuals in the 60+ age group and social vulnerability mapping; in terms of assessing the spread of communicable and non-communicable diseases in villagers.

As tried and tested in PLA MIS reporting, once the data of



essential health services indicators is fed in, it becomes immediately available on a digital platform accessible by all respective officials at the National Health Mission (NHM), Jharkhand. The availability of data in all the different geographic units (state, district, community health centre (CHC), health sub-centre (HSC), gram panchayat) helps in better visualization of the scenario, thus aiding line departments in coming together towards field-based planning.

2. CO-BOT: PROTECTING FRONTLINE CORONA WARIORS

One of the major concerns of the battle against COVID-19 is reducing contact. The objective of designing and deploying CO-BOT is to minimise interaction between ancillary healthcare workers and paramedical staff with positive COVID-19 cases. In COVID-19 hospitals, the CO-BOT delivers medicine, food and water to patients, without requiring health workers and ancillary staff to attend to COVID-19 patients in person.

The CO-BOT, which can move freely and operate remotely, is fitted with a camera which has a microphone that allows for two-way communication. The doctors can monitor patients without getting too close to them and can easily pass on necessary instructions over the microphone. Another feature of the Co-bot is that it will serve food, water and medicines with less chance of spreading the lethal infection. A doctor or nursing staff can check if the patient picks up the correct medicines or not, monitoring them remotely. The cameras can also keep vigil over the interaction between patients in the isolation wards. The speaker will enable staff to communicate with the patient, and the patient can air his/her grievance through the speaker and microphone.

3. SERO-SURVEILLANCE

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4. TruNat Testing Stations

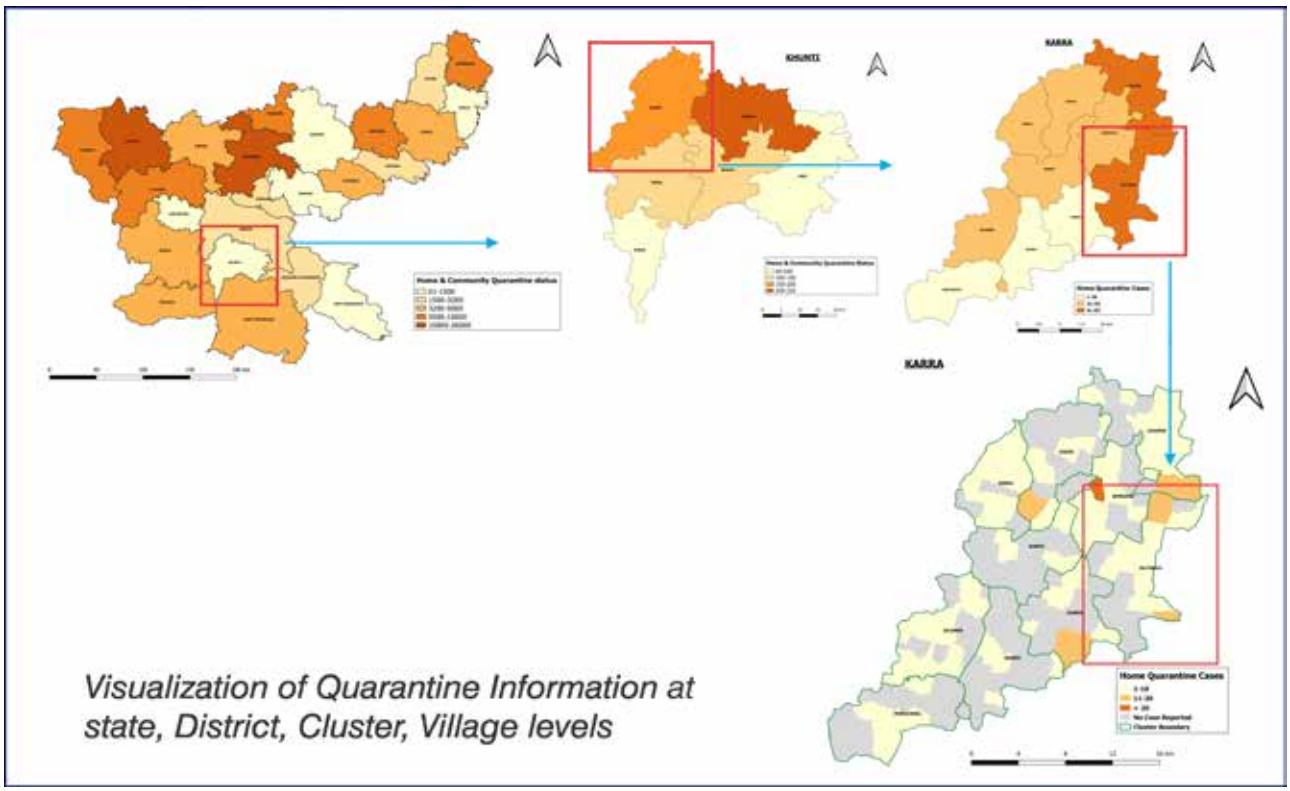
Testing was paramount to tackling the virus. Jharkhand State has purchased 30 Quattro machines and placed a supply order for 30 more machines. Also, 22 double channel TruNat machines have been provided by the Government of India (GoI). These 22 double channels Duo and 30 Four Channel Quattro machines have been installed. In future, there is a proposal for installing TruNat at all the CHCs which will empower TB testing as well at the CHC level.

