



Soil health in Uganda

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Presentation for 27th Conference of the Working Group Sustainability / Soil
Protection
of the Working Community of the Danube Regions 2020

A ROCHA UGANDA

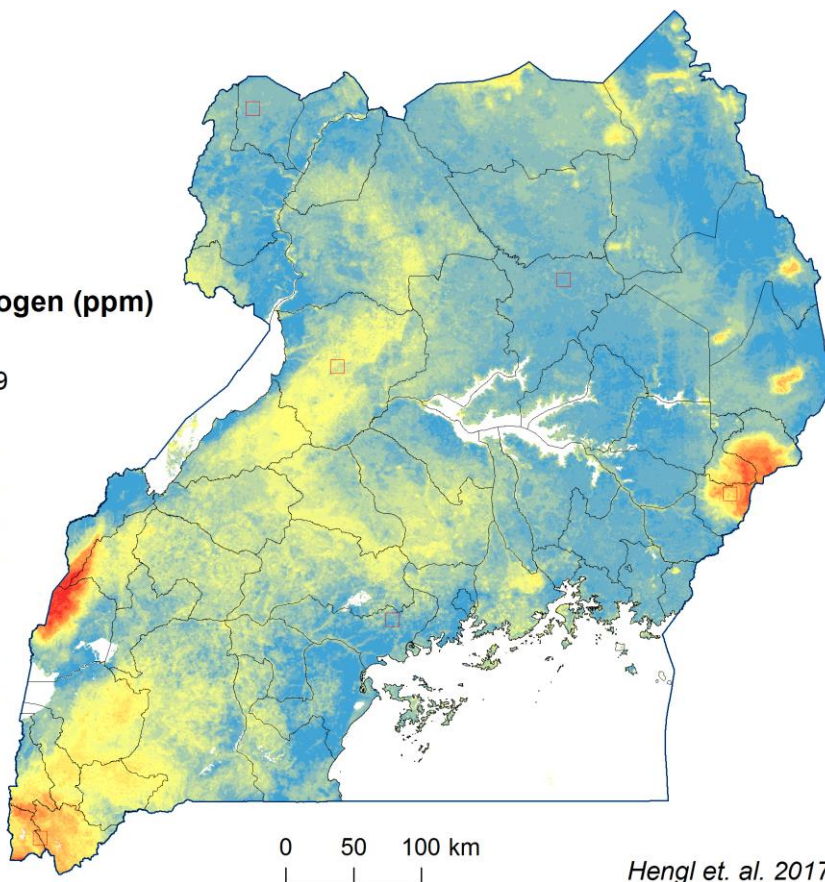
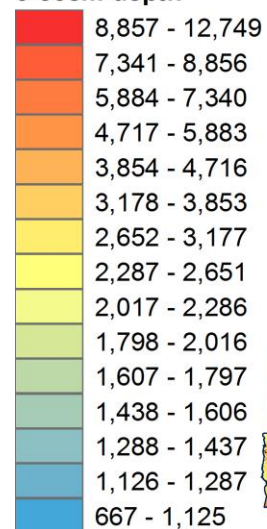
<https://www.arocha.org/en/a-rocha-uganda/>



Districts
Landscapes

total organic Nitrogen (ppm)

