

Izrada Land use sloja za Hrvatsku (2020.)



Zagreb 03 / 10 / 2023

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REPUBLIKA HRVATSKA
Ministarstvo gospodarstva
i održivog razvoja



AGENCIJA ZA
PLAĆANJA U
POLJOPRIVREDI,
RIBARSTVU I
RURALNOM
RAZVOJU



HRVATSKE
ŠUME



EKONERG



REPUBLIKA HRVATSKA
Državna geodetska uprava



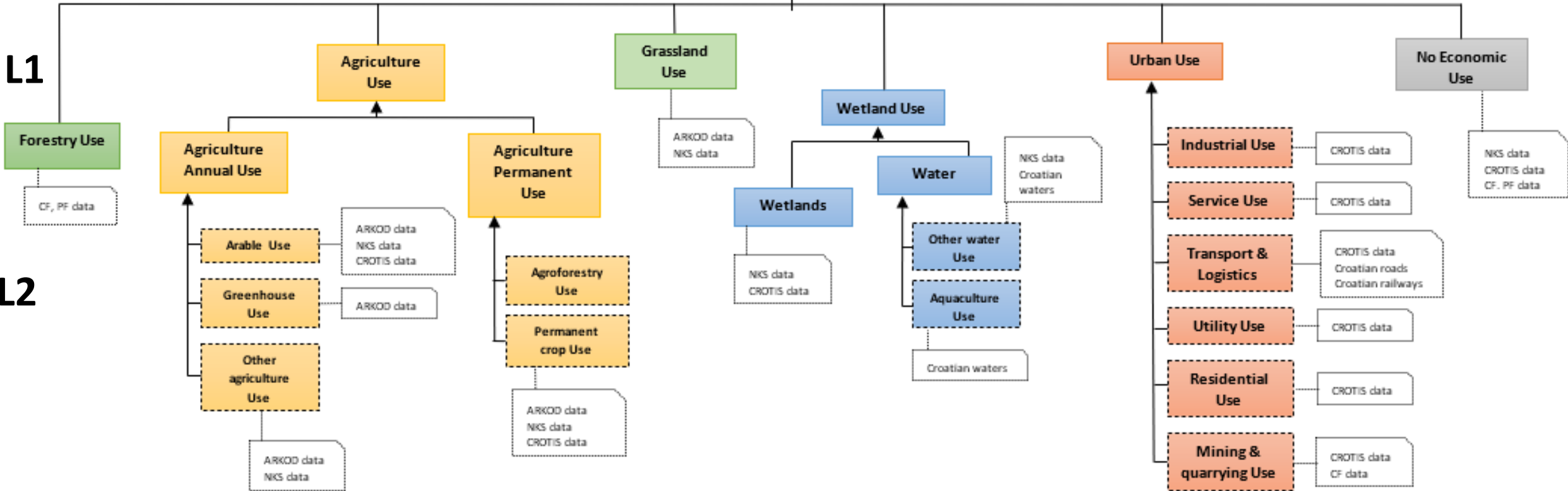
FOND ZA ZAŠTITU OKOLIŠA I
ENERGETSKU UČINKOVITOST

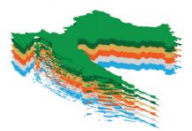


LAND USE

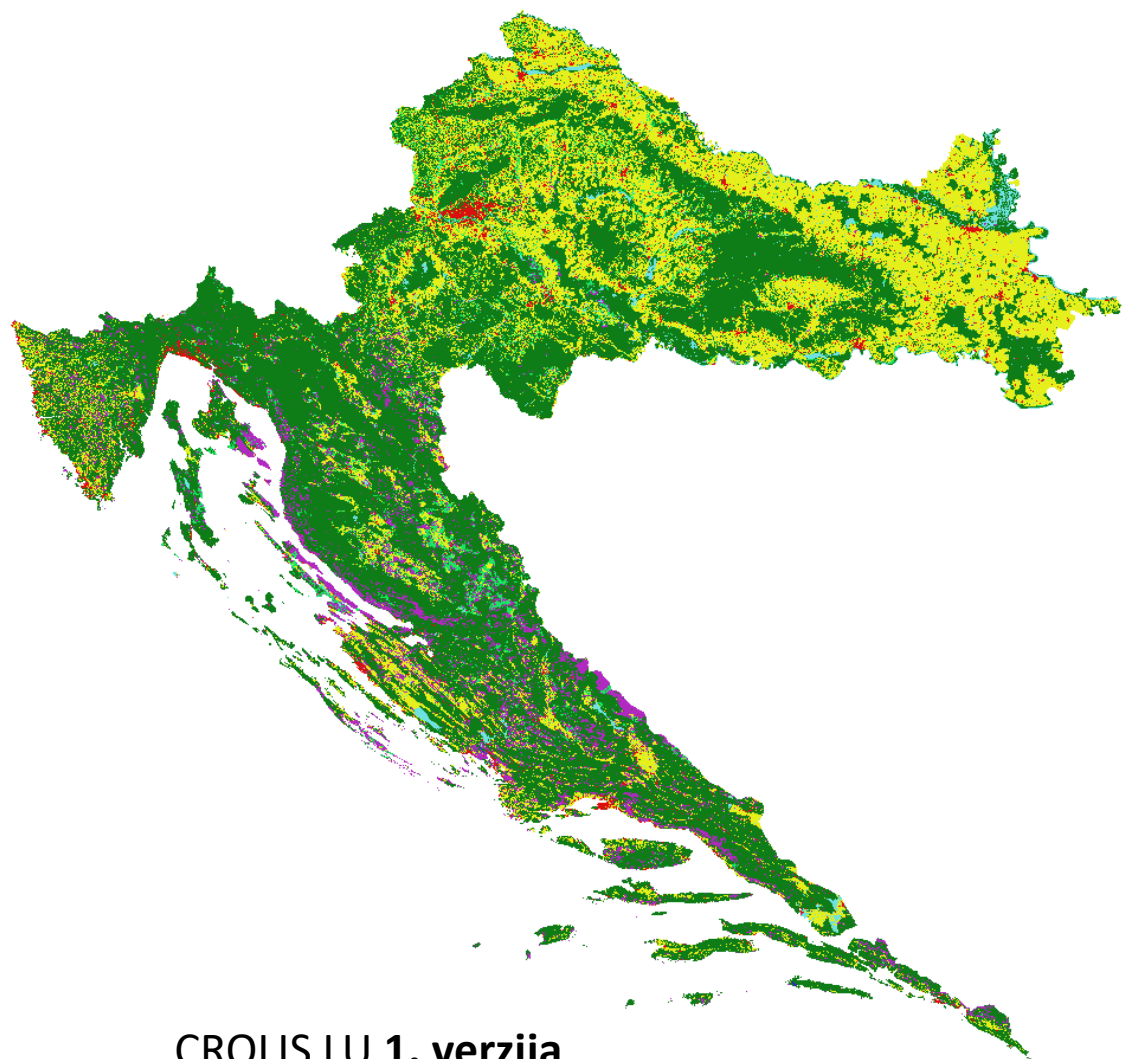
L1

L2





