Figure1: Map showing percentage urban population living in slums all over the world
Ref:worldbank.org
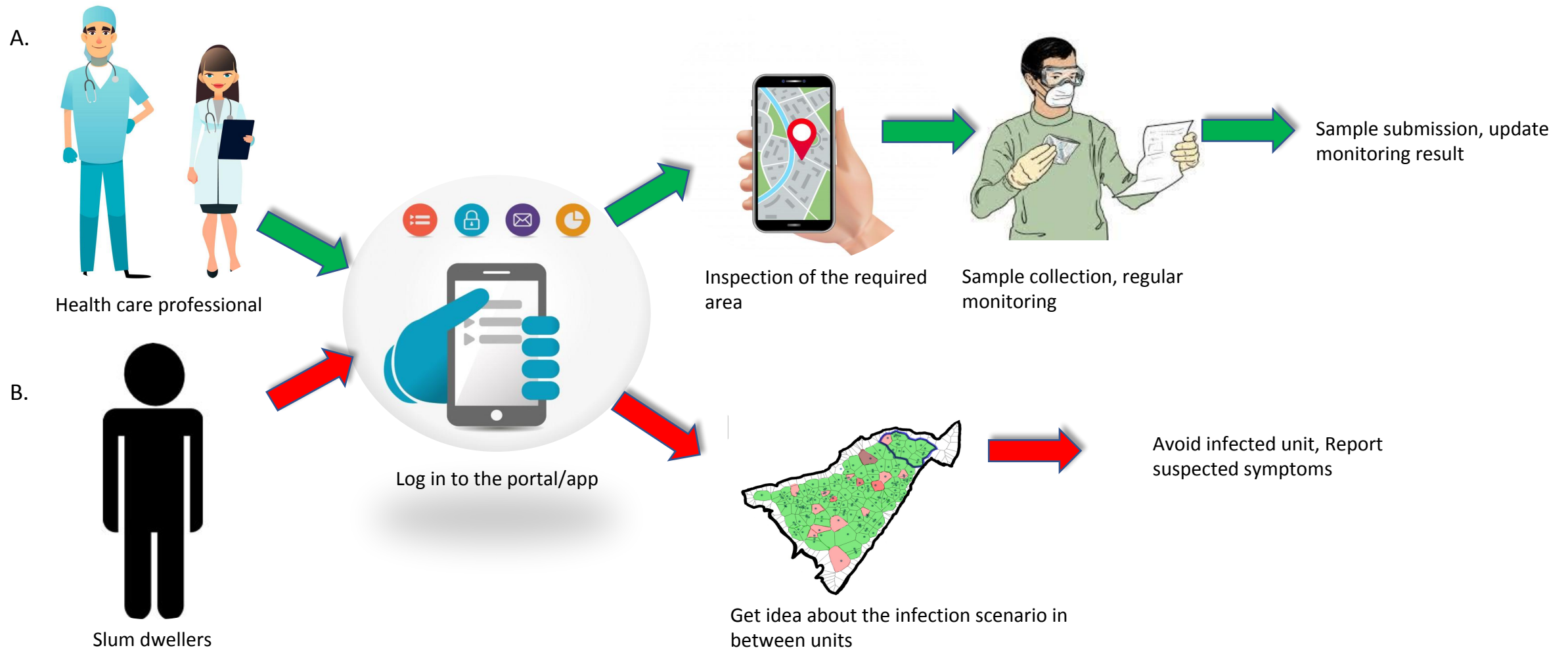
A.

Health care professional

Log in to the portal/app

Inspection of the required area

Sample collection, regular monitoring

Sample submission, update monitoring result

B.

