

Presence of non-forest greenery in Ada municipality after land consolidation process

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Abstract

Land consolidation process has been conducted in Ada municipality with the main objective of regulation of agricultural parcels and establishing irrigation systems. In order to form new parcels suitable for application of agricultural mechanization and irrigation equipment in the process of land consolidation clear cut of the terrain has been performed as well as clearing of ranches and areas under non-forest greenery. Generally, function of non-forest greenery within areas which are intensively cultivated has many important ecological functions e.g. protection of land from drying and from wind erosion, preserving biodiversity and landscape features. Nearly thirty years after conducted land consolidation on some areas within the Ada municipality attempts were made for establishing new parcels with non-forest greenery. Presence of the non forest greenery was registered using available satellite images from the Google Earth application. The registered non-forest greenery has been classified into point, lined and area elements. According to character of the greenery it has been estimated that the coefficient of ecological stability is very low. With the support of the GIS it has been concluded that the existing non-forest greenery is weakly linked and that in the center of the municipality, where irrigation systems are present, there are areas where nearest greenery is 3 km far away. The obtained data were compared to the projected situation where network of wind shelterbelts is constructed. In the case of realization of the projected situation the area would be better covered with non-forest greenery, with its better allocation within the area and better linkages.

Key words: land consolidation, non-forest greenery, shelterbelts, Geographic Information System

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