

| <b>Table of Contents</b> |                       | <b>Page</b> |
|--------------------------|-----------------------|-------------|
| 1.0                      | Executive Summary     | 2           |
| 2.0                      | Introduction          | 3           |
| 2.1                      | The Target 6.1 Map    | 4           |
| 2.2                      | Data from Mapped Area | 6           |
| 3.0                      | Need Assessment       | 10          |
| 4.0                      | Relevance             | 10          |
| 5.0                      | Research Design       | 12          |
| 5.1                      | Data Collection       | 13          |
| 5.2                      | Reporting Data        | 15          |

### **List of Figures**

|   |   |
|---|---|
| An overview of the Target 6.1 Map   | 5 |
| Water Availability Status for All the Mapped Communities across three states in Nigeria | 7 |
| Water Availability Status for All the Mapped Communities in Ekiti State, Nigeria        | 7 |
| Water Availability Status for All the Mapped Communities in Osun State, Nigeria         | 8 |
| Water Availability Status for All the Mapped Communities in Oyo State, Nigeria          | 8 |
| Schematic representation of the Target 6.1 Map Management and Team                      | 9 |

### **List of Tables**

|  |    |
|--|----|
| List of required data collected from the field | 14 |
| List of required data collected from the field | 15 |

## 1.0 Executive Summary

It has been noted that in Nigeria, estimated 60 million Nigerians do not have access to clean drinking water, but their exact place of residence remains unknown. This raises another significant question: how can we solve people's problem when we do not know where they live? It is practically impossible. Governments and NGOs have been trying to provide water aid for many years without having access to this vital information; approximately 58% of boreholes in Nigeria are non-functional due to poor management and inadequate project monitoring systems. New water projects that are being set up are also at risk of breakdown. An estimated 40% of new water projects break down within two years. These stats show that the solution provided by Government and NGOs is unsustainable; and poor people are more likely to suffer from extreme water poverty because they cannot afford to install an improved water source such as a borehole or developed well in their home. Therefore, they depend on the Government and NGOs for access to clean drinking water. As a result of all these, it was considered important to implement a simple to use, and comprehensive water systemic safety approach that bridges the gaps among such interrelated issues as evidence based research that provides reliable vital information; efficient management system; and funding approach that are sustainable. This has led to the development of the Target 6.1 Map by Fairaction team. The development of this approach was in cooperation with stakeholders' actions towards waterworks, and the Target 6.1 Map is now being actively promoted, with guidelines available. Mapping exercise have been conducted in 1,693 communities in Nigeria across three states namely; Oyo, Osun, and Ekiti. The data collected were reported via the Target 6.1 Map admin app, and the analysis revealed that a total number of 962,923 people have been reached, out of which 806,624 people currently lack access to safe drinking water, representing 83.8% of people reached; and some total number of 156,299 people are currently enjoying safe drinking water, representing 16.2% of people in the mapped areas. A breaking down of this data analysis brings vital information to funders, give them sense of reliability of where to site projects, and ensure end to end cycle coordination and management of each project, using the Target 6.1 Map. Fairaction Nigeria in partnership with our international allies, is hereby seeking support in form of sponsoring research for more communities/regions in Nigeria, so as to have the clear picture of the challenges facing every regions and/or communities, in order to reach green status for all – which implies that “we have achieve sustainable access to clean drinking water for all”.

## 2.0 Introduction

For more than four years, in collaboration with other charities, government departments and professional organizations, Fairaction has operated in Australia and Nigeria to provide an ultimate solution to the water issues affecting millions of people. A major initiative designed and developed by our team has been the Target 6.1 Map.

The overall purpose of the Target 6.1 Map is increasing development and utilization of water facilities with a goal of contributing to the reduction or totally avoid downtimes and deterioration of water facilities due to poor coordination and management system. A key result area is stopping systems breakdown throughout mapped area, and across the nation at large. The target 6.1 map has been conceptualized along end to end cycle monitoring and management, and is structured around three focus areas:

1. **Vital information:** Access to reliable and safe water represents one of the greatest challenges facing humanity in the 21st century. Indeed, the demand for water is unprecedented, and having the right information always up to date does not only show where interventions are needed, but also reduces the duplication of effort across development projects which is often the resultant effect of poor coordination in low- and middle- income countries which receive development assistance. Having this vital information shows and ascertain where the 60 million Nigerians who lack access to clean drinking water live; the interrelated challenges they face, and how a sustainable water solution for their communities can be provided. This information is represented on the Map using color coding.
2. **Efficient Management System:** Involving communities in the operation and maintenance (O&M) of water facilities is expected to be a cost-effective means of ensuring sustainable provision of water to rural communities in Nigeria. It records, tracks, and reports sustainability and functionality of new and existing water supply facilities so that each water project can be adequately managed and sustained. The Map is constantly updated with input from operatives in the field, grassroots' researchers and on-site caretakers to enable us to have highly accurate information on every water project. Approximately 58% of boreholes in Nigeria are broken. However, 80% of these broken boreholes are repairable.