LEVEL 1 - trenutni sloj

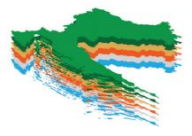


CROLIS LU 1. verzija



CROLIS LU trenutna verzija





Izrada CROLIS sloja *korištenja zemljišta* (LU, land-use)

1. Prikupljanje **nacionalnih LU podataka** od ovlaštenih institucija po klasama

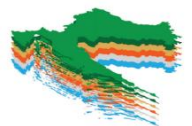
2. Rasterizacija vektorskih podataka (vector - > raster)

3. Spajanje pojedinačnih rastera u jedan raster za cijelu Hrvatsku

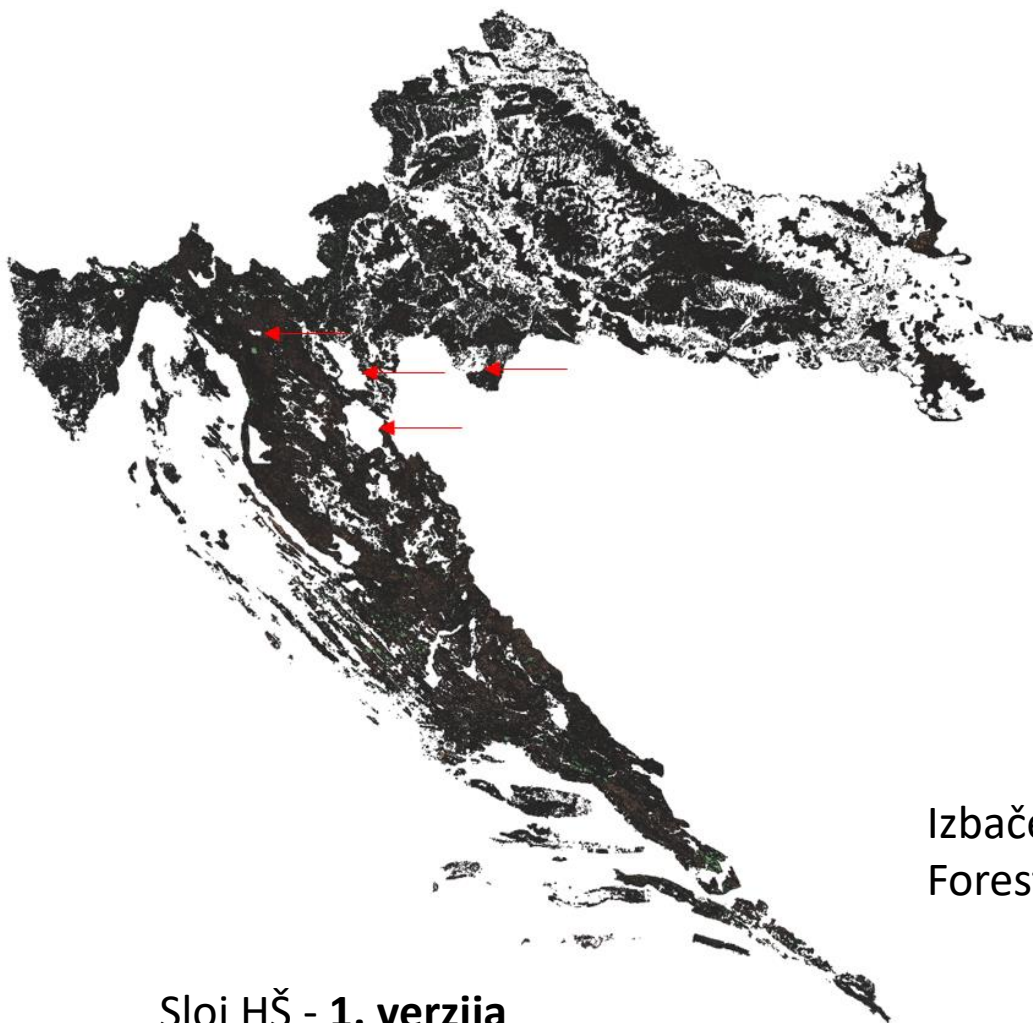
- Po prioritetima, 17 LU slojeva (prema EEA metodologiji)

