

je namreč pod velikim kapitalnim pritiskom. Slovenski in tuji vlagatelji si prizadevajo, da bi dobili dovoljenje za izgradnjo otokov v Viližanskem zalivu in velikega turističnega naselja na obalnem območju. Če bi načrt uresničili, bi Izola popolnoma spremenila podobo in postala največje slovensko obmorsko turistično središče.

KLJUČNE BESEDE

obalne preobrazbe, vodna zemljišča, razvoj vodnih zemljišč, pristanišče, mesto

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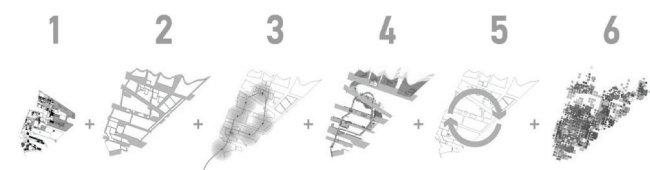
Slika 4: Območje severnega dela pristanišča (Nordhavn) v Københavnu, Danska (BY&HAVN).

Figure 4: The north area of the port (Nordhavn) in Copenhagen, Denmark (BY&HAVN).

natural and cultural heritage sites and industrial activity, some of which remains in operation and some partially abandoned—is under great capital pressure. Slovenian and foreign investors are seeking permission to build three islands in the Viližan Bay and a large tourist resort along the coast. If this plan were implemented, Izola would be entirely different; it would become the largest Slovenian seaside resort.

KEY WORDS

waterfront redevelopment, bluefields, bluefield development, port, city



Slika 3: Šest strateških principov za razvoj severnega dela pristanišča v Københavnu na Danskem: otoki in kanali, identiteta in zgodovinski razvoj, mesto 'petih minut', 'plavo' in 'zeleno' mesto, nizkoogljično mesto in pametna mreža (BY&HAVN).

Figure 3: Six strategic principles for the development of the north area of the port in Copenhagen, Denmark: islands, canals, identity and historic development, the 'five-minute city', 'blue' and 'green' city, low carbon city and intelligent grid (BY&HAVN).



Slika 5: Vizija mesta prihodnosti za 40.000 ljudi in 40.000 delovnih mest v severnem delu pristanišča v Københavnu, Danska (BY&HAVN).

Figure 5: The vision of the city in the future for 40,000 inhabitants providing jobs in the north area of the port in Copenhagen, Denmark (BY&HAVN).

Lučka Ažman Momirski

SREDOZEMSKA TERASIRANA POKRAJINA: SPREMEMBE V RABI TAL

POVZETEK

Doslej so bile objavljene številne razprave, ki obravnavajo spreminjanje rabe tal v zadnjih 200 letih na ozemlju srednje Evrope. Osnovni vir vseh teh študij je franciscejski kataster, ki je bil izdelan v prvi polovici 19. stoletja na območju nekdanjega Avstrijskega cesarstva. V nekaterih raziskavah je pregledno prikazano spreminjanje rabe tal na območju celotnih sedanjih držav ali regij, najpogosteje so bile obravnavane Češka, Slovenija in Avstrija. V pričujoči študiji so raziskani vzorčni primeri iz sredozemskih pokrajin, za katere so značilna terasirana pobočja, s terasami pa so povezani posebni dejavniki sprememb rabe tal. Kot vzorčen primer je izbrana tudi vas Ostrožno Brdo, ki leži že na prehodu med sredozemskim

