Information Management for CSOs in Disaster response and management

Asian Disaster Reduction and Response Network
Alan Mills
8 September 2020

What we do

- Humanitarian mapping charity that works through skilled volunteers.

- We help target and coordinate the delivery of humanitarian aid.

- Since 2002 we have responded to around 100 emergencies (plus many more remotely).

- In 2020 - Beirut field mission, over 20 projects worldwide remotely.

MAP
ACTION

About MapAction

100 DISASTER RESPONSES

CONFLICT
Cameroon
Central African Republic
Côte d'Ivoire
Iraq
Libya
Nigeria
South Sudan
Syria

POPULATION MOVEMENT
Bangladesh
East Africa
Mediterranean
Pakistan

POST CONFLICT
Sri Lanka

COMPLEX

FOOD SECURITY — SLOW ONSET
Lesotho
Namibia
Niger
Sahel

EBOLA
Liberia
Mali
Sierra Leone

EARTHQUAKE
Ecuador
Haiti
Indonesia
Nepal
Pakistan
Tanzania

TSUNAMI
Japan
Sri Lanka

MUNITIONS EXPLOSION
Brazzaville

CYCLONE & HURRICANE
Barbados and BVI
Caribbean (regional)
Dominica
Dominican Rep.
Fiji
Haiti x3
India
Jamaica x2
Madagascar x2
Myanmar x2
Philippines x4
St Lucia
Turks & Caicos
Vanuatu x2
Yemen

WILDFIRES
Chile

LANDSLIDE
Sierra Leone

VOLCANO
Cape Verde x2
Indonesia

FLOODING — SUDDEN ONSET
Madagascar
Albania   Malawi
Benin   Mexico
Bolivia   Namibia
Burkina Faso   Nicaragua
Chile   Pakistan
Comoros Islands Paraguay x3
El Salvador   Peru
Ghana   Serbia
India   Sudan
Kenya   Suriname

MAP ACTION

Our vision

Our vision

A world where people vulnerable to humanitarian emergencies are more resilient and those assisting them are more effective through the use of technological advances in information management. .