Prioritetnost	LU sloj
1	Forestry Use
2	Arable Use
3	Grassland Use
4	Permanent crop Use
6	Greenhouse Use
7	Other agriculture Use
8	Wetland Use
9	Aquaculture use
10	Other water Use
11	Residential Use
12	Industrial Use
13	Service Use
14	Transport & Logistic Use
15	Utilities Use
16	Mining and quarrying Use
17	Other no economic Use





Faza 1: Prikupljanje nacionalnih LU podataka po klasama L1 klasa Forestry use



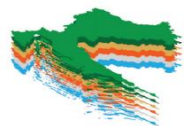
Sloj HŠ - 1. verzija

Izbačen NKS (Karta staništa) kao izvor za
Forestry use



Ažurirani sloj HŠ – trenutna verzija





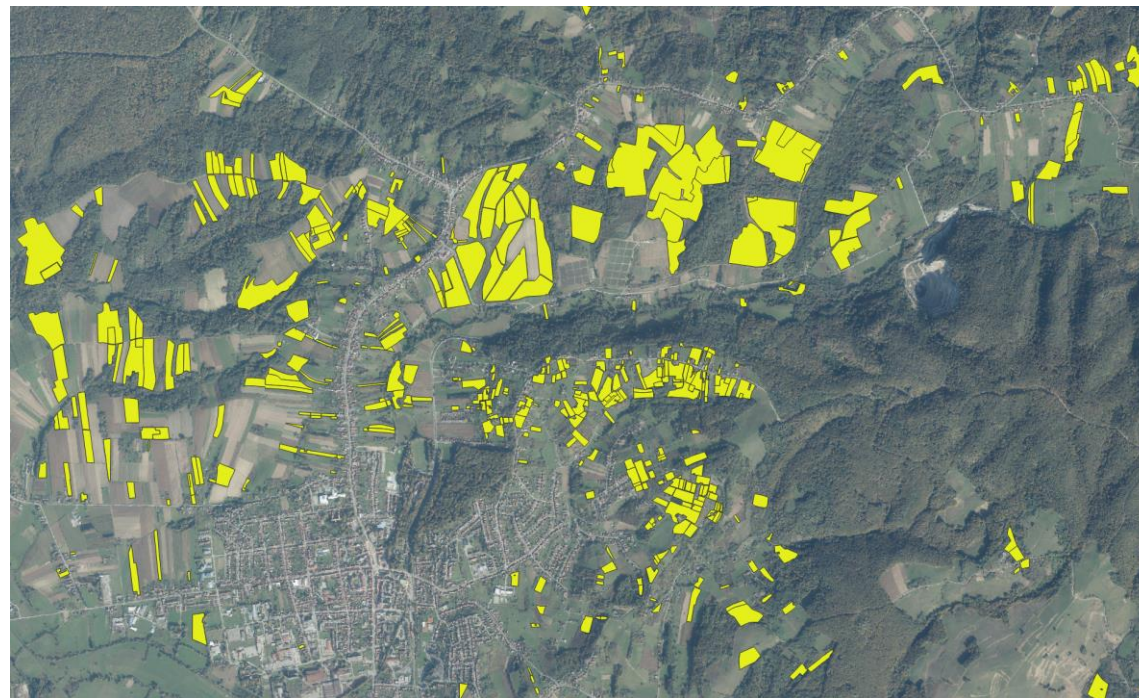
Faza 1

L2 klasa Permanent crop Use

- izvor 1) ARKOD baza: atributi Voćnjak, Vinograd, Maslinik, Višegodišnji trajni nasadi
- izvor 2) Min. poljoprivrede: atribut Voćnjak, Vinograd, Maslinik