Slum dwellers

Get idea about the infection scenario in between units

Avoid infected unit, Report suspected symptoms

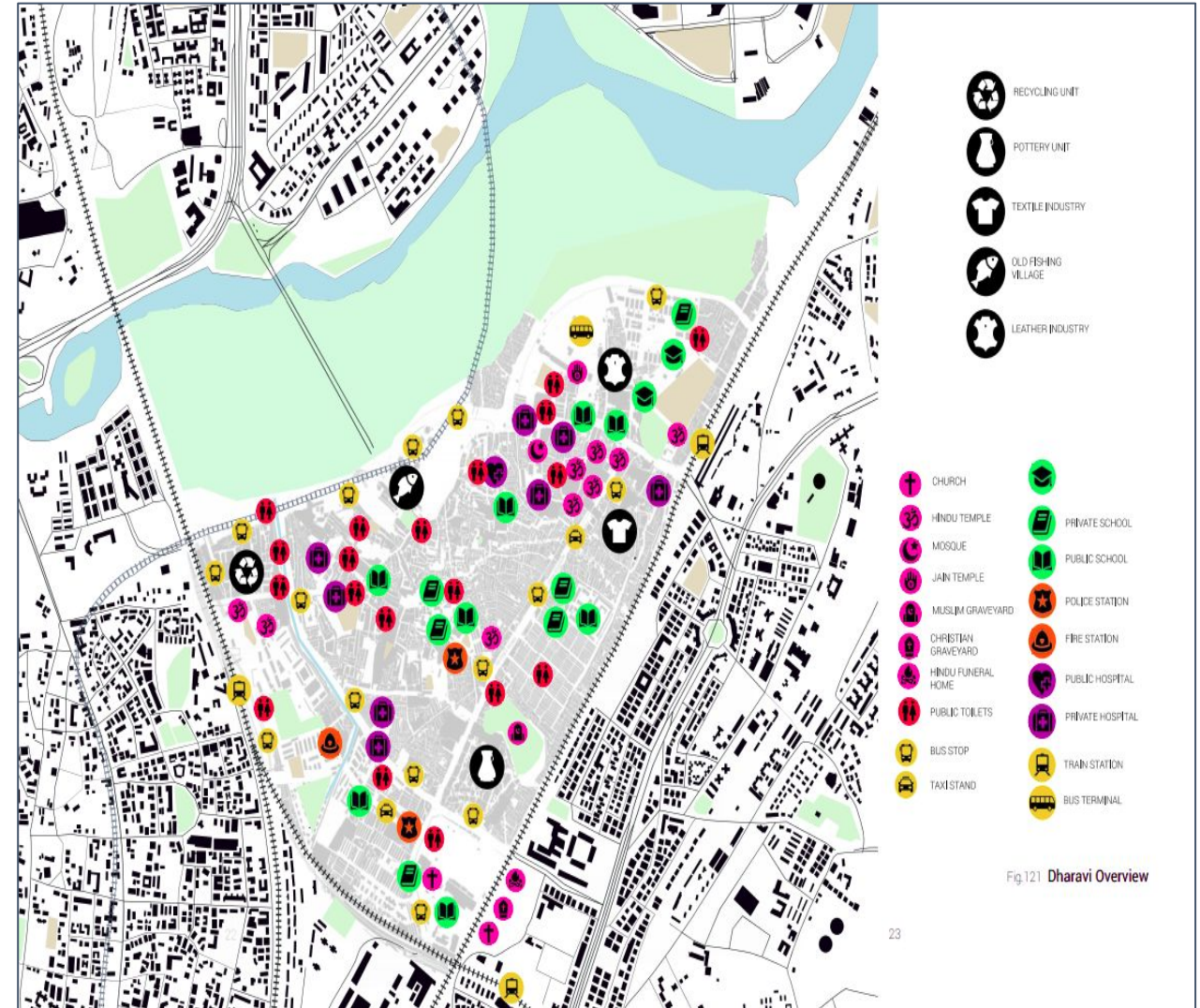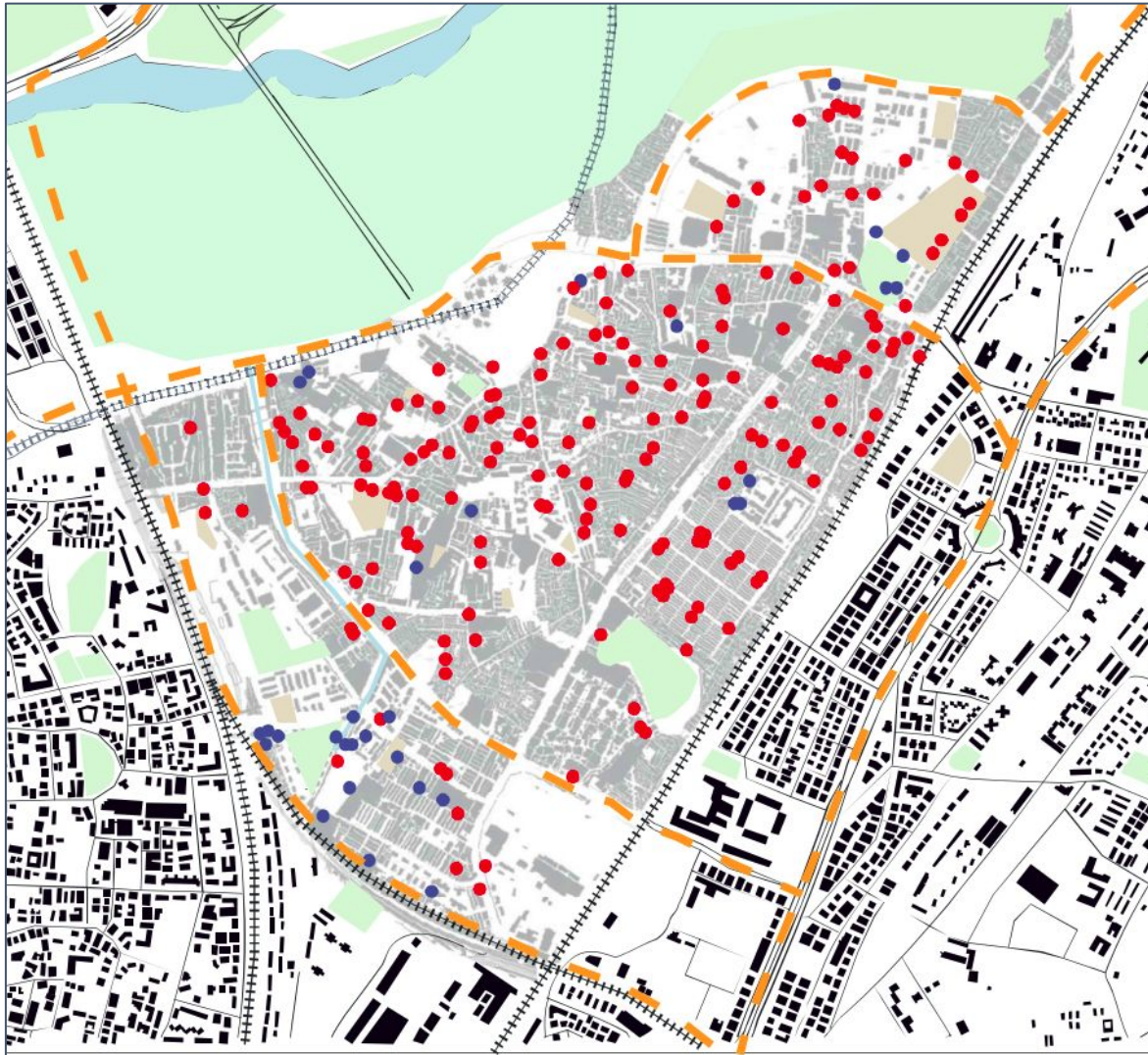Figure 2: A.Work life of health care personnel and B. normal slum dweller

