PROJECT Description

1. Project name

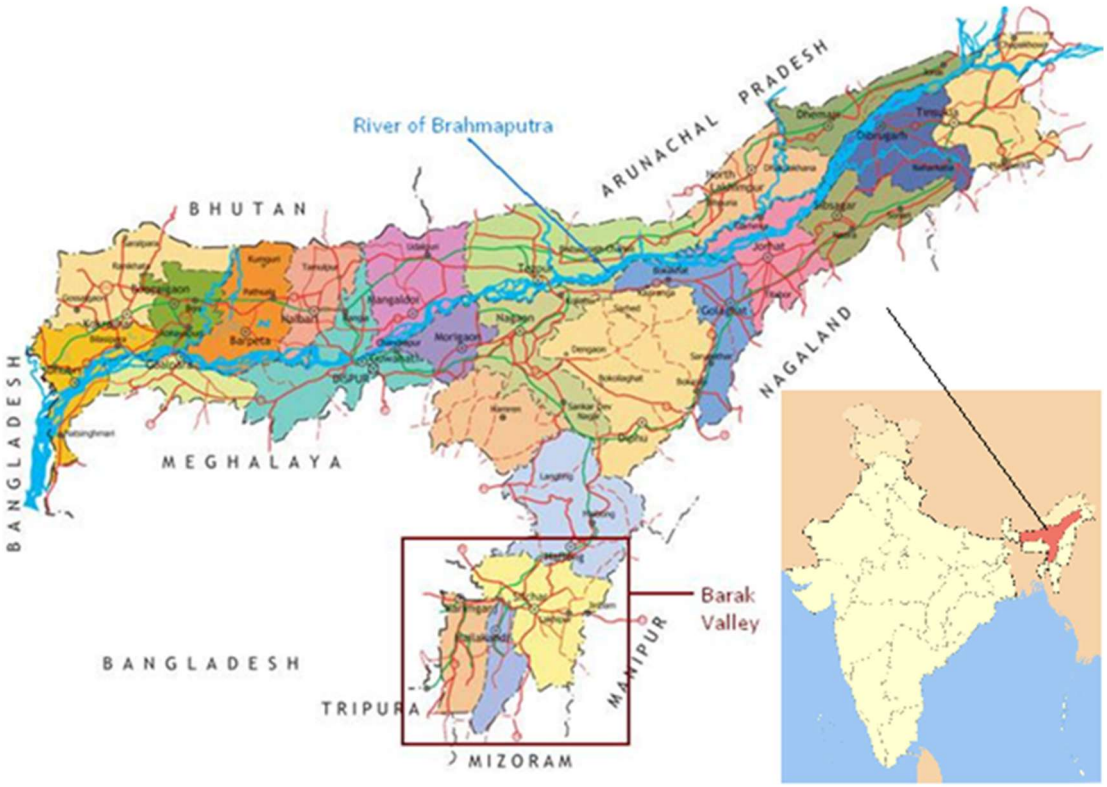
Helem Maternity ward "Safe Delivery"

2. Name of the organization. When was it established?

Helemhealth e.V. Vorarlberg
www.helemhealth.at
established 20.02.2015

3. Project country / location

India / Chandamari Gaon, Helem, Biswanath Chariali (Assam)



4. Project initiative

Helemhealth e.V. Vorarlberg
Knie 4a
A-6850 Dornbirn
Austria
registered as not-for-profit society under ZVR-number 623037609

5. Contact person / contact details

Chairman:
Dr. Harald Geiger, MD, MPH
Email: hgeiger@aon.at
Phone: +43 650 241 38 01

6. Project description & history

The mission: setting up a delivery ward according to the Guidelines for STANDARDIZATION OF LABOR ROOMS AT DELIVERY POINTS March 2016, Maternal Health Division, Ministry of Health & Family Welfare Government of India

The delivery unit has to be installed on the first floor of an already existing building which in long-term is foreseen to become a hospital. The building has been built and is owned by Mr. Yasobanta Mahanta, who was born and brought up in Helem.
He is an Austrian Citizen since 2000 and actually runs the restaurant "Schlössle Mahal" in Liechtenstein. He always wanted to give back something meaningful to his native people and decided to provide a better facility for medical care in his home country.

In 2012 he met with Dr. Geiger, a paediatrician additionally trained in public health, who has been keen on the idea to develop something meaningful and sustainable for the rural population desperately lacking decent medical treatment. Dr. Geiger visited the project site four times so far.