MEDITERRANEAN TERRACED LANDSCAPES: LAND USE CHANGES

SUMMARY

A considerable number of papers have already been published on land use changes in the past 200 years on the territory of Central Europe. All these studies basically draw on the Franciscan Cadastre, made in the first half of the 19th century for the area of the then Austrian Empire. Some of them clearly present land use changes in the area of entire states or regions of today; the most often studied countries are Bohemia, Slovenia and Austria. Land use changes in the current research were studied on terraced terrains which predominantly mark the image of the Mediterranean landscape. Special factors of land-use changes are related exactly to terraces. The village Ostrožno Brdo,

in dinarskim svetom. Na rabo tal obravnavanega območja so pomembno vplivale politične spremembe, saj je bilo slednje po propadu Avstro-Ogrske sestavni del treh različnih držav. Območje teras v Ostrožnem Brdu obsega 10 % oziroma 93,6 ha zemljišč. Značilna prvina brkinskih teras je dolžina terasne ploskve oziroma celotne terase: običajno so terase dolge približno 150 metrov, medtem ko so na najbolj pokrajinsko izrazitih območjih terasne dolžine tudi preko 300 metrov. Teraso, predvsem pa njihove brežine, so v slabih 200 letih ostale povsem enakih oblik, torej enakih dolžin in širin terasnih ploskev ter enakih višin in širin terasnih brežin. Izrazito prepoznaven proces sprememb rabe tal v celotni katastrski občini je ogozdovanje. Danes je pokrovnost z gozdom kar 82%. Tudi na terasah se je delež gozda povečal iz 1% na 8%, ta podatek pa prikazuje zaraščanje kulturnih teras. Zaradi sprememb v demografiji se je v času od franciscejskega katastra do danes več kot štirikrat zmanjšala zemljiška kategorija travinja, pa tudi njiv in vrtov je danes le še 2%. Sadovnjaki na terasah so pomembna zemljiška kategorija, saj zajema 12% delež. Dobri dve tretjini terasne rabe tal so v preteklosti obsegale njive in vrtovi, ki imajo v sodobnosti malenkost manjši delež kot sadovnjaki. Poleg sadovnjakov in gozda se je skoraj trikrat povečal delež travinja. Pomemben podatek za rabo je tudi osončenje teras, saj je največ teras orientiranih na sever. Tudi v Ostrožnem Brdu na razporeditev teras vplivajo predvsem reliefne razmere, zaradi katerih so terase na severnem pobočju dobro osvetljene, za izbor kmetijskih kultur pa je odločilna tudi nadmorska višina.

UPORABNOST REZULTATOV

Podatki za današnje dejansko rabo tal sicer opredeljujejo rabo posamezne parcele bolj natančno kot franciscejski kataster, kljub temu pa ni današnji Interpretacijski ključ za določanje rabe povsem natančen pri upoštevanju terasiranih območij. Pravila za določanje rabe tal na terasnih brežinah v Evidenci dejanske rabe kmetijskih in gozdnih zemljišč (RABA) niso bila oblikovana dosledno. V primeru vinogradov, intenzivnih sadovnjakov in oljčnikov, velja določilo, da so v rabo tal vključene tudi zatravljene brežine, medtem ko v primeru njiv velja določilo, da so v rabo tal vključene brežine teras med njivami, katerih florisna širina ne presega 2 m. V primeru drugih vrst zemljišč bi bilo potrebno v skladu z navodili rabo tal na terasnih brežinah kartirati ločeno. Znanе metodologije kartiranja in evidentiranja terasnih območij in njihove rabe izključevanja dela teras ne omogočajo.

KLJUČNE BESEDE

terasirana pokrajina, raba tal, spremembe rabe tal, franciscejski kataster, Ostrožno Brdo, Sredozemlje

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Slika 6: Po prepoznavnosti v naselju Ostrožno Brdo izstopa terasirano območje na severozahodu vasi, ki je tudi največja sklenjena površina kmetijskih zemljišč na terasah (Matevž Lenarčič).

