Geospatial Application in identifying area of concern under Covid 19, Quarantine load and Planning in Jharkhand

Covid 19, a pandemic outbreak has put the entire world and economy on halt putting humankind in risk. A highly contagious and linked with living obstacles in the socially inequitable world, this disease has kept health professionals on toes for quite sometimes now. Human migration, one of the important indicators linked with this disease outbreak need to be mapped in better surveillance planning of the Health Medical Education & Family Welfare, Govt. Of Jharkhand.

40,000 ASHA and other front line workers (FLWs) altogether 56,483 personal in Jharkhand in different capacities were trained on Covid 19 awareness, strategies in field and respective reporting framework. Organized over the virtual platform or in person training in small groups maintaining the norms of physical distancing this let the entire activity to take place in matter of a week. The idea was to strategically use the time under first phase of countrywide lockdown in preparedness, identifying quarantine hotspots, isolate persons with symptoms or asymptomatic and treat the entire population effectively without entering into panic zone.

Availability of the existing sahiya database, demarcation of catchment areas of sahiya sathis as "clusters" which is nested within the boundaries of CHCs, crisscrossing with the boundaries of HSCs,

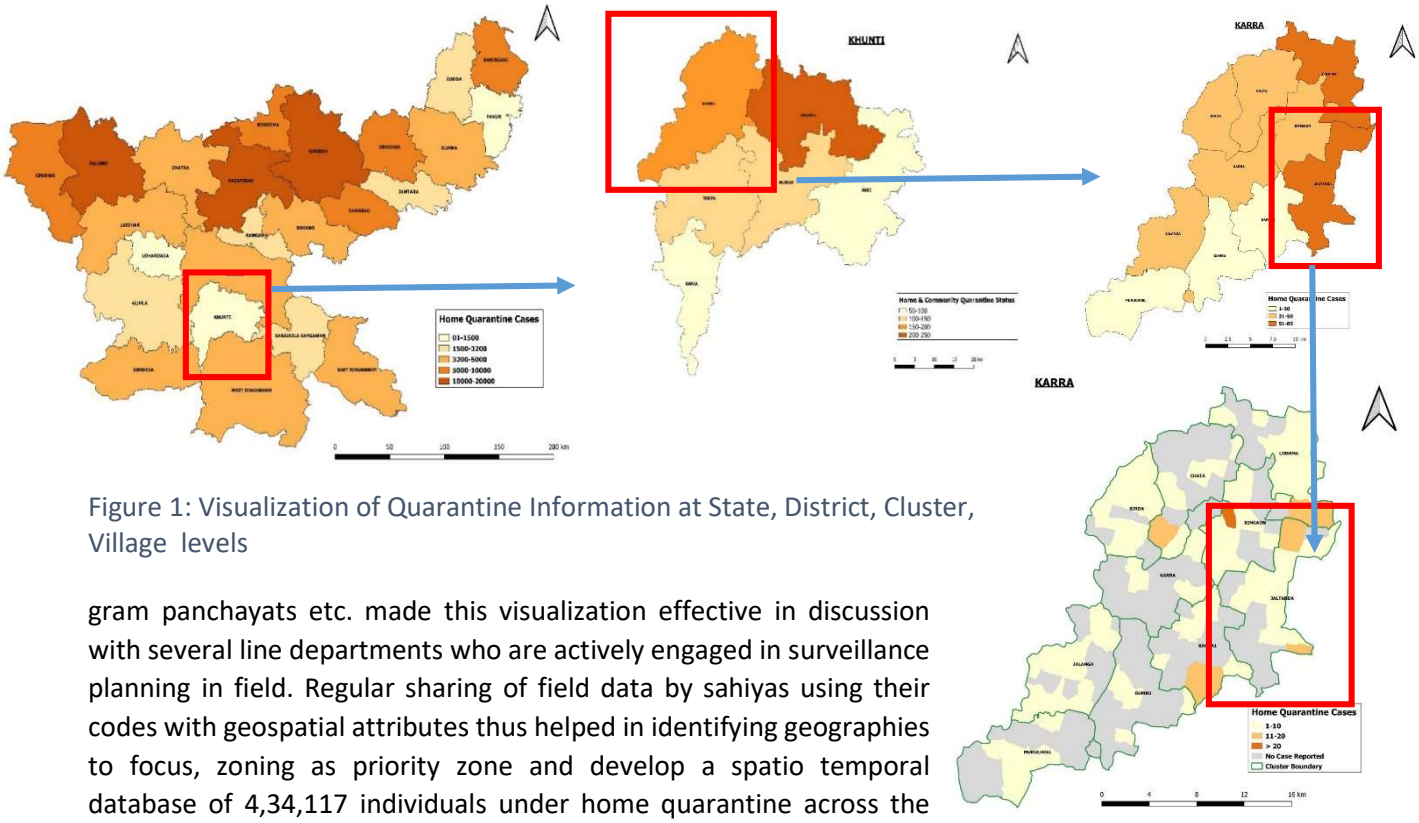

Figure 1: Visualization of Quarantine Information at State, District, Cluster, Village levels

gram panchayats etc. made this visualization effective in discussion with several line departments who are actively engaged in surveillance planning in field. Regular sharing of field data by sahiyas using their codes with geospatial attributes thus helped in identifying geographies to focus, zoning as priority zone and develop a spatio temporal database of 4,34,117 individuals under home quarantine across the state of which 2,55,948 individuals were reported to be safe in completion of 28 days of mandatory quarantine.