Amrita University Live-in-Labs Project

Initiative

Amrita Live-in-Labs is a multi-disciplinary experiential learning program that facilitates the research, development and deployment of sustainable solutions for current challenges faced by rural communities in India. The programme is designed to encourage participants to break classroom and lab barriers to implement theoretical knowledge to address real world problems. The aim of all of the projects was to improve the livelihood of remote villages in rural India. Our students were initially based at Amrita University sites in Kerala and Coimbatore and were sent in small teams to three project sites in India across Kerala, Odisha and Chhattisgarh, 1200 miles north. The challenges were to design and develop a smokeless stove for cooking in huts and to develop strategies to educate children in maths in Chhattisgarh, one of the states with the poorest rates of educational achievement in India. The other students were involved in producing sustainable plastic bricks to be used in the construction of rural toilet blocks and distilling lemongrass oil to be sold as a source of income for the local village women. The program involved the use of materials research and expertise as well as allowing the development of social skills within an international team.

How the Amrita University Live-in-Labs Project Team has made a difference

Co-design workshops were used to gather feedback from the villagers which was then used to target the most efficient solutions. The education project found that students couldn’t answer basic maths questions and so the teaching method was altered to include video content and mentoring. The smokeless stove prototype has the potential to reduce the respiratory problems faced by the women using them and the lemongrass project provided a sustainable income promoting entrepreneurship and independence. The students were able to make significant inroads into empowering women and children in rural communities.