Figure 6: Terraced terrain in Ostrožno Brdo at the northwestern part of the village, representing the largest coherent farming area on terraces (Matevž Lenarčič).

which is located in the transition zone between the Mediterranean and the Dinaric world, was one of the villages selected for the case study. Land use of the studied area was significantly influenced by political changes, since after the collapse of Austria-Hungary, the studied area was, in turn, part of three different states. The terraced area in the cadastral municipality of Ostrožno Brdo accounts for mere 10% of the total area or 93.6 ha of land. A typical feature of the Brkini terraces is the length of terrace platform or the whole terrace; terraces are usually about 150 m long, while in the landscape most expressive areas, terraces are even longer than 300 meters. During almost 200 years the terraces and their slopes have preserved the same forms. Afforestation is an explicitly recognizable process of land-use changes in the entire cadastral municipality. The present forest cover amounts to as much as 82%. The percentage of woodland increased even on terraces, i.e. from 1% to 8%; the data show the overgrowing of cultural terraces. Due to the changes in demography, the land-use category of grassland has decreased more than four times since the Franciscan Cadastre, and also fields and gardens do not exceed 2% today. The present terrace orchards represent an important land category, since they amount up to 12%. In past times, more than two-thirds of terraced land were used for fields and gardens, but their percentage is now slightly lower than that of orchards. In addition to the increase in orchards and woodland, the percentage of grassland also increased, almost three times. Insulation of terraces is important information with regard to land use, since most of the terraces are oriented towards the north. At Ostrožno Brdo landforms mainly influence the distribution of terraces, and altitude above sea level influences the selection of farming cultures.

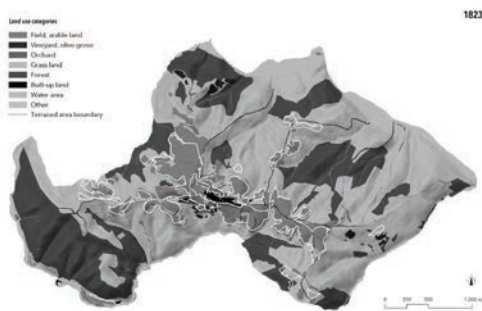
ISSUES AND THEIR SIGNIFICANCE

Though the data on the current actual land use determine the utilisation of individual parcels more precisely than the Franciscan Cadastre did, the present interpretation key for determining the use in terraced areas is not completely accurate. The rules for specifying land use on terrace slopes in the Register of Actual Utilisation of Farming and Woodland have not been formulated consistently. In the case of vineyards, intensive orchards and olive groves, the provision applies that overgrown and grassed terrace slopes are also included in land use, while in the case of fields the provision says that it only relates to terrace slopes with the maximum ground plan width of 2 metres. In the case of other types of utilisation, land use on terrace slopes should be mapped separately in accordance with instructions. With the known methodologies of mapping and inventorying terraced areas and their use, any exclusion of parts of terraces is all but impossible.

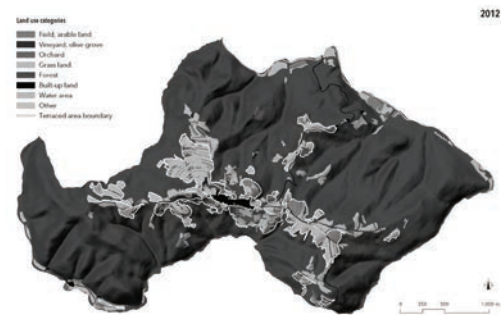
KEY WORDS

terraced landscape, land use, land use changes, Franciscan Cadastre, Ostrožno Brdo, Mediterranean





Slika 7: Raba tal v naselju Ostrožno Brdo v letu 1823 (Arhiv Republike Slovenije, GURS).
Figure 7: Land use in the village Ostrožno Brdo, 1823 (Slovenian National Archive, GURS).



Slika 8: Raba tal v naselju Ostrožno Brdo v letu 2012 (Arhiv Republike Slovenije, GURS).
Figure 8: Land use in the village Ostrožno Brdo, 2012 (Slovenian National Archive, GURS).

