

Technological Innovations to support implementation of Public Employment Programmes (PEPs) in the era of COVID19 pandemic and beyond



A real-time information system that locates and feeds multisectoral, population based social protection needs including healthcare, skill and occupation needs information.

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EXPANDED PUBLIC WORKS PROGRAMME

Webinar 07.07.2020

OCN
DATA

India/Maharashtra/Pune

PUNE

AMBIENT SOUND

01-Feb-2018 - 31-Mar-2018

GO

The challenge

Reference: EPWP Phase IV business plan 2019-24

Ensuring work opportunities and strengthening social protection and resilience

The need for infrastructure that will improve operational efficiency while informing the government of capacity deficits, training needs and available skilled/unskilled workforce:



Persons with disabilities



Youth



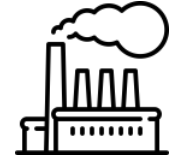
Women

Department of
Public Works and
Infrastructure



Close to 6 million work
opportunities

More than 100,000
projects



How does the Ecosystem work?

Stakeholder coordination for servicing social protection needs and health threats



Department of Public Works and Infrastructure to receive aggregated reports from across the country



Elected representatives improve policy through evidence based decisions..



Departments report data on workers needs, skill upgrade opportunities and work opportunities



Quick response by EPWP and allied programme functionaries



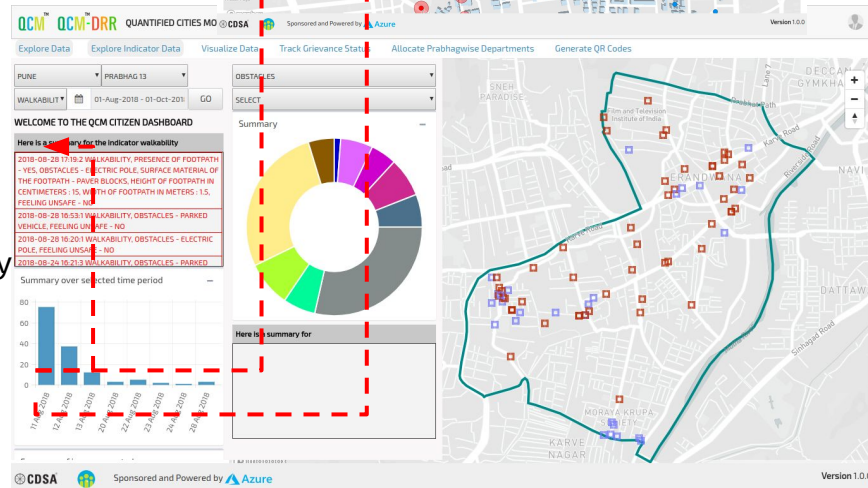
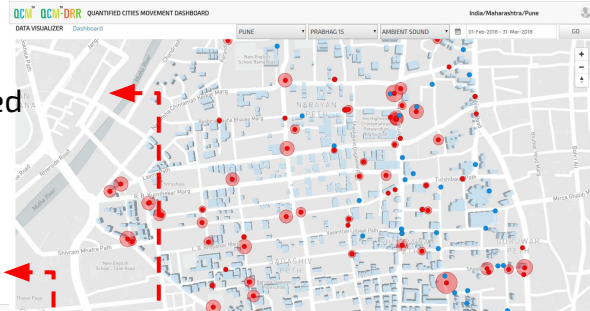
Citizens report availability, social protection needs and emergencies



Uploads sent directly to EPWP/DPW command and control center.



Creation of a data repository enabling feedback loops and policy iteration.



Workforce protection indicators

Intensifying resilience and social protection indicators in coordination with the National government, the Provincial government' and their line departments as well as other stakeholders such as NGOs etc..

1. Health threat reporting (COVID19 symptoms etc.)
2. Social input status will evaluate access to:
 - a. **Employment opportunities and skills data:** Worker and workforce family information such as skill level, occupation location etc.
 - b. **Needs for Medical supplies-** medicines, disinfectants, masks.
 - c. **Needs for Food supplies-** public distribution system, food packets, water supply- sources and availability.
 - d. **Hygiene supplies-** soaps, garbage disposal, functional hand hygiene stations
 - e. **Other essential services-** LPG cylinders, electricity supply etc.

