### Project Summary

**Title**
Understanding the Persistence of Foot-and-Mouth Disease in Uganda: the case of western Uganda

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**Purpose**
The overall objective is to contribute to skilled manpower development and generation of knowledge useful for the implementation of knowledge based strategies in the control of FMD

**Project Summary**
In East Africa livestock is not only a source of family income to millions of people but also offers uses closely linked to the social and cultural lives of millions of resource-poor farmers for whom animal ownership ensures varying degrees of food security, sustainable farming and economic stability. Unfortunately, epidemic diseases undermine efforts towards strengthening the livestock sector. Foot-and-Mouth disease (FMD), the focus of this proposed study, is one of the most important livestock diseases that undermine livestock production and marketing. In Uganda, control of FMD has mainly been through extensive ring vaccinations, restrictions to trade in and movement of livestock and livestock products in affected areas and zoo sanitary measures. Despite these efforts, the number and frequency of outbreaks continue to rise annually with communities stealthily continuing with livestock trade even when restrictions are in place. The persistence of the disease could be attributed to inadequate knowledge about circulating strains, role of wildlife reservoirs, effectiveness of prevailing control measures and community attitudes and knowledge in management of contagious diseases. Currently, research efforts in Uganda are concentrated on establishing the role of wildlife and farming systems in the
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epidemiology of FMD and assessing the socio-economic losses due to FMD. This proposed study will aim at: i) assessing community based knowledge for FMD management, ii) evaluating the effectiveness of control measures in limiting FMD outbreaks when detected and iii) characterising FMD viruses circulating in the major cattle production zones of Uganda to determine if there are geographical differences in circulating viruses. These objectives will be achieved through baseline surveys conducted in selected areas with contrasting livestock production systems to assess the implication of differing production goals as well as farmer perceptions on FMD control measures. On addition, oropharyngeal and probang samples will be systematically collected from animals in the FMD prone cattle corridor of Uganda followed by molecular characterisation. It is anticipated that this research will generate knowledge that is vital in the control of FMD in Uganda, with potential application in the East African Region.

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<th>Country and Specific Location(s)</th>
<th>Uganda,</th>
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<tr>
<td>Participating Institutions</td>
<td>Makerere University, Diagnostics and Epidemiology Center, Ministry of Agriculture, Animal Industry and Fisheries</td>
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<td>End date</td>
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<td>Amount of Funding</td>
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