The Map provides information about broken water projects so that the projects can be repaired and subsequently maintained.

- 3. Connecting Funders to communities:** Ending extreme water poverty and boost shared prosperity around the world, requires collaboration and collective impact in communities across the country. This supports fundraising from governments and organizations to implement water projects in the urgent project regions shown on the Map. This ensures that the extremely poor people who can't afford to install an improve water source in their homes finally gets access to clean drinking water.

## 2.1 The Target 6.1 Map

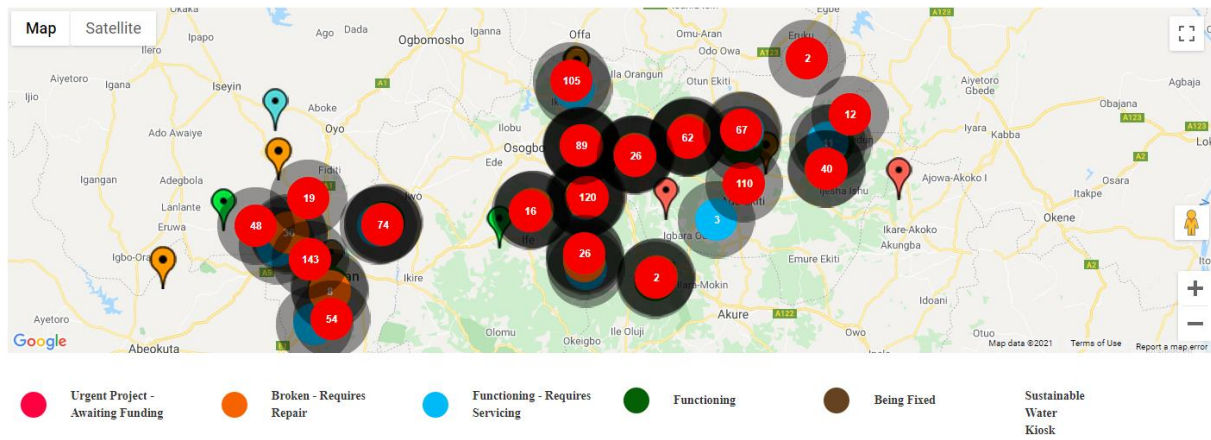


Figure 1: An overview of the Target 6.1 Map

The Target 6.1 Map is a centralized and transparent management system that monitors the end to end life cycle of water projects. The Map’s functionality includes, but not limited to the following:

1. **Location:** It shows the exact location where people who lacks access to clean drinking water lives, the interrelated challenges they face, and how sustainable water solutions for their community can be provided.
2. **Tracking:** It records, tracks, and reports the functionality of water projects, so that each water project can be adequately managed, and sustained.
3. **Cooperation:** It connects water projects’ funders to needy communities, thereby providing the fund required to deliver water project for the poor people within a community.

The Map is color coded, and each color code represent the current status of a water project. The color code system is as follows:

- a. **Red Status:** The red status indicates “Urgent Project - awaiting funding”, - when a new project is implemented in an urgent project region, the red color changes to green.
- b. **Green Status:** The green status indicates a “Functioning Project”.
- c. **Orange Status:** This indicates a “Broken Project - requires urgent repair”. Green status projects changes to Orange status when the project breaks down. This functionality shows

that broken projects are repaired as soon as they break down, enabling continuous flow of water. Orange color changes to green once the broken project is fixed.

- d. **Blue Status:** This indicates a “Functioning Project – requires servicing”, this information facilitates the routine maintenance of water projects. Blue status changes to green once the project is serviced.
- e. **Brown Status:** It shows when water projects are being implemented (Project – being fixed). This information prevents overlapping services among water aid service providers. Brown status changes to green when the project is completed.

Our end is to achieve “Green Status” for every community, and ensure that every green stays green. Establishing green status for every community means we have achieved sustainable access to clean drinking water for all.

