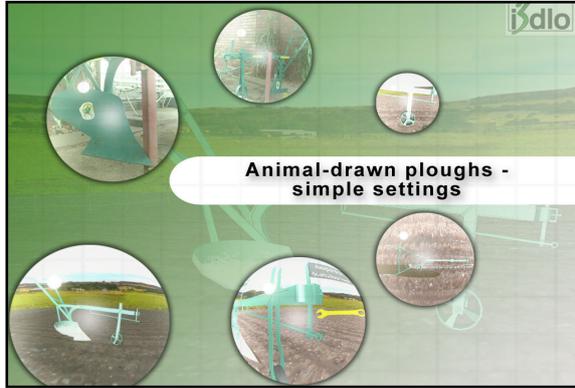# the Naledi3d Factory
Capacity building in rural communities - Farm mechanisation

Purpose: Efficient farm machinary is a key component of any productive and sustainable agricultural infrastructure and it is important that farmers understand how to set and use their equipment optimally as well as how to replace worn parts when required. These two *i3dlo's* show the farmer how the parts of an animal-drawn plough fit together and how the plough can be adjusted to achieve optimal ploughing results (including .furrow depth and furrow width - both of which can vary depending on the crop to be planted).


Animal-drawn ploughs - simple settings

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

W.K. KELLOGG FOUNDATION

WORLD LINKS

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.

Plough Parts:

In many parts of rural Africa animal-drawn implements are still the norm and there are a number of thriving African companies that produce quality implements. The use of animal drawn farm implements is actually beneficial in preventing soil compaction and also provides natural manure that can be used as fertilizer to enhance crop production. By showing farmers how key parts fit together, they are better able to understand how to replace worn parts as well as fit them onto the plough frame correctly.
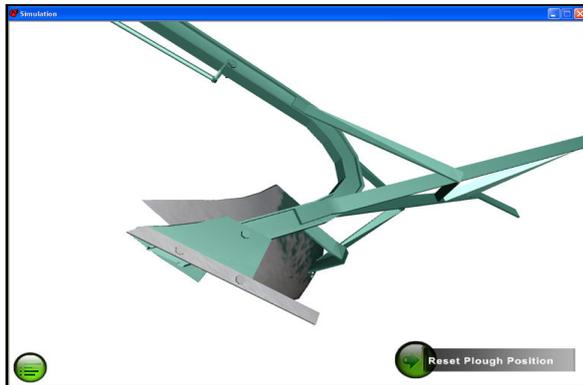
Plough Settings:

The plough settings simulation has been shown to rural farmers in Zimbabwe on a number of occasions as part of regional training workshops, where it emerged that farmers (including experienced farmers) either set their ploughs incorrectly, or don't adjust them at all. As a result, component parts wear out more rapidly, stress is placed on draught animals and sub-optimal harvests are produced. Significantly, the simulation generated a large amount of discussion where misconceptions like these were cleared up.

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