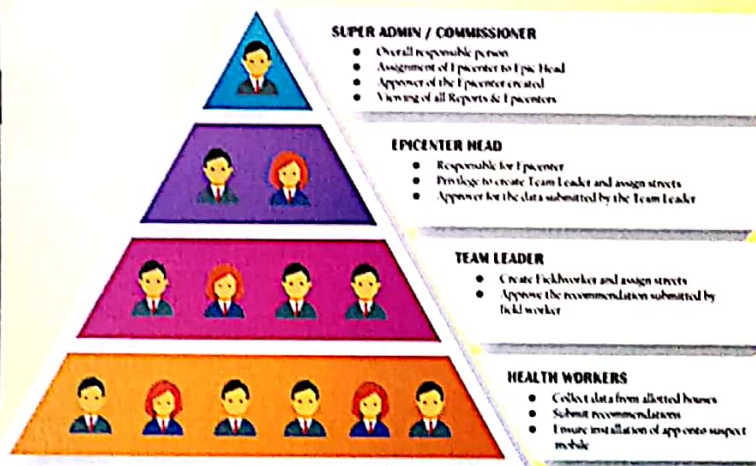# COVID 19- TRACKING AND RESOURCE ALLOCATION

Providing adequate health care for all during a pandemic outbreak may not be possible, when health resources are likely to be limited. Setting priorities and efficiently rationing resources in this context is of utmost importance.
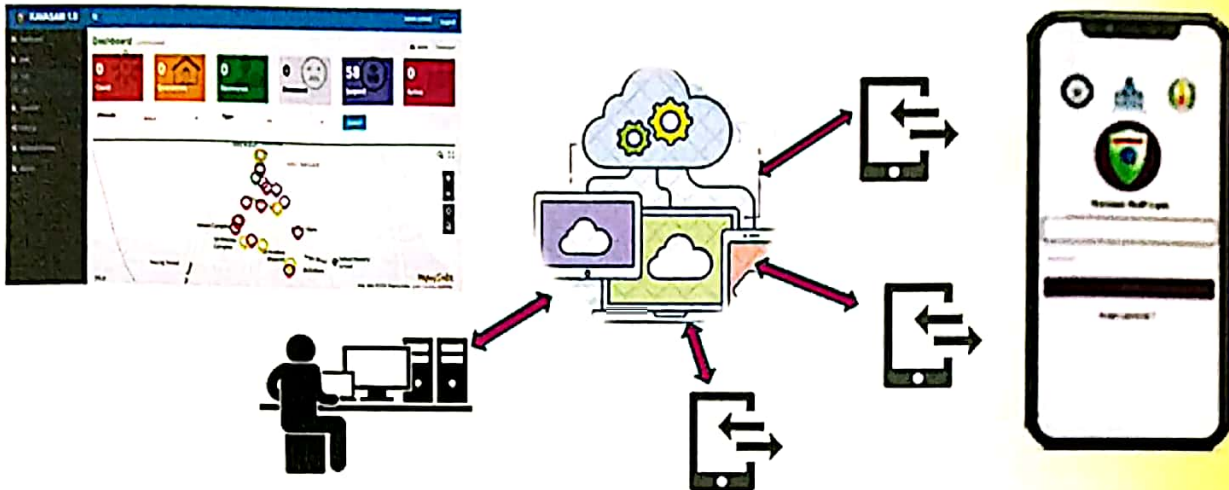
The KAVASAM software developed by Combat Vehicles Research & Development Establishment, Avadi, DRDO, Ministry of Defence empowers for efficient and effective collection of data. This unique framework formulated provides a useful guidance in the current Covid 19 pandemic scenario for tracking and resource allocation thereby identifying and suppressing COVID 19 pandemic.

The KAVASAM software framework consists of a web based application for supervision and approval by the Admin and Epicenter head. Two android apps, one for the Team leaders & Health workers and another for Patient. It also facilitates field level data collection and efficient monitoring

RESOURCE ALLOCATION FRAMEWORK

A four level hierarchy of super admin, epicenter head, team leader and health worker is defined, the roles and responsibilities are as follows:

FEATURES

- Provisions to select 1.5km,3km,5km radius from Epicenter and select the streets and houses for survey within the radius automatically/manually.
- Efficient allocation of houses to field worker for data collection-Automaticand Manual based on number of houses in a street
- Data collection by field worker at allocated streets which can be used for any resource allocation namely vaccine for COVID 19 at a later date.
- Planning, bi directional Approval and monitoring process
- Geofencing of the quarantined person
- Notification to Super admin, Epic Head and Team Leader/police if quarantine person moves away from home
- Highlighting of the houses in map with different colours to identify suspects easily.
- SMS notification at all stages to ensure authentication.
- Map views and generation of various reports required at different levels
- Creation of database with Geocoding of streets

SPIN OF BENEFITS

- Systematic data collection across the area will lead to GIS map creation for house/population attributes
- Software can be enhanced for distribution of other resources viz food, water, ration, medical purposes viz vaccination etc.
- Software can be enhanced for conducting surveys
- Software can be used during any disaster like flood etc.

Combat Vehicles Research and Development Establishment, Avadi, Chennai, DRDO, Ministry of Defence.