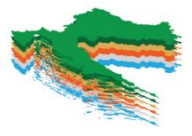


Izvor 1: ARKOD



Izvor 2: Min. poljoprivrede

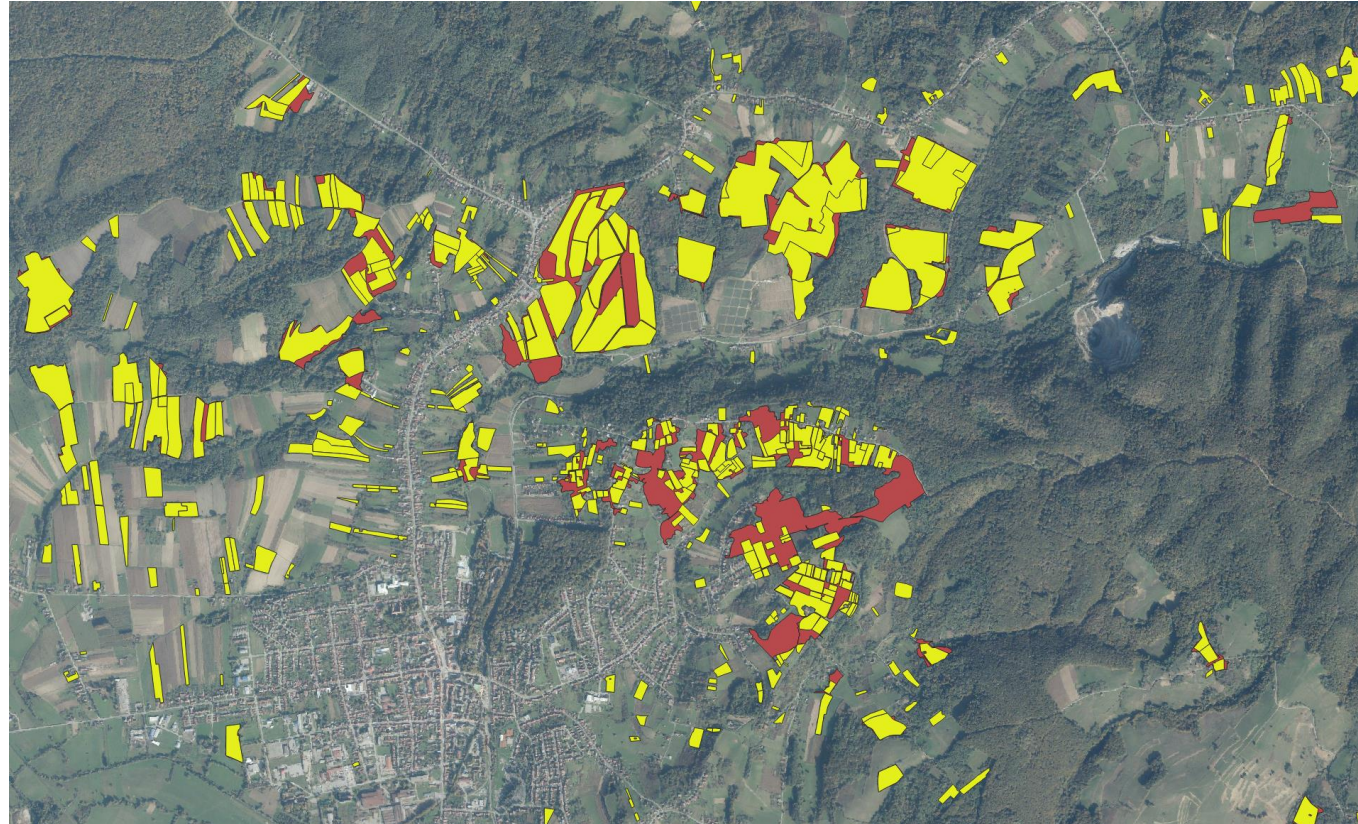


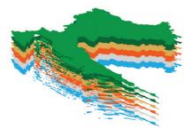


Faza 1

L2 klasa Permanent crop Use

- izvor 1) ARKOD baza: atributi Voćnjak, Vinograd, Maslinik, Višegodišnji trajni nasadi
- izvor 2) Min. poljoprivrede: atribut Voćnjak, Vinograd, Maslinik





Faza 1

L1 klasa Grassland use

- izvor 1) ARKOD baza: atributi Livada, Pašnjak, Krški pašnjak
- izvor 2) Min. poljoprivrede: atributi Livada, Pašnjak, Nekorišteno

