

Guidance on procuring ox carts to improve maternal health access in Mongu, Zambia



Ox cart and shelter in Mongu, Western Province, Zambia

Background

Zambia's maternal mortality ratio (MMR) is 398, which equates to four women dying for every 1,000 live births. Inability to reach health care, or delays in reaching care, contribute significantly to this situation. In rural Zambia, transport availability is often poor, cost can be a major barrier to use, and the terrain can be very challenging. Many pregnant women end up walking to health facilities, are pushed on a bicycle, or are discouraged from travelling, citing lack of transport as a major constraint. Such delays can worsen the clinical severity of cases, particularly where complications exist.

The MORE Mobilising Access to Maternal Health Services in Zambia programme (MORE MAMaZ) was established in 2014 to support the government's efforts to improve maternal and newborn health access and outcomes. The programme procured and deployed over a hundred Bicycle Ambulances in districts where there was a strong local bicycle culture. In Mongu, deep sand and the frequency of flooding meant that ox carts were a more appropriate emergency transport solution. In Mongu, 18 ox carts were constructed by a local supplier using a traditional design that was widely used in the district. This design was then adapted to suit the vehicle's purpose; transporting women to health facilities. For example, a canopy was added to provide pregnant women with privacy as well as protection from the elements. 36 oxen were locally purchased and trained on how to pull the carts.

The unit cost for an ox cart (including 2 oxen) is GBP 1,178.52 (K16,499). Exchange rate is GBP1= K14.

This figure includes vaccines and oxen spraying, logbook and pen, solar light, reflective jacket, gumboots and a rain suit for the riders

Tips for procurement and deployment

Oxen

- Engage the Vet's Office, if one is available. They can advise where and how to procure animals and the size of oxen that would be ideal. They can also advise on the types of diseases that might be in the area and what steps can be taken to mitigate these.
- Procure animals locally within the region and, where possible, source from within local communities.
- Engage communities on where to source oxen as they have the local knowledge and can help ensure that oxen that are 'ready to pull' are procured. Animals that are young enough to be trained should be given priority. This will also help to ensure that they have the capacity to pull an ox cart for many years.
- Screening the oxen is vital to check that they are healthy. This should be done periodically (prior to distribution and then at regular intervals). The Vet's office can help advise on this, as well as any vaccinations that are recommended.
- Involve the communities throughout the whole process – communities will most likely keep the ETS oxen with their own oxen and will need to look after the animals to ensure they stay healthy.

Ox cart

- Local production of ox carts is recommended so that the product is accepted by the community and suitable for the operating environment.
- Local production means that ongoing repairs and maintenance will be easier to arrange.
- For ETS a canopy is important to provide shelter from the rain, sun and also for privacy during transfers.

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