0-30cm depth



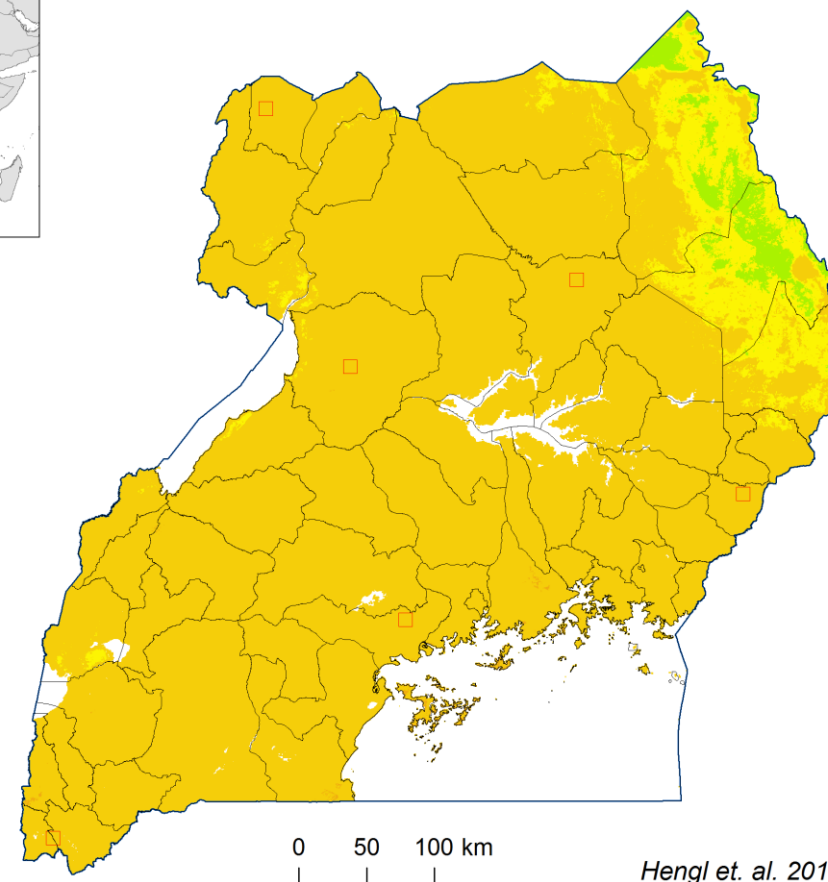
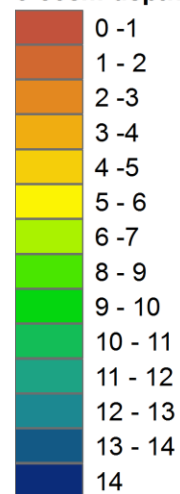
Hengl et. al. 2017



Districts
