Michéli Erika

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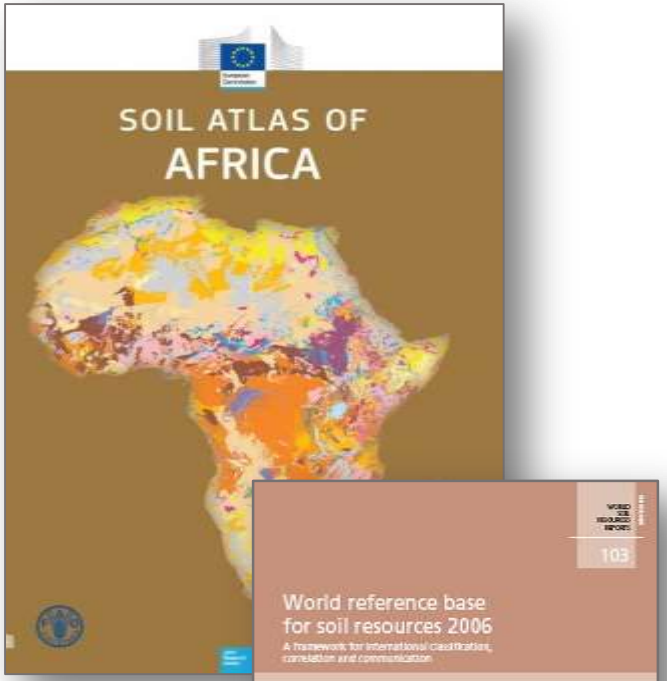
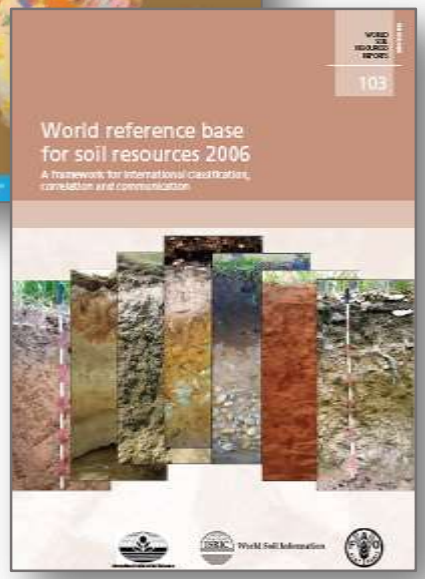
Most important Africa connections





Capacity building:

PhD Programs / students:
Kenya, Etiopia

MSc Programs/students:
Kenya, Etiopia, Rwanda, Uganda, Sudan, Nigeria, Ghana, Somalia…

Ongoing Projects

HORIZON 2020
THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

PRO*IntensAfrica*

Carbon content / farming activities used by smallholder farmers of Mt. Kenya region

esa
European Space Agency

TIGER AFRICA

Application of Remote Sensing Data to Improve the Water Resource Management of Rwanda

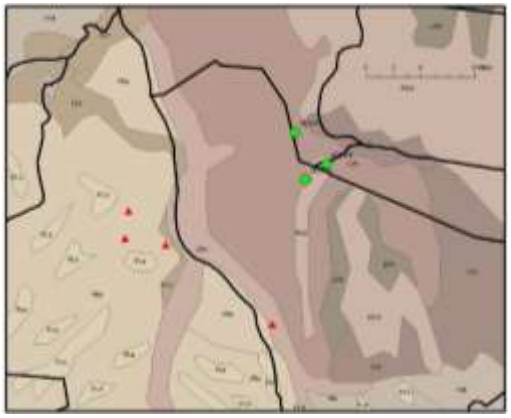
UNIVERSITY OF RWANDA

SZENT ISTVÁN UNIVERSITY
FACULTY OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES, GÖDÖLLŐ

Challenge:

Soil information not existing, not detailed enough, outdated or not accessible
(often publication oriented data collection): !

Needed Research:
Development of modern methods for:
soil observation / mapping / interpretation
(Rationalized sampling design,
application of Remote sensing, digital mapping, pedometrics)
Developing information technics to Deliver (extension)

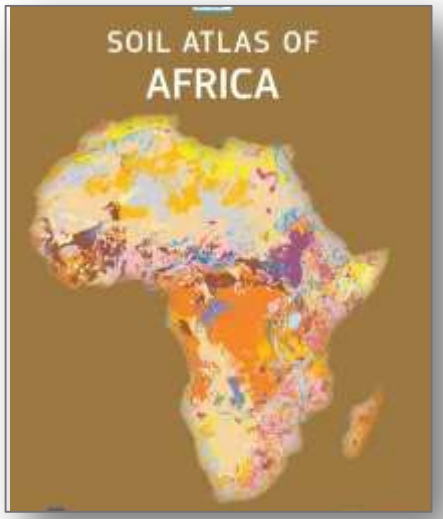


Challenge:

Most soils highly weathered → mineral part has low contribution to CEC (hence low nutrient and water holding capacity)
The mineral composition can not be changed.
Organic carbon is the possible way to increase CEC

Needed Research:

Development of methods to increase the OC content of soils – including waste and residue management.



Challenge:

WATER

Insufficient amount and/or unfavorable distribution

Needed Research:

Development of modern water harvesting and storage methods for different scale
Development of effective irrigation methods adapted to soil types