



# Project In-Depth

## Birthing Centers, Nepal

### Project Name:

Nepal Birthing Centers

### Project Location:

Western and Northern districts in Nepal including Baglung, Dolpa, and Bhojpur

### Project Summary:

Partnership with One Heart Worldwide to upgrade birthing facilities, including providing trained midwife, to reduce mothers and babies dying in childbirth.

### Project Cost:

Costs vary depending on location, condition, etc. Typically between \$8,000 and \$12,000 per facility.

### Summary Impact:

- Maternal deaths reduced by more than 90%
- Neo-natal deaths reduced by as much as 95%, depending on location



### Project Context

Nepal has one of the highest rates of maternal neo-natality (women dying in childbirth) in the world. The British medical journal, Lancet, reports 240 maternal deaths per 100,000 live births in Nepal, compared to only 8 deaths in the U.K. and 4 in Italy. That means that every 90 seconds a woman in Nepal dies in childbirth. This is largely preventable.

The rate of neo-natal mortality (babies dying in childbirth) is also one of the highest in the world. The World Health Organization reports 2,190 infant deaths for every 100,000 births. In other words, every 10 seconds a newborn in Nepal dies during delivery. As with mothers dying, a very high percentage of these deaths are preventable.

## **Problem Statement**

Maternal and neonatal mortality are considered key indicators for health and development. The current official overall maternal mortality ratio (MMR) in Nepal is now 170 per 100,000 live births and the neonatal mortality rate (NMR) is 33/1000 births. However a recent UNICEF study showed that the maternal mortality is probably closer to 500/100,000 live births. These ratio/rates vary widely by location.



**Baglung Center Before**

Most efforts to reduce maternal and neonatal mortality so far have been concentrated in the more easily accessible districts of Nepal (usually in the Southern region). These areas have been the recipients of many interventions from multiple international organizations and therefore have made much better progress towards reducing mortality rates than the more remote districts (usually in the Northern Mountain/Hill regions).

In these remote areas, mortality rates are between double to as much as five times the national average. The reason is that more than 80% of births occur at home, without a skilled birth attendant proficient in newborn resuscitation. There are many contributing factors: lack of roads; unavailability of transport; and long distances from settlements to the nearest functioning health facility. Not surprisingly increasing distance from an urban area in Nepal is associated with an increased incidence of home births.

First level care facilities (health posts and sub-health posts) have limited equipment and a paucity of trained personnel to manage childbirth and newborns on-site. These facilities need improvements in staffing, training, resources, infrastructure, and recourses for escalation. Few of the currently functioning facilities are accessible for the majority of the population. There is an urgent need to upgrade local health posts to be able to function as birthing centers.