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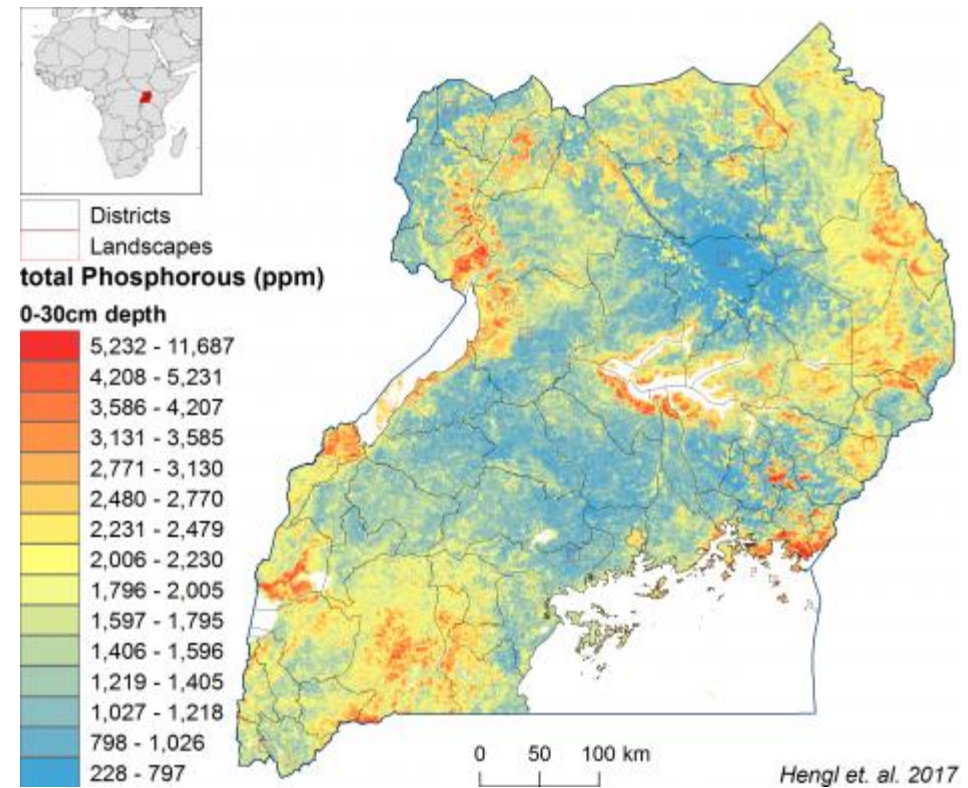
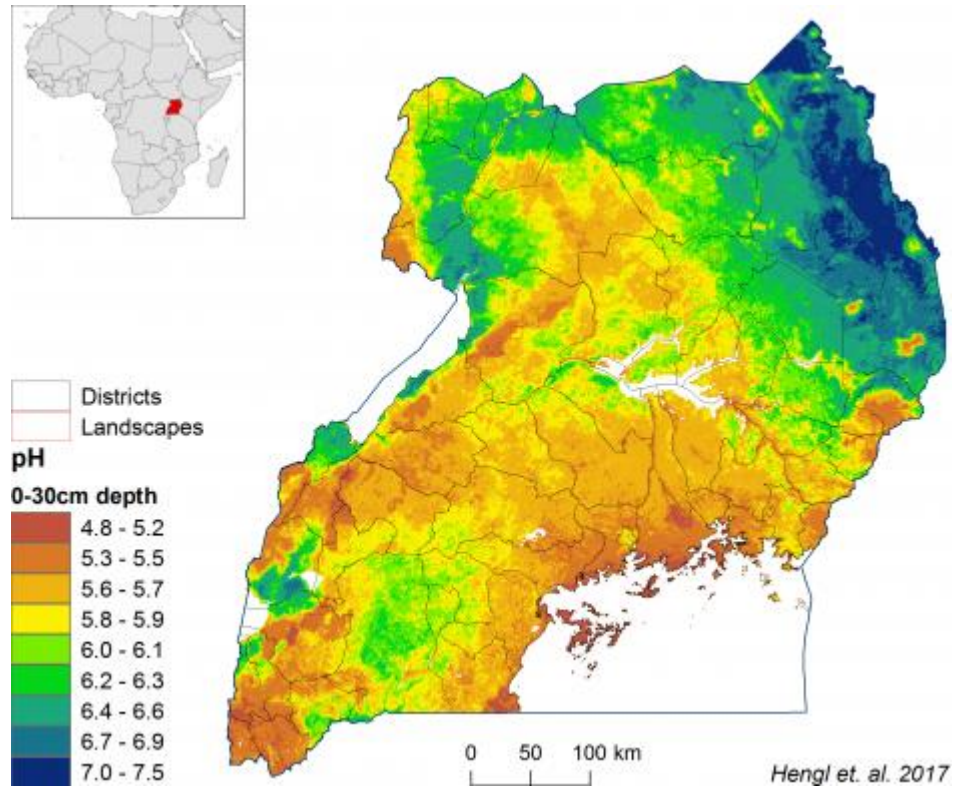
pH

