

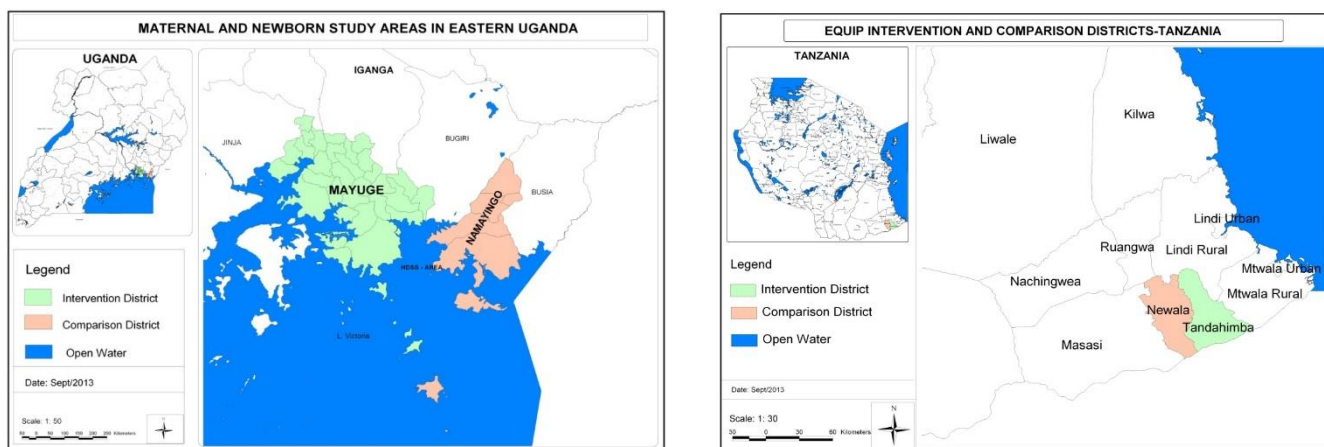


## 2: The Study Setting and Overall Evaluation Methodology

### The Study Area

EQUIP was implemented in two rural areas in Tanzania and Uganda over a period of 30 months (November 2011 to April 2014). The EQUIP intervention was implemented in eastern Uganda (Mayuge District) and southern Tanzania (Tandahimba District); two neighbouring districts served as comparison areas (Namayingo District in Uganda and Newala District in Tanzania) (Figure 1). All four districts have high maternal and newborn mortality rates, are predominantly rural with small district capitals, and have populations that live on subsistence farming. In Tanzania, less than half of the population live in a house with improved roofing (iron sheeting). In Mayuge district in Uganda, 74% of houses had an iron roof whereas in the comparison district in Namayingo, the level was only 39%.

Figure 1: Maps of study countries



### Study Design

EQUIP used a quasi-experimental design to compare changes in maternal and newborn health outcomes and output indicators over the implementation period between one intervention district and one comparison district (Figure 2). This study design was chosen because EQUIP targeted the district level, not smaller implementation units such as wards or villages, and therefore randomization was not possible as funds were limited.

The evaluation was based on continuous household and health facility surveys (see **Brief 4**), which provided estimates of changes over time between intervention and comparison districts. To assess whether other changes over time or other factors might have led to changes in indicators or in implementation, we also documented contextual factors in our evaluation process.

