

Mapping UNSW Impact Global Development

Primary SDG	11: SUSTAINABLE CITIES AND COMMUNITIES
Broad theme	Sustainable infrastructure
Research	Training and educating public officials in infrastructure development, and locals in improving and maintaining property
Impact region	South Pacific
Faculty	Built Environment
School/Institute	Built Environment
Academics	Dr Sarath Mataraarachchi, Dr Christian Tietse
Project partners	World Bank, Asian Development Bank Institute and Planning NSW – funding and in-kind contribution of \$200,000 for three years until end of 2018
	UNSW IGD – seed funding of \$40,000
Related SDGs	10: Reduced Inequalities
	12: Responsible Production and Consumption

Elevator pitch

UNSW will train public officials to identify and develop viable infrastructure projects and upskill community members in the repair and maintenance of housing and basic infrastructure, lifting the standard of living in Fiji, the Solomon Islands and Vanuatu.

The Challenge: Infrastructure is difficult to justify in the Pacific

Sparsely populated settlements in Pacific Island countries are scattered across islands, making it difficult to justify desirable infrastructure like roads and bridges. Because these communities are vulnerable to climate change and are among the poorest in the world, there is plenty of funding available but the local government sector lacks capacity and private enterprise cannot justify undertaking projects due to inadequate returns. As a result, the local population is deprived of key infrastructure like roads and access to water, restricting their development and wellbeing.

UNSW's solution: Train public officials in project development and locals in repairs and maintenance

When researching for a symposium on green Infrastructure and poverty reduction in PNG, Sarath realised the region's problem is not at the finance level but around the development and maintenance of viable infrastructure projects. There is a clear need to improve local capacity to create deliverable infrastructure projects and maintain housing stock to enhance living conditions and reduce poverty.

Sarath decided to target grass roots infrastructure and housing projects with an emphasis on sustainability and social enterprise. In June 2018, he will train public sector employees from three nations (Fiji, Solomon Islands and Vanuatu) in Fiji. Training will focus on how to develop viable infrastructure projects at national and local

levels as well as repair and maintenance of housing through a time tested “Housing for Health” model. This model, which upskills people in house and building maintenance, was developed in Australia and has been implemented in Indigenous communities in Australia, South Africa, PNG and other countries. It will be offered to community groups and individuals keen to start their own property maintenance business. Participants will be trained on the job, given maintenance kits, and encouraged to go back to their communities and train others.

In other projects, Sarath is examining the role of community cohesion in the flood-affected Kelani River Basin in Colombo, Sri Lanka. Sarath is focusing on how these communities rebuild their lives without much help from authorities using their own resources and helping each other. He wants to establish why and what other communities can learn from them. He is also working on creating a centre of excellence for sustainable practices in Sri Lanka that investigates traditional methods and whether they can be integrated into modern society.

The Impact: Increase infrastructure projects, improve quality of housing and quality of life

The training of public officials will lead to more viable, realisable projects being undertaken in the three nations. Key basic infrastructure in these countries will improve, giving locals better access to roads, water supply, sanitation and employment, enhancing their overall quality of life.

The Housing for Health programme will provide locals with the skills to start a new vocation and income stream. It will also create a local supply of handy people working on and improving the state of housing and infrastructure in the country, increasing the health and wellbeing of the local population.

Researcher

Dr Sarath Mataraarachchi is Convenor of Courses and Lecturer in Sustainable Built environment at UNSW. He conducted his preliminary PhD research at the Development Planning Unit of the UCL and completed his PhD in Architecture at the University of Queensland. He has experience working for private consultancy, international development organisations, and national, state and local government agencies in many countries, including in the Pacific. He is passionate about employing Australia’s world class knowledge in sustainable development to provide practical help to those in need in the Pacific.

Ben Falkenmire 07.02.18