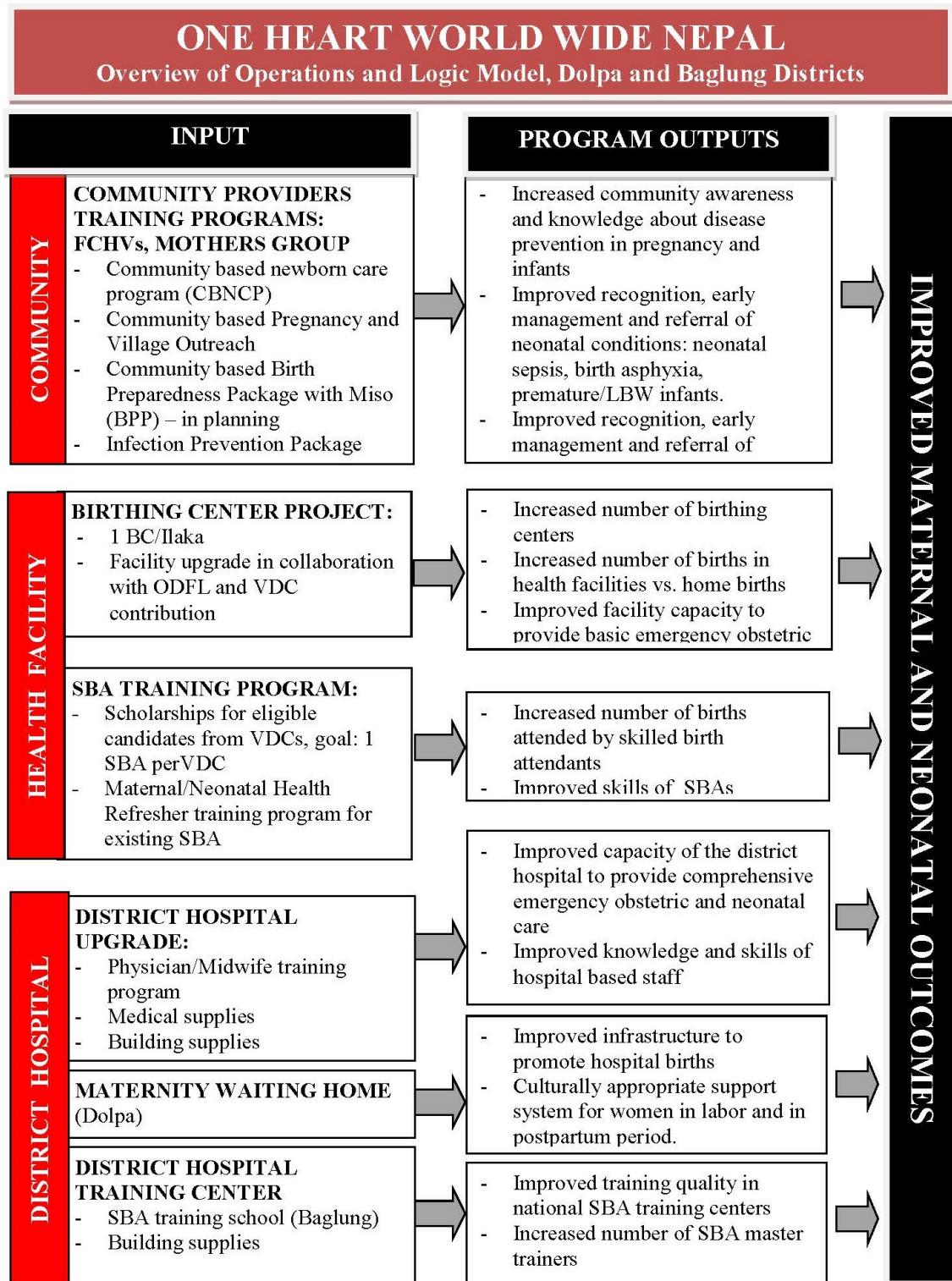


**Baglung Center After**

## **Solution**

TGUP works with One Heart Worldwide (OHW) to upgrade existing health posts in rural areas into Birthing Centers (BCs). OHW has completed more than 60 of these Birthing Centers in multiple districts in Nepal, including 6 in Dhading, 39 in Baglung,

and 10 in Dolpa. OHW works closely with the Nepal Ministry of Health in choosing and designing facilities, training and staffing them, and in monitoring outcomes from inception of pregnancy to after birth. The OHW methodology is displayed here:



In simple terms, TGUP, through OHW:

- Locates and upgrades high-need, high-impact facilities that are then able to offer:
- Appropriate pre-natal care and safe motherhood education to expectant mothers;
- A clean, warm, well-equipped and private birthing environment to all expectant and delivering mothers in the relevant catchment area;
- A skilled birth attendant able to deal with basic obstetric/neonatal complications
- Appropriate post-natal care in a clean, private, respectful environment.



Clean, private personal hygiene facilities

OHW implements all facility upgrade activities and training programs. They train medical providers (nurses and doctors) to become Skilled Birth Attendants (SBAs); they offer continuing medical education to existing SBAs (high-risk obstetrics/ neonatology and ultrasound training); they train female community health volunteers and health workers to become community outreach providers; and they train local stakeholders in birthing center management.

In the epochal earthquake of 2015, many health facilities that had not been upgraded were destroyed, creating a public health crisis. In the immediate aftermath, TGUP funded four “temporary” birthing centers, military field-grade emergency hospital tents in Baglung province. These were provisioned with the same grade of equipment and staffed with the same level of staffing as is provided to the permanent birthing centers.



Temporary tent-based birthing center

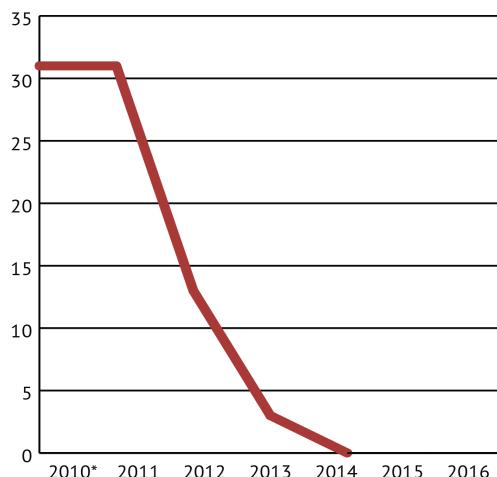
## Project Impact

TGUP has funded 12 birthing centers with One Heart Worldwide. They are located in Baglung, Dolpa, and, most recently, Bhojpur districts. Specific outcomes per district follows. The data are compiled and updated by the Nepal Ministry of Health.

