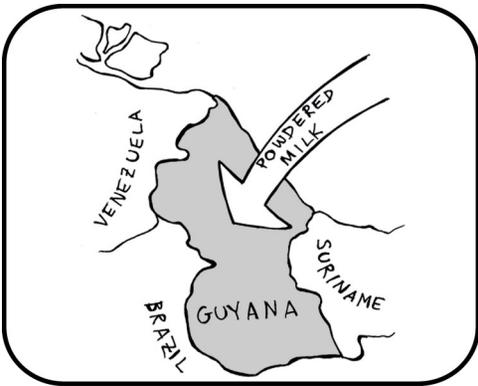
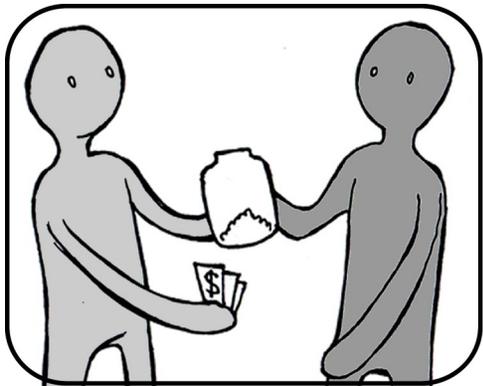


There are over 5000 dairy farmers in Guyana who are limited by the amount of milk they can store.



75% of all of Guyana's milk is imported powdered milk from other countries.



A cheap and accessible milk dehydrator will allow farmers to store and sell milk without the loss of product.

Reservoir

A container to store excess farm milk that is ready to be dehydrated.

Applicator

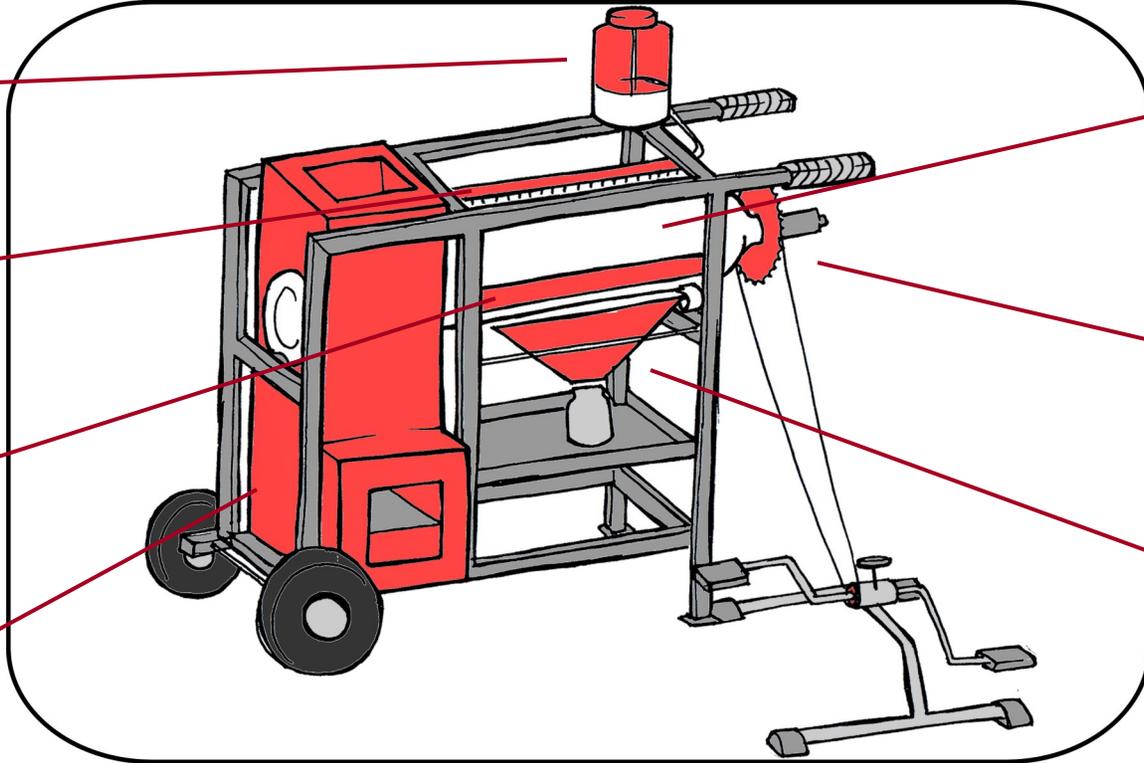
A long cylinder with small holes that run along its bottom where milk drips onto the drum.

Scraper

A flat blade that runs along the length of the drum. The blade is held against the drum via springs to scrape dried milk off the drum.

Furnace

A cement rocket stove used as the milk dryer's heat source with a biomass fuel.