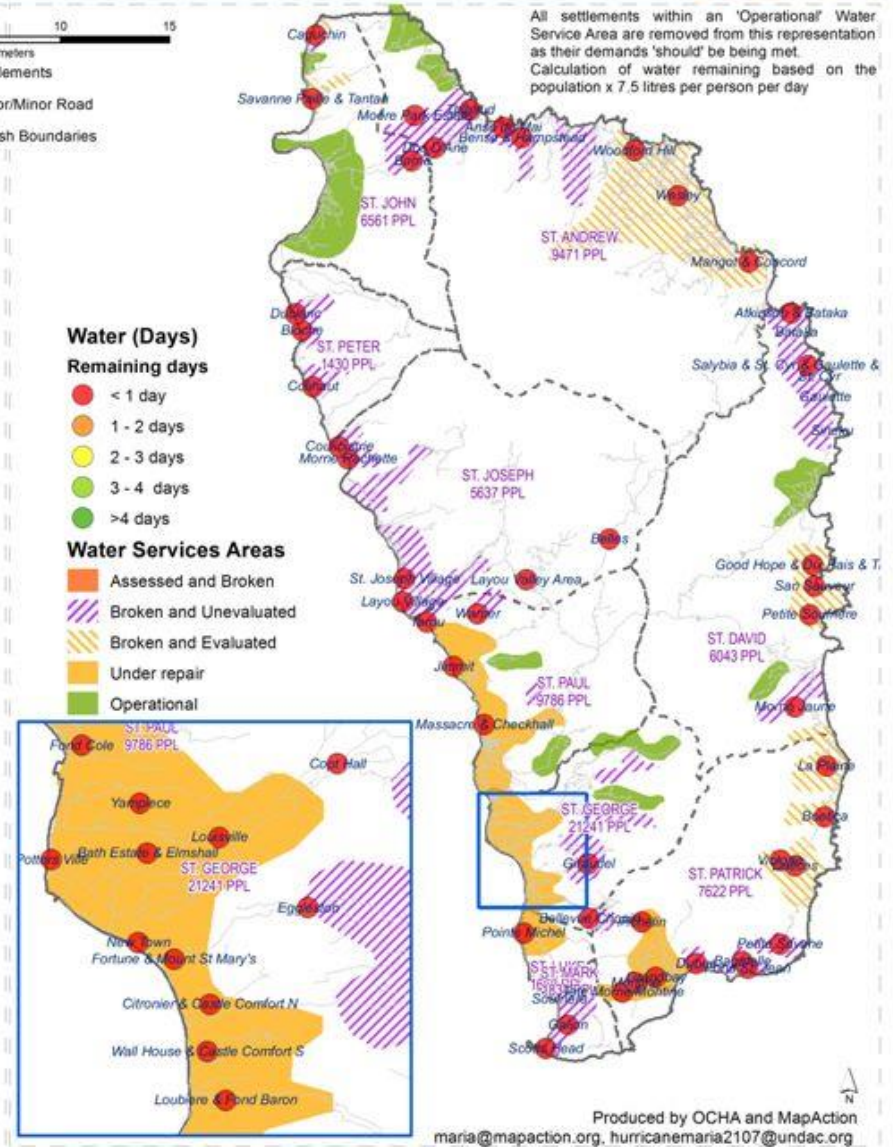# Where we have worked

How we work

