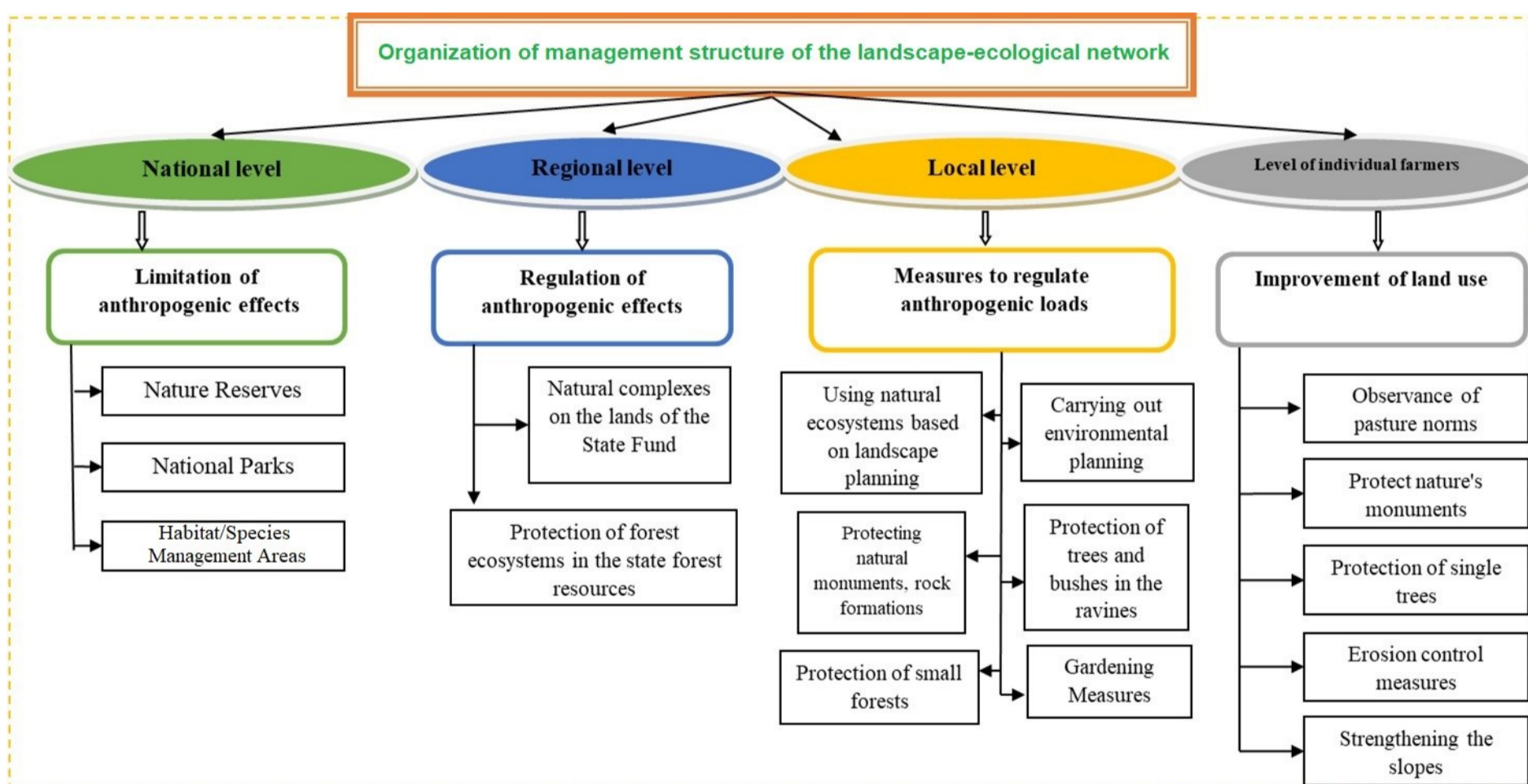


Landscape-ecological network- is a system of measures aimed at preserving the landscape and biodiversity in a given territory. There is a need for the creation and modeling of landscape-ecological network based on geographical location data for the preservation of the ecological balance of each country, region or the world as a whole. In modern conditions, the dramatic increase in anthropogenic impacts has resulted in an increase in the value of natural resources and ecosystems as well. The rapid progress of this situation in the modern world requires a well-regulated nature management procedure. At present, environmental management in Azerbaijan is at the local level. From this point of view, the study of the elements of nature as a whole system is very important in ensuring sustainability.



Different structural and administrative elements of the environmental network can vary depending on regional geographical features. Due to its role in maintaining environmental stability in Azerbaijan and to ensure its sustainability, specific regimes for the use of certain areas have been identified. We consider it expedient to divide the structural-managerial elements of the landscape-ecological network in Azerbaijan into four levels. These are the national, regional, local and individual farmers' levels.

The management of protected areas is organized at the national level. The main goal of the activity is to limit and regulate the anthropogenic impact in these areas. At the regional level, it is expected to regulate anthropogenic impacts on natural complexes and forest ecosystems which are not belonging to protected areas. At the local level, the management of the ecological frame is organized to regulate anthropogenic loads. The last part of the management structure is at the level of individual farmers. This level includes regulation of grazing norms in the context of improved land use, erosion control measures, and strengthening of slopes.

Depending on the time and place, the elements of the environmental network may also change. Each of these elements has a role in the efficient functionality of the ecological framework. Failure of one element can affect other parts of the system as well. To maintain inter-connection between systems, river systems, natural monuments that play the role of ecological corridors, such as large forest strips, should be considered in the organization of the ecological frame. Taking into account the necessity of links between the elements of the structure, it is important to integrate such natural objects into the composition of the ecological network. All protected areas are regarded as the landscape-ecological core of the network. Ecological corridors have been identified along the river beds flowing through the territory of Azerbaijan. Other elements included in the map are wetlands, unprotected natural forest ecosystems, and various natural monuments (caves, mud volcanoes, rocks, sea and river terraces,

Ecological network of Azerbaijan

1:600,000

0 10 20 40 60 80 Kilometers

Legend

- Protected areas
- Ecological corridors
- Elements of the ecological network
 - Lake-wetland complexes
 - Natural forest ecosystems
 - Gullies and gorges
 - Protective valuable forests and forestation
 - Lakes
 - Rivers
 - Irrigation channels and collectors
- Natural monuments
 - Caves
 - Mud volcanoes
 - Rocks
 - Sea and river terraces
 - Tree and forest residues
 - Unique geological intersections
 - Summer and winter pastures
 - Planting and Garden Areas
 - District centers