Example: WASH needs reported

Water	Sanitation	Hygiene	Health care waste	Environmental cleaning
Advanced service To be defined at national level	Advanced service To be defined at national level	Advanced service To be defined at national level	Advanced service To be defined at national level	Advanced service To be defined at national level
Basic service Water is available from an improved source located on premises.	Basic service Improved sanitation facilities are usable with at least one toilet dedicated for staff, at least one sex-separated toilet with menstrual hygiene facilities, and at least one toilet accessible for people with limited mobility.	Basic service Functional hand hygiene facilities (with water and soap and/or alcohol-based hand rub) are available at points of care, and within 5 meters of toilets.	Basic service Waste is safely segregated into at least three bins and sharps and infectious waste are treated and disposed of safely.	Basic service Basic protocols for cleaning available, and staff with cleaning responsibilities have all received training.
Limited service An improved water source is within 500 meters of the facility, but not all requirements for basic service are met.	Limited service At least one improved sanitation facility, but not all requirements for basic service are met.	Limited service Functional hand hygiene facilities are available at either points of care or toilets, but not both.	Limited service There is limited separation and/or treatment and disposal of sharps and infectious waste, but not all requirements for basic service are met.	Limited service There are cleaning protocols, or at least some staff have received training on cleaning.
No service Water is taken from unprotected dug wells or springs, or surface water sources; or an improved source that is more than 500 m from the facility; or the facility has no water source.	No service Toilet facilities are unimproved (pit latrines without a slab or platform, hanging latrines and bucket latrines), or there are no toilets or latrines at the facility.	No service No functional hand hygiene facilities are available at either points of care or toilets.	No service There are no separate bins for sharps or infectious waste, and sharps and/or infectious waste are not treated/disposed of.	No service No cleaning protocols are available, and no staff have received training on cleaning.

UNICEF WASH report

Filling the deficit for workers' livelihood, health and social protection needs

Strengthening access to local livelihood and resilience infrastructure

What can a worker who registers do?



Access to employment opportunities



Access to social protection and health



Access to food distribution



Two-way communication with EPWP



Access to on and offline skill training



Reporting emergency needs



Reporting health issues such as COVID symptoms



Access to employment opportunities and performance reports

Enabling the government in identification of livelihood, health and social protection needs

Strengthening local resilience infrastructure

What do government agencies and programmes like EPWP receive?



Reporting and Monitoring



Real-time location specific



Access to granular data



Two-way communication with citizens



Strategy formulation



Specific inputs for action planning



Planning and policy insights



Purposive data collection for Employment and social input need identification

How do we input workforce information and reports?

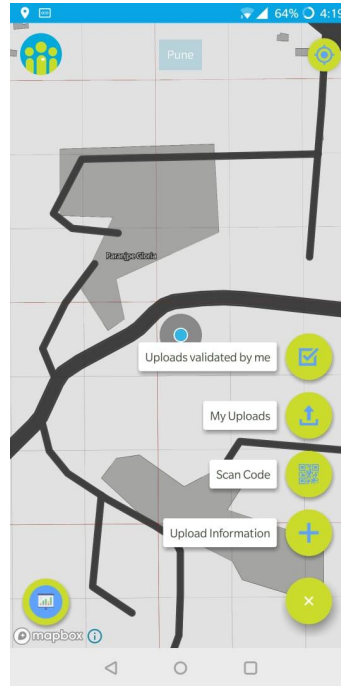
QCM Infrastructure



iNagrik

Collecting evidence to improve quality of life.

iNagrik is the QCM mobile application created to enable stakeholders to upload information to manage various needs.



- Real Time
- Language enabled
- GIS enabled



Province can track health threats and lack of medical supply, food inventory, manpower availability and other issues instantly and with location.



EPWP surveys and workforce reports reach the Command and Control Centre in real time with health threat incidence locations.



Quick and efficient response by departments and emergency services to real time reports of WASH, food and other social protection needs.