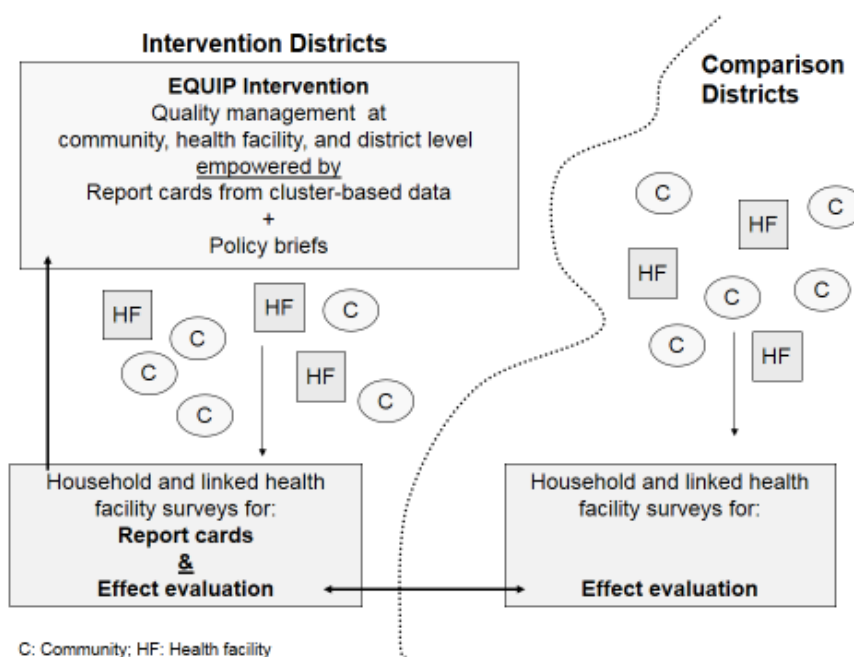


Figure 2. The EQUIP study design



## Contextual Documentation Methodology

EQUIP documented changes over time and differences between the implementation and comparison districts through:

- Monthly documentation of important events such as unrest, drought, or policy changes
- Interviews with the district management team in the implementation and comparison districts three times a year to investigate any resource or management changes, such as: breakdown of ambulances; changes in human resource availability and trainings; or existence of other donors
- Interviews with the district management teams once a year about overall health planning and implementation
- Health reports and continuous survey data

## Results : The health system context of the study

The intervention district in Uganda (Mayuge district) has double the population size (400 000 people) than the intervention

district in Tanzania (Tandahimba, 220 000 people). The Tanzanian comparison district of Newala reported 12 USD per capita for health expenditure, compared to 7 USD in the intervention district, Tandahimba, in 2013/2014. For Uganda, such data were not available, but availability of funds at the district level is limited. Availability of human resources was similar in both districts in Tanzania, but slightly higher in the intervention district than in the comparison district in Uganda (Table 1). There was little training in the area of maternal and newborn health in both districts in Tanzania, whereas several trainings were provided in the intervention area in Uganda, supported by other partners during the EQUIP implementation period. Availability of drugs and supplies were better overall in Tanzania than in Uganda.

In both countries, health planning was based on information from the health management information system (HMIS), whereas other data from surveys or studies were not used, except in the intervention district in Uganda. The primary health care infrastructure was similar, but the comparison district in Uganda had no district hospital. Referral systems were relatively underdeveloped in Uganda.

## Discussion

We documented differences between intervention and comparison districts, which need to be taken into consideration when interpreting the results.

**Table 1.** Summary of contextual information

	Tanzania		Uganda	
	Tandahimba	Newala	Mayuge	Namayingo
<b>Population</b>	227,514	205,492	412,500	233,000
<b>Financing</b>				
Overall Economy	7USD	12 USD	Not available	Not available
Per capita spend on health				
<b>Governance &amp; leadership</b>	Good continuity, some bottom-up planning, good collaboration with partners	Interruption in leadership, strong team spirit, bottom up-planning and good collaboration with partners	Interruption in leadership, clear vision, good team spirit, bottom up-planning	New team, some involvement of communities
<b>Human resources</b>				
% of posts filled	39%	43%	61%	47%
In-service training courses	Several trainings in family planning, HIV, PMTCT and district management	Several trainings in family planning, HIV, PMTCT and district management	Several trainings in life saving skills, helping babies breathe (HBB), & Kangaroo Mother Care	Not assessed
1 training in emergency obstetric care		No training in emergency obstetric care		
<b>Drug and supplies *</b>				
Oxytocin	93%	90%	57%	25%
Syphilis Test	18%	10%	33%	33%
Clamp/umbilical ties	97%	82%	57%	65%
Resuscitation device	100%	55%	43%	65%
<b>Health Information</b>	HMIS, no other sources	HMIS, no other sources	HMIS EQUIP data and other survey information used	
<b>Delivery system</b>				
Infrastructure	1 hospital, 33 primary facilities	1 hospital, 29 primary facilities	1 hospital, 41 primary facilities	no hospital, 20 primary facilities
Referral	1 ambulance: referral system established at the end of project	2 ambulance / Referral system established	1 ambulance in poor condition	1 ambulance in poor condition

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