About Helemhealth:
Helemhealth societies have been founded in three countries to support this project, in Austria, Switzerland and Liechtenstein.
The medical part is covered by Dr. Geiger who is the chairmen of the Austrian branch. He gets support by interested health specialists, nurses and doctors willing to contribute towards the project.
The below mentioned water processing has been already provided by Michael Zöhrer, chairman of the Swiss branch.
President of the Liechtenstein branch is Mr. Mahanta. The main function is to coordinate actions within the different societies and to raise awareness for the project.

7. Project details

Right now only the ground floor of the building is partly in use. On the first floor there is space allocated to install a state of the art - delivery unit according to the guidelines of the Indian Ministry of Health. The concept follows the recommended "LDR"-concept, which means "labour-delivery-recovery". To enhance security for mother and new-born, the pregnant woman under labour once admitted stays in the same bed till the baby is born and for 4 hours after the delivery.

Targeted deliveries will be initially 1'500 per year. Anyway, in the beginning only a few deliveries per day will be handled. With growing experience and resources the unit will be in full operation later following an approach of an organic growth.

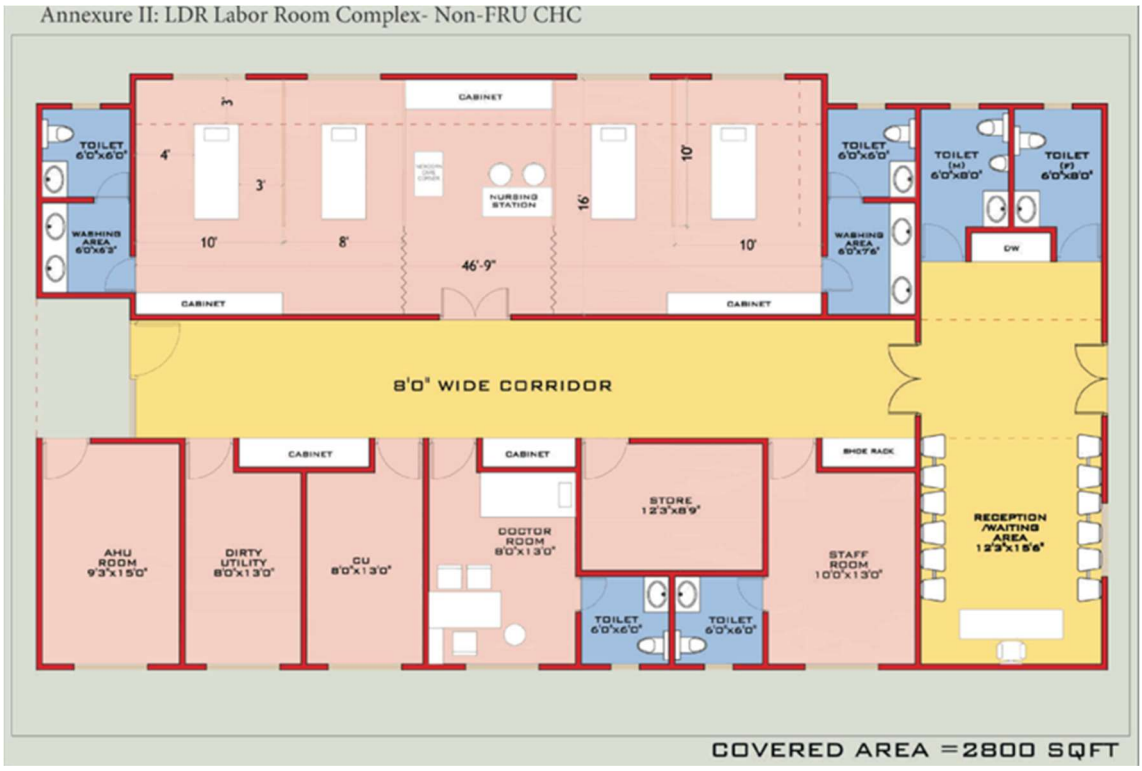
Additional benefits:
a) Pregnant woman will be screened for major risks in pregnancy and treated accordingly
b) State of the art care for new-born with initial problems will be established (esp. oxygen supply, basic life/breathing support etc.)
c) Stepwise new-borns will be screened for major health risks like hyperbilirubinaemia caused by blood group intolerance and congenital heart defects (pulse oximetry screening) or congenital hip dislocation
d) Mothers will get informal instruction about reaction to threatening situations like diarrhoea, malaria prevention or feeding problems
e) Establishing of a report chart for mother and child, according to our "Mutter-Kind-Pass" by using already existing materials