## **Baglung**

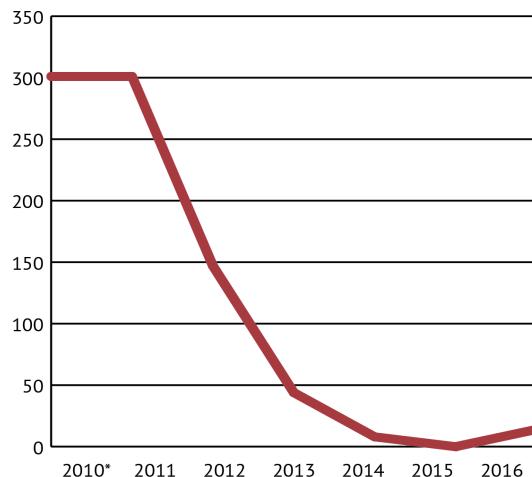
Baglung is a hill district in northwestern Nepal, which covers an area of 689 square miles. It has a population of 278,259. Baglung reports 7,400 pregnancies per year. Before the implementation of the OHW program in 2010, the few existing maternity services that existed were severely underutilized; about 90% of all deliveries occurred at home, and less than 20% of all deliveries were attended by a skilled birth attendant. As a result, both maternal and neonatal mortality rates were twice the national average. After five years implementing OHW's training and utilizing upgraded facilities, the rate of deliveries with a skilled birth attendant was doubled, and the maternal and neonatal deaths were reduced to zero.

**Number of Maternal Deaths**



\* Baseline data

**Number of Neonatal Deaths**

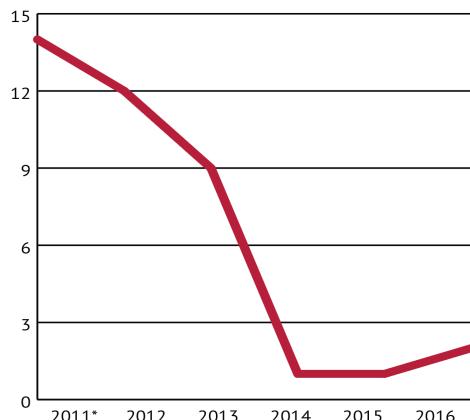


\* Baseline data

## **Dolpa**

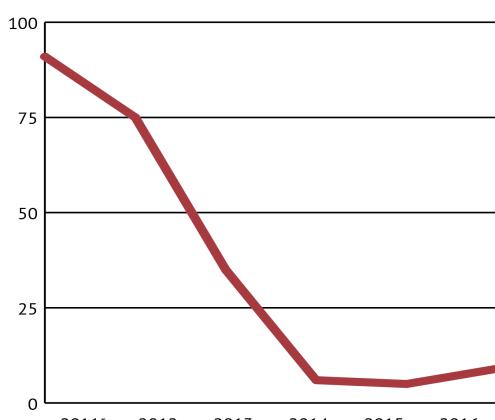
Dolpa is a mountain district in northwestern Nepal. It covers an area of 3,046 square miles and is home to 38,607 people. There were 1,300 pregnancies reported per year. There are few roads, and those that do exist are poorly maintained and frequently impassable during inclement weather. Plane service is expensive and unreliable at best. The original feasibility study from 2011 reported some of the highest maternal and neonatal mortality rates in the entire world, and five times the national average of Nepal. There were virtually no facilities and services by skilled birthing attendants was non-existent. After four years implementing OHW's training along with upgraded facilities, the rate of deliveries with a skilled birth attendant was tripled and both maternal and neonatal mortality were reduced by 97%.

### Number of Maternal Deaths



\* Baseline data

### Number of Neonatal Deaths

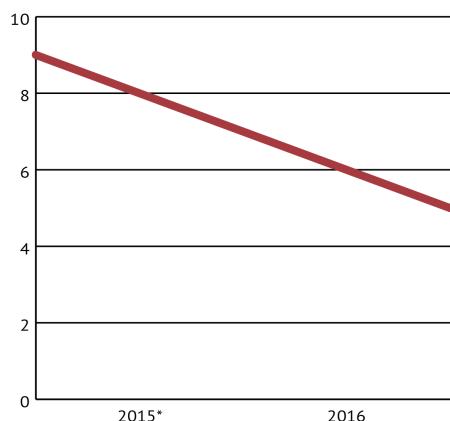


\* Baseline data

## Bhojpur

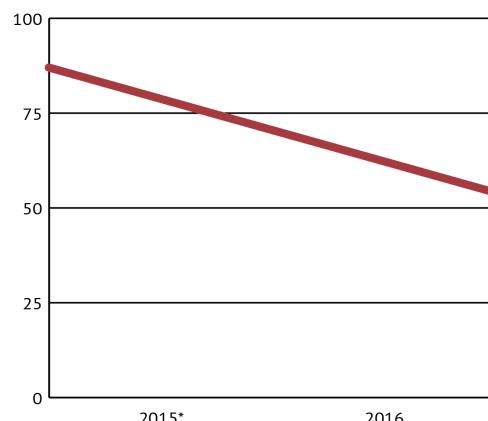
OHW is just starting to work in this district. TGUP has just completed upgrading three birthing centers in Bhojpur. Bhojpur is a hill district located in the northeastern part of Nepal. It is home to 182,459 people. The total district area is 582 square miles where 4,500 pregnancies were reported last year.

### Number of Maternal Deaths



\* Baseline data

### Number of Neonatal Deaths



\* Baseline data

These impacts are significant, systemic, and enduring. TGUP intends to continue to invest with One Heart Worldwide in birthing centers in the current and new areas.