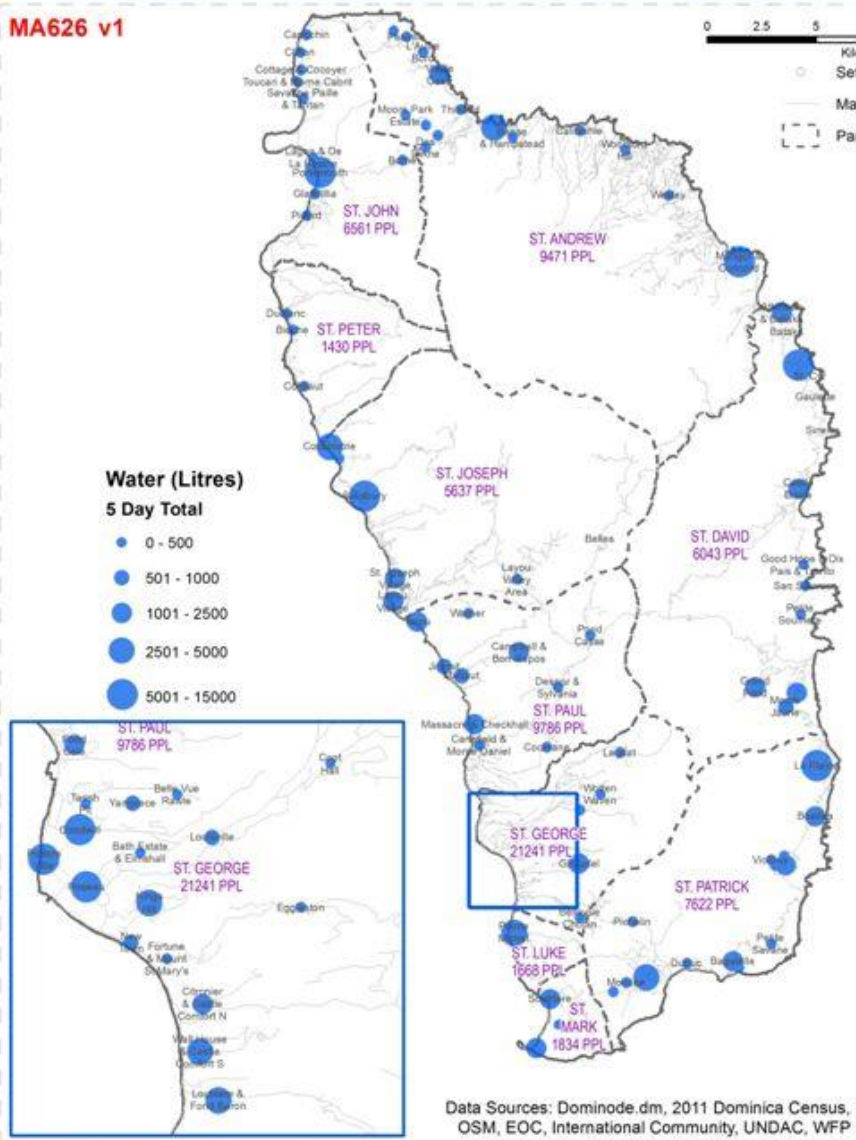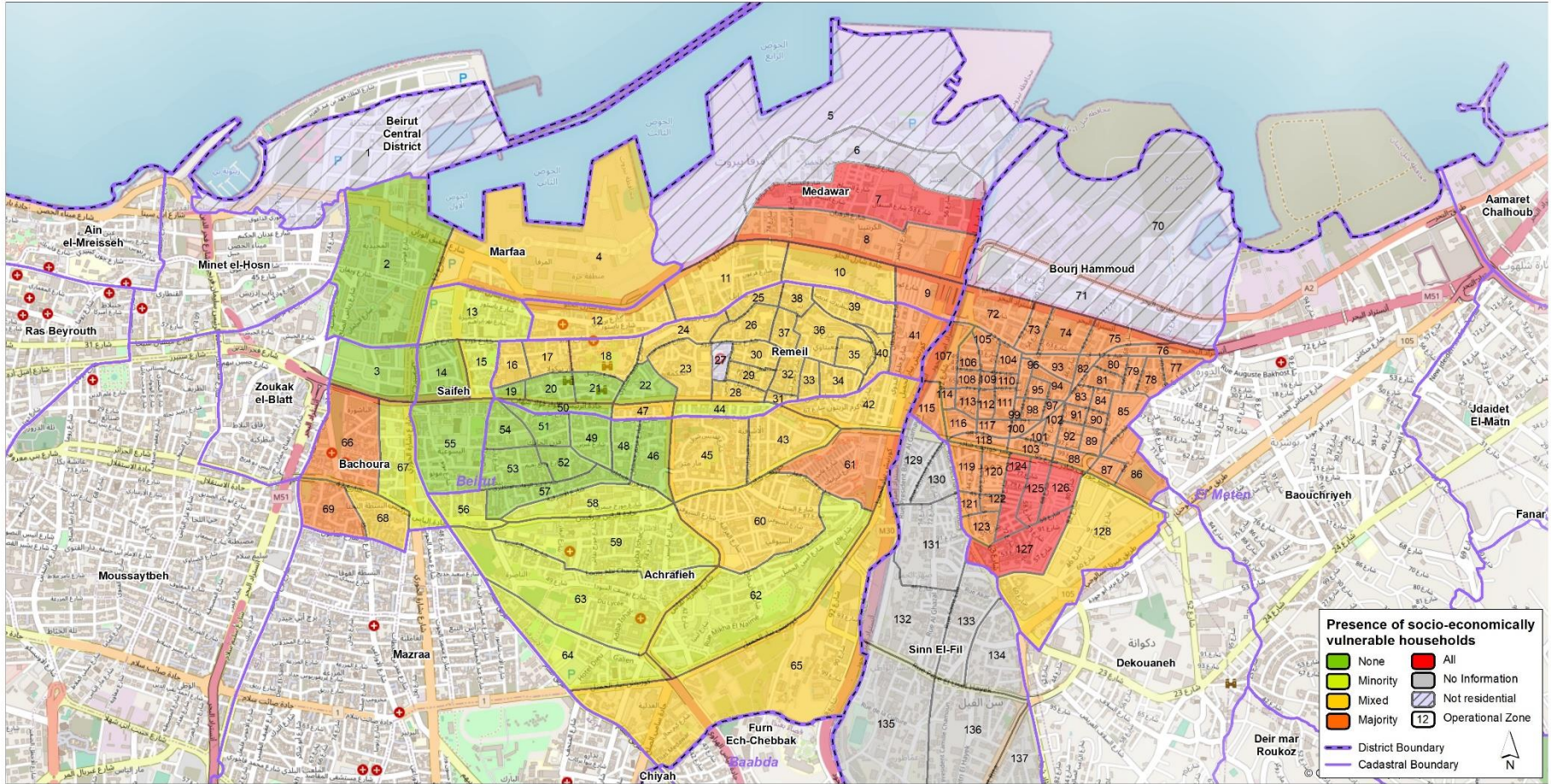# Regional partnerships

