Abstract

This soil survey was commissioned by the East Jabel Aulia Development Co Ltd and comprises a foundation element for the development of the Sondos Agricultural Project. It was considered a critical requirement for the agricultural development of Sondos, as the soils of this region can be problematic in terms of salts and alkalinity. Correct management and or amelioration of such soils would be an important factor in the project’s successful execution - in terms of quality agricultural outputs.

The Sondos Project covers an area of some 80,000 feddan and is bound on its western side by the main Khartoum-Kosti road (just in from the White Nile), and on the Eastern side by the Gezira Irrigation Scheme. The scheme has been laid out in terms of canal networks and associated infrastructure, and much of the land has been divided into allotments.

The overall objective of the study was to delineate and demarcate the soils in terms of their salt content, quantify these salts and to record pedological characteristics – especially those directly affecting salt accumulation, salt based degradation and aspects that have agricultural significance.

The soil study is composed of two parts:
- A **reconnaissance survey** covering the whole area of the project (80,000 feddan). This survey was also intended to compare results with previous studies, giving an up to date evaluation. The survey was to stress salinity and sodicity problems.
- A **semi-detailed survey** of the proposed two experimental plots (2,000 feddan), giving a more detailed investigation and evaluation of the soil conditions. This would be valuable input to the establishment of the pilot irrigated plots.