

GIS Tracking for improved settlement reach accountability during Seasonal Malaria Chemoprevention Campaign

Pilot of GIS tracking for SMC campaign in Borno State





PLANFELD IN ACTION



LOCATION Borno, Nigeria



PARTNERS

Borno State Ministry of Health World Health Organization



IMPACT

5,947 settlements reached by SMC teams in accessible locations.

BACKGROUND

In 2017, due to the surge of Internally Displaced Persons (IDPs) with limited access to basic healthcare services, resulting from the Boko Haram insurgency, Malaria became the number one killer disease in Borno State, accounting for 50% of deaths, according to WHO estimates. To curb the high death toll resulting from Malaria, WHO supported the State Ministry of Health (SMOH) and other health delivery partners in Borno state to launch a Seasonal Malaria Chemoprevention (SMC) campaign in July 2017. The campaign involves the intermittent administration (once a month for 4 months) of the full treatment course of an antimalarial regimen (a combination of sulfadoxine-pyrimethamine and amodiaquine (SPAQ) to children aged between 3 to 59 months, in areas of highly seasonal transmission of malaria. From 2017 to 2019, the SMC campaign has been implemented in Borno across selected LGAs targeting about 1.1 million children (3-59 months). In 2020, the SMC campaign in Borno was extended to cover all 27 LGAs reaching over 2 million children.



FEATURES Planner & Monitor

FOCUS AREA

Malaria



THE CHALLENGE

The challenges faced during the SMC campaign implementation were:

- Poor Planning: Paper-based micro-planning did not accurately represent all locations in the state.
- No Ability to Track Teams: Limited location coverage monitoring as there
 was no ability to track locations that were missed resulting in missed
 households.
- No geographical coverage accountability: Actual geographic coverage of settlements planned for could not be accounted for as this had been based only on reports provided by commodity drug distribution teams.

THE SOLUTION

To combat these challenges, the Borno State Ministry of Health and WHO decided to implement digital and geospatial tools for better planning, tracking of teams, data collection, and coverage accountability during the implementation of SMC campaigns. Geospatial processes and tools were deployed to support the planning and monitoring of the SMC campaign in Borno for Cycles 1 to 3 of the 2020 Round. The geospatial tools were able to improve the SMC campaigns by:

Improved Planning: Micro planning was done based on the geospatial listing of settlements from the Nigeria <u>data portal</u>. The planning is based on mapping information and can be auto-generated to estimate the appropriate number and distribution of teams to effectively implement activities within specified days across selected settlements or locations. The planning is carried out at the local government administrative level for each ward/district to be covered.

Improved Tracking & Accountability: GIS-enabled mobile devices were deployed to every ward/district to be carried by CDD teams across all settlements where SMC activities are to be implemented. GPS tracks and location data were collected, via passive and active monitoring respectively. These geospatial datasets are analyzed via automated systems to determine which settlements are reached and the proportion of settlement areas that were covered.

FEATURE HIGHLIGHTS



PLANNER

- Created daily schedules for SMC campaigns using the list of settlements extracted from database
- The plan identified additional resources needed to cover locations during allotted time



- Used GPS coordinates to verify visitations and service delivery
- Visualized progress in near real-time on maps and charts

RESULTS

To ensure that the data collected is effectively used for active decision making, the analysis is carried out daily in the field locations by LGA Field Consultants. This helps determine the settlements that were reached and those not reached from the daily plan. Settlements reported as not reached are immediately planned for subsequent days. This helps to minimize the accumulation of missed settlements to be addressed through mop-up activities to ultimately reduce or eliminate missed settlements.

The information analyzed at the LGAs is transmitted to the state where supervision and high-level decision making are carried to ensure the effective and successful progress of the activity. Post campaign analysis of the monitoring result is carried out to provide a retrospective of how the campaign and teams performed. This also aids the decision for addressing challenges and planning for subsequent campaign activities.

GIS tracking of SMC has proven to be effective in improving the planning and monitoring of SMC activities, which can be extended to fully automate the planning process, improve monitoring and ensure accountability for other Malaria elimination activities such as Long Lasting Insecticide Nets (LLIN) distribution as well as other health delivery services (MNCH, Measles campaigns, etc.)

5,947

settlements reached by SMC teams in accessible locations.

1,289

settlements reached by SMC support teams in partially accessible locations.

1,139

settlements reached by SMC support teams in security challenged locations.