Aim

To provide the first-ever rigorous evidence base that a localised, WSC approach to upgrading informal settlements can deliver sustainable, cost-effective improvements in health and the environment.

Main Activities

1. Baseline health and environmental assessments
2. Co-design of settlement upgrading plans with communities and local partners
3. Upgrade the first round of settlements
4. Monitoring of human health and the environment on a quarterly basis
5. Upgrading the control settlements at the end of the study
6. Share lessons and results to inform policy making and investments

Mission

To improve the lives of women and men, girls and boys in urban informal settlements, improving environmental and human health by adopting a water sensitive cities (WSC) approach to informal settlement upgrading.

Approach

A randomised control trial involving 24 settlements. Half will be upgraded initially and the other half (the control group) will be upgraded after two years. RISE will compare the two groups to measure the impact of the intervention on health and environmental outcomes.
What is a ‘water sensitive cities’ approach to upgrading informal settlements?

The water sensitive approach integrates ecologically and economically sustainable water infrastructure into buildings and landscapes. This includes constructed wetlands, bio-filtration gardens, stormwater harvesting, and local sanitation systems based on “smart” new septic tanks.

Also known as nature-based solutions, these types of systems are more ecologically sustainable because they mimic the earth’s natural systems, while being more economically sustainable because they require less maintenance and do not require connection to a central “big pipes” system.

Decentralised water infrastructure is implemented at dwelling, neighbourhood, and precinct scales to harvest rainwater and stormwater, recycle wastewater, and protect dwellings from flooding and environmental pollution.

Wastewater is managed locally using natural passive treatment processes such as constructed wetlands and natural filters.

Stormwater runoff is conveyed to minimise flooding and environmental pollution using grassed channels, surface wetlands and bio-filtration gardens.

Locally sourced water, such as storm and rain water, is used for a range of domestic purposes and economic activities including urban agriculture, while green spaces increase local amenity.

Addressing the Sustainable Development Goals

RISE is taking an integrated and holistic approach to achieving the Sustainable Development Goals (SDGs), with a deep understanding of the inherent connections between each.

Program outcomes will have impact across the SDGs, with particular focus on Good Health and Wellbeing; Improved Water and Sanitation; and, Sustainable Cities and Communities.
Revitalising Informal Settlements and their Environments (RISE) is an action-research program working at the intersection of health, environment, water and sanitation in urban informal settlements.

RISE aims to provide new evidence that a localised, water sensitive approach to revitalising informal settlements can deliver sustainable, cost-effective health and environmental improvements, paving the way for further deployments in the region and globally.

Working with communities, governments, local leaders and partner institutions in 24 settlements across Suva, Fiji and Makassar, Indonesia, RISE is co-designing location-specific solutions that integrate water sensitive infrastructure, such as constructed wetlands, to strengthen the whole-of-life water and sanitation cycle.

Underpinned by the emerging discipline of ‘Planetary Health’, RISE success will be measured by the health and well-being of residents – particularly children under five years of age – and the ecological diversity of the urban environment.

Part of Wellcome Trust’s ‘Our Planet, Our Health’ program, with support from the Asian Development Bank, RISE is being led by Monash University in partnership with the CRC for Water Sensitive Cities, Stanford University, Emory University, The University of Melbourne, University of Cambridge, Hasanuddin University, Fiji National University, The University of the South Pacific, Live & Learn Fiji, United Nations University International Institute for Global Health, Melbourne Water, South East Water, Oxfam, WaterAid, UN-Habitat, Australian Aid, the World Health Organization, New Zealand Ministry of Foreign Affairs and Trade and the Wellcome Trust Sanger Institute.

RISE commenced in August 2017 and will conclude in July 2022.

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