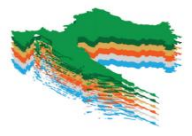


Izvor 1: ARKOD



Izvor 2: Min. poljoprivrede





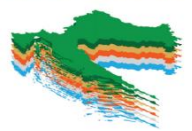
Faza 1

L1 klasa Grassland use



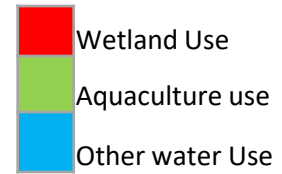
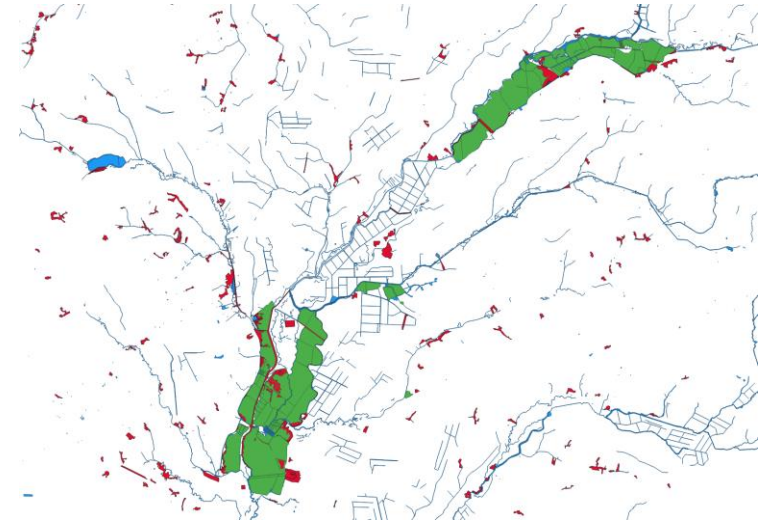
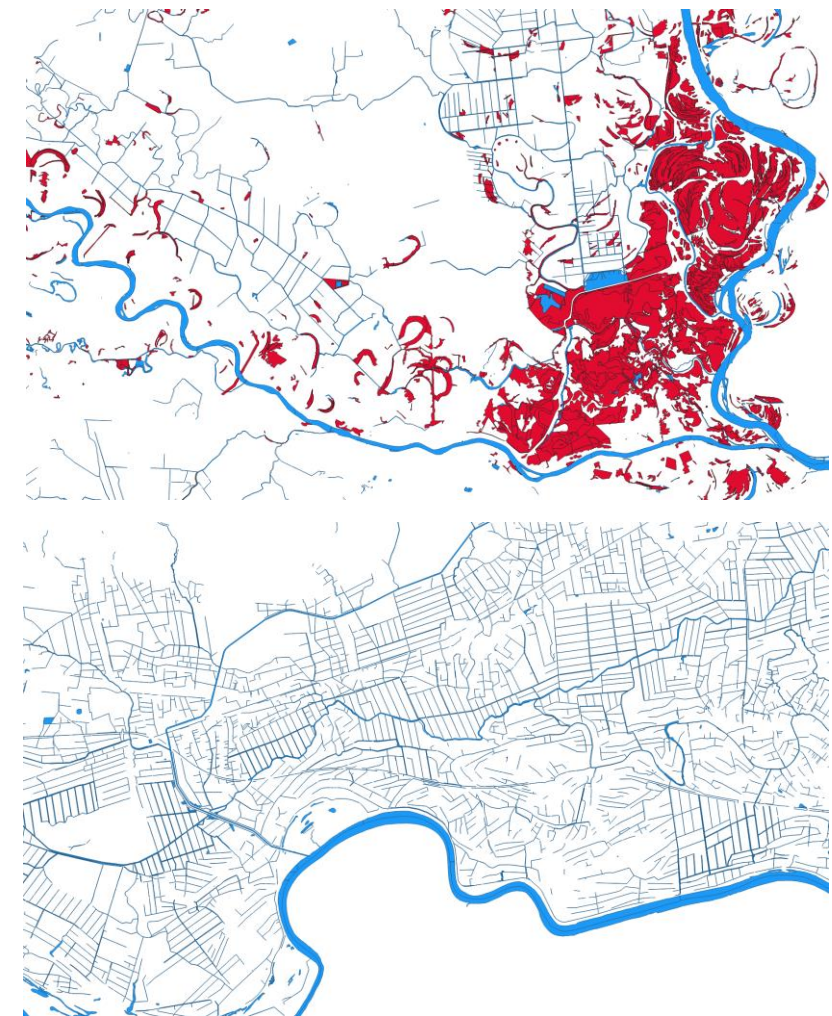
- izvor 1) ARKOD baza: atributi Livada, Pašnjak, Krški pašnjak
- izvor 2) Min. poljoprivrede: atributi Livada, Pašnjak, Nekorišteno