0-30cm depth

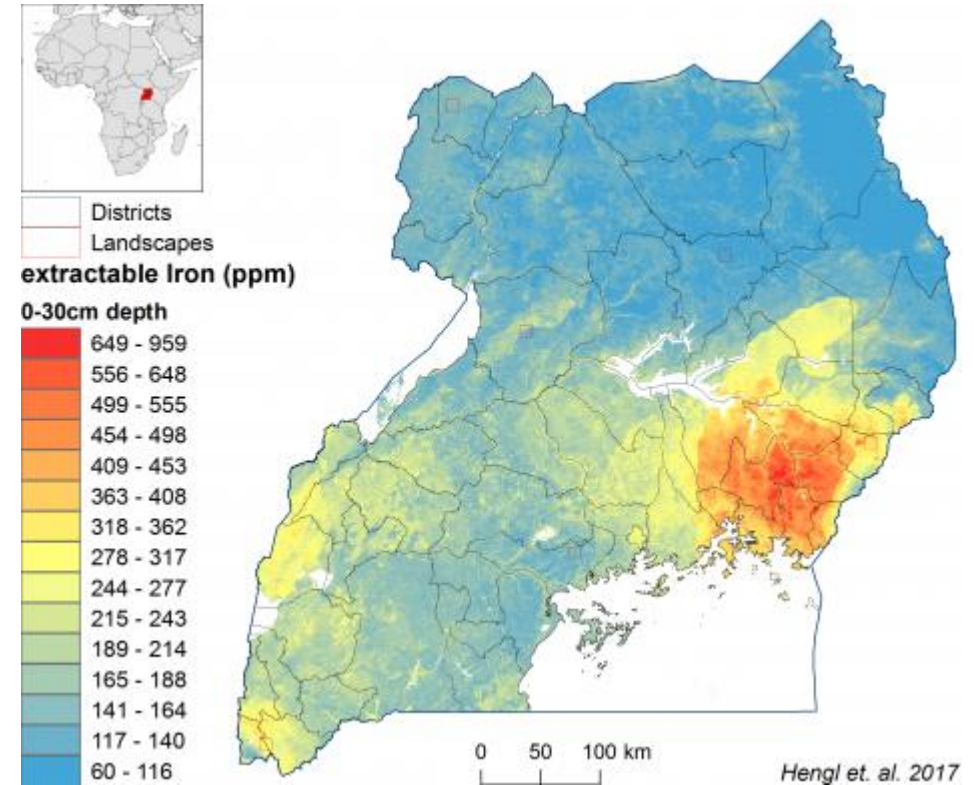
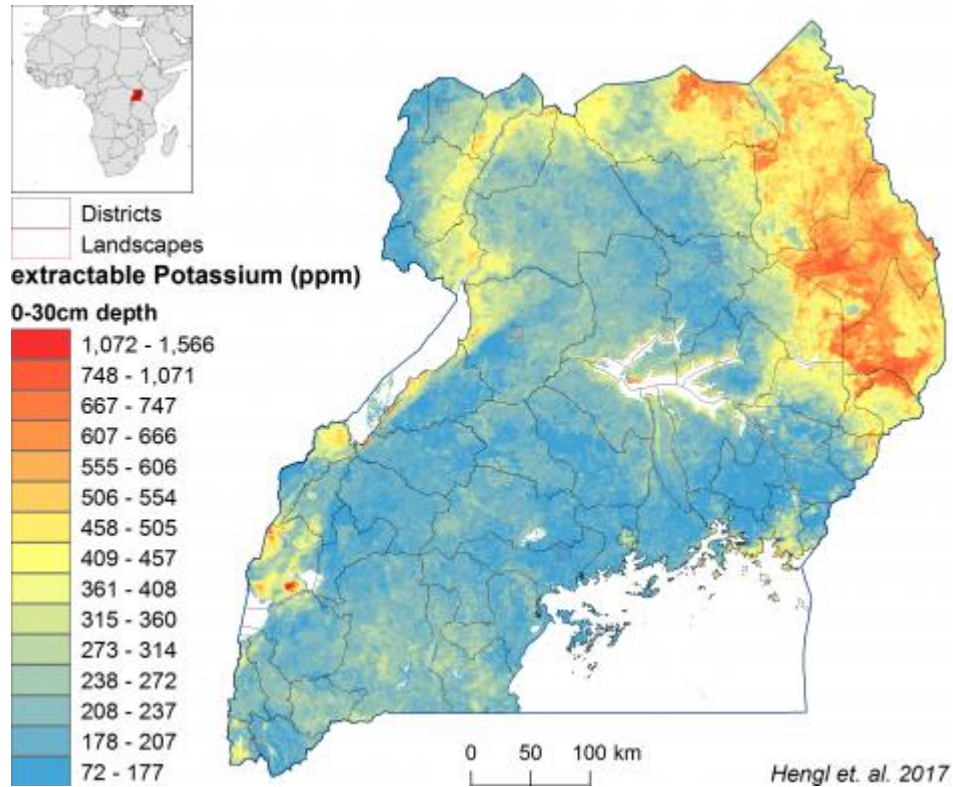


