

The aim of the study is to improving the concept of geo-ecological monitoring of land use in regions and justifying the directions of its development and application. The article addresses the following tasks:

- justification of theoretical and methodological approaches to determining geo-ecological monitoring of land use in regions;
- identification of structural components of geo-ecological monitoring;
- assessment of the level of development and application of geo-ecological monitoring of land use in regions.

Presentation of the main material. Taking into account regulatory, legal, theoretical and methodological support, the following approaches to determining geo-ecological monitoring of land use in regions are justified:

- **functional:** characterised by directions and determined by the specifics of geo-ecological monitoring use;
- **structural:** the structural components of geo-ecological monitoring of land use in regions are identified;
- **factorial:** the elements for determining geo-ecological monitoring are characterised;
- **comprehensive:** monitoring is justified as a system of interacting elements that allows the formation of a basis for decision-making.

The structural elements of geo-ecological monitoring of land use in regions include:

- formation and application of information support;
- creation of spatial support;
- formation of a quantitative basis for assessing the factors of formation and application of geo-ecological monitoring of land use in regions;
- identification and assessment of the factors of formation and application of geo-ecological monitoring;
- application of mathematical tools;
- use of geographic information systems for geo-ecological monitoring of land use in regions;
- making informed decisions.

As a result of the assessment, an indicator of the level of formation and application of geo-ecological monitoring of land use in regions was determined (Fig. 1).

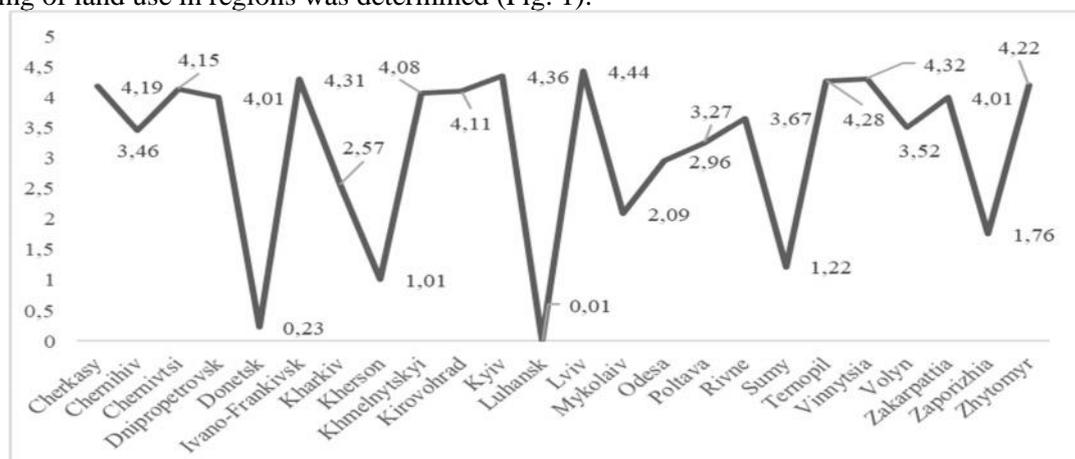


Figure 1 – Results of assessing the level of development and application of geo-ecological monitoring of land use in regions, relative units.

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To characterise the assessment results, a scale was constructed to measure the level of development and application of geologic monitoring of land use in the regions (Table 1).

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10.08.2025