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## Baseline Mapping and Socio-Economic Analysis of Urban and Peri-Urban Agriculture (UPA) in Khartoum City, Sudan

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### Abstract

Urban and peri-urban agriculture (UPA) is the growing of plants and raising of animals for food, feed and other uses, and related processing and marketing activities, within and around cities and towns. UPA has received increased attention in the past few years from development organisations and national authorities in developing countries. It plays an important role in poverty alleviation, food security and waste management. In spite of this, there is very little information on UPA in Khartoum, the capital city of the Sudan. Thus, one of the main objectives of the UPA project, sponsored by the Alexander von Humboldt foundation, is to produce a baseline mapping and socio-economic analysis of agricultural activities in Khartoum city. Agricultural production in Khartoum is categorised into two farming systems on the basis of the location, and used as units of investigation: urban and peri-urban. Satellite images in combination with geographic positioning system (GPS) were successfully used to determine the actual extend of inner and outer city areas used for agricultural purposes, and the spatial distribution of such areas. The information collected include household demographic data, access to land, water resources for cultivation, assets and livestock, manure sources, cropping calendar, output data, marketing access and constraints to production. It is expected that the study will present a clear overview of UPA in Khartoum by documenting its scale and extent, its role in food security, poverty alleviation, public health and sustainable resource management. Furthermore, during the later phases of the project nutrient flows will be quantified for a number of urban and peri-urban farms. The knowledge obtained will allow for an integration of bio-physical and socio-economic data in modelling urban and peri-urban biomass and nutrient flows, which is a prerequisite for resource-efficient agricultural production.

**Keywords:** Baseline mapping, Khartoum city , socio-economic analysis, urban and peri-urban agriculture