

Worms a winner for engineering students

First-year engineering students from the University of Western Australia (UWA) have won an **Engineers Without Borders (EWB)** Challenge prize for designing a worm farm to help farmers in Tamil Nadu, India.



Credit: University of Western Australia

The system, which uses local worms to process organic waste and produce a nutrient-rich fertiliser, will enable farmers in the village of Devikulam to enrich the soil and improve crop growth.

The objective of the EWB Challenge Program, run in conjunction with Australian universities, is to actively engage first-year university students in team-based design on sustainable development projects.

The program aims to produce more effective educational outcomes through exposure to holistic design. Students learn about design, teamwork and communication through real sustainable development projects. Last year, students had the opportunity to address waste management issues in rural India, Buenos Aires and Perth.

The UWA students won the Overall Champion Team Award for the most innovative, sustainable engineering solution that best addressed cultural values, economic conditions and environmental constraints of the Devikulam villagers.

Entries were judged by representatives from the EWB and the Pitchandikulam Forest Organisation, a not-for-profit group dedicated to the preservation and restoration of the tropical dry evergreen forest in Tamil Nadu.

UWA's Dr Rita Armstrong, an anthropologist, and Professor Caroline Baillie, a materials engineer, jointly coordinated the teaching unit that incorporates the prize. Dr Armstrong says it is important for engineering students to seek technical solutions in a cultural, economic and environmental context.

'The traditional approach to engineering problem-solving where students are limited to finding purely technical solutions is behind us.

'Rapid globalisation requires students to learn to develop new ways of questioning the world around them and apply this to a range of real-world problems.'

Source: University of Western Australia

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