

## SHREDDER • EMERGING TECHNOLOGY



### Breadfruit Shredding

Breadfruit is a tree that can be found throughout Southeast Asia and Pacific Ocean Islands—including many nations that struggle with hunger and malnutrition. Because it produces a fruit that is high in carbohydrates, **breadfruit has been long recognized for its potential to alleviate hunger in tropical climates.**



However, breadfruit is difficult to preserve; it begins to rot 48 hours after its harvested. So, despite its potential, **breadfruit is often overlooked as a food source because of its limited shelf-life.**

With the right tools, breadfruit can be preserved for years as flour. For many island nations, including Haiti, **locally produced breadfruit flour could replace imported cereals and increase food security.**

**CTI's volunteer engineers have designed a processing system—a shredder, dryer, and grinder—that can be used in impoverished communities to make breadfruit flour.**

CTI is collaborating with the Breadfruit Institute to test a manual breadfruit processing system and develop an economic model for producing breadfruit flour for impoverished communities in the Caribbean. By transforming breadfruit into nutritious flour, we aim to show that we have a robust and replicable technology that can increase the food security in developing nations at an economic profit for both producers and processors.

For 30 years, Compatible Technology International (CTI) has been creating practical food and water tools for the developing world.

CTI@COMPATIBLETECHNOLOGY.ORG • 800 TRANSFER RD STE 6, ST PAUL, MN 55114 • © 2011 COMPATIBLETECHNOLOGY INTERNATIONAL

### MAKING BREADFRUIT FLOUR

**Compatible Technology International (CTI)** is developing an economical, reliable, village-level method to extend the shelf-life of breadfruit by processing it into shelf-stable flour.



### SHREDDING

CTI's prototype manually-operated shredder processes breadfruit into strips for even drying.



### DRYING

The breadfruit strips are dried outdoors in breathable netting.



### GRINDING

The dried breadfruit strips are ground into flour with CTI's grinder. Breadfruit flour can be used in a number of food products including snack foods, pasta and cookies.