

PBL-ISRIC Lunch seminar: nutrients in African soils

Date: May 23th 2017

Time: 12.00-14.00

Location: Ministry of Foreign Affairs, The Hague

(Micro) nutrient availability for a more intensified agriculture. Identifying key risks in Africa.

Abstract/contents: Hunger for nutrients

Malnourishment is widespread across Africa and inadequate intake of nutrients is often more common than hunger itself. Zinc intake deficiency, for instance, is a prime cause of child mortality. Part of the problem originates in a low availability of such nutrients in soils, caused by natural and human induced processes of degradation, equally limiting crop yields.

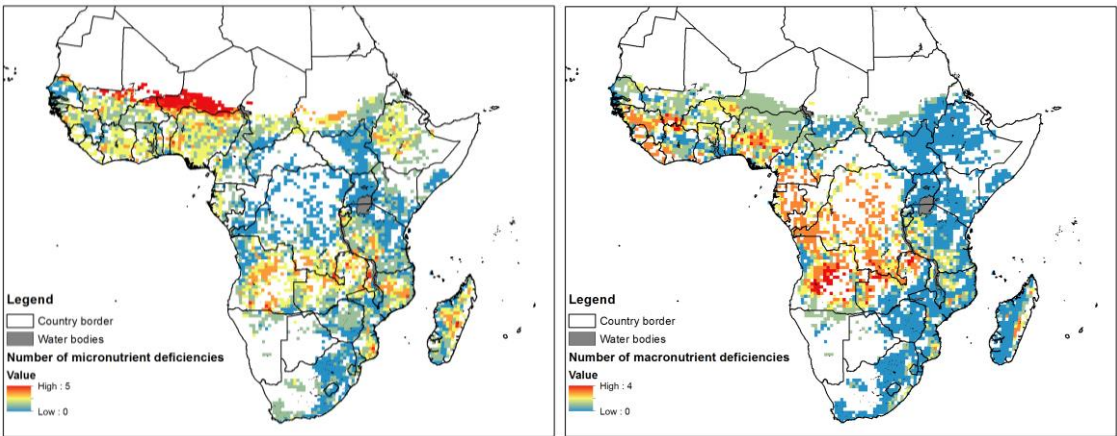


Figure: The maps display a count of the number of micro- and macronutrients that fall in the lower 25% of the distribution of soil nutrient stocks, highlighting areas where the likelihood of deficiencies are greatest. Calculations are shown for those areas where PBL-IMAGE scenarios forecast agricultural production in 2050.

Fertilization, with a broad array of nutrients included, could both intensify agricultural production and enhance the dietary intake of essential nutrients across the continent. Yet, such a strategy necessitates nutrient supply from external sources and links agricultural intensification and human health in Africa to the vagaries of global commodity markets. For zinc and manganese, for instance, a stable and ample supply is by no means certain.

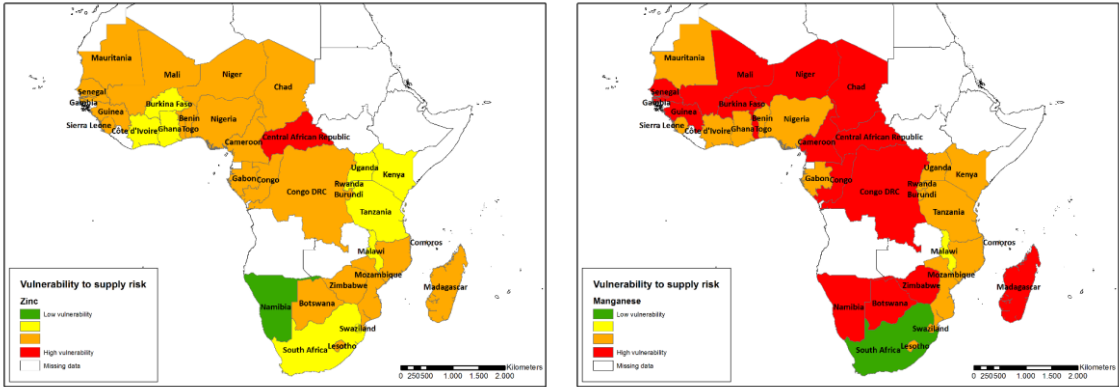


Figure: Vulnerability of African countries to supply risks of Zinc (left) and Manganese (right).

This joint PBL/ISRIC seminar presents novel data into the severity of the problem and illustrates how and why it differs across African countries.