Master`s thesis contains 112 pages, 22 fig., 29 tables, 2 appendixes. It was used 33 sources.

The object of study is a method to maximize stability to areas of displacement under load.

The purpose is to increase the stability of the studied areas to shift fixed by material costs, getting optimal management plan as placing piles on prisms.

The research method is Bellman dynamic programming.

The main causes of landslides are high humidity of soils, mass deforestation and building on slopes. Plot matrix model and method calculation of stress and optimal location of piles was constructed. Due to the large number of dependencies the software for the implementation of the method of dynamic programming for matrix heights cadastral areas with the aim of increasing resistance to the slope landslides was developed. The ASP.NET MVC framework was chosen to implement the project.

The results of the thesis were published at international conferences for future modifications and improvements. We recommend using a software implementation of a forest mining, agricultural and construction enterprises.

BELLMAN DYNAMIC PROGRAMMING, MULTISTAGE PROCESS, LANDSLIDES, PHYSICAL AND MECHANICAL PROPERTIES OF SOILS, BUILDINGS SLOPES