## **2.2 Data from Mapped Area**

Mapping exercise has been conducted in 1,693 communities in Nigeria across three states namely; Oyo, Osun, and Ekiti. The data collected were reported via the Target 6.1 Map admin app, and the analysis revealed that a total number of 962,923 people have been reached accumulated from across all the water project status (i.e., Urgent Project – Awaiting Funding, Broken Project – Requires Repair, Functioning Project – Requires Servicing, Functioning Project, Being Fixed Project, and Sustainable Water Kiosk), out of which 806,624 people currently lack access to safe drinking water (i.e., Urgent Project – Awaiting Funding, Broken Project – Requires Repair, Functioning Project – Requires Servicing, and Being Fixed Project), representing 83.8% of people reached; and some total number of 156,299 people are currently enjoying safe drinking water (i.e., Functioning Project, and Sustainable Water Kiosk), representing 16.2% of people in the mapped areas.

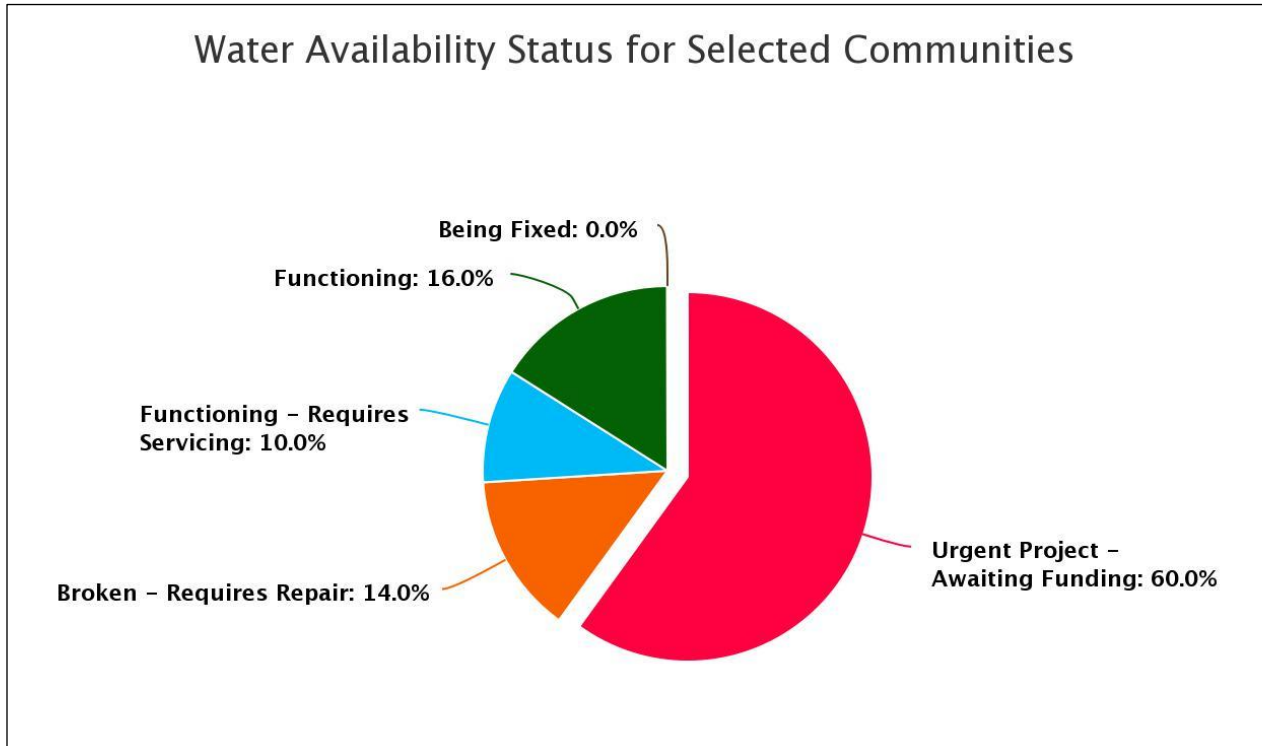


Figure 2: Water Availability Status for All the Mapped Communities across three states in Nigeria.