8. Purpose of the project

Project Mission Statement
The journey of every precious child starts with a safe delivery – together we will try our best to make it a good one.

a) To significantly reduce the excessive mortality rate of new-borns in the region by providing a safe delivery in a state of the art delivery unit
b) To significantly reduce the excessive mortality rate of mothers in the region by providing a safe delivery in a state of the art delivery unit
c) The special consideration of pregnant woman infected by tuberculosis
d) To inform all mothers prior to discharge about the main preventive actions have to be taken by them to allow healthy growth and thriving with regard to reaction in case of infectious diseases. To encourage breastfeeding. Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. Virtually all mothers can breastfeed, provided they have accurate information, and the support of their family, the health care system and society at large
e) Suitable materials have to be developed or adapted.

In the later process:
a) To create social services prior and after delivery to improve female and child health respectively family health in collaboration with the social health system of Auxiliary Nurse Midwifes (ANM) respectively ASHA's (Accredited Social Health Activist).
b) To create a preventive orthopaedic treatment for children born with disabilities especially cerebral palsy.
c) To provide a first responder emergency care for all emergencies including an ambulance car stationed at the hospital for transfers to higher-level care



9. Targeted overall achievement

In an optimal scenario every pregnancy is supervised by an ASHA in cooperation with the Gyn-OPD (outpatient department). During pregnancy laboratory test are performed to identify woman at risk, especially iron deficiency or blood group intolerance and treated if necessary. Ultrasound examination is performed at least once to rule out pre-existing anomalies, esp. breech position and placenta anomalies. If everything is expected normal delivery is performed at the delivery point.
Mothers will be admitted around time of birth following the LDR-concept as mentioned above.
In uncomplicated cases hospital discharge will be the same day, but the exact procedure has to be established in a participatory approach with the specialists involved.
Services will be charged in general but with a subsidized rate in relation to the social situation of the family. To secure financial aspects for high-income families a special service package will be provided.
Although we start out as a Community Health Care Centre (CHC) we aim for a First Referral Unit status later. In the beginning only normal deliveries without recognizable problems will be handled. In case of unexpected problems measures will be taken for transferring the mother and the baby to the next level hospital.

The actual setting and role of ASHA's
Sub-Centres take care of the outmost places to serve as the first contact point between the Primary Healthcare institutions and the villagers. Its manpower strength includes one Auxiliary Nurse Midwife (ANM), one Multipurpose Health Worker (MWP) with the assistance of voluntary workers, who are supervised by one Lady Health Worker (LHV). Pregnant woman are advised to deliver their babies in institutional care normally provided by a Community Health Care Centre (CHC). They are established and maintained by the state governments and are expected to have four medical specialists, such as a surgeon, physician, gynaecologist and paediatrician and assistance by paramedical and other staff. The given facilities in one CHC are 30 beds with one Operation Theatre, X-ray equipment, one labour room and one laboratory, as well as facilities for obstetric care and specialist consultations. In reality medical equipment of CHC's is mostly out-dated and broken especially delivery beds. Sometimes woman have to share one bed and devices for new-born care are unavailable.
According to different Sources of Health Indicators (CEHAT 2007, Government of Assam 2012, PRB 2007, Census of India 2013, CIA 2014, WHO 2015, UNICEF 2015, WHO 2014) there is a shortfall of 128 CHC's and 1'232 Sub-Centres.

The ASHA programme was one of the achievements of the National Rural Health Mission (NRHM, now: National Health Mission, NHM) launched in 2005.
Every ASHA in the state is selected by the local community and must first and foremost be a literate woman, who is resident in the village and preferably in the age group of 25 to 45 years. She acts as a facilitator and provider of health care services and therefore, works as a health activist, who promotes health awareness and integrates the community into the health system of the state. The most essential component of ASHA's work is to attend and support pregnant women and new-borns. She has to advise women on birth preparedness, importance of safe delivery in hospitals, breast-feeding, nutrition, immunisation, and contraception and prevention of common diseases. Furthermore, she has the responsibility of informing the community about factors for a healthy lifestyle, e.g. nutrition, basic sanitation and hygiene, working conditions and health services and providing basic health care to the people (NHM 2014).