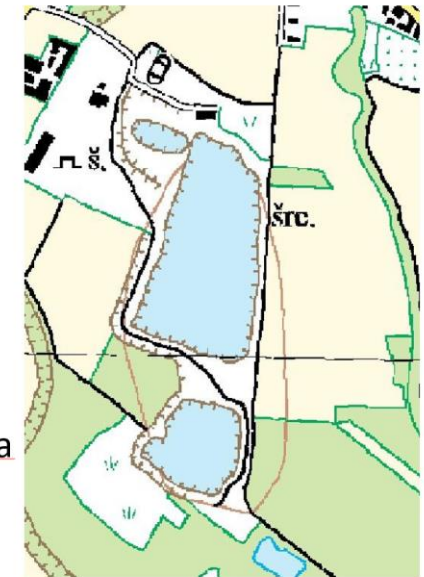


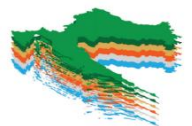
Faza 1 L1 Water use

- izvori: Hrvatske vode i Temeljna topografska baza (TTB)



Godina izvornika 1996



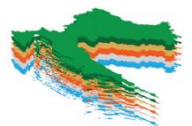


Faza 1

L2 klasa Transport & Logistics use

- izvor 1: TTB
- izvor 2: Hrvatske autoceste (HAC)
- izvor 3: Hrvatske ceste
- izvor 4: Hrvatske željeznice (HŽ)



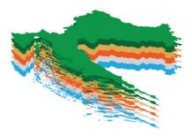


Faza 1

L2 klasa Transport & Logistics use

- **Izvor:** Hrvatske željeznice
- *Buffer* dodan na liniju



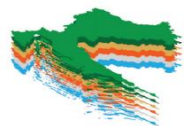


Faza 1

L2 klasa Services Use

- Izvor 1: TTB
- Izvor 2: HAC





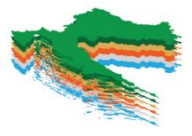
FAZA 2. Rasterizacija vektorskih podataka

Vektorski sloj  Raster 10 m



Rasterski tip podataka jednostavniji je za obradu i analizu





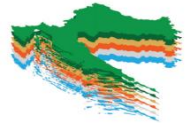
FAZA 3.

