

s part of the Philippine Development Plan 2011-2016, the Philippine government is implementing a range of programs to promote inclusive growth by boosting economic and social development. The plan is paying off: the country is expected to meet some of the health-related Millennium Development Goals by 2015. The goal of reducing mortality of children under five to 26.7 in 1,000 live births appears attainable. According to the World Health Organization, though, maternal mortality remains high, at 120 per 100,000 live births, and the target of 52 seems likely to remain out of reach. To address this issue, in 2008 the government initiated MNCHN-the Maternal, Neonatal, and Child Health and Nutrition strategy-with the goal of improving the quality and access of maternal and child healthcare.

#### REDUCING MATERNAL MORTALITY IN RURAL AREAS

In March 2006, ahead of the launch of this strategy, JICA began the Maternal and Child Health Project to support the Philippine government in its efforts to reduce the country's maternal mortality ratio (MMR). The project targeted the rural mountainous regions, where the progress toward the maternal mortality MDG target was far behind.

One project site was the province of Ifugao in northern Luzon. In Ifugao, births without a skilled birth attendant present were over 10 times the national average. The other site was the volcanic island of Biliran, northeast of Leyte Island, which had the country's highest MMR. There, home births were extremely common as rough roads hindered access to health facilities at the time of the project formulation.

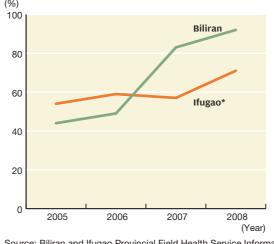
Terraced rice fields and remote villages lie scattered among the towering peaks of Ifugao province in northern Luzon.

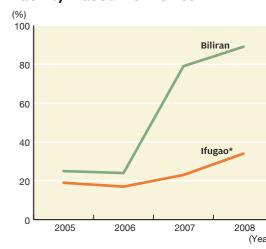
In rural areas in particular, many births take place at home, where they are often attended by unlicensed midwives and other unregulated traditional birth attendants. This has been a significant obstacle to nationwide reductions in the Philippine MMR. Home births were most common in remote regions. In these areas, when hemorrhaging and other birth-related complications arose, it was difficult to receive emergency obstetric care due to poor road conditions and inadequate means of transportation.

Over four years to March 2010, JICA assisted in providing medical training to midwives and educated community health volunteers to support maternal and newborn care in target areas. As a result of these efforts, between 2005 and 2008, the number of deliveries by skilled birth attendants increased in these areas-in Biliran climbing from

## Percentages of Deliveries by Skilled Birth Attendants and **Facility-Based Deliveries in Target Areas**

# Deliveries by Skilled Birth Attendants Facility-Based Deliveries





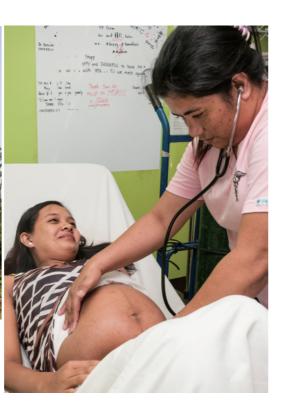
Source: Biliran and Ifugao Provincial Field Health Service Information System (2005–2008)

\*Figures are for the municipalities of Alfonso Lista, Mayoyao, and Aguinaldo.

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The barangay health station in Combis on the island of Leyte (left). An expectant mother receives a prenatal checkup from a trained midwife at a rural health unit.



44% to 92%, and in Ifugao improving from 54% to 71%. The frequency of facility-based deliveries also increased considerably: Biliran went from 25% to 89% and Ifugao rose from 19% to 34%.

The Philippine government has recognized the achievements of the JICA project. In 2008 the Department of Health published a book to share and implement the processes used in this project nationwide.

#### **SCALING UP THE EFFORTS**

The Project for Strengthening Maternal and Child Health Services in Eastern Visayas, called SMACHS, is being implemented from July 2010 to July 2014 to roll out the outcome of the Maternal and Child Health Project attained in Ifugao and Biliran, but scaled up to cover a population more than 10 times as large. The project is centered in Leyte, the largest province in the Eastern Visayas, and is being conducted in the city of Ormoc and 41 other municipalities.

Like earlier efforts, the project aims to strengthen the medical support system for pregnant mothers and ensure they are able to give birth safely by improving access to the obstetric and neonatal care that they need. To this end, the project is working to increase basic emergency obstetric and neonatal care services by providing medical facilities with proper equipment and by training medical staff at rural health units and regional hospitals, which serve as front-line medical facilities.

