

## EQUITY ANALYSIS OF IMMUNIZATION PROGRAMMING IN ETHIOPIA'S DEVELOPING REGIONAL STATES

In 2019, Ethiopia had the fifth highest number worldwide of children who were underimmunized or zero-dose (had received no vaccines), resulting in over 1.1 million children vulnerable to vaccine-preventable diseases. JSI Research & Training Institute, Inc. (JSI) carried out an equity analysis in 2021 in Ethiopia's Developing Regional States (DRS), four remote regions of the country where many children are unimmunized or underimmunized.

The analysis focused on examining equity gaps in immunization programming and identifying evidence-based approaches to strengthen programming. Achieving equitable service delivery for routine immunization requires that all levels of the health system have sufficient health infrastructure, human resource capacity, immunization supplies and vaccines, and operational capacity and budget to provide quality services that reach all target populations.

**The Reaching Every District Using Quality Improvement (RED-QI) strategy addresses all of these issues.**

Implemented in 103 Ethiopian woredas (districts), RED-QI has improved immunization service delivery: by focusing on all three of Ethiopia's primary equity gaps: access to immunization, limited health worker capacity to provide

The equity analysis centered on reviewing data from the Ethiopian District Health Information System 2 (DHIS2), the 2016 Demographic Health Survey (DHS), the 2019 mini-DHS, regional microplan data, and other project data sources. Highlights of the findings include the following:

- **Static service delivery alone misses 50 percent of the DRS population**, many of whom are nomadic and/or live in remote communities with limited access to health care services. To reach DRS target populations, immunization services must be multifaceted, including providing outreach and mobile services.
- In three of the four DRS regions, a sizable portion of health extension workers **do not have the training or skills to deliver safe vaccinations.**
- **The location of distribution hubs influences immunization coverage.** For example, one hub—Jijiga—serves more than 70 woredas.
- Immunization managers throughout the health system need **additional training and technical support** to design and manage high-quality immunization services.

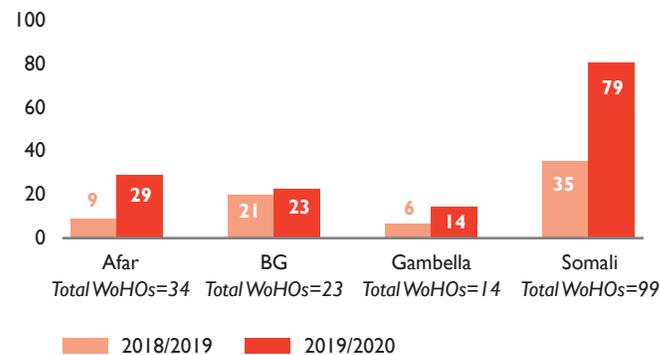
quality immunization services, and management capacity to plan, implement, and monitor immunization services.

A mainstay of RED-QI is bottom-up microplanning involving community members and woreda administration. JSI worked with the four DRS regions to support microplanning, with some areas developing microplans for the first time. In the DRS, microplanning included expanding mobile and outreach immunization services. See Figure 1 for increases in microplanning in the DRS.

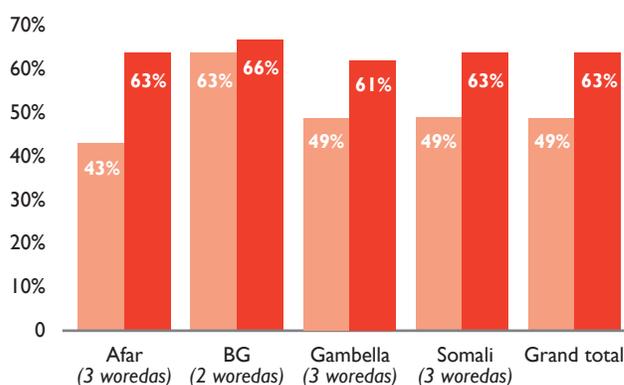
To help health workers improve their performance and to provide on-the-job skill updates to strengthen immunization practices, RED-QI uses supportive supervision. Figure 2 shows service delivery improvements—sometimes dramatic increases—in woreda-level performance scores among facilities that participated in three or more supervisory visits.

Through RED-QI, JSI also strengthened individuals' capacity to manage immunization programs. Managers completed a self-assessment questionnaire to measure their competencies in critical immunization programming skills. JSI then supported the managers to develop action plans to address the gaps in skills, tools, and resources that were identified. The RED-QI approach, which is successful in improving immunization service delivery, can be scaled nationally and tailored for populations of focus.

**Figure 1. Changes in Number of Woredas Developing a Microplan by DRS Region**



**Figure 2. Average Health Facilities' Supportive Supervision Performance Scores at First and Last Supervision Visits (UI-FHS supported woredas)**



**JSI's 10-year (2011–2021) Universal Immunization through Improving Family Health Services (UI-FHS) project is using innovative approaches to expand equitable access to routine immunization (RI) services for all eligible children in Ethiopia—including those in hard-to-reach pastoralist communities. The project, funded by the Bill & Melinda Gates Foundation and implemented by JSI Research & Training Institute, Inc. (JSI), currently works in five of the country's 11 regions.**

**To reach these “last-mile” communities, JSI built upon the Federal Ministry of Health (FMOH) national strategy for RI, Reaching Every District (RED). The project's innovation, RED-QI, integrates quality improvement to the RED approach. JSI's experience implementing RED-QI increases access to immunization among hard-to reach communities and offers useful information on how to achieve equity in services for all children.**