Recycling fruit market waste  
India  
Reducing emissions by converting fruit and vegetable waste into compost

Converting solid waste from fruit and vegetable markets in Delhi reduces emissions of the harmful greenhouse gas methane and creates reusable biomass that can be sold on as compost.
The Context
Composting is hardly a new idea. In fact, it has been the method of choice in India for centuries. Modern times have seen many composting facilities fail due to lack of maintenance, meaning product waste is instead fed into India’s growing landfills. When organic waste is left untreated in these warm, wet climates it decays, emitting harmful and odorous greenhouse gases that damage the earth’s atmosphere.

The Project
This project involves the expansion, operation and maintenance of a previously closed compost plant. The plant takes in waste from vegetable markets across Delhi, comprising essentially of fruit and vegetables, empty fruit bunches and packaging wastes. It uses open window aerobic composting technology to convert approximately 73,000 tonnes of municipal solid waste into compost every year. This is equivalent to 200 tonnes of municipal solid waste per day. The compost output is then utilised as organic fertiliser for agricultural purposes, and the project has found a stable and growing market for selling compost that is higher priced than standard fertilizers.

The Benefits
This project creates jobs for local people, providing employment to the community directly through the composting facility and indirectly through waste collection and transportation of compost to the end user. Training and information days on composting methods are also organised for local agricultural groups and farmers. Maintaining soil fertility is critical to the agrarian economy of India and food safety, necessary to feed a billion people. Providing recycling resources and a better management of solid waste puts nutrients back into the soil to provide positive benefits for agriculture and horticulture.