Figure 3. Maps used to make the units and super units within Dharavi slums. these maps mark the location of public toilets, and commercial units
Ref:https://www.semanticscholar.org/paper/Dharavi%3A-Merging-Boundaries-Kundliwal/60c2a01ab9cdc82b3c9dbc70568b23eef26de5e4
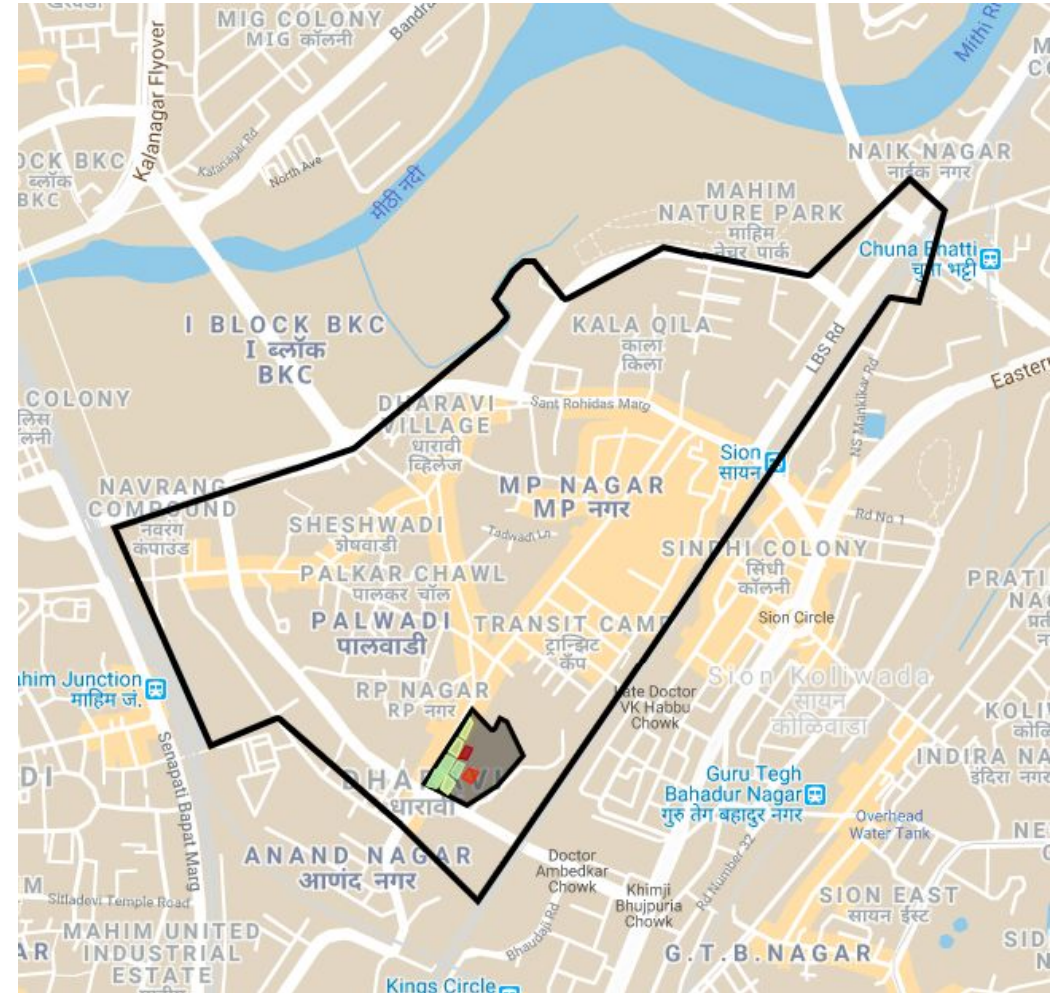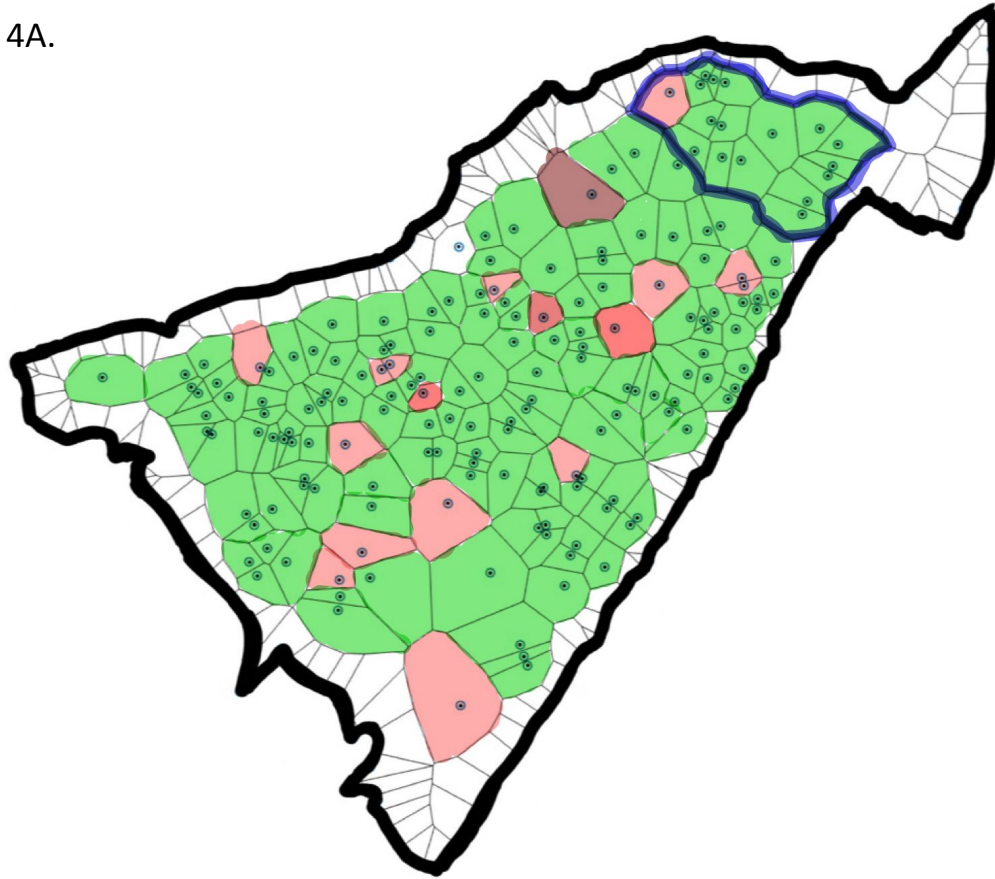
4A.