AHA Centre
CESDRR
CDEMA
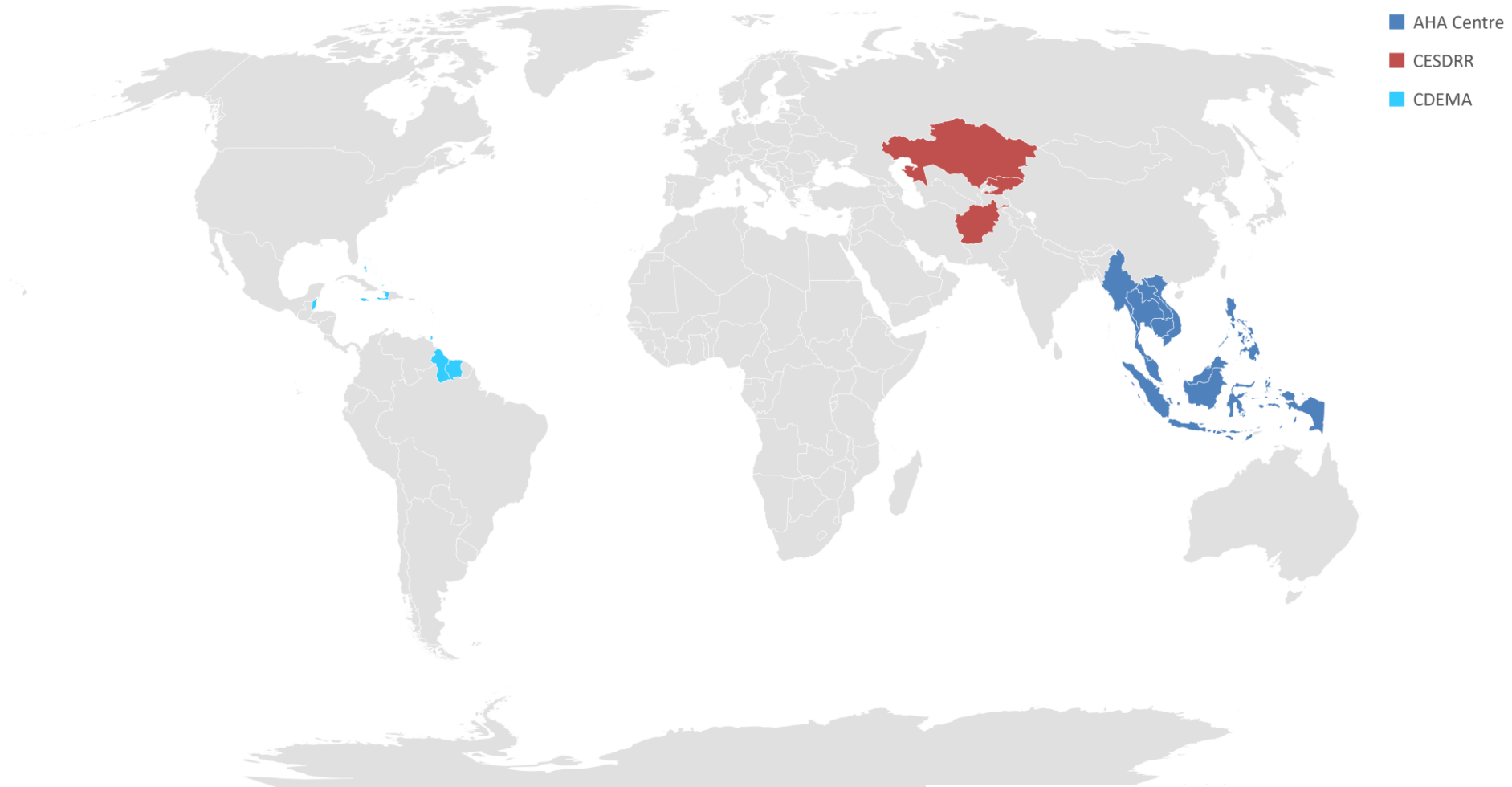
How can IM help?

- Communicate / Report
  - Presence, programmes, issues,
- Visualize
  - Immediate impact, patterns, stories
- Strategize
  - Scenario building, What if? Conflict Resolution

Photo: EU/N Mazars

MAP ACTION

Example maps

Potable Water status: litres delivered in last 5 days and remaining days supplies (up to 08 Oct 2017)