Spajanje pojedinačnih rastera u jedan **zajednički raster** za cijelu državu

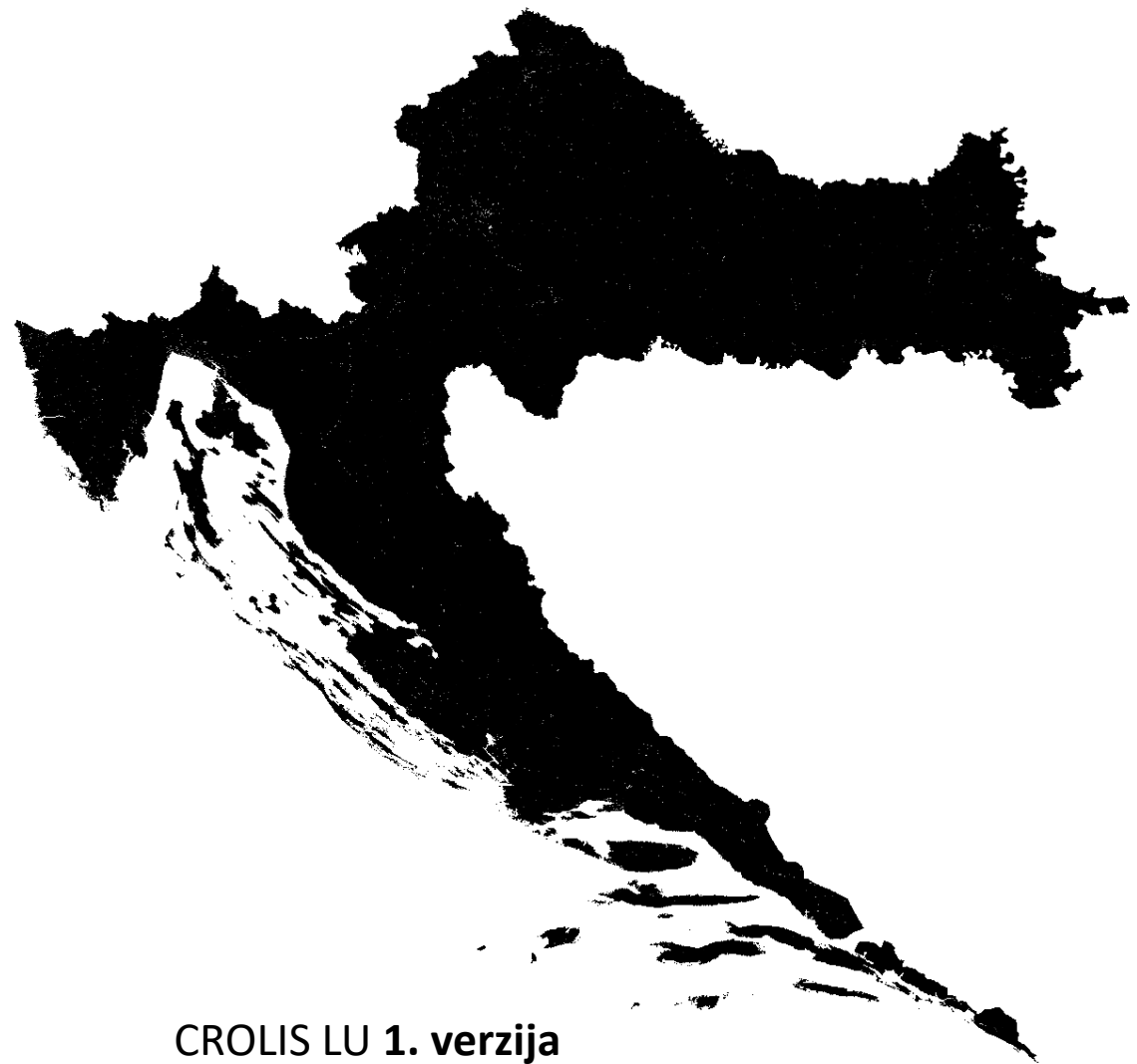
- Po prioritetima

Priority	LU layer
1	Forestry Use
2	Arable Use
3	Grassland Use
4	Permanent crop Use
6	Greenhouse Use
7	Other agriculture Use
8	Wetland Use
9	Aquaculture use
10	Other water Use
11	Residential Use
12	Industrial Use
13	Service Use
14	Transport & Logistic Use
15	Utilities Use
16	Mining and quarrying Use
17	Other no economic Use





Popunjavanje praznina

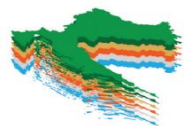


CROLIS LU 1. verzija



CROLIS LU trenutna verzija



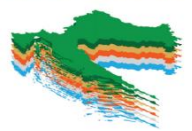


Popunjavanje praznina

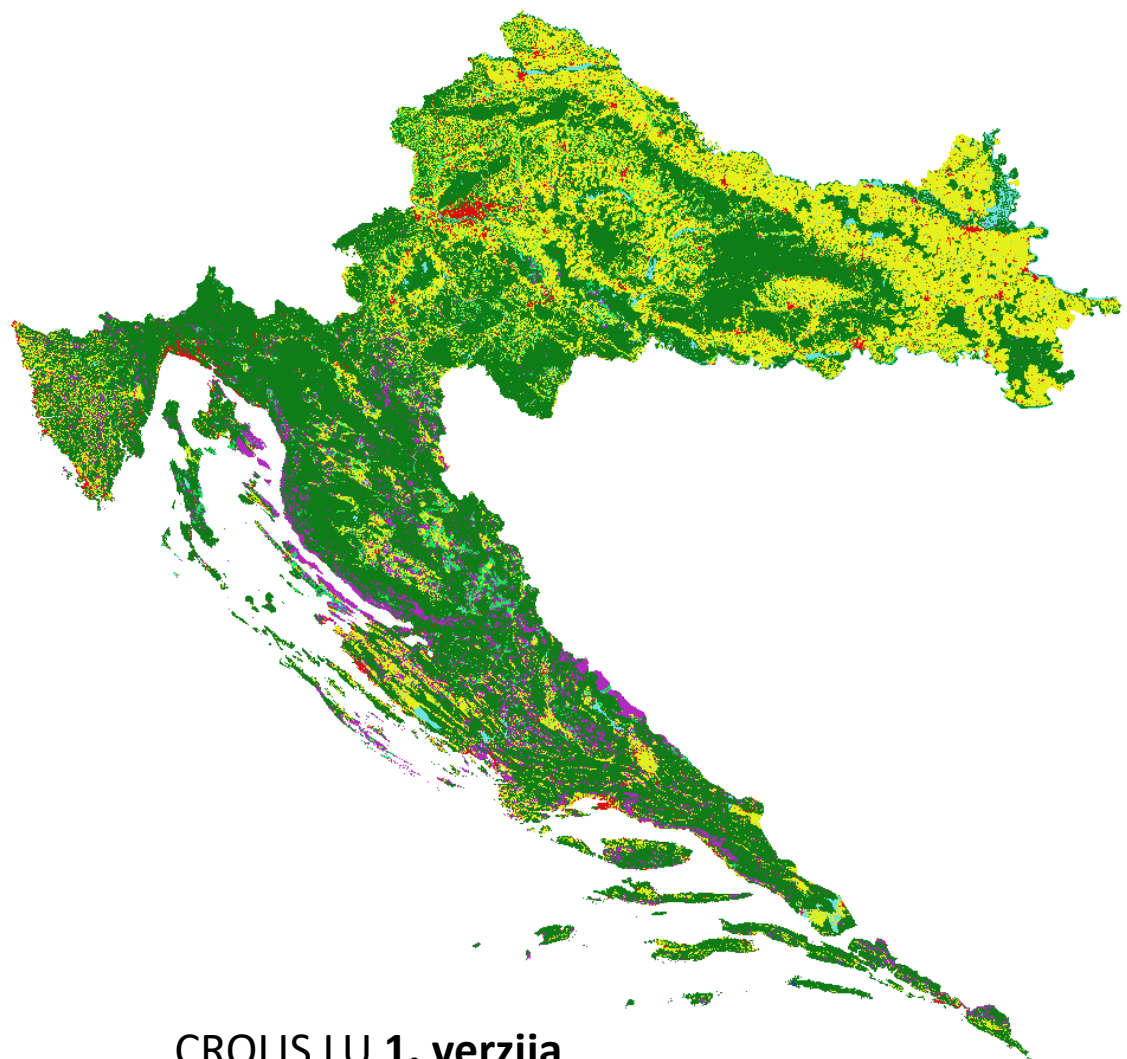
- Karta staništa (NKS) – grupirana po klasama L2
- Urban use klase: CLC 2018 – grupirano po klasama L2
- Udio površine u 1. verziji LU sloja: 0,55%
- Udio površine u trenutnoj verziji LU sloja: 3,5 %