Drum

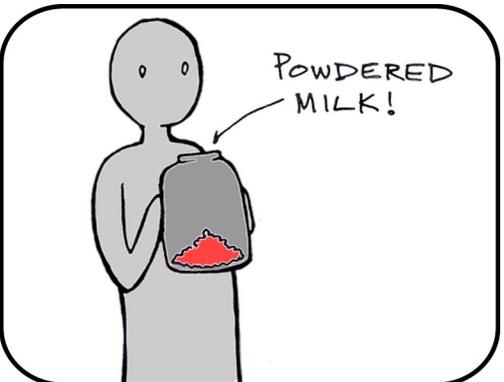
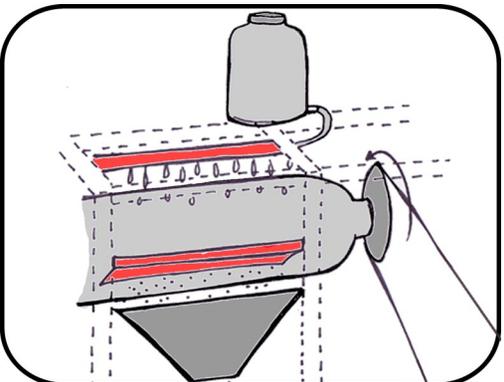
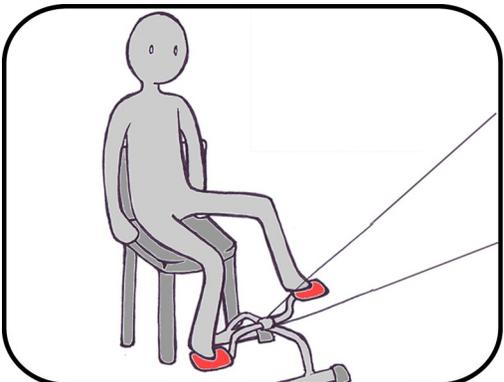
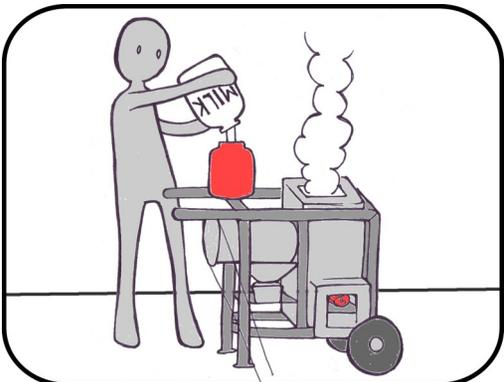
A pressure vessel maintained at 50psi. This ensures that it is always at 140°C, the ideal temperature for drying milk.

Drive Mechanism

A geared pedaling system to rotate the drum.

Collector

A trapezoidal funnel to transfer the dried milk into its final container.



Distribution Plan

200 USD

to manufacture

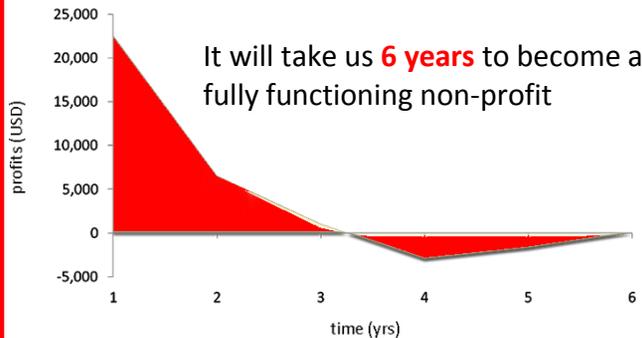
Selling for

40 USD/unit

Fixed donations

45,000 USD/yr

Projected Subsidized Profit



Market

2.5 BILLION Farmers Worldwide

900M Dairy Farmers

250M Rural Dairy Farmers

5K Guyanese Rural Dairy Farmers



Team Members

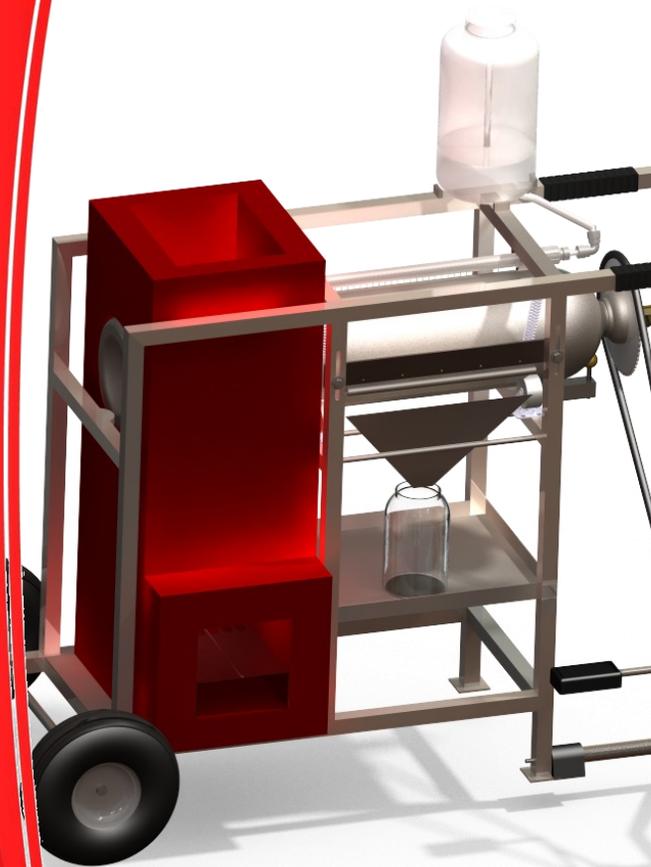
Maia Bageant	Stephan Hawthorne
Andrea Blakemore	Travis Hery
Carter Chang	Moji Jimoh
Tommy Ciesielski	Chiedozie Okafor
Michael Dobson	Matthew Rodriguez
Jasmine Florentine	Trevor Shannon
Michael Fraser	Thi Tran
Tim Grejtak	Juan Valdez
Quinnton Harris	Brett Van Zuiden

If you have any questions or would like to learn more about the Gaia Milk Dryer, you can email us at:

milkdrying@mit.edu

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Dr. Barbara Hughey	
Dr. Pradip Sarmah	Chevalley Duhart
Jose Gomez-Marquez	Judith Anderson



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