Respond maps of Nkurungu: press release

1. General information

Since 1975 the demand for water has doubled worldwide. We produce, harvest and draw water at a great pace to feed, dress and provide comfort for the rising number of people on the planet. As a result, the pressure on such a scarce but indispensable and vital resource is increasing constantly. A lack of pure drinking water is a fact of life for approximately 1.1 billion people worldwide!

In Uganda, 40% of the population do not have access to drinking water. Protos is a water NGO that aims to work on a better world for underprivileged people, especially in the provision of water. One of Protos' current programmes is situated in the southwest of Uganda, more specifically in the area of Lake George, which is inhabited by rural communities living on subsistence agriculture or fishing. Investments are made to provide drinking water, sanitation and hygiene in the district Kamwenge at the eastside of the lake. S*ource: Protos*

2. Respond activities

For Nkurungu, a pilot basin of 60 km² in the Lake George area, Protos requested that detailed mapping of houses, road infrastructure, rivers and water bodies and the analysis of drinking water accessibility should be undertaken by Respond. With this information a better understanding of access to drinking water and the location of critical locations would be possible. As a result, Respond-partner GeoID, produced two digital thematic maps of Nkurungu at a scale of 1:10,000, both based on an Ikonos image that was taken in March 2008.

The Ikonos image was orthorectified and all requested layers were mapped, which resulted in a first thematic map of the area, showing the Ikonos image as a backdrop. The accessibility of drinking water could then be studied by means of a cost analysis, taking into account steep slopes, natural barriers and roads. This analysis indicates the effort of obtaining drinking water from a water-well or river. The zone where the UN Millennium Goal (MDG) for water is reached is traced, based on this cost analysis. In this Goal, "reasonable access to drinking water" is defined as "the availability of at least 20 liter per person per day from a source to drinking water". A second thematic map was generated with this information.

A website was developed integrating a 3D interactive file including all the developed layers: http://www.3D.GeoID.be/Nkurungu.