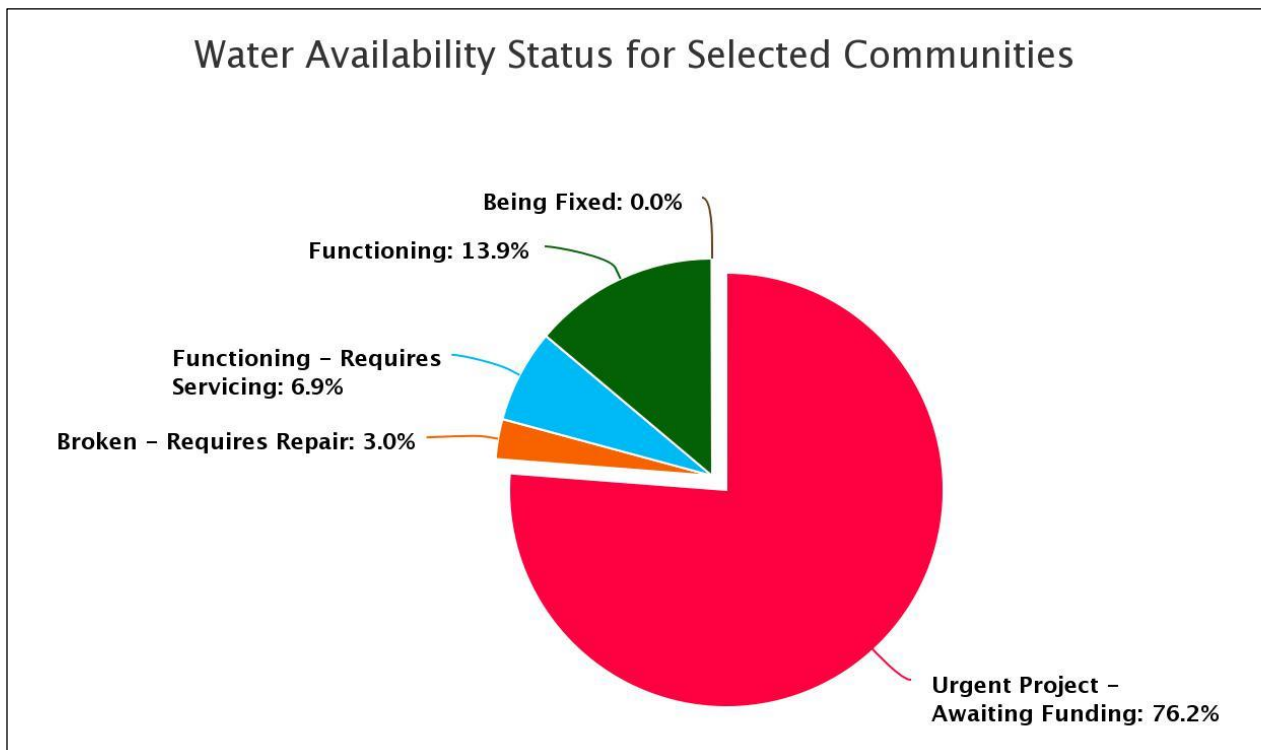


Figure 3: Water Availability Status for All the Mapped Communities in Ekiti State, Nigeria.