Presence of socio-economically vulnerable households

- None
- Minority
- Mixed
- Majority
- All
- No Information
- Not residential
- 12 Operational Zone
- District Boundary
- Cadastral Boundary
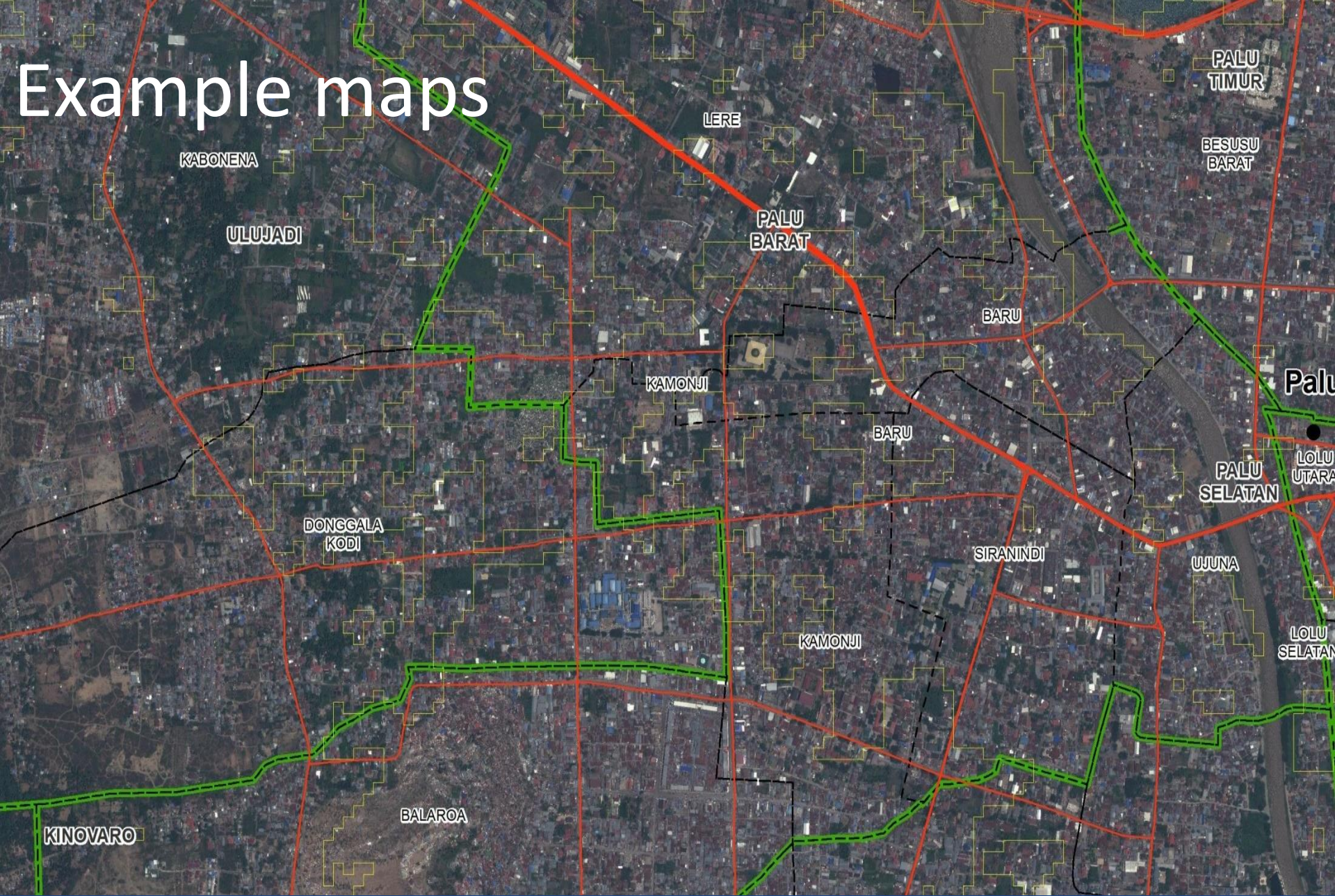
These zones were developed to help coordinate and collaborate on relief efforts at the operational level. Level 3 Administrative boundaries in Lebanon 'Cadasters' were divided into Zones. Those zones will be used as a reference to facilitate the data collection for all different aspects of the response. A Zone can be defined as a cluster of built-up plots separated by the road network within the Administrative Level 3 – Cadasters of Lebanon.