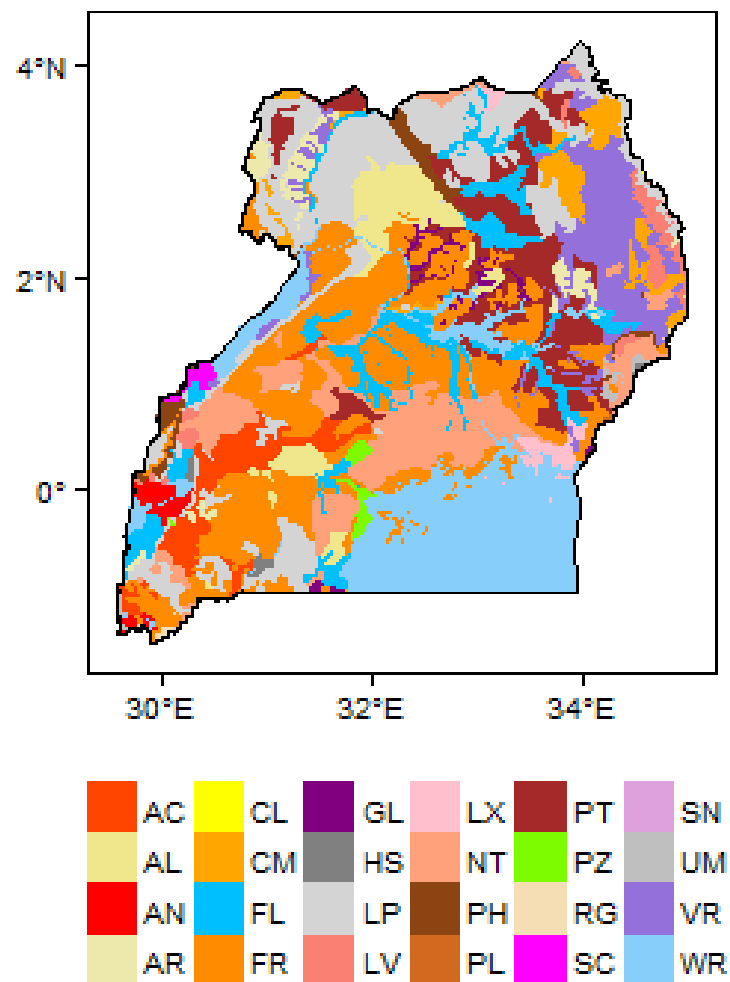
Hengl et. al. 2017

Uganda nutrient maps



Uganda nutrient maps





Soil Map of Uganda, from the European Commission Joint Research Centre: European Soil Portal.

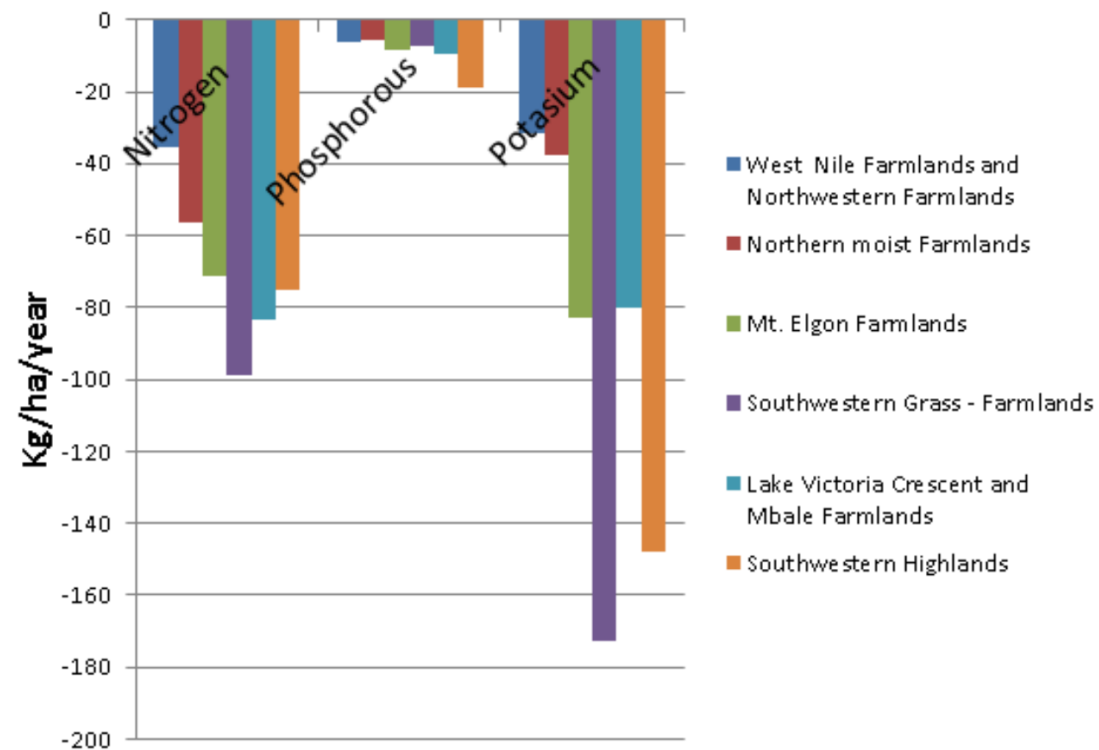


Figure: Estimated average depletion rates (1990 -2000) for Nitrogen (N), Phosphorous (P) and Potassium (K) in different agro-ecological zones of Uganda