	Popunjene praznine po klasama u 1. verziji (ha)	Popunjene praznine po klasama u trenutnoj verziji (ha)
Forestry Use	3,138	124,526
Arable Use	1,300	44,800
Grassland Use	1,087	12,435
Permanent crop Use	329	5,326
Greenhouse Use		
Other agriculture Use	7,574	103,085
Wetland Use	460	1,018
Aquaculture use		
Other water Use	1,010	3,734
Residential Use	8,543	47,260
Industrial Use	2,269	4,601
Service Use		
Transport & Logistic Use	2,902	3,638
Utilities Use	1,182	2,263
Mining and quarrying Use	947	927
Other/no economic Use	98	23,364
Total	30,840	376,139





LEVEL 1 - trenutni sloj

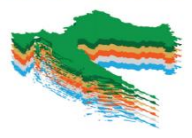


CROLIS LU 1. verzija



CROLIS LU trenutna verzija





LEVEL 2 - trenutni sloj

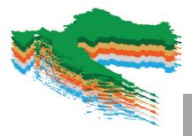


CROLIS LU 1. verzija



CROLIS LU trenutna verzija

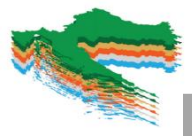




LEVEL 1 cijeli sloj – trenutna verzija

	CROLIS LU sloj - 1. verzija (ha)	CROLIS LU sloj – trenutna verzija (ha)	NIR 2021 (ha)
Forestry Use	3,244,933	2,639,977	2,401,873
Agriculture Use	1,603,532 (ARKOD+NKS+TTB)	1,427,809 (ARKOD+Min.polj.)	1,521,932
Permanent Crop Use	143,397	148,626	121,462
Grassland Use	208,514 (ARKOD+NKS)	1,090,188 (ARKOD+Min.polj.)	1,154,222
Wetland Use	115,700	109,933	75,356
Urban Use	161,583	194,011	287,956
No economic Use	334,907	206,414	218,062

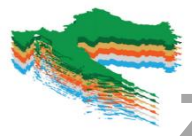




LEVEL 2 cijeli sloj – trenutna verzija

	CROLIS LU sloj - 1. verzija (ha)	CROLIS LU sloj - trenutna verzija (ha)	NIR 2021 (ha)
Forestry Use	3,244,933	2,639,977	
Arable Use	1,400,288	1,248,187	1,400,470
Grassland Use	208,514	1,090,188	
Permanent crop Use	143,397	148,626	121,462
Greenhouse Use	220	547	
Other agriculture Use	59,626	30,449	
Wetland Use	38,989	26,626	
Aquaculture use	4,805	9,558	
Other water Use	71,905	73,749	
Residential Use	111,816	129,082	
Industrial Use	10,371	11,939	
Service Use	8,436	10,735	
Transport & Logistic Use	25,215	36,333	
Utilities Use	1,676	1,676	
Mining and quarrying Use	4,069	4,246	
Other/no economic Use	334,907	206,414	



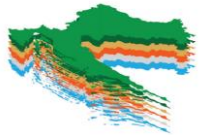


Zaključak i izazovi



- Poboljšanje LU 2020 s podacima ARKOD+ (još uvijek u izradi)
- Problem izvora za povijesno razdoblje
- Kvaliteta ulaznih podataka je ključna za finalni LU sloj
- Rješavanje otvorenih pitanja preklopa pojedinačnih klasa
- Potreba za usklađivanje karakteristika prostornih baza na nacionalnoj razini





Hvala na pažnji

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