During informal meetings with ASHA supervisors responsible for the district it became obvious that the erection of a delivery unit with sufficient medical resources would be on top of the wish list. This applies also to general physicians working in the region.
Therefore, it could be assumed and already has been promised that there will be close cooperation between physicians, ASHA's and the delivery point.

10. Problem to be tackled

a) Highest neonatal and maternal mortality
The Labor room is one of the most versatile rooms within a hospital. Appropriate delivery care is crucial for both mental and perinatal health and increasing skilled attendance at birth is a central goal of safe motherhood and child survival. In addition to the professional attention it is important that mothers delivers baby in an appropriate setting, where the available lifesaving equipment and hygienic condition can also help reduce the risk of complication that may cause death or illness to both mother and child.
According to a TIME-Magazine article from August 2015 (Where Motherhood Kills by Nikhil Kumar) Assam has the highest neonatal and maternal mortality rate in whole India – 300 of 100'000 mothers die during or because of labour.
50 out of 1'000 alive new-born will not reach their 5th birthday, 50% of those will die in their first month of life – as comparison, in Austria this rate is 4 out of 1'000.
A recent study conducted by the state health department has revealed glaring gaps in healthcare accessibility in tea garden of the state of Assam. The update of AHS found that only 428 tea gardens out of 758 have functional hospitals. This is around 57% coverage. The tea garden areas are also among those in the state reporting the highest maternal

mortality rate (MMR). A survey found that labor rooms were not available in 321 tea garden hospitals, there are non-functional labor rooms in many tea gardens, only 46% of the tea gardens have a functional labor rooms.
There is a huge gap in health infrastructure existing in and around the tea gardens.
Woman health in general is affected additional because of lack of preventive services and insufficient health services not able to deal with the burden of diseases caused by poverty (malnutrition of pregnant woman, esp. iron/folic acid deficiency) and geographic circumstances. As an example anaemia in Pregnant Woman (15-49 years) in Assam is 72.6% versus 57.9% compared to the rest of India. So motherhood in Assam bares an increased risk of maternal mortality, prenatal mortality, premature delivery and low birth weight.
To add to the worse, heavy flooding every year caused by the river Brahmaputra hits the region.
Chandamari gaon is basically a village in Biswanath Chariali which is surrounded by tea gardens. The local tribes have to travel to the nearest town of Biswanath Chariali or Lakhimpur for having medical facilities.
In fact women have to opt for deliveries at home on the floor risking their lives in case of complications and threatened by tetanus – something that's unknown in Europe. The sequels for the new-borns are even worse.
b) Many children are and will be affected by cerebral palsy while lacking preventive treatment.
Due to lack of oxygen during labour a huge number of kids suffer from cerebral palsy. To the worse there is no preventive treatment for those kids later so they are facing the destiny of lying in bed for the rest of their lives because of untreated joint contractions.

11. Beneficiaries (direct/indirect) and numbers

Targeted deliveries will be initially 1'500 new-borns per year, considering of course their mothers and their families.

12. Beneficiary background

As outlined above, Assam is situated in the northwest of India and is known worldwide for its tea. So most people in the project region Helem work in the surrounding tea plantations. As in many rural regions of India malnourishment and infections are a common cause of death in Assam, with toddlers especially stricken. The rural regions suffer from a lack of doctors, healthcare staff and medical facilities. Even if medical treatment is available it is for most too expensive.

13. Implementation process

a) Constructions plans are already commissioned to adapt to existing structures for the recommended requirements of the LDR-Unit; begin of construction is scheduled for October/November 2018
b) Water supply is already provided by setting up the needed infrastructure
d) At the end of 2021 the photovoltaic system is scheduled to be installed by technicians from Austria
e) Laboratory already is established to start out with basic laboratory tests of pregnant woman
f) Pharmacy already exists
g) Recruitment of human resources will start as soon the financial aspects are fixed.

Further aspects:
a) Completing of the facility according to project and construction plan
b) Setting up a local steering committee including a responsible person for the construction phase.
c) Collaboration with local medical specialists and social workers.
d) At least two visits per year by board members of one of the societies; paid by themselves.

On behalf of Helemhealth e.V. Vorarlberg
Dr. Harald Geiger, MD, MPH
Chairman

Dornbirn, 15.11.2021