Factors of importance



FARMER SOIL IMPROVEMENT
INNOVATIONS

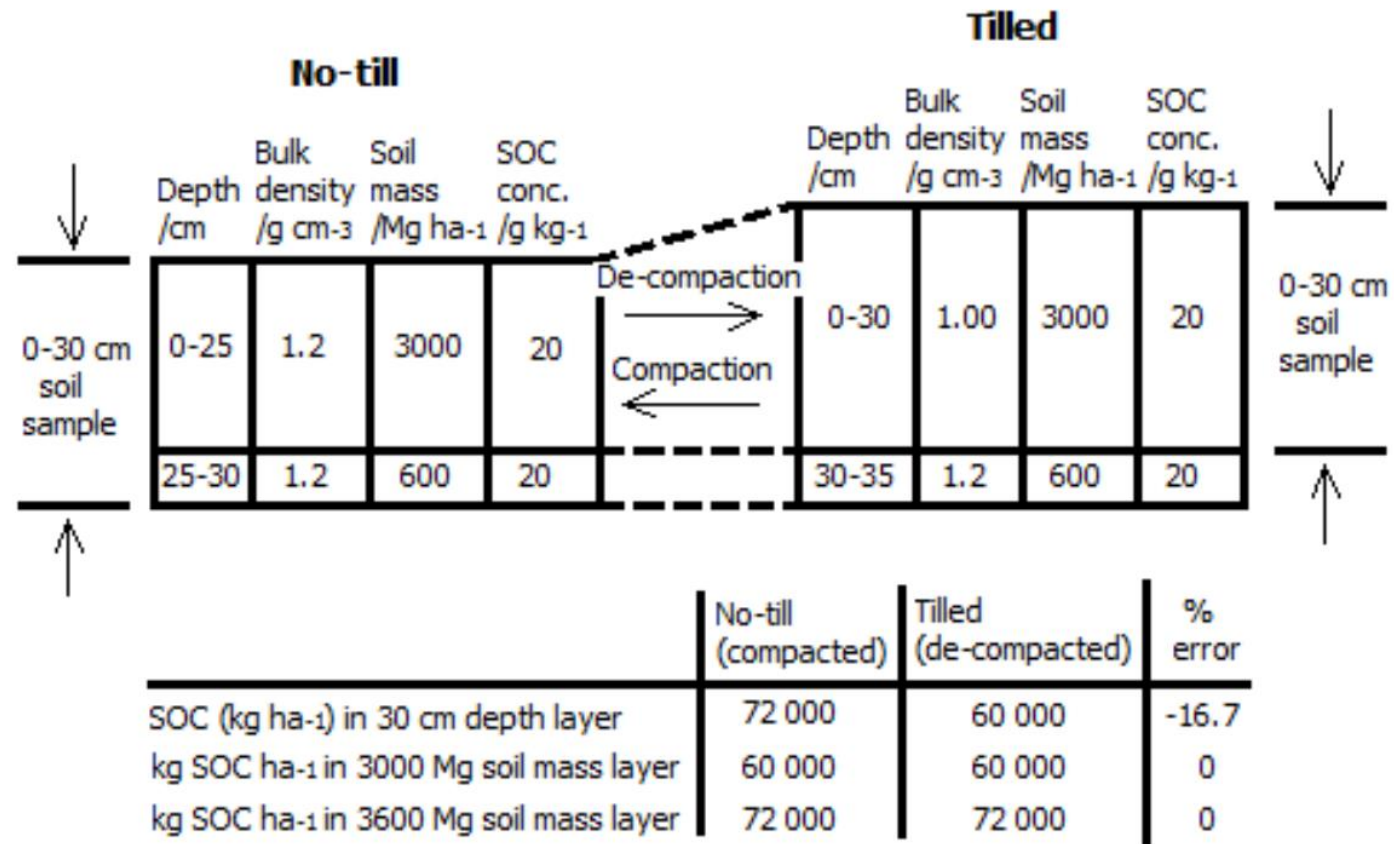


RESEARCH COLLABORATIONS



AGRO-PROCESSING FOR
VALUE ADDITION

soil bulk density differences, Wendt and Hauser (2013)





Challenges & strategies to cope

Challenges

- Total dependence on rain-fed agriculture
- Soil nutrient mining
- poor soil health, low fertility
- Land degradation increases vulnerability of farming systems
- predisposes rural households to food insecurity and poverty

coping strategies and resilience

- ✓ Climate smart agriculture
- ✓ Farmer innovations
- ✓ Develop a national carbon accounting and measurement, reporting and verification (MRV) system
- ✓ collection, aggregation, processing and analysis of monitoring data
- ✓ studies to increase scientific knowledge on vulnerability and GHG emission of the agricultural sector.

Finances



Agri-machinery
sales



Development
cooperation



Research
projects



Trainings &
demonstrations



Joint ventures



Consultancies



Donations

References

- Björsell, Pia. "Soil carbon in small-holder plantain farms, Uganda." (2014)
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- <http://vitalsigns.org/soil-nutrient-maps>
- http://earthwise.bgs.ac.uk/index.php/Hydrogeology_of_Uganda
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