

# Qualitative evaluation of soil and the importance of land use cadastre based on the example of brown soils of Samtskhe-Javakheti Region

Salome Pkhaladze

E-mail: [salome.pkhaladze567@ens.tsu.edu.ge](mailto:salome.pkhaladze567@ens.tsu.edu.ge)

*Department of Geography, Faculty of Exact and Natural Sciences, Iv. Javakishvili Tbilisi State University #1, I. Chavchavadze Avenue, Tbilisi 0179, Georgia*

The theme focuses on the importance of land use cadasters for qualitative assessment of the soil, and for the research we have selected the brown soils of Samtskhe-Javakheti region as an area of active, traditional farming. It was found out that due to the natural and anthropogenic factors of Samtskhe-Javakheti, soils have a decrease in fertility, where water erosion and irritation of poisonous chemicals play a leading role.

The land resources are limited for agriculture, due to the specific fertility of soil, for the fair distribution of agricultural lands and for the economic evaluation we need to know the quality and price of each plot of the land plot and the soil of different varieties of land.

Land Use Cadastre is the basis of land management, it is a single, open information system. Quality Assessment of Soil The same bulletin is one of the components of the land cadastre, which is an agronomic inventory of soil fertility.

The topic of discussion is the normative acts of Georgia on land management and soil protection. We have reviewed the land reforms that have negatively impacted the country's agriculture development, as there were incorrect and unfair fragmentation of land.

This topic is relevant because the Association Agreement with the EU obliges member states to develop the spatial data infrastructure. Georgia is obliged to create cadastral data, all of its elements (one of the ground quality assessment), make it public and available.

In the paper we will review a few ways to soil fertility and its significance in restoration of soil protection and fertility.

In several villages of Meskheti, we conducted a study of brown soils within the given topic. The data obtained from laboratory analysis of soil samples was compared to data from R. Petriashvili's "Meskheti Soils". We have concluded that the fertility of the soil has been reduced in 40-year yield due to improper agricultural activities in some of the villages.

Here we have reviewed the maps of the Meskheti Soil, which was created jointly by the KfW Banks Group (Germany) and the Government of Georgia in 2000-2007. The result is quite worrying, according to the scoop scores, the majority of soils in Meskheti are poor or scarce.

The topics discussed clearly illustrate the importance of assessment of soil cadastre and quality. Without appraisal of land resources, it is impossible to function effectively in agriculture, conduct agro activities - prediction, soil protection and restoration of ecological balance in the environment.

Keywords: Soil fertility, soil prosperity, land resources, cadastre.