An end to end system

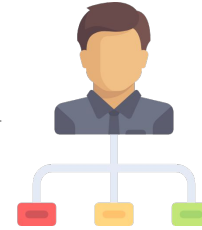
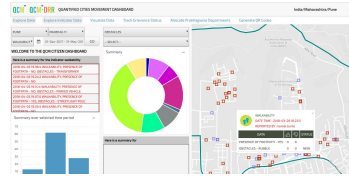
QCM Infrastructure

Data driven workforce needs identification and management

Data collection



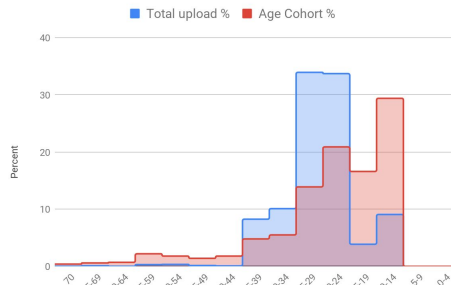
Dashboard for analysis and visualization



Access to data across various stakeholders

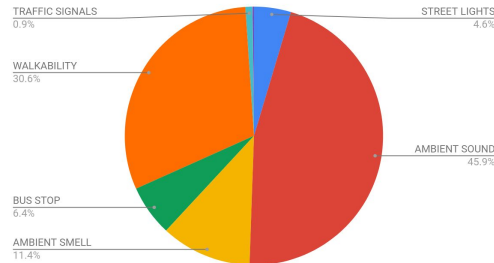
Data types

Who?

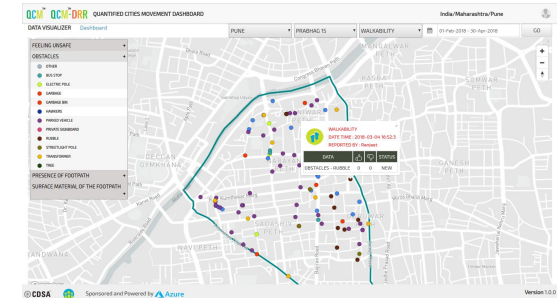


What and How much?