Figure 4A. Our implementation of segmentation of dharavi slums nto units and super units. Blue borders mark a sub unit based on commercial structure and light black boundaries mark the units which include at least one public toilet. Red mark the already infected units and Green mark the units which are not infected. These maps will be available on our web platform and will be distributed to different units in the community by health workers. We have used voronoi tessellation to make sure that at least one toilet exist in units
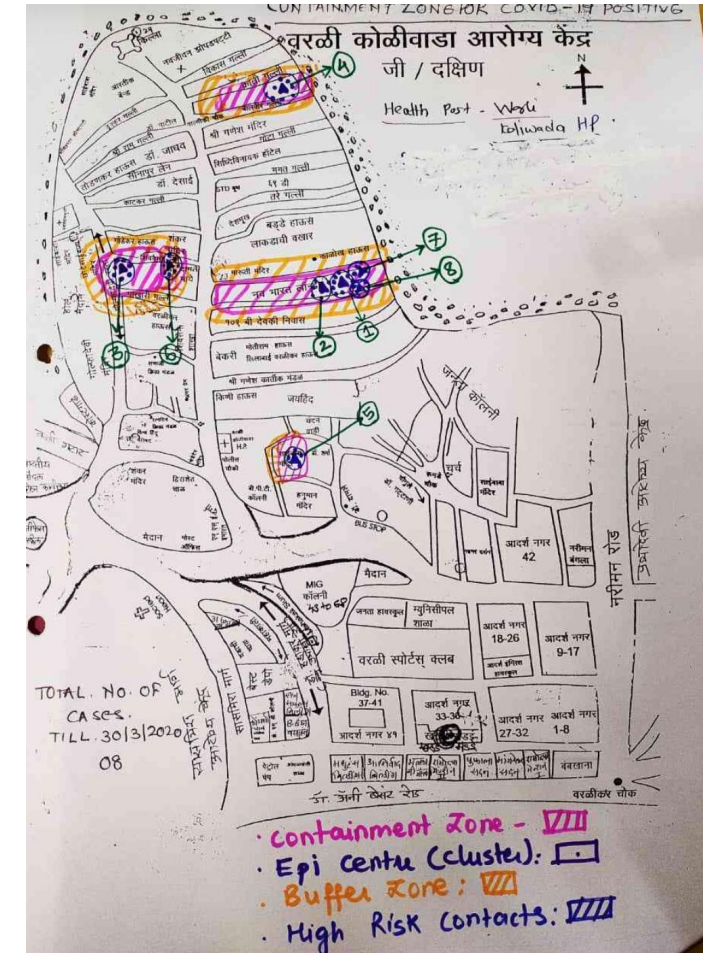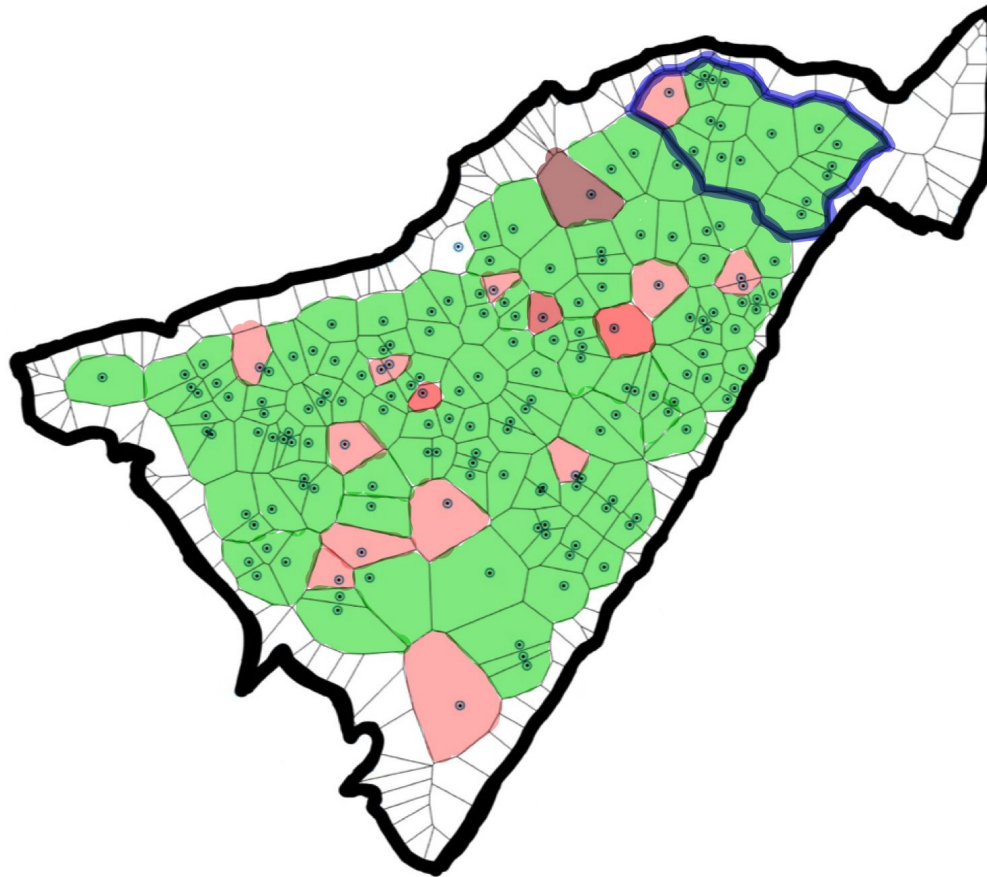
4B.

