

## CASE STUDY DESCRIPTION



**Institute name:** University of KwaZulu-Natal

**Unit of relevance:** Sub-course 2 (Unit 2.2 – Treatment Mechanisms)

**Link to video:** <https://www.youtube.com/watch?v=TAO6ZQmthcs>

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| <b>TITLE:</b> Large Scale LaDePa Machine (South Africa)  |
| <b>DURATION:</b> 12:03 minutes   |
| <b>PROBLEM STATEMENT:</b><br>Disposal of pit latrine sludge is a major health and environmental problem in the Third World. Additionally, the sludge contains phosphates (a critical but diminishing resource) and other nutrients, which are generally wasted in current disposal methods.  |
| <b>DESCRIPTION:</b><br>This case study shows the potential for resource recovery from innovative faecal sludge treatment processes such as the LaDePa machine to generate a profit that could help sustain the sanitation service chain. The LaDePa (Latrine Dehydration and Pasteurisation) which is a machine that provides a containerized method of processing sludge in order to produce a nutrient rich soil conditioner. The technology removes the detritus, pasteurizing and drying the sludge to beyond the sticky phase. The LaDePa is a low tech machine and would suit many low-income countries where a substantial number of people depend on pit-latrines and has the potential to provide both business and work experience for the low skilled people. |
| <b>PRESENTATION STYLE:</b><br>The video is based on slides and interviews to describe the entire faecal sludge management service chain in Durban and includes footage from the field and from the labs.   |
| <b>TAKE HOME MESSAGE:</b><br>The gap in sanitation services could be fulfilled with profitable business based approaches to faecal sludge management. Resource recovery from faecal sludge treatment products could provide a key financial incentive. FS treatment products should be seen as a source of revenue generation from resource recovery and not a disposal problem.   |