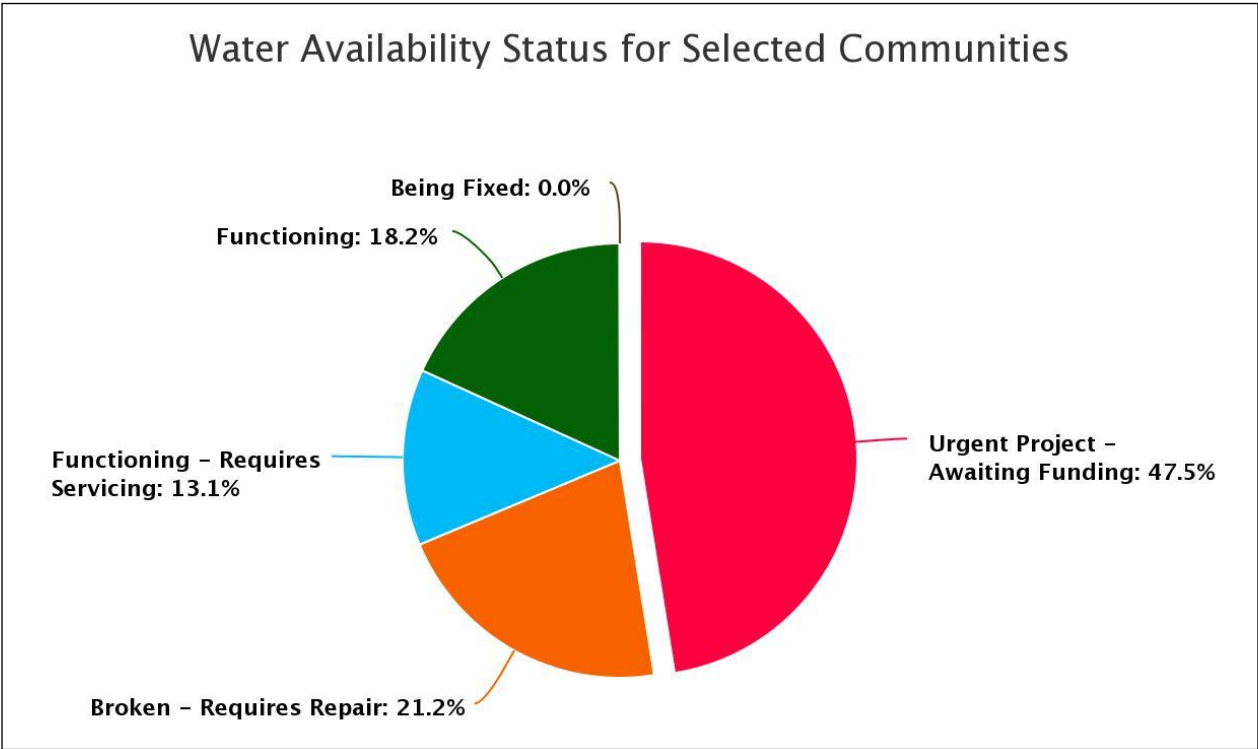


Figure 4: Water Availability Status for All the Mapped Communities in Osun State, Nigeria.

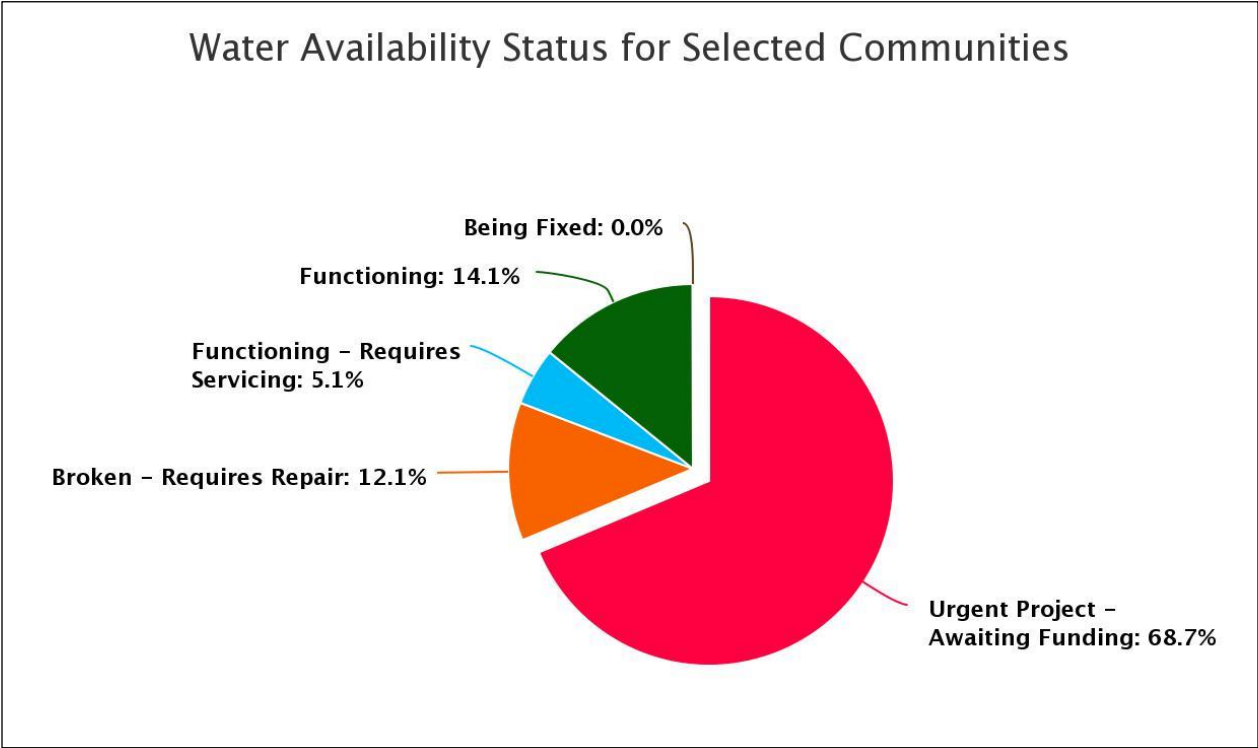


Figure 5: Water Availability Status for All the Mapped Communities in Oyo State, Nigeria.



