

PACE VIRTUAL EXPLORER FOR SCIENCE: DVD CONTENTS

PACE case study: SHORT VIDEO	Overview
<p>Pico Hydro Power Kathamba Self Help Group and Practical Action, Kenya</p>	<p>A roleplay exercise about a pico hydro power scheme in rural Kenya reveals how science and engineering can change people’s lives. Two contrasting case studies – microhydro power in Somerset, and the mega-hydro Three Gorges Dam in China - set the global context of hydroelectric power generation, and provide material for a social and environmental impact assessment activity.</p>
<p>Recycling Rubbish City Garbage Recyclers, Kenya</p>	<p>The entrepreneurial City Garbage Recyclers in Nairobi will hopefully inspire students to think creatively about rubbish via the mantra: ‘re-think, reduce, re-use, recycle.’</p>
<p>Food for Thought Toronto Primary School, South Africa</p>	<p>Could your school be self-sufficient? After watching a film about a school in South Africa who grow their own fruit and veg, students learn about permaculture techniques and complete a fun exercise designed to stretch the imagination.</p>
<p>Biogas Anthony and Agnes Katakwa and NAFRAC, Tanzania</p>	<p>Students learn about biogas through the case study film, which shows a small biogas plant on a farm in Tanzania. Further activities are designed to put the case study into a global context and extend understanding. The lesson can be developed into a more detailed comparison of energy use and generation in Tanzania and the UK. Instructions for building your own biodigester are included.</p>
<p>Mafia Island Marine Park Mafia Island fishermen and WWF, Tanzania</p>	<p>Students pay a virtual visit to Mafia Island off the coast of Tanzania and learn how fishermen are changing their behaviour to protect fish stocks. Use roleplay to investigate how data is collected and used in fisheries management. Put this lesson in its global context with a musical plenary from Indie band Stornoway.</p>
<p>Rich Roots Trasizo Phiri, WCS and World Agroforestry Centre, Zambia</p>	<p>How does science help farmers? Discover how nitrogen-fixing plants help farmers and gardeners grow more food in Tanzania and in the UK. Extensions include going deeper into the global context with a ‘compass rose’ investigation into the use of artificial chemical fertilisers in farming and an experiment to demonstrate the effects of rhizobium bacteria on leguminous plant growth.</p>