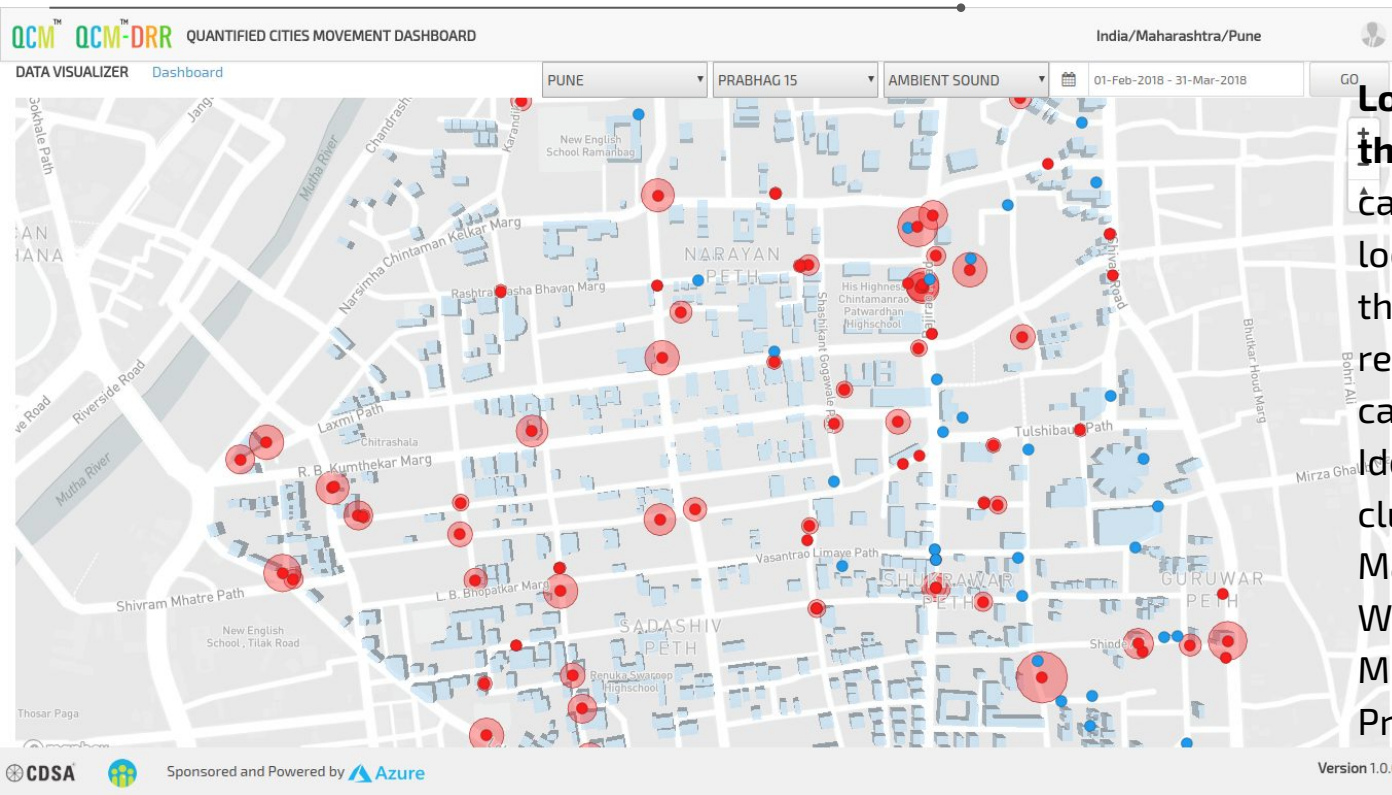
What 25-30s are reporting



When and Where?



Mapping the workforce and social needs in real time for management and planning



Location of workforce and their needs: Migrant needs can be identified and located in real-time through surveys and self-reporting. Need magnitude can also be reported. Identifying and helping clusters of workers. Mapping can take place at Ward, Local Municipal, Municipal, District, and Provincial level.

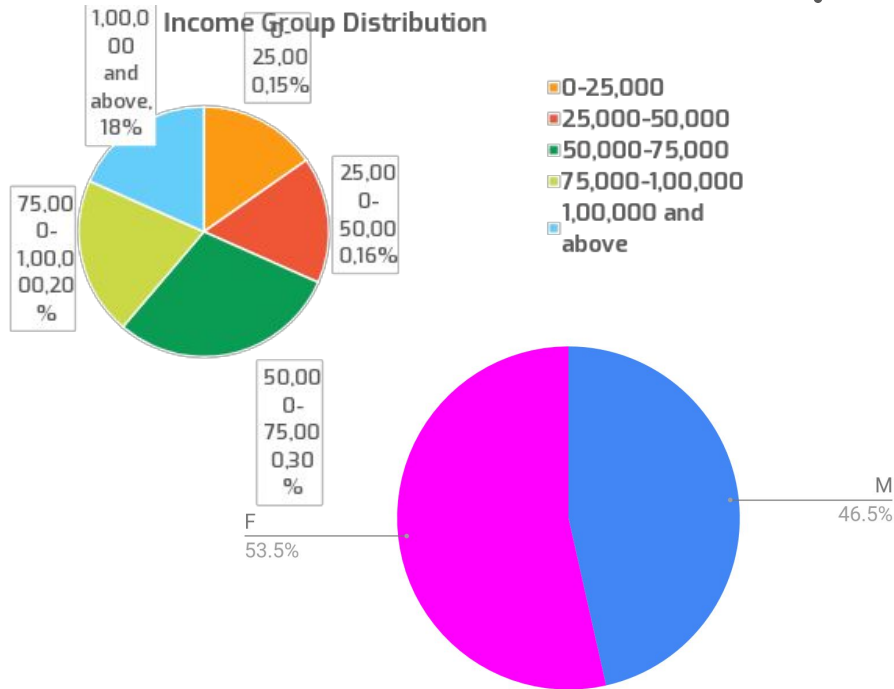
Infrastructure and asset sorting and querying



Social infrastructure sorting and infrastructure gap identification:

