**THE POTENTIAL OF DRE TECHNOLOGIES IN UGANDA’S MAIZE MILLING**

**MAIZE IS ONE OF UGANDA’S TOP CROPS BY PRODUCTION**

Maize is a major staple crop in Uganda providing over 40% of the country’s daily calorie consumption.

- **2.8 MILLION**
  Uganda’s total Maize production in metric tons.

- **>2 MILLION**
  Number of households in Uganda who rely in Maize as a source of livelihood.

- **4X TIMES**
  Maize flour earns 4x times more revenue than raw maize in Ugandan market.

**MILLING CAPACITY IS LOW DUE TO ELECTRICITY CHALLENGES**

Current capacity is estimated at 255 MT per day. This covers only 10% of overall maize production.

- Over 70% of the grain millers in Uganda are not connected to the grid and hence use diesel mill.
- Of the grain mills connected to the grid, close to 75% report intermittent power as the main challenge facing their business.

**MINI-GRID POWERED OR STAND-ALONE SOLAR MILLING ARE THE ALTERNATIVE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Cost</th>
<th>Average throughput</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini-grid powered maize milling</td>
<td>USD 2000</td>
<td>120 - 150 Kg/hr</td>
<td>Equatorial Power</td>
</tr>
<tr>
<td>Stand-alone solar milling</td>
<td>USD 2500</td>
<td>32 Kg/hr</td>
<td>AGSOL</td>
</tr>
</tbody>
</table>

**MINI-GRID AND STANDALONE SOLAR MILLING ARE HAVE POTENTIAL TO SCALE-UP**

- Uganda has earmarked more than 600 mini-grids to be developed by 2030 unlocking opportunities for new millers.
- Declining solar PV system costs from improved module efficiency and lower parts prices make standalone solar mills competitive with diesel mills.
- Volatility in diesel prices prompts millers to prefer solar-powered milling machinery, as diesel constitutes their highest operating cost.

Sources: NAADS, FAOSTAT, Uganda PULSE report, CLASP, USAID, Uganda Maize millers mapping