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Another Compatible Technology at Work

About this time every year, CTI volunteers Purnima and Bibek Ray return to Bibek's home town of Gohaldanga, West Bengal, India for approximately six months. There they are working to improve the social and economic welfare of the people in and around Gohaldanga. Part of the economic development program involves increasing the value of the potato harvest. In the past we have discussed the potato processing; in this article we report on storage opportunities.

In West Bengal, the potato harvest is large. However, due to the climatic conditions, much of the crop rots quickly before it can be eaten or processed. Purchase prices increase rapidly as the time from harvest extends. Thus, the farmers get a low value for their harvest, but business enterprises that can refrigerate or cold store the potatoes, get a higher price as time passes. Working on a CTI funded project, Bibek and Purnima have been developing, with the assistance of CTI engineers, Rustic Storage facilities for potatoes.



A Rustic Storage Unit is a brick walled, thatched roof building constructed over an open water reservoir. These Rustic Storage units, built by farmers themselves, use the concept of

evaporative cooling to greatly reduce the temperature within the facility. Due to the reduced temperature, the storage life of the potato crop is greatly extended and the farmers can get a higher price for their crops.

Last year, around Gohaldanga, the potato crop was harvested in mid-February. Potatoes stored in the facility did not begin to spoil until late July. Potatoes used for sun dried chips and strings

had to be processed about a month earlier. Because the good quality life cycle of the crop could be greatly extended, farmers will be able to significantly increase the value of their cash crop by as much as 300%.

Click [here](#) to see Bibek and Purnima's full report.

Drying Breadfruit in the Marshall Islands

This past summer CTI volunteer and St. Thomas engineering professor, Camille George, was invited to the Republic of the Marshall



Islands (RMI) by their Ministry of Natural Resources and Development to see if breadfruit, a plentiful food resource, could be dried and ground into flour. Food security and nutrition are two of the most pressing issues for these remote islands, located near the International Date Line and the equator. Mass relocations and financial subsidies after the USA's nuclear testing program have resulted in a largely sedentary population severed from their traditional culture and currently dependent on imported American food. Obesity in the adult population is over 50% and diabetes is epidemic.

There is a high level of interest in the successful introduction of the harvesting and drying of excess breadfruit, which may also have a substantial social impact. Breadfruit was successfully shredded using the Tommie shredder developed by University of St. Thomas (UST) students, sun dried, and ground into flour using the Omega IV grinder developed by Compatible Technology International. The two machines were mounted on a single production stand and are currently being transported to different Marshallese islands as a first introduction of the technology. At this time a partnership is forming between UST, CTI, the Breadfruit Institute of Hawaii, and the Republic of the Marshall Islands to explore opportunities to use breadfruit commercially and to help strengthen food security.

Volunteers Gather at Gibbs Museum



An early Fall outing at fascinating Gibbs Museum attracted CTI volunteers in late September. The Gibbs Museum, a feature of the Ramsey County Historical Society, graciously hosted our event with tours of the grounds and house where our CTI volunteers got a taste of what life would

have been like in the mid-1800's. CTI volunteer and Board member Ralph Thrane, who manages the apple orchard at Gibbs, gave a talk on the unique and rare varieties of apples there - followed by an apple tasting!

Refreshments featuring autumnal produce were followed by a short program headlined by Jim Erickson, Site Manager of the Museum, CTI Board Chair Rob Scarlett, and Bruce Humphrys. Volunteer Erv Lentz was honored for his boundless energy and work making the new shop area efficient and productive.

2007 Harvest/Annual Report To Be Published Soon

The *2007 Harvest/Annual Report* has been sent to the printer and should be arriving in your mailbox no later than early November. Volunteer Ruth MacDonald has done a beautiful job putting it together. Thank you Ruth! If you have recently signed up for the *Post Harvest* and did not supply your mailing address, please send Anne-Marie an e-mail message (link below) with that information so we can be sure you get the *Harvest* as well. We'll also be posting it on our website as a PDF file.

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