Martina Zbašnik-Senegačnik METODE IN ORODJA ZA OCENJEVANJE TRAJNOSTNIH ENODRUŽINSKIH HIŠ

METHODS AND TOOLS FOR EVALUATION OF SUSTAINABLE SINGLE-FAMILY HOUSES

POVZETEK

Stavbe imajo negativne vplive na okolje v celotnem življenjskem ciklusu, torej od faze pridobivanja surovin ter proizvodnje gradiv in polizdelkov, do prodaje, vgradnje in uporabe do končne faze odstranitve, ko stavba odsluži svojemu namenu. Trenutna zakonodaja omejuje v glavnem rabo energije in emisije v obratovanju, manj pa ostale parametre, ki prav tako definirajo zasnovo sodobne trajnostne stavbe. Preverjanje trajnostne zasnove stavbe je smiselno že v začetnih fazah projektiranja, ko je še mogoče vplivati na rezultat.

V raziskavi je bila med drugim izdelana enostavna metoda, s pomočjo katere se z izbranimi petimi indikatorji ocenjuje kakovost trajnostnih zasnov: energijska učinkovitost, raba primarne energije, emisije CO₂, stroški ter na doseženo bivalno ugodje. Ocenjevanje s pomočjo indikatorjev poteka po treh načinih objektivnega in subjektivnega ponderiranja, s čimer se v skupno oceno vključijo vidiki neodvisnosti presojevalca ter vidiki nacionalnih in uporabniških zahtev.

Na osnovi rezultatov, zbranih v raziskavi na velikem statističnem vzorcu enodružinskih pasivnih hiš, je bil izdelan tudi računski model za ocenjevanje energijskih tokov v stavba. V praksi se uporablja veliko število računskih orodij za izračunavanje energijskih tokov. Njihova uporaba prinaša natančne rezultate, zahteva pa vnos velikega števila parametrov v zapletenih računskih postopkih. Vrednost teh parametrov je znana šele na koncu načrtovalskega procesa. Razvita je bila enostavna metoda za ocenjevanje energijske učinkovitosti enodružinske hiše, ki je vključevala čim manjše število parametrov in enostavne računske postopke.

UPORABNOST REZULTATOV

Sodobna stavba mora torej ustrezati številnim zahtevam, zato pa mora biti ustrezno zasnovana. Z enostavnimi metodami in orodji se predvsem zagotovi, da jo uporabijo projektanti v fazi idejnega načrtovanja in s tem takoj na začetku načrtovanja poiščejo najoptimalnejšo zasnovo stavbe.

KLJUČNE BESEDE

energijska učinkovitost, trajnostni koncept, enodružinska hiša, enostavna metoda, enostavno orodje

SUMMARY

Buildings have negative effects on the environment throughout their life cycle, i.e. from the phase of obtaining raw materials and manufacturing materials and components up to the sale, building and use through the final phase of removal when the building is decommissioned. In general, current legislation limits both the use of energy and the emissions allowed during operation, but do not limit the other parameters that define the design of contemporary sustainable buildings. Determining the sustainability of buildings should take place in the planning phase of the project, when it is still possible to influence the outcome.

In a research study, a simplified method using five chosen indicators was elaborated to evaluate the level of sustainability. The areas to be evaluated are energy efficiency, use of primary energy, CO₂ emissions, costs, and the level of living comfort achieved. The evaluation using these indicators is carried out using three subjective and objective weighting methods, such that the final evaluation includes the viewpoints of an independent evaluator and the points of view of both the user and the state.

On the basis of results obtained in a research study conducted on a large statistical sample of Slovenian single-family houses the calculation model was created, which calculate the energy flows in buildings. In practice a number of calculation tools are used to calculate annual energy flows. Their use yields accurate results but requires the input of a large number of parameters in the complex calculation procedures involved. The values of these parameters are usually known only after the planning process of a building has been completed. A simplified evaluation method for energy efficiency in single-family houses has been developed with the aim of using as few building parameters as possible with the simplest calculation procedures possible.

ISSUES AND THEIR SIGNIFICANCE

A contemporary building must answer to a number of demands and therefore must be designed accordingly. The simplicity of the new