At the community level, the project is working to strengthen the capacity of community health volunteers and to increase the ratio of patients receiving a continuum of care at healthcare facilities, from prenatal to birth and postnatal, with the overall goal of decreasing the MMR.

#### STRENGTHENING NEONATAL CARE

There are 25 rural health units and district health centers in project areas. In a situation unique to the Philippines, there are also 103 barangay health stations that operate on a regional level in affiliation with these institutions. (A barangay is the smallest administrative division and forms the basis of towns and cities.) These health stations serve as many as 1,500 barangays throughout the country.

As part of the project, midwives from rural health units make regular visits to barangay health stations. Residents can receive natal health education, medical exams for nursing babies, vaccinations, treatment for tuberculosis, vitamin supplements for malnourished children, and other basic medical care and health guidance at the barangay level.

In general, one health station is staffed by one resident midwife and serves 10 barangay. The stations provide prenatal and postnatal checkups and are the first stop for residents seeking healthcare

Through the project, training is provided for midwives at barangay health stations in Ormoc City and 18 other municipalities. "We try to give participants the most practical training as possible, such as using cuts of pork to practice giving shots and dolls for natal resuscitation," says a member of JICA's SMACHS staff. "Barangay health stations are the front line of natal health, and the first step is to build community-level participation."

Barangay health-station midwives are unprepared to offer a full range of maternity care. To ad-



Mothers bring their children to a barangay health station to be vaccinated.

JICA and the Department of Health hold a meeting with the governor of Leyte and mayors of municipalities in project areas. Meetings like these worked to improve maternal and child health services by fostering cooperation among local governments.



dress this issue, a new program was established to train residents as health volunteers. In this program, midwives provide basic maternal health management training to volunteers, who are then charged with between 20 and 70 households to look after. Community volunteers regularly check on expectant mothers, as well as nursing mothers, for up to six weeks after birth, and file weekly reports with midwives at the barangay health stations.

### **BUILDING CONFIDENCE WITH TRAINING**

Barangay health stations provide a broad level of basic medical services, but in cases requiring a higher level of care, such as with critical conditions, patients can be transferred via a referral system to rural health units, which have one doctor and several nurses and midwives on staff.

Roughly 30 kilometers south of Leyte's largest city of Tacloban is the rural health unit in Dulag. The center receives patients from the barangay health station in nearby Combis, which serves villages with roughly 1,000 residents. Here the project trains doctors and nurses in prenatal and postnatal care and medical techniques.

"The biggest difference training has made is that nurses and midwives have gained a lot of confidence," says Allen Alvarez, a doctor working at the center. "Before, they would often ask me what to do, but now they are able to provide birthing care on their own."

In addition to medical training, a new system was introduced for staff from county and provincial hospitals and the health department in Leyte to visit individual rural health units and barangay

health stations to monitor how training is being utilized. The system ensures that health service quality is being maintained. These efforts have helped facility-based births in Leyte rise from 42.3% to 80.6% between 2009 and 2012. These numbers are proof of continued efforts to create a safe environment for mothers to give birth.

#### **EXPERIENCE REMAINS AFTER TYPHOON**

Just as the Maternal and Child Health Project was entering its final stage, Typhoon Haiyan (locally called Typhoon Yolanda) made landfall on Leyte on November 8, 2013, lashing the island with peak winds of 313 kilometers per hour. Tacloban, which sits on the east coast, sustained catastrophic damage from flooding caused by massive tidal waves.

The region's health facilities were not spared the destruction wrought by Haiyan. The rural health unit in Tolosa, which sits on the coast, was severely damaged by winds and flooding. The first floor of the building was covered in 1 meter of water, destroying the center's delivery table, sterilization devices, and other vital medical equipment. The situation at the center was so severe that staff abandoned the structure and set up a makeshift center in the town hall.

Despite the extent of damage to the area, the regional director for the Department of Health in the Eastern Visayas, Jose Rubillos Llacuna Jr., remains confident. "Buildings and equipment were destroyed, but the techniques and knowledge gained from training remain, as does regionwide support for maternal and child health," says Llacuna. Even among loss, the experiences of those involved in the program remain alive.



A midwife at the barangay health station in Combis records information during a medical exam of a nursing baby.

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