

# Journal of Humanitarian Engineering

Volume 1, Issue 1 – May 2012

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engineers  
without borders  
AUSTRALIA





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## Journal of Humanitarian Engineering (JHE)

The Journal of Humanitarian Engineering publishes outcomes of research and field experiences at the intersection of technology and community development. The field of 'humanitarian engineering' describes the application of engineering and technology for the benefit of disadvantaged communities. This field spans thematic areas from water to energy to infrastructure; and applications from disability access to poverty alleviation. The JHE aims to highlight the importance of humanitarian engineering projects and to inspire engineering solutions to solve the world's most pertinent challenges.

For more information, visit: [www.ewb.org.au/journal](http://www.ewb.org.au/journal).

### EDITOR

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### ASSISTANT EDITOR

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### PRODUCTION

Engineers Media

### SUBSCRIPTION

The Journal of Humanitarian Engineering team encourages collaboration and the dissemination of ideas. JHE is an open access publication and electronic copies are freely available from the website: [www.ewb.org.au/journal](http://www.ewb.org.au/journal)

### FEEDBACK AND CONTACT

The editorial team welcome your feedback, comments and suggestions for the future direction of the journal. We also welcome people who are interested in becoming involved in supporting this initiative.

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## EDITORIAL

It is my pleasure to launch the first edition of the Journal of Humanitarian Engineering (JHE). This new publication showcases the innovative work of researchers and practitioners working at the intersection of technology and community development.

Humanitarian engineering is about applying and developing technology – not to meet a market or financial opportunity – but to address a real human need. These projects are each designed to serve a disadvantaged community or group, often overlooked by traditional engineering and technology projects. From poverty alleviation to disability access, these projects highlight a new approach to developing and implementing technologies.

Research that collects dust on shelves or is stored away in the depths of an electronic archive is research that fails to make an impact. Dissemination is key, and the JHE aims to help facilitate this, as a destination for research outcomes. We expect the audience of this Journal will be engineers, researchers, students, NGO workers and community development practitioners. Promoting collaboration is just as important an aim for the Journal as publishing new knowledge.

Engineers Without Borders Australia (EWB) is a leader in the field of humanitarian engineering and is proud to be the publisher of this Journal. With almost a decade of experience working in partnership with communities in Australia and across Asia, EWB is also well placed to share the lessons learned from its experience in the field.

This first issue highlights research that addresses some major global issues: energy access, water quality and occupational safety, all within the context of developing countries. The articles come from researchers and practitioners with an interest in creating change as much as they are interested in creating knowledge.

Good humanitarian engineering research starts at the local level and addresses a real challenge, one that the local community have identified for themselves. It is rigorous while remaining accessible; technically innovative without losing its connection to the community. We hope that this Journal will be the home of research that embodies this approach.

As this is the first issue we are actively seeking involvement from the community to help us chart the direction, and be involved in the future of this publication. We are open to contributors from all over the world, particularly engineers, scientists, designers and innovators that are addressing challenges in their own community. The publication frequency, use of theme issues and editorial guidelines will be led by the interest and needs of the readers. Please make your thoughts heard and get in contact if you are interested in being involved in this publication or have ideas on how to make it great.

Once again, welcome to the JHE and to being part of a community committed to making an impact, and committed to doing it well.

**Julian O'Shea**

Editor, Journal of Humanitarian Engineering

Cover: Students using water from their new rainwater tanks installed at a primary school in Kedaro village, Indonesia.  
Photo: Michelle Quach

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