Figure 4B. Left:Proposed map for Dharavi. Additional information about locations will be added and can be referred from google map overlay available on web service, Right:Current map used by Worli area in Mumbai slums for Covid 19 containment.

Figure 5. Screenshots of web platform developed for slum dwellers and healthcare workers. On the right we show the daily list of test to be performed by a healthcare worker
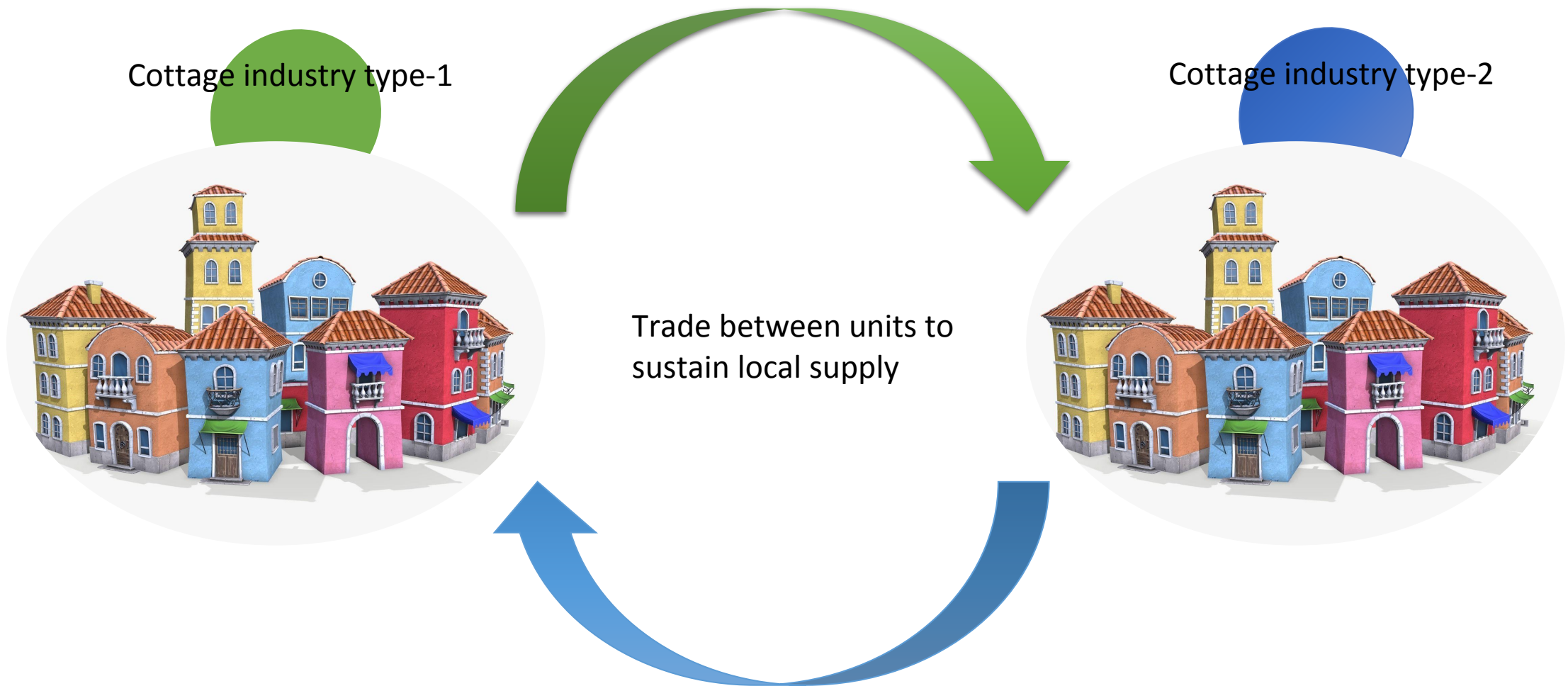
Cottage industry type-1

Cottage industry type-2

Trade between units to sustain local supply

Figure :

What is the probability of detecting an infection by taking a certain number of samples, n=500
green (x=20), blue (x=50), red (x=100)