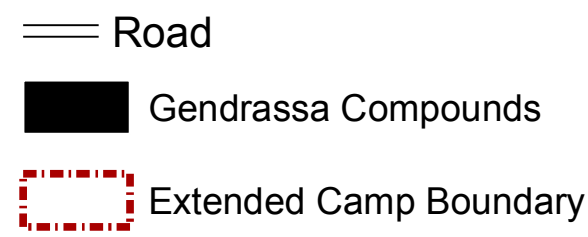
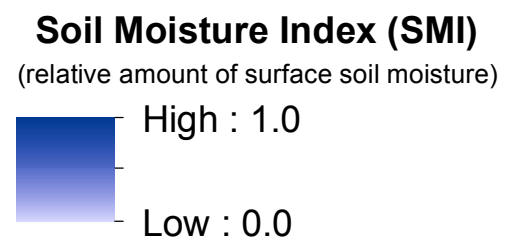
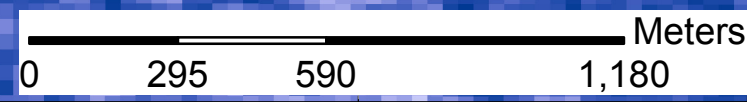


Map Description: Soil Moisture Index (SMI)

This map shows relative amounts of surface soil moisture estimated by satellite analysis of vegetation cover and surface temperature in-and-around Gendrassa camp in April 2013, with areas of high soil moisture displayed in darker shades of blue. The map was produced for the Malaria Prevention Team to help them identify potential Mosquito treatment sites. The map is meant to be used in conjunction with the separate map of WASH assets, seasonal lakes and waterways which was developed by REACH field teams using ground-derived GPS coordinates.

Please note that this map has not been verified on the ground. Its intended use is to identify areas of interest which might need to be investigated in more detail by field investigators.

The soil moisture index (SMI) was developed based on the relationship between surface soil moisture, presence of vegetation and surface temperature (Moran et al. 1994). The model assumes that surface temperature differences in areas with the same vegetation cover may be a result of changes in their soil moisture. The parameters of the model were obtained with a Landsat 8 satellite image acquired on 17 April 2013.



Data Sources:
Vector layers - REACH;
SMI - satellite image analysis.

Satellite imagery: Landsat 8
Image acquisition date: 17 April 2013
Spatial resolution: 30 m
Coordinate System: GCS WGS 1984
Contact: reach.mapping@impact-initiatives.org

This document has been produced with the financial assistance of UNHCR. The views expressed herein should not be taken, in any way, to reflect the official opinion of UNHCR.

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners mentioned on this map.

File name: SSD_Gendrassa_HE_SoilMoistureIndex_19Nov2013_A3L