**Project Title:** Validation of a pH-based pen-side kit for control of camel and cattle mastitis in arid and semi-arid lands

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<th>Institute</th>
<th>Veterinary Research Institute</th>
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<td>Center(s)</td>
<td>KALRO Muguga North</td>
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**Problem Statement**
Mastitis in cattle and camels continue to be a constraint to dairy production among livestock keepers in arid and semi-arid lands (ASALs). An easy to use and affordable mastitis diagnostic technology that can be used by these farmers at farm level is lacking, yet this is crucial for improvement of milk quality along the value chain. In addition current information on mastitis causing agents in cattle and camels reared under pastoral production system is scanty. Furthermore, there is paucity of data on the drug(s) of choice for mastitis therapy in ASALs.

**Objective(s)**
1. To validate the new pH-based pen-side kit for diagnosis of subclinical mastitis in camels
2. To validate and introduce the pH-based mastitis kit for use in cattle reared under pastoral production system
3. To register the new pH-based pen-side mastitis test kit
4. To disseminate the research findings including the new mastitis kit

**Planned Activities**
1. Registration of the kit by regulatory bodies
2. Pre-industrial production of the kit
3. Up-scaling of the kit

**Outputs**
1. Pen-side pH-based mastitis kit for detection of sub-clinical mastitis in cattle and camel validated
2. Pen-side pH-based mastitis kit registered and availed to end-users
3. Project report
   Two scientific publications

**Outcomes**
To enhanced sustainable productivity and competitiveness of the dairy sub-sector by lowering the prevalence of mastitis and reduction at farm level of the quantity of milk that cannot be marketed due to mastitis

**Budget**
4,070,300.00

**Start date**
2016-06-01

**End date**
2017-12-30

**Funded by**
EU-ASAL APRP;

**Collaborators**
Masinde Mulliro University of science and technology (MMUST); DVS; Laikipia County; Kajiado County;