## Target 6.1 Map Management and Team

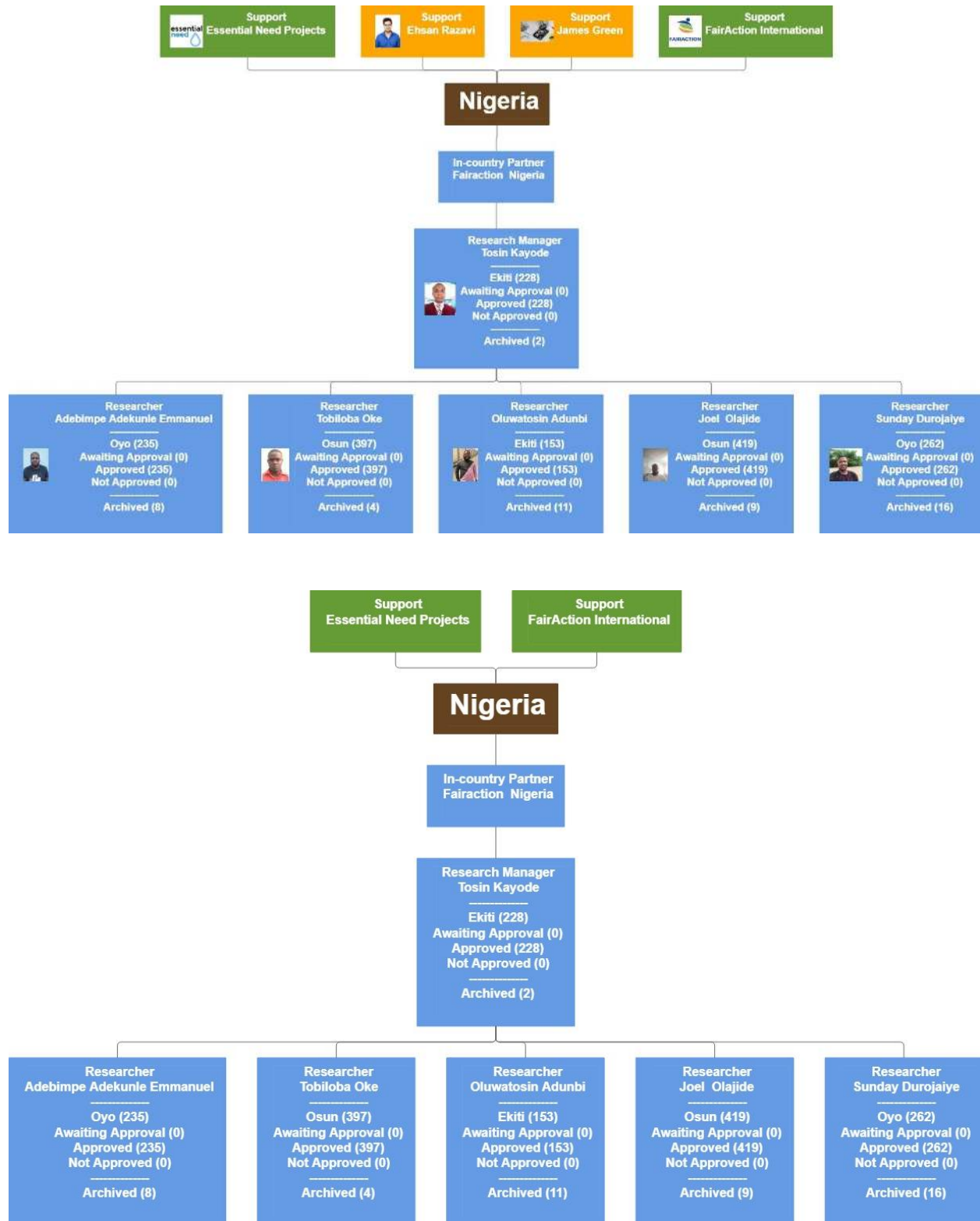


Figure 6: Schematic representation of the Target 6.1 Map Management and Team

### **3.0 Need Assessment**

The Water and Sanitation sector is highly unreliable and inadequate in Nigeria. There have been series of efforts and approaches (from Governments, Civil Societies or NGOs, Consulting Firms, Academia, Development Partners or Donors, Business or Private Sectors, Multilaterals, and Others) over the last decade in improving the quality and quantity of water available to households and its related institutional challenges. Despite all these efforts from various sectors in Nigeria, households most especially in rural underserved communities are still forced to rely on unsafe source of water for drinking and other household uses: such as unprotected wells, rivers, open streams, and ponds. Furthermore, there has also been no implementation of a comprehensive approach that incorporates collaboration with innovations for the coordination and management of available water facilities, leading to system breakdown. This has further led to duplicated interventions resulting in more deteriorated water facilities, financial wastes and causing communities to become water facilities' graveyard. As a result, many communities are still suffering and being neglected their basic needs. The target 6.1 mapping exercise has critically assessed the components of a functioning water system within communities across three states in Nigeria, leading to the development of a simple, but comprehensive end to end cycle coordination and management system that are color coded.

