



EU.WATER

TRANSNATIONAL INTEGRATED MANAGEMENT OF WATER

RESOURCES IN AGRICULTURE FOR EUROPEAN WATER

EMERGENCY CONTROL

WP3: Knowledge capitalization and sensitive area maps

Abstract of the regional report

Botna river basin – Ialoveni rayon, Moldova

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Location, general description and topography of the Ialoveni rayon

Ialoveni Rayon is an administrative territorial unit of the Republic of Moldova with residence city Ialoveni. The rayon has 33 village-types of settlements. The area is 742.5 km², population is 98000 people.

Rayon is located in western border of Chisinau municipality. It's territory is elongated from north-west to south-east, following Botna river bank.

Relief has mostly flat character. Northern part is covers southern-eastern part of Codri elevation with highest heights of more then 250 meters. South is situated in the limits of Lower Bic flatland where heights are between 50-60 meters to 177 meters (Baltati mnt.)

Main shape figures are: Botna, Isnovat rivers valleys, wide and stretched from north-west to south-east watersheds. River's high water beds can reach the width of 4 kilometers. Slopes are represented by river terraces till 8-10°. In the boundaries of the rayon there are a lot of ravines and landslides. In the agricultural areas there are a lot of washed off soils.

Soils are quite diverse. The north of the region in the branches of Codri highland some areas are covered by brown luvic typical soils. River valleys are composed of deluvial and alluvial typical soils. On the watersheds leached and unhumic chernozems are dominating.

In the forests of the region, the rocky oak is dominating, in the river valleys, there are inundate meadows, but watersheds are irregularly covered by ravines.

One of the natural place of interest is a very vivid natural reserve Malcoci – Condrita. It is a preferred resting place for citizens.

Hydro meteorological conditions.

By climatic conditions, Ialoveni rayon is referred to the central agroclimatic rayon, which is characterized by lesser humidity degree in comparison with northern agroclimatic rayon, longer warm period (182-193 days), and longer period of snow preservation in the elevated areas. This conditions lead to specialization of the agriculture – cultivation of grain crops, gardening and wine-growing.

Unfortunately, There is only one meteorological station in Ialoveni rayon, so the temperature and rainfall information were created using taking into account all available meteorological stations in Moldova.

Rainfall variety is very small for the given rayon. It varies from 460 in the north-west to 420 in the south-east

Land Uses

Total area of the Ialoveni Rayon's land stock is 74,3 thousands ha, including: 1.5 thousands ha of water tables, 8 thousands ha of suburban areas, 7.5 thousands ha of open areas (pastures), 0.1 thousands ha of wetlands, 8.7 thousands ha of forests and 48.5 thousands ha of cultivation areas

Soil properties and soil degradation

The soil is mainly composed of chernozem - about 73%, forestry soil and soil of the river valleys approximately 11% each, colluvial soil – about 4%. During transition to the market economy, following the reforms, the breakdown of land stock between the land owners has changed substantially. Per types of ownership, the land stock divides as follows: state property – 22,8%, public ownership of territorial administrative units – 21,9% and private ownership – 55,3%.

The reproductive capacity of the soil fertility was seriously affected by the large agricultural exploitation based on intensive technologies. The economic and energy crisis, way of implementing reforms in agriculture along with creation of many owners deprived of necessary machinery and specialized knowledge, old technologies and the drastic reduction of fertilizers (organic and mineral), wear and tear of irrigation systems, have all led to intensified process of soil degradation. The soil degradation is also conditioned by erosions, ravines, landslides, and under floodings.