Affordability:

As engineering students from diverse backgrounds that have experiences of being framed as cultural minorities, we value equity. This leads to our value of affordability as we understand the perspectives of financial minorities and therefore seek a design that is affordable to all community members, avoiding inequity due to cost.

Opportunity Statement:

Sheep are a significant part of many community members’ lives of Rosedale, Mthatha as most of them either own sheep or serve as shepherds [agorize]. (Some stat abt sheep in Rosedale or Mthatha would be nice here, couldn’t find anything yet) “Subsistence agriculture and livestock raising are the primary economic activities in the area;” - https://www.britannica.com/place/Mthatha Here, there is an ongoing issue of losing sheep mainly due to them wandering off, different owners’ sheep getting mixed up, or shepherds not showing up [agorize].

When the sheep wander off, they tend to move within a 1-2 km radius where due to the high concentration of sheep, easily get lost and end up falling into ditches, getting attacked by stray dogs, and more. Moreover, the sheep getting mixed up between community members are very common as the feeding area is limited and most of them do not have cars for the occasion. Hence, the role of a shepherd is important yet the relationship between the shepherds and owners is insecure as an outcome of underpayment, resulting in frequent and unanticipated absences.

Therefore, we are looking for a cost-efficient, … (cont. once requirements are finalized) … solution to either retain the sheep, preventing them from going missing, or track the lost sheep such that the owners can easily locate them. … (relate to team value?)

Non-functionality Research:

Dorper Sheep Characteristics:

Rosedale, Mthatha Geography, and more... :