

**About Qualcomm**

At Qualcomm, we invent breakthrough technologies that transform how the world connects, computes, and communicates. We know that innovation can catalyze social change and that every breakthrough has the potential to impact society for the better. We also understand that the success of our business is fundamentally connected to the well-being of our world. For decades, we have seen our technologies enable people, transform industries, and enrich lives – and we want to build upon that legacy.

**Qualcomm in Indonesia**

Over the past two decades, Qualcomm companies have been working with local enterprises in Indonesia – including mobile network operators, equipment design and manufacturers – to develop and deliver next-generation wireless technology products and solutions. Through collaboration across the wireless ecosystem, we have helped advance Indonesia’s transformation to a knowledge economy and a digitally empowered society and helped make mobile communications more accessible and affordable. Now, through a virtuous cycle of innovation, we are set to help enable Indonesia’s transition to 5G, AI and the realization of Industry 4.0.

**About Qualcomm® Wireless Reach™**

Qualcomm Wireless Reach is a strategic initiative that brings wireless technology to underserved communities globally. Wireless Reach invests in programs that foster entrepreneurship, aid in public safety, enhance the delivery of health care, enrich teaching and learning and improve environmental sustainability. Since 2006, Wireless Reach has positively impacted over 24 million people through 137 programs across 49 countries. We collaborate with non-governmental organizations, universities, government institutions, nonproﬁts, development agencies and other private sector companies to develop programs which demonstrate innovative uses of Qualcomm technology for social and economic development.

These are some highlights of our impact in Indonesia:

A person sitting on a boat with fishing nets

Description automatically generated with low confidenceSmall-Scale Fisheries Tracking, Indonesia

Indonesia is the world’s largest island country, comprising about 17,000 islands. Surrounded by the ocean, fisheries play an integral role in Indonesia, specifically small-scale fisheries, which make up 88 percent of the fishing industry. Small-scale fisheries are a vital source of food, nutritional security, and livelihoods of many local communities.

The limited availability of independent fisheries data from the small-scale fishers’ community leads to challenges in sustainable fisheries management.

To help address this, Qualcomm has partnered with Global Fishing Watch (GFW), an international non-profit dedicated to advancing ocean governance through increased transparency of human activity at sea, to support a small-scale fisheries vessel tracking project in Indonesia. The data from these small-scale fishing vessels are now available on the public GFW map, enabling information on patterns of small fisheries, which was incomplete till now, and data-driven resource management.

**Challenge:**

* Fisheries in Indonesia are critical to food security; more than half of Indonesia’s animal protein supply comes from fish and seafood, underscoring the importance of sustainable fisheries for domestic food security.
* The sustainability of global fisheries can only be achieved with effective monitoring and governance of small-scale fishing.

**Solution:**

* A picture containing sky, outdoor, boat, water

  Description automatically generatedThe program has deployed a 4G LTE mobile data connectivity device to learn small-scale fishing vessels movements. This data has helped develop an Artificial Intelligence (AI) model to recognize fishing vessel patterns at sea. The results of the AI model are displayed as fishing efforts on a public map of Global Fishing Watch, which also includes data of large fishing vessels.

**Impact**

**Ocean Transparency and . Governance**

Integrating small-scale fisheries information into the readily scalable global map platform of Global Fishing Watch will be a powerful tool for ocean governance..

**A picture containing text, map

Description automatically generatedVisualization and Analysis of small-scale fisheries leading to Improved Management**

Visualization and analysis of small fisheries data will help find patterns and trends in fishing by small-scale fishers and help determine where and how much fishing is taking place. Combined with their local and historical knowledge, the small-scale fishery communities s will have a better understanding of their environment. Improved fisheries management will help recover the fish stocks and benefit communities.

# Building disaster-resilient communities in Indonesia

Indonesia is one of the world’s most disaster-prone areas. In 2017 alone, Indonesia was affected by 2,341 floods, earthquakes, and other natural disasters that led to 3.49 million evacuations, nearly 50,000 damaged homes and public facilities, and 377 deaths.

Wireless Reach collaborated with Atma Connect in Indonesia to launch [AtmaGo](https://www.qualcomm.com/media/documents/files/indonesia-atmago.pdf), an innovative mobile app that empowers users with information that can help save lives and reduce economic losses from a disaster. The app provides access to a neighborhood-level social network. More than 2.5 million people, most of whom are economically disadvantaged, use AtmaGo to connect, receive and share emergency warnings and real-time disaster news with their neighbors, take action to reduce their risk, and build social cohesion for strengthening their ability to bounce back.

The tool’s emergency alerts have the potential to reduce disaster-related property damage by US $324 per household per year in the Jakarta region. By empowering people to take effective action, AtmaGo has the potential to reduce disaster-related morbidity and mortality by 643 years of healthy life lost per 100,000 population. And, by increasing women’s access to disaster-related information, the app is empowering women as key agents of community change and social cohesion.

A person holding a sign

Description automatically generated

# THRIVE Indonesia - An Integrated, Mobile Health Information System Enhances Maternal and Neonatal Health Outcomes

A group of people standing in front of a building

Description automatically generatedFrontline health workers (FLHWs) are the first and often the only point of contact for health care access for millions of people and form the backbone of the health system, especially in resource-constrained environments. However, FLHWs are often inadequately trained and have poor access to health information, tools, and guidance. There is a clear and urgent need for an integrated health information system to reduce the workload of frontline health workers and provide data in real-time for program managers and to guide strategy and improve health outcomes.

The THRIVE Indonesia program in Indonesia is part of a multi-country research study led by the WHO and implemented by Summit Institute of Development (SID) to increase the quality of care provided by the front-line health workers using OpenSRP application as an integrated electronic mobile health platform. OpenSRP combines data collection, client management, and reporting workflows into one linked mobile interface and allows health workers to access client information and decision-support tools. Participating FHWs use tablets pre-loaded with midwife, vaccinator, nutritionist and early child development professional applications. All participants receive training in the use of technology. Real-time data sharing enables multiple FHWs in the same area to coordinate more efficiently; active feedback from FHWs and coaching from SID helps improve frontline health workers' performance such as the coverage of beneficiaries, on-time submission of data, improvement in data completeness, as well as data quality. In addition, SMS for service reminders and health promotion increase compliance and delivery of timely services.

**Impact of the program**

A picture containing person, indoor, woman, wall

Description automatically generatedThe program has served over 32,000 pregnant women, new mothers and infants in Lombok, West Pasaman in West Sumatera Province, Banggai in Central Sulawesi Province and Magelang in Central Java Province.

OpenSRP platform has enabled FHWs to conduct ANC, PNC, and home visits to more mothers on time and with higher completion of required tasks, resulting in 6% improved quality of care and timeliness of service delivery on average across all villages in the preliminary research pilot.

Based on analysis of over 6500 registered pregnancies in the deployment areas, including over 24,000 ANC visits, and 3,200 PNC visits, there has been 19% increase for overall antenatal care coverage, a two times higher coverage in four or more antenatal care visits. Maternal postnatal care coverage improved from 1% in the control area to 45% in the intervention. Neonatal postnatal care increased from 3% in the control area to 33% in the intervention area and there was 2x higher coverage of fully vaccinated kids at one-year-old in the intervention area. There was also a 19% drop in overall maternal-neonatal mortality in the intervention area compared to the control area.