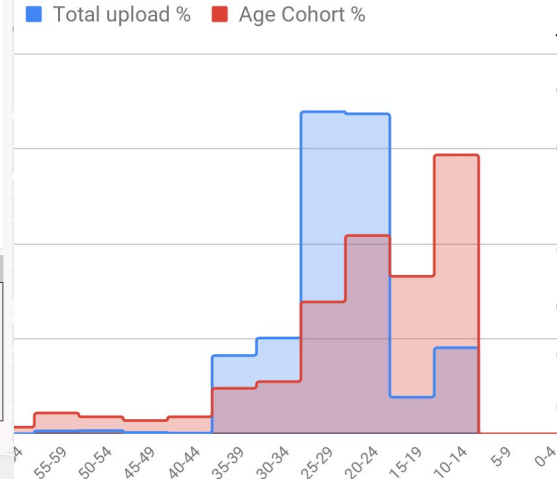
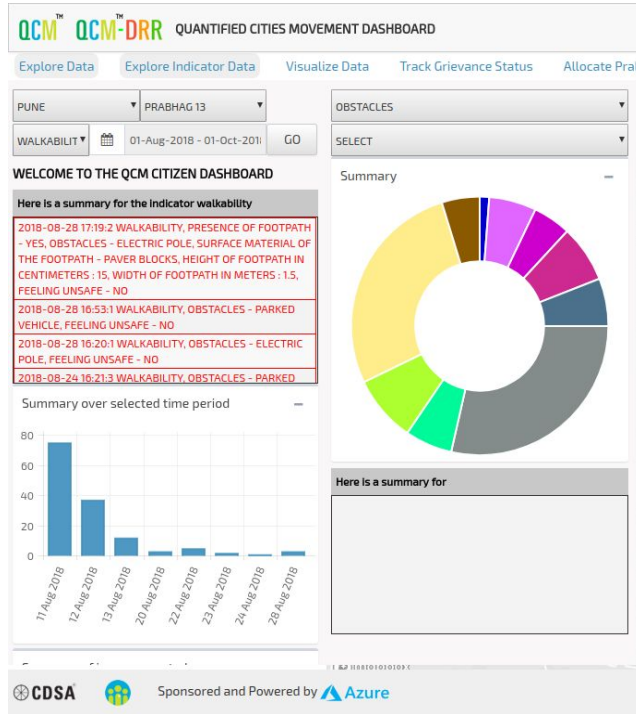
Infrastructure can be sorted at building level. The sorting can take place on the basis of type, and workforce needs. Through analysis and sorting, gaps can be identified in order to support decisions for social protection.

Identification of vulnerable groups



Stakeholder centric planning: In the event that households are surveyed, the QCM ecosystem generates graphs for various types of data such as gender and age breakdown of threats amongst the surveyed population. This enables pin-pointed policy and planning interventions for various vulnerable groups in wards and local areas.

Workforce Data querying for trends



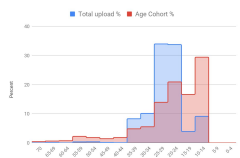
Tracking and management:

Various data can be tracked and queried through the ecosystem. Anonymized data on individuals that was collected through surveys or citizen reports can be queried, in order to make informed policy decisions. Using time series data enables long term planning and visioning as well as comparison against base years in order to track action output and planning outcomes over years.

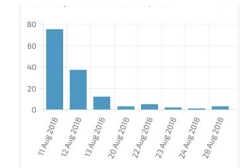
Applying the data for monitoring, iteration and improved outcomes



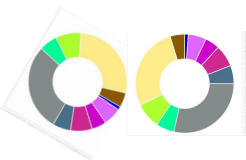
Filling gaps in infrastructure: Reports enable the creation of spatial and temporal evidence that helps in identifying gaps in infrastructure, social inputs and resources.



Comparing against quality standards: Through reporting workforce stresses and risks, QCM facilitates best practices in social protection policy and planning by mitigating stresses that are identified through data comparison to quality standards for solution identification.



Benchmarking and comparing against baselines: Due to the potential of continuous and timely data collection, the ecosystem enables baseline studies and benchmarking. Stakeholders can compare the current situation to baselines and benchmarks in order to monitor marginal changes for various indicators including quality of life, workforce health, workforce skills and workforce needs etc.



Comparisons between Provinces: With standardized datasets, stakeholders can compare various indicator levels between towns and administrative precincts or even whole provinces.

Access more information about CDSA and QCM

