

# 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.



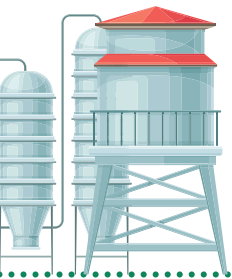
**4X TIMES**

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

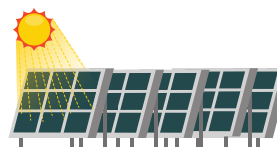
	Description	Estimated Cost	Average throughput	Companies
<b>Mini-grid powered maize milling</b>	AC-powered mills that use mini-grid	USD 2000	120 - 150 Kg/hr	 Equatorial Power
<b>Stand-alone solar milling</b>	Driven by a AC or DC-powered solar PV system	USD 2500	32 Kg/hr	 AGSOL

## 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 [Uganda Maize millers mapping](#)
- FAOSTAT [CLASP](#)
- Uganda PULSE report [USAID](#)