Thirze Hermans

Modelling grain Surplus/Deficit in Cameroon for 2030

Central Africa has the lowest food production per person, slow yield per hectare growth and the fastest growing population in the world. This study aims to develop a model, which predicts the grain surplus or deficit in Cameroon for 2015-2030. Grains are a main part of the diet in Cameroon and the modelled grains in this project are sorghum, millet, rice and maize. In the case of a grain shortage, the yield growth needed to meet consumption in 2030 was calculated. Two farmers and an agricultural officer were interviewed to get local knowledge and opinions.

The model results show that a shortage for maize and rice is expected in 2030 but not for millet and sorghum. Yield growth needed for rice is high whereas the maize yield growth needed is small. Main identified problems for further production growth are climate change, population growth, postharvest losses, which is the loss of crop after harvesting, and the access to resources such as fertilizers, mechanization, and preservation technology.

Keywords: Physical Geography and Ecosystem analysis, food security, Cameroon, modelling, grains, sorghum, millet, maize, rice.

Advisors: **Jonas Ardö, Genesis Tambang Yengoh**

Master degree project 30 credits in Physical Geography and Ecosystem Analysis, 2016.
Department of Physical Geography and Ecosystems Science, Lund University. Student thesis series INES nr 393.