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Inventorying terraced landscapes in Slovenia: Territorial levels and survey methods

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In the past, terraced landscapes in Slovenia were surveyed at different territorial levels and using different survey methods. A simple plot survey determines the basic features of the terraced system, including the area of the terrace platform, the plan (projection) area of the terraced slopes, and the area of the paths. At the level of the cadastral unit or settlement, the inventory shows not only terraced areas with the extent of the area (in hectares), but also the individual terraces that form the terraced landscape. In most cases, inventorying the terraces in the cadastral unit or settlement is manageable thorough GIS technologies, orthophotos, and fieldwork. However, parts of the areas that are agriculturally not well developed, where the terrain is more dynamic and the terraces have been abandoned, can only be recognized using contemporary tools such as LIDAR. Data at the level of the entire municipality can be gathered using the same methods as at the level of the cadastral unit and settlement, but this requires many years of research. Time-consuming inventorying also does not guarantee the accuracy of the data collected. At the national territorial level, none of the methods described are effective any longer. Inventory methods used to date to locate terraced areas in Slovenia resulted in approximations with significant differences between onsite conditions and the representation of results. For the scientific study of terraced areas, precise and systematic data are essential. Today's inventory research is developing toward improving the survey accuracy of current methods for defining terraced areas and establishing new methodological approaches to improve measurements of terraced systems across the approximately 20,000 km² of Slovenian territory.