### **4.0 Relevance**

The Target 6.1 Map in many ways complements international and national efforts in addressing coordination and management challenges facing water services delivery as indicated below:

1. The overall Target 6.1 Mapping strategy is designed along the United Nations' Sustainable Development Goals (UN-SDGs) 2030 Agenda, SDG 6 – Ensure availability and sustainable management of water and sanitation for all; Target 6.1 - By 2030, achieve universal and equitable access to safe and affordable drinking water for all. One of the most essential uses of water is for drinking and hygiene purposes within households. This use is captured in target 6.1, which seeks to secure safe and affordable drinking water for all.
2. It had been recognized that there was limited coordination among various sector actors at community level. The development of Target 6.1 Map was meant to address this challenge.

The Target 6.1 Map places emphasis on coordination between various actors at community level.

3. Monitoring water facilities functionality in the country has had challenges, with inconsistencies in data obtained from different sources and sometimes from the same source but at different times. The Target 6.1 Map harmonized data collection and management for consistency.
4. Construction of water facilities faces demographical and technical constraints in terms of knowing the actual number of beneficiaries which is a major factor in facility's capacity design. This has been recognized to cause system failure, shutdown and/or total abandonment of water facilities due to overstressing of water facilities, and also conflicts in most communities. Furthermore, the quality of water facilities constructed often do not measure to required standards (easily accessible, affordable, and available always). To this end, inferences made from the Target 6.1 Map will help decision makers during system design and implementation of projects.
5. Governments, Civil Societies or NGOs, Consulting Firms, Academia, Development Partners or Donors, Business or Private Sectors, Multilaterals, and Others' work plans are incorporated in the Target 6.1 Map development. The Target 6.1 Map usage therefore reflect areas of other stakeholders' involvement and independent facilitation of their activities.
6. Inadequate political will and leadership to effectively mobilize communities towards improved coordination and management of water services at community level has been identified as a key challenge in water services delivery. The Target 6.1 Map coordination targets leaders for programme support, more resources allocation to water services coordination and management, and for exemplary leadership. A key indicator of the coordination is percentage of political leaders from Nigeria down to local communities' level in target areas supporting Target 6.1 Map promotion in their respective areas of jurisdiction.
7. At Fairaction, we recognizes the need for, documentation and cross learning. A number of efforts have been taken, supporting report writing, documenting and dissemination of best operational practices, supporting learning among others. The coordination of the Target 6.1 mapping exercise shall build on these efforts, documenting and sharing lessons learnt

in the course of research and projects implementation. The use of media is a core channel for information and sharing of achievements at Fairaction.

Finally, the institutional set-up, financing systems and governing policies related to water services coordination and management are in place in Nigeria. The major constraint has been the significant gaps in terms of funding, fund management, project situation & duplication, unavailable demographic data, and system break down. Through the Target 6.1 Map, these gaps are being addressed and it is believed that the Target 6.1 Map will serve as a valuable coordinating and management system that can be used effectively and efficiently to reduce the burden of system breakdown, and water facilities' deterioration leading to more resources being allocated to water provision activities by all concerned stakeholders: NGOs, ministries as well as states and local governments.

Incorporating Target 6.1 Map into every sectors' water provision activities will enhance the sustainability of program outcomes thereby leading to permanent improvements in the lives of poor people.

## **5.0 Research Design**

As part of the initial activities, Fairaction worked with partner (Essential Need) to fund the first phase of the research activities. Visits to communities/schools/health facilities to map and gather data on water access coverage, demand and willingness to pay for regular borehole maintenance services was undertaken by researchers in communities across three states.

The Target 6.1 mapping used a mixed research approach in data collection. A mixed approach which involves collecting, analyzing and integrating quantitative (e.g., experiments, surveys) and qualitative (e.g., focus groups, interviews) research with the below aim and objectives.

**Aim:** To identify the “Status” of every community as per Target 6.1 Map which focus on achieving sustainable access to clean drinking water for all.

