



National Soil Information System in Turkey

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Land consolidation (LC) represents complexity if management, legal, economic and technical procedures realized in order to adjust the land structure according to actual human preferences and needs. It includes changes in ownership rights to land and other real estate property, exchange of parcels among owners, changes in parcel borders, parcel size and shape, joining and dividing of parcels, changes in land use, construction works as roads, bridges, water changes etc.. Since the subject of LC is agricultural lands, the quality of consolidation depends on the quality of soil data. General Directorate of Agrarian Reform (GDAR) is the responsible institution on land consolidation whole of Turkey. Under GDAR, National Soil Information System (NSIS) has been build up with base soil data in relevant scale (1:5000). NSIS contain detailed information on soil chemical and physical properties, current land use, parent material, land capability class, Storie Index Values. SI were used on land consolidation, land use planning and farm development services. LCC was used for land distribution, rental land; define of village settlement, consolidation, expropriation, reconstruction, reclamation, non-agricultural usage. LCC were also specified to subclasses in four different limited factors as i) flow and erosion risk ii) requirement of drainage and soil moisture iii) Limits of soil tillage and root (shallow soils, low water retention capacity, stony, salty .etc) iv) climatic limits. In this study, digital soil survey and mapping project located in Yumurtalik, Adana is presented as an example of NSIS data structure. The project cover an area of 45709 ha that include crop lands as an area of 28528 ha and other land use (urban, roads..etc) as an area of 17181 ha. Soil profiles were described in 45 different points and totally 1279 soil samples were collected in field study and the check bore hole were made in 3170 points.