The socio-economic status of households living pre-blast in each zone was estimated by UN-Habitat based on (1) a national ranking of 498 disadvantaged area undertaken to inform the ongoing UN-Habitat-UNICEF Neighbourhood Profiling project and (2) a visual assessment in the field on 12 August 2020.
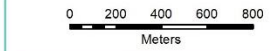
Data Sources: OpenStreetMap, Lebanese Red Cross, OCHA, HDX, UN Habitat, UNICEF

The depiction and use of boundaries, names and associated data shown here do not imply endorsement or acceptance by MapAction.
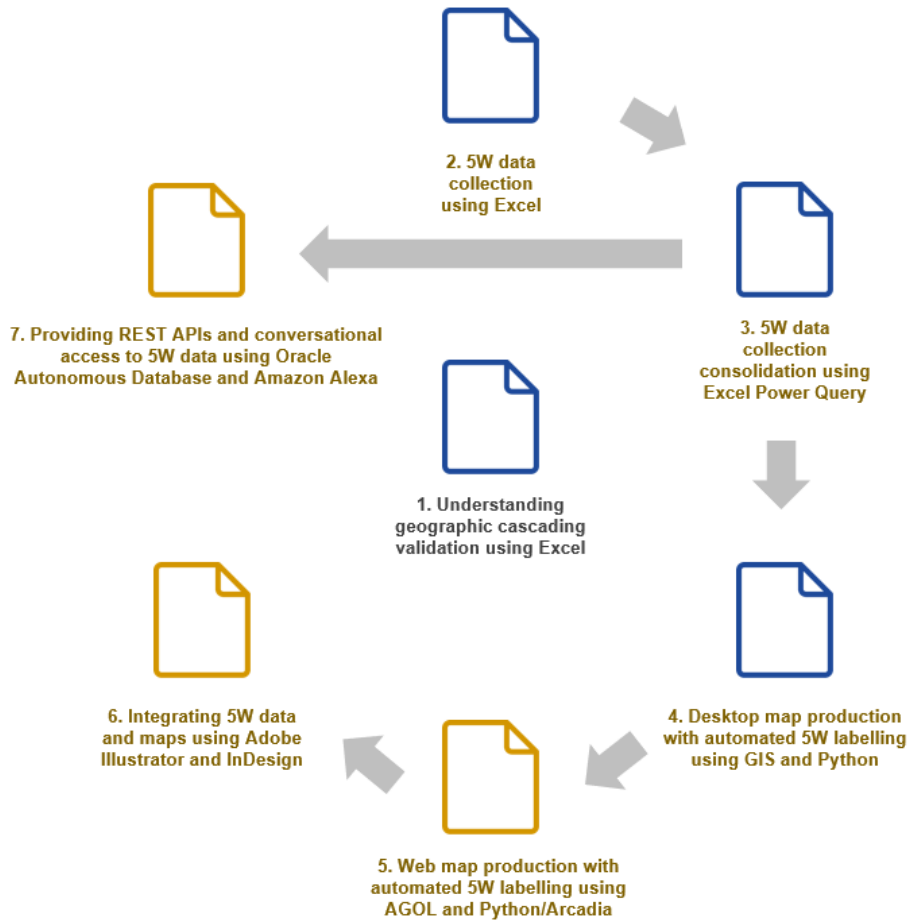
WASH – Location of Water ATMS in Kenya

MA009

This map shows the density of Water ATMs within 500 meters.

