### SECTION 1: LEAD INSTITUTION AND PRINCIPAL INVESTIGATOR (PI) PARTICULARS

1.1 **LEAD INSTITUTION:**

KALRO Biotechnology Research centre kabete

1.2 **Principle Investigator:**

*Name: Dr Yatinder Singh Binepal*

1.3 **Mailing Address:**

1.4 **E-Mail Address:** ybinepal@yahoo.com

1.5 **Collaborators and their affiliate Institutions**

1. Eugine Mukhay - JCUAT

2. Francis Chaka – KU

3. Leonard Ateya – KALRO

### SECTION 2: PROJECT PARTICULARS

2.1 **PROJECT No. & TITLE:**

AR02/1/10: Development of subunit vaccine against Rift Valley Fever Virus

2.2 **KCSAP Livestock Value Chain**

Animal Health

2.3 **Value Chain:**

Improved livestock health and reduced livestock mortalities related to RVFV

2.4 **Location (Area)**

KALRO Biotechnology Research Centre, Kabete

2.5 **Duration in Years: - (20 Months)**

<table>
<thead>
<tr>
<th>Date of Commencement:</th>
<th>Expected Date of Completion:</th>
<th>Total Duration in Months:</th>
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<tbody>
<tr>
<td>01/05/2020</td>
<td>31/01/2020</td>
<td>20 months</td>
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2.6 **Total Cost of the Project (KES):**

4,986,850

### Executive Summary

Rift valley fever virus (RVFV) is a zoonotic virus causing economically important disease in cattle, sheep and goats and sometimes, humans. The only available vaccine is the attenuated vaccine that poses the risk of reverting to virulence and causing harm to unborn fetuses. Therefore the need to develop, cheap and safe vaccine against the virus cannot be underestimated.
This study is aimed at developing a safe and cheap subunit vaccine based on the previous evidence that the RVFV Gn/Gc glycoproteins could confer protection against virulent strain of RVFV. Potassium alum, and oil emulsions will be used as adjuvant and stabilizer respectively.

The study will be carried out at KALRO Biotechnology Research Institute.