

SOILS AND FOOD SECURITY

Nortcliff, Stephen

Soil Research Centre, Department of Geography and Environmental Science, School of Human and Environmental Science, University of Reading, Reading, RG6 6DW, United Kingdom.

Abstract.

This paper addresses the complex issue of food security with a particular focus on soil. The increasing population and changing dietary habits (a shift to a more meat based diet) have placed increasing demands on the small proportion of global soils suitable for food production. The need to protect this high quality land is highlighted. The functions of soil are highlighted and a number of threats to the soil and hence its ability to produce food are identified and discussed briefly. Whilst all these threats are important of particular significance is the loss of soil through sealing linked to urbanisation and associated infrastructure developments. A threat impacting on food security strongly in Africa is nutrient mining where insufficient nutrients are returned to the soil after crop production. The impacts of global change on food security and the potential impacts of global markets for food and land are also briefly discussed.

Received: 2012/02/25

Accepted: 2012/03/05