Data sources
© OpenStreetMap contributors
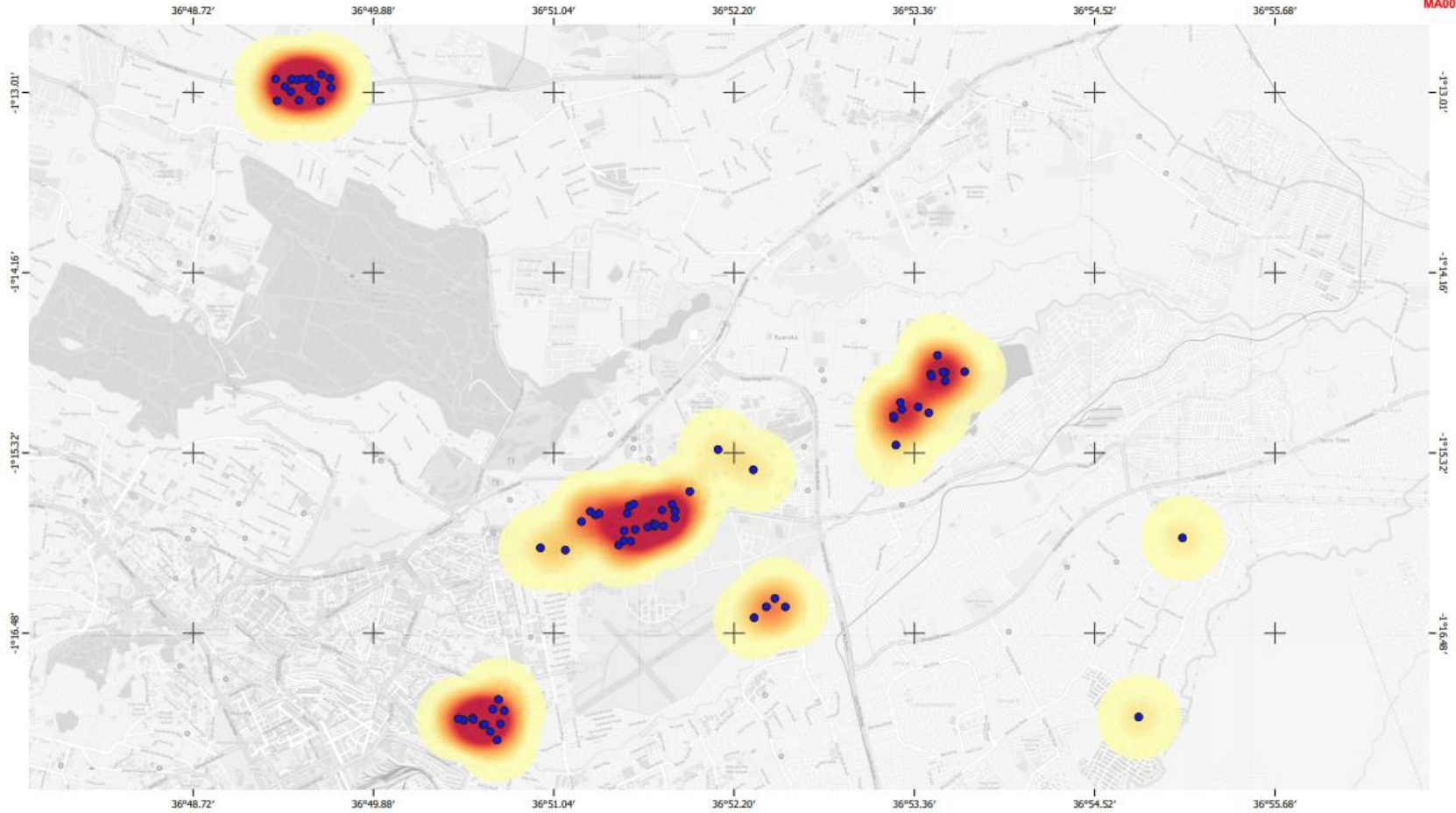
The depiction and use of boundaries, names and associated data shown here do not imply endorsement or acceptance by MapAction.

Country: Kenya
Emergency: Covid-19 Response
Title: The Density of Water ATMs in Nairobi County

KENYA

NAIROBI

| | 2 km |
| 0 | 1 |

Created:	17th July 2020
Map Document:	MA009_Nairobi_Water_ATMs
Projection / Datum:	WGS 1984

