

Potato Chip making in India Dissemination phase

The technology described here is being used to generate income in rural villages in India.

Potatoes are one of the most important food crops in India. Uttar Pradesh is one of the major growers of the crop. Almost all the potatoes produced in this area are harvested between mid-February and mid-March. This often results in a glut, lower prices for the farmer and up to 30% spoilage.

CTI in collaboration with SOTEC (Society for Appropriate Technology located in Bareilly, Uttar Pradesh approximately 150 miles from New Delhi) has developed village level technology to convert fresh potatoes into shelf stable chips and strips. Manual and/or bicycle driven washer/peeler and slicers are sold under “Nave” brand name in recognition of one of CTI founders. The dried potato products are sold in bulk to consumers who fry them as snacks.



Bareilly is 150 miles East Southeast of New Delhi, just south of Nepal. Uttar Pradesh is the largest state in India with 180+ million people.



**“Nave” brand
Village level potato chip making technology**
Peeler Rs. 2304 (\$50) Slicer Rs. 5004 (\$110)

The technology includes step-by-step process of selecting potatoes, washing, peeling, slicing, a chemical dip in Sodium Meta bi-sulphite and Acetic Acid to protect color, blanching to inactivate enzymes and solar drying to produce a shelf stable finished product. In addition to developing the slicer and peeler equipment, we use nylon net bags to handle the potatoes during processing and nylon nets to protect the product from insects and debris while drying. Economic analysis has shown that investment in units with daily capacity of 200 Kg, to 500 Kg. (440 lbs. to 1100 lbs.) of fresh potatoes can be recovered in one to two years. More than one hundred entrepreneurs in and around Bareilly have set up these seasonal enterprises.

Sara Leiste is the CTI program manager. Peter Chowfin and Lalit Loyal manage the program at SOTEC. CTI volunteers; Bob and Ruth Nave, George Ewing, Hank and Doty Garwick, Bob Wolf and Shiv Murty have been involved in bringing this simple technology to the villagers in India.