

## Specialisation project

Students undertake self-directed project work to consolidate and apply the concepts, principles and methodologies they have learned in the course.

Students select a specialisation area or industry placement that is interesting and valuable to their professional development. They work closely with supervisors and conduct their projects in Australia or overseas. The following case studies are examples of student research projects.

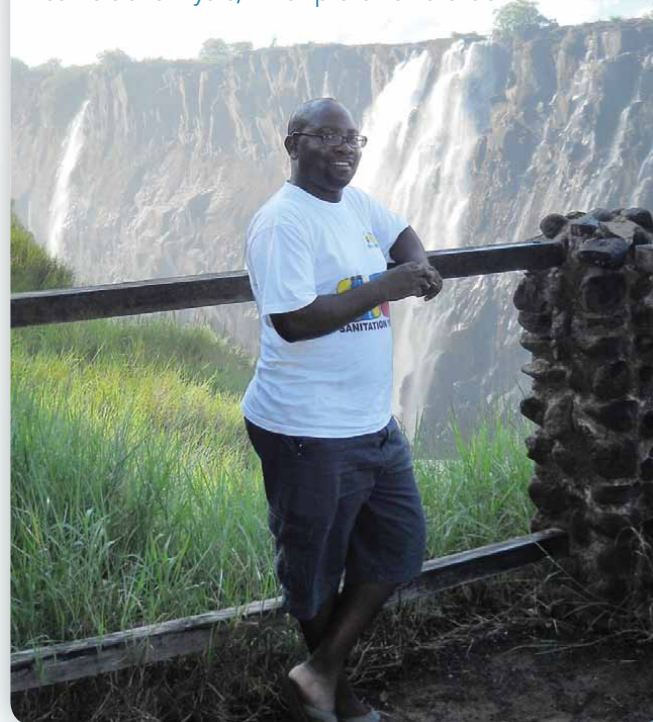
### Wastewater management feasibility study for Nauru

Kasenga Hara – Civil Engineer, Zambia

Kasenga's research project focused on reduction of groundwater contamination through cost-effective sanitation on the tiny island of Nauru in the Pacific Ocean, where chronic diarrhoea is up to twice as prevalent as in surrounding countries.

Kasenga considered technical and non-technical options and their effects on environmental and social conditions in Nauru.

His study recommended household level double compartment septic tanks in the region 0-24m above mean sea level, composting toilets in the regions over 24m above Mean Sea Level as there was limited unsaturated sandy soils to support safe disposal of wastewater, institutional and policy frameworks which promote sound wastewater management, and information programs to overcome restrictive social barriers and myths, which prevail on the island.



### The challenge of sustainable rural water supply in East Timor

Janina Murta – Environmental Engineer, Portugal

In East Timor, only half the rural population has access to improved water supply, and the sustainability of rural water supply schemes is still a major challenge.

Janina conducted field research in East Timor with the AusAID-funded Rural Water Supply and Sanitation Program (RWSSP), investigating sustainability issues in a case study of a water supply system.

Using a framework which considers five dimensions of sustainability – social, institutional, financial, technical, and environmental – to analyse the system, the research highlights a number of sustainability aspects relevant for the development of the country's rural water supply sector.



Industry placement    Research project