Produced by MapAction
www.mapaction.org
kenya@mapaction.org

Water ATMs
Number of ATMs within 500 Meters
1
2
3
4
5
6
7
8
9
10
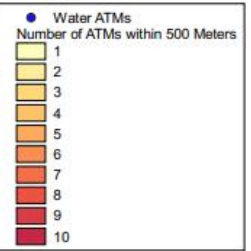
Cash Transfer - Who What Where
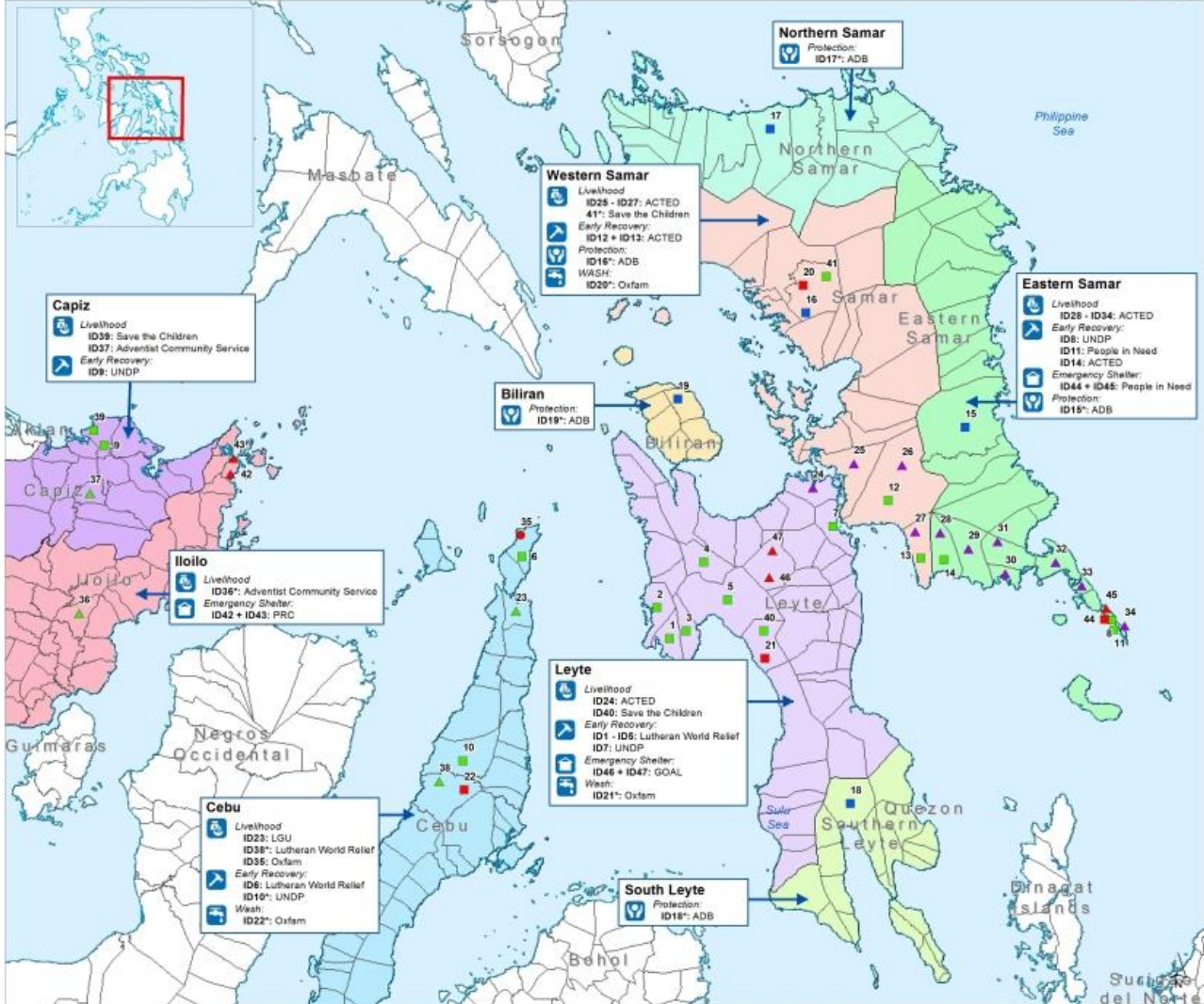
Not just pretty maps…..

- While the end products are useful, other aspects of what we do..
  - Problem solving
  - Finding the right data
    - Mobile collection
    - Satellite/online/other sources
  - Organising the information
  - Sensible usage of information
    - Protecting the vulnerable
  - Sharing with the right people
    - Communities, peer organisations, the world.

Information flows and appropriate tools

2. 5W data collection using Excel

3. 5W data collection consolidation using Excel Power Query

7. Providing REST APIs and conversational access to 5W data using Oracle Autonomous Database and Amazon Alexa

1. Understanding geographic cascading validation using Excel

6. Integrating 5W data and maps using Adobe Illustrator and InDesign

5. Web map production with automated 5W labelling using AGOL and Python/Arcadia

4. Desktop map production with automated 5W labelling using GIS and Python

Choosing Data

Organising and visualising

Training - Capacity Building – Knowledge Sharing

- Learning together
  - Defining needs/field experience
  - Our connections to a large body of technical expertise.
  - Technical Skills; software and devices
  - Good Practice on IM

mapaction.org