Terms of Reference for Milling utilization and efficiency assessment of CARI-EA MF partners in Uganda, Kenya and Tanzania

1. Background information

Kilimo Trust (KT) is a not-for-profit organization working in agriculture for development across the East Africa Community member countries. KT has increasingly become the go to partner organization for market-led agricultural value chain development in the region. KT vision is to see “sustained and equitable wealth creation, food and nutrition security for smallholder farmers and other VC actors”. Our mission is to make agribusiness a transformative tool for wealth creation, food and nutrition security for over 500,000 smallholder farmers and other VC actors in the next five years beginning 2018. The core business of KT is to structure national and regional trade in agricultural products for enhanced wealth, food and nutrition security for smallholder farmers and other VC actors.

In partnership with the EAC Secretariat, Kilimo Trust is implementing a three-year project (2019 - 2022) commissioned by the United States Agency for International Development (USAID) through the Alliance for a Green Revolution in Africa (AGRA). The central aim of CARI-EA project is to enable locally produced rice in East Africa to competitively substitute the current over 300 million US$ worth of rice imports to the East Africa Common Market. The overall goal of the project is to contribute to inclusive transformation of the rice sector in East Africa for sustainable increase in incomes of 220,000 women, men and young people employed in the value chain of locally produced rice in the East Africa Community. The Project has three specific objectives:

   a) Increase productivity, commercialization, profitability and resilience for enterprises of smallholder producers of rice.
   b) Strengthen and expand access and competitiveness in the national and regional markets for the locally produced rice.
   c) Strengthen local, national and regional enabling policy and institutional environment for optimal commercialization of the rice sector.

2. Justification for Milling utilization and efficiency assessment:

Agri-processing is a very competitive industry, and the only way to be really competitive is to be very efficient in converting raw material to high quality products. Millers incur high investment costs in purchasing milling plants and the only way to recoup the large investment, is to run mills up to at least 70% of its capacity. It has been established that millers in EAC are running below the minimum threshold of 70% thereby incurring huge losses on their investments. Most CARI-EA partner mills are currently underutilized.
Main reasons are insufficient quantity of paddy produced in the catchment area of the mill, lack of working capital to off-take enough paddy and store it to ensure a year-round input and inadequate infrastructure and storage facilities.

One of the objectives of CARI-EA project is to increase competitiveness of locally produced rice by dealing with inefficiencies that arise at miller level through; i) poor quality milling equipment, ii) low technical capacity of mill operators and iii) poor manufacturing practices coupled with iv) inappropriate lay out/design milling of equipment for optimal utilization and efficiency. The project is working with millers and farmers to deal with inefficiencies in the supply chain of rice so that through interventions such as; a) good agricultural practice trainings, b) pre-financed inputs and c) contractual arrangements; farmers are enabled to produce more and better-quality paddy, which has a secured market, while millers can secure large volumes of high quality paddy for milling and increase mill capacity utilization.

3. Goal and Objectives of the assignment

The goal of this assignment are to assess the milling capacity utilization and efficiency of the CARI-EA partner rice mills. The findings of this assessment will be used to:

a) Make recommendations to improve the utilization as well as the quality of the milling produce thereby increasing profitability for the millers.

b) Develop profitability scenarios/cases that clearly show the growth path millers can take to improve their milling businesses

c) Identify capacity gaps for mill operators and managers

d) Develop optimal mill lay out and design plan for millers at different levels of operations; i.e. micro to small scale, small to medium scale and medium to large scale

The specific objectives are:

1) Provide a comprehensive description about the mills structure and their processing current operations, milling activities and schedules; plus mill maintenance schedules.

2) Based on (1); rank/classify mills into micro, small, medium or large scale. Based on; i) design and lay out of the rice mill, ii) type of ownership iii) scale of the outgrower scheme, iv) installed and utilized
capacity and v) technological aspects and vi) compliance to national certification e.g. Bureau of standards and or Food and Drug authority.

3) For each category of mill; develop current vs potential profitability scenarios if mill operations are optimized

4) Conduct a technical skills assessment/audit of mill operations and managers to identify capacity gaps.

5) Develop visual map of mill lay out for each category of mill and how it can be optimized.

4. Methodology and Key Activities

The following activities are to be carried out by the consultant:

a) On-site assessment of the milling equipment; review of miller records, the processes of the mill plus various functions of the different staff
b) Inspect the mill schedule (s) for milling, down time and maintenance; if available
c) Interview of owners of the milling business, operators and/or mill managers and other relevant staff on mill operations, management and staff skills
d) Establish the current milling efficiency and the proportion of long grain, short grains, stones, foreign matter etc
e) Conduct high-level cost benefit analysis for the mills
f) Provide recommendations based on the on-site assessment and discussion with the staff and draw recommendations to increase milling utilization by identifying bottlenecks and provide workable and tailor-made recommendations to improve the situation.

5. Deliverables

i) Full description of each mill interms of; size, level of operations, size of out-grower scheme, volumes handled on annual basis, its ownership, management etc
ii) Ranking of all MF partner mills based on set criteria
iii) Profitability scenarios for each category of mill; including optimization options
iv) Capacity needs assessment for mill operators employed by partners plus a high level plan to address the capacity gaps.
v) Visual lay-out plans for each mill and recommendations to optimize it; in case the current lay out is inefficient
vi) Comprehensive mill specific recommendations to increase mill utilization and efficiency of production

6. Estimated timeframe

- 28 days over a period of time; (starting date: 6th April 2020 & ending date: 31st May 2020)
- On-site visits (including travelling to remote areas) as well as desk studies.
- The on-site visits for milling utilization and efficiency assessment have to be in agreement with the respective CARI- EA country team as well as the assessed mill.

<table>
<thead>
<tr>
<th>Main activities</th>
<th>Time frame</th>
<th>Days</th>
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<tbody>
<tr>
<td>On-site assessment (1.5 days per mill)</td>
<td>Up to 19 days</td>
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<tr>
<td>Desk study (short assessment and recommendations)</td>
<td>Up to 3 days</td>
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<tr>
<td>De-briefing with all country teams (0.5 days each)</td>
<td>2 days</td>
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<tr>
<td>Report preparation</td>
<td>Up to 3 days</td>
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<tr>
<td>Travel days</td>
<td>Up to 13 days</td>
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<td>Total</td>
<td>Up to 40</td>
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7. Qualifications

a) The consultant has a minimum of 10 years working experience in quantitative and qualitative research work especially in the rice milling industry.

b) The consultant is familiar with the rice value chain and sub-sector in the EAC and has intimate knowledge about the working mechanism of the rice milling factories plus out-grower schemes

c) The consultant has worked previously in the rice milling industry or has been a rice mill operator or supplier.
d) The consultant shows evidence of forming a competent team of local experts, at least one (1) per country to conduct the assessment and potentially mentor millers after capability gaps are identified.

e) Fluency in English – both written and spoken is required, knowledge and fluency in both written and spoken Kiswahili language IS AN ADDED ADVANTAGE.

f) Excellent presentation and private sector engagement skills is required.

8. Application procedure:

Applications should be submitted not later than COB Friday 27th March to the email address recruitment@kilimotrust.org

Complete applications will include the following documents;

1) Cover letter explaining why you or your company are best suited to conduct this assessment
2) Technical proposal
3) Financial proposal
4) Detailed CVs of main applicants