

LIVELIHOOD

DESIGN AND DEVELOPMENT OF FRUIT AND VEGETABLE VENDING CART

APPLICATION :

This innovative solution facilitates easy transportation and sale of fruits and vegetables with a cycle attachment for mobility. It offers maximum display area, optional motorization, and cold storage to preserve perishables. Additional closed storage at the bottom minimizes waste and enhances profitability for vendors.

ORGANISATION/INSTITUTION	:	RUTAG IIT MADRAS
TECHNOLOGY READINESS LEVEL	:	After successful trials using different vendor's it's ready for business development.
PRINCIPAL INVESTIGATORS	:	Prof. Rajiv Sharma, IIT-Madras

PROBLEM ADDRESSED :

- To reduce the spoilage of vegetables and fresh fruits during the retail marketing by street vendors.
- To increase the shelf life of fresh fruits and vegetables

ABOUT THE TECHNOLOGY :

A three-wheel version of the cart is to meet popular demand, responding to feedback from the trials of our five-wheel cart. Smaller and more compact, it provides increased space and storage features in a triangular framework, ensuring stable weight distribution. Its lighter frame enables easier maneuverability and usage, especially by women vendors, and its modular design facilitates easy assembly, as either a front- or back-load cart. The cart is made of a lightweight frame of corrosion-resistant steel, with storage panels of steel mesh and sheet metal, offering greater display and storage space. It has a flex canopy, offering shelter to both cart vendor and products. The provision for cold storage greatly facilitates cart vendors, adding to their storage space and improving their planning and economic prospects.

SOCIAL IMPACT

- 1.The 3-wheeler cart, developed through feedback gathered from regional vendors via a comprehensive survey, stands out as the most preferred model among vendors.
- 2.This tricycle design offers ample display area, improved assortment of fruits and vegetables, and features like canopy and cold storage, generating increased interest among vendors.
- 3.The Panchayat Raj department officials in Tamil Nadu express keen interest in providing potential dissemination support, emphasizing the need for customizing the cart to meet vendors' specific needs while maintaining cost-effectiveness.

PRODUCT IMAGE



USP

- Modular Display Rack
- Foldable Side Extension
- Modular Canopy
- Portable Cooling Unit
- Adjustable Handle
- Modular Shade Sails
- Foldable Stool
- Water Sprayer
- LED light
- Rechargeable Fan with
- Megaphone (Entertainment)
- Waste Collector

END USERS/CUSTOMERS

- Fruits and Vegetable Vendors.
- Street Food Vendors.