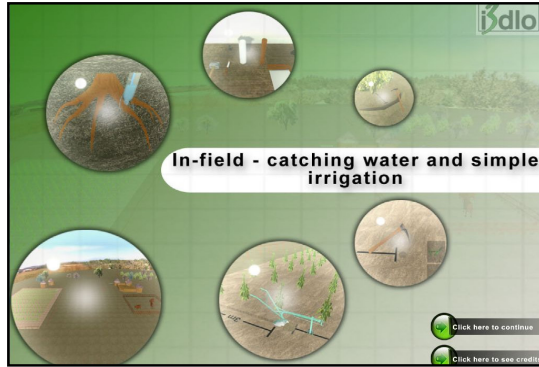


the Naledi3d Factory Capacity building in rural communities - water conservation

Purpose: Two interactive 3d learning objects were developed to show how to conserve water in rural communities - looking at how to conserve water in the field; and roof-top water harvesting. Water conservation is becoming a crucial issue in Southern Africa, especially so as a result of global warming. These two *i3dlo*'s were developed as part of a broader two-year WK Kellogg funded project to explore the use of VR as a means of capacity building in rural communities in Southern Africa, piloted in Zimbabwe with World Links.



Partners:
W.K.Kellogg Foundation
& World Links Trust

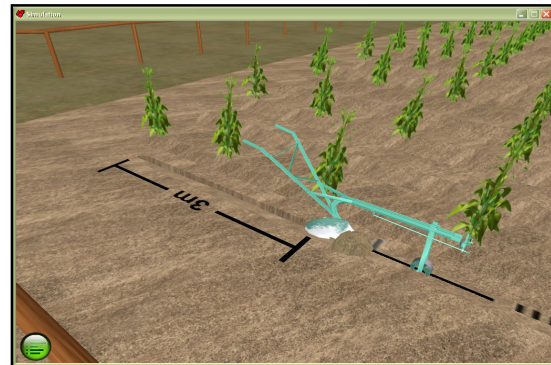
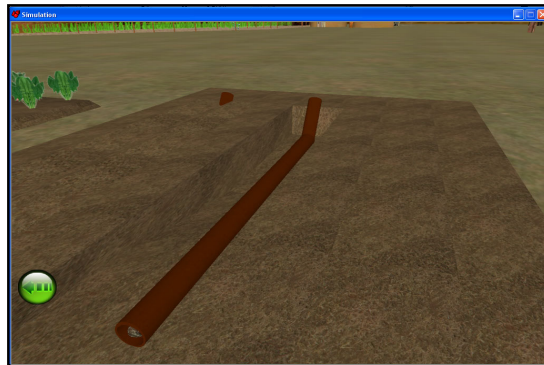


In a Nutshell:

Through a collaboration between the Naledi3d Factory and the World Links Zimbabwe Trust, this project has produced a range of *i3dlo*'s, which were translated into Shona and Ndebele by World Links and taken to rural communities in Zimbabwe (and in particular, to smallholding farmers) to provide them with relevant farming and life skills that have a direct impact on agricultural productivity.

In-field water conservation:

The main drawback of contour ridges lies in the fact that, during seasons with lower rainfall, only crops close to the actual contour ridge get enough water whilst crops further in-field suffer. As this *i3dlo* shows, this problem can be addressed in a number of simple yet effective ways. Look at how to capture and conserve more run-off water using pot-holing, half-moon ridges and inverted bottle watering - and during the dry season, how to make your own clay pipes to irrigate your vegetable gardens.



Roof-top water harvesting:

In dry areas in particular, the efficient harvesting of water is crucial. This *i3dlo* shows how to set up a system to harvest water from roofs, a useful supplementary water source for schools, farms, homes and businesses. The simulation looks at the main components of a rooftop water harvesting system; how to plan for water yield and the impact on storage tank size; how to build a water storage tank; and finally looks at a more advanced storage system, where water is also pumped to a roof-top tank.