At present, more than 1000 tests are being conducted on a daily basis. All together, 52 TruNat machines may test up to 1500 samples every day. All districts have been provided with a confirmatory ASSAY for TruNat test, making them self-sufficient to detect true COVID positives. This has facilitated local testing with ease and convenience to deal with emergencies and quick testing requirements for pregnant women, emergency cases and in re-testing of already positive patients towards releasing them.

5. Geospatial Applications

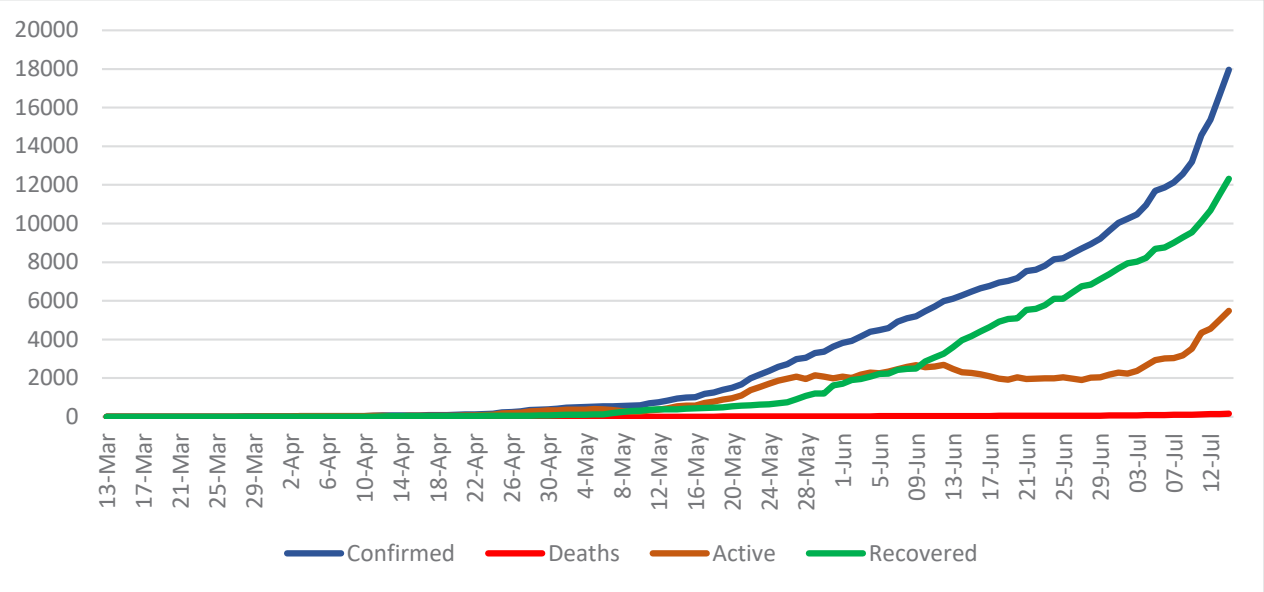
It was crucial to identify which areas needed attention first, and at which point. Human migration, one of the important indicators linked with this outbreak, needs to be mapped using better surveillance, and the planning. Importantly, 40,000 healthcare workers and other frontline workers (FLWs) - altogether 56,483 people in Jharkhand in different capacities - were trained in COVID-19 awareness and strategies in field and respective reporting framework. Organized over virtual platforms or through in-person training in small groups maintaining the norms of physical distancing, the entire program took place in matter of a week. The idea was to strategically use the time under the first phase of a countrywide lockdown towards preparedness, identifying quarantine hotspots, isolating persons with symptoms or the asymptomatic - and treating the entire population effectively.

Availability of existing healthcare workers (Sahiya) database and demarcation of catchment areas of healthcare workers fellows (sahiya sathis) as “clusters” nested within the boundaries of CHCs, crisscrossing with the boundaries of HSCs, gram panchayats etc, all made this visualization effective in discussion with several line departments who are actively engaged in surveillance planning in the field. Regular sharing of field data by healthcare workers using codes with geospatial attributes thus helped in identifying geographies to focus on, zoning on priority and developing a spatiotemporal database of 4,34,117 individuals under home quarantine across the state; of which 2,55,948 individuals were reported to be safe upon completion of 28 days of mandatory quarantine.



Visualization of Quarantine Information at state, District, Cluster, Village levels

Way Forward



While cases of Covid-19 continue to rise in Jharkhand, with a current total of more than 3,756 as of 13th July, health workers, the administration, police force and citizens groups are working together to slow down the spread of the virus.

The number of recovered person (i.e., 2,308) now is more than the number of active cases (i.e., 1,418). If they are able to break the chain of virus spread and flatten the curve, they will help prevent overwhelming the capacity of local health infrastructure.

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