Solving Urban Problems while Producing Rural Resources

Compost production contributes to climate change mitigation while increasing the yields of local farmers.

Diverting waste from landfills to composting plants reduces the emission of methane, a greenhouse gas. Therefore, the establishment of compost plants contributes to the mitigation of climate change. In developing countries, large, centralized and highly mechanized composting plants have often failed due to high operational, transport and maintenance costs. However, the smaller-scale Integrated Resource Recovery Centres (IRRCs) being implemented in developing Asian countries overcome some of these difficulties.

IRRCs use limited mechanical technology that requires little energy, keeping operational costs low, and are easy to operate and maintain. Local organizations can quickly become familiar with the technology and adapt it to local contexts. IRRCs are based mostly on manual labour and with the involvement of local communities ensure waste is well sorted before it is composted. This avoids many of the problems that may lead to the failure of larger, centralized composting plants. By using an approved method of greenhouse gas emission reduction, IRRCs can qualify as Clean Development Mechanism (CDM) projects.

The strict quality control that is maintained throughout the IRRC process allows the compost to comply with numerous standards for certified compost. In turn, local farmers benefit from this high-grade compost through improved soil quality and increased yields.

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Photographs courtesy of Brent Lewin and Kibae Park