### **Research Objectives:**

1. To overview water project status of every community, and identify current water source.

2. To identify and describe the different context responsible for prevailing water project status.
3. To identify factors (social, economic and political) responsible for community's prevailing water status.
4. To identify solutions and alternatives that can be put in place.
5. To identify community's willingness to pay for water services.

## **5.1 Data Collection**

To map a community as per Target 6.1 mapping definition, researchers collected data for each project status as highlighted below:

| <b><u>Urgent Project – awaiting funding</u></b>  | <b><u>Broken – Requires Repair</u></b>   |
|--|--|
| <p>Required Data fields:</p> <ul style="list-style-type: none"> <li>* Longitude</li> <li>* Latitude</li> <li>* Street Address</li> <li>* City</li> <li>* Country</li> <li>* State</li> <li>* Local government Area</li> <li>* Postcode</li> <li>* Water Solution Required</li> <li>* Number of Solutions</li> <li>* Estimated Beneficiaries</li> <li>* Project Cost</li> <li>* Research Sponsored By</li> <li>* Researcher</li> <li>* Current Water Source</li> <li>* Researchers Comments</li> <li>* Pictures</li> <li>* Video</li> <li>* Water Facility Location</li> <li>* Community’s Willingness to Pay for facility maintenance</li> </ul> | <p>Required Data fields:</p> <ul style="list-style-type: none"> <li>* Longitude</li> <li>* Latitude</li> <li>* Street Address</li> <li>* City</li> <li>* Country</li> <li>* State</li> <li>* Local Government Area</li> <li>* Postcode</li> <li>* Estimated Beneficiary</li> <li>* Research Sponsored by</li> <li>* Researcher</li> <li>* Current Water Source</li> <li>* Researcher’s Comments</li> <li>* Borehole Owner</li> <li>* Care Taker’s Full Name</li> <li>* Care Taker’s Personal Details (Mobile, address etc)</li> <li>* Care Taker’s Next of Kin</li> <li>* Care Taker’s Next of Kin Phone</li> <li>* Project Functionality Monitored By</li> <li>* Breakdown Reason</li> <li>* Repair Cost</li> <li>* Cost Breakdown</li> <li>* Project History</li> <li>* Site Pictures</li> <li>* Site Video</li> <li>* Water Facility Location</li> <li>* Community’s Willingness to Pay for facility maintenance</li> </ul> |

Table 1: Showing list of required data collected from the field.

| <b><u>Functioning Project</u></b>  | <b><u>Functioning – Requires Servicing</u></b>  |
|--|---|
| <p>Required data fields:</p> <ul style="list-style-type: none"> <li>* Longitude</li> <li>* Latitude</li> <li>* Street Address</li> <li>* City</li> <li>* Country</li> <li>* State</li> <li>* Local Government Area</li> <li>* Postcode</li> <li>* Research Sponsored By</li> <li>* Researcher</li> <li>* Current Water Source</li> <li>* Researchers Comment</li> <li>* Borehole Owner</li> <li>* Estimated Beneficiaries</li> <li>* Care Taker’s Full Name</li> <li>* Care Taker’s Personal Details (Mobile, address, etc)</li> <li>* Care Taker’s Next of Kin</li> <li>* Care Taker’s Next of Kin Mobile</li> <li>* Monitored By</li> <li>* Project History</li> <li>* Upload Site Picture</li> <li>* Upload Site Video</li> <li>* Water Facility Location</li> <li>* Community’s Willingness to Pay for facility maintenance</li> </ul> | <p>Required data fields:</p> <ul style="list-style-type: none"> <li>* Longitude</li> <li>* Latitude</li> <li>* Street Address</li> <li>* City</li> <li>* Country</li> <li>* State</li> <li>* Local Government Area</li> <li>* Postcode</li> <li>* Research Sponsored by</li> <li>* Researcher</li> <li>* Current Water Sources</li> <li>* Researcher Comments</li> <li>* Borehole Owner</li> <li>* Caretaker’s Full Name</li> <li>* Caretaker’s Personal Details (phone &amp; address)</li> <li>* Monitored by</li> <li>* Project History</li> <li>* Service Requirement</li> <li>* Service Cost</li> <li>* Site Picture</li> <li>*Set video</li> <li>* Water Facility Location</li> <li>* Community’s Willingness to Pay for facility maintenance</li> </ul> |

Table 2: Showing list of required data collected from the field.

**5.2 Reporting Data**

After collecting data from the field, researchers and research managers reported the data collected, using the Target 6.1 Map admin app. This thereby create opportunities for decision makers, funders, and investors to make observations, inferences, and decisions via the Target 6.1 Map.