

LDN and SLM at local level –how it works?

A case study of Bosnia and Herzegovina

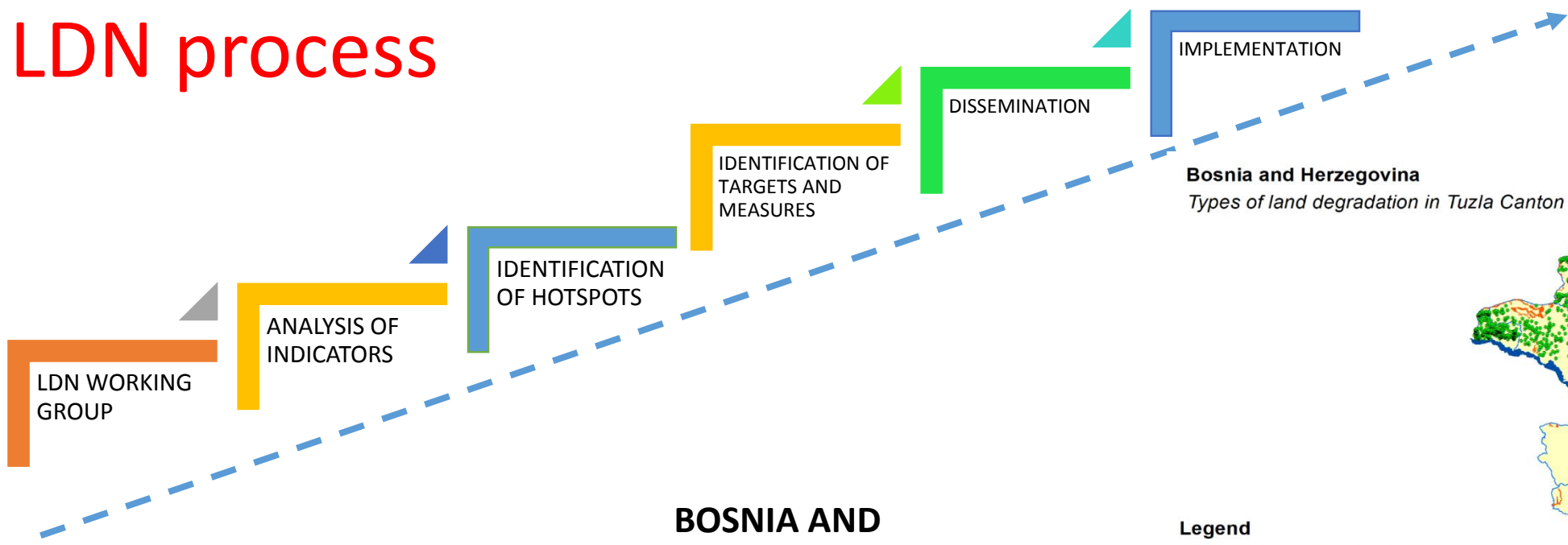
COP 14 New Delhy

03. September 2019, 18 00 H

Prof. dr Hamid Custovic



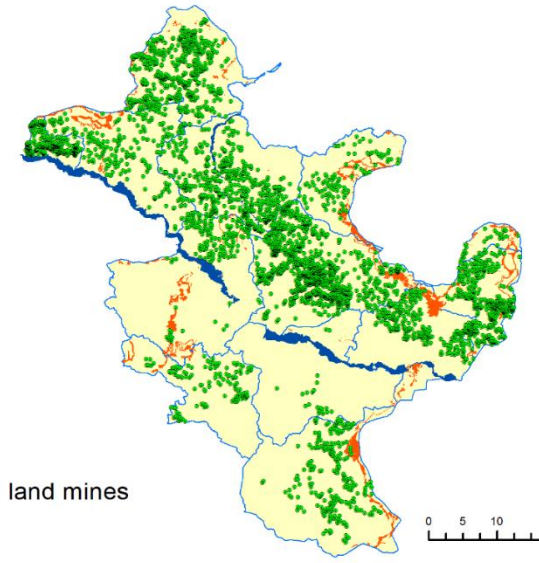
LDN process



Bosnia and Herzegovina
Types of land degradation in Tuzla Canton

Legend

- Locations of landslides
- Flood risk areas
- Areas suspected to contain land mines
- Municipality borders



Source: Ministry for Spatial Planning and Environmental Protection of Tuzla Canton



LDN targets - Achieving LDN to 2030

1. Improve land quality and protection and restore degraded land functions in specific ecosystems or minimize adverse environmental impacts

1.1. Land management in support of environmental protection and spatial planning system

1.2. Establish a basis for harmonious and spatially balanced socio-economic development, with a focus on marginalized and degraded areas

A total of 17 measures were identified and two transformative projects.

LDN and SLM

**FAO/GEF full-size project on “Decision Support for Mainstreaming
and Scaling up of Sustainable Land Management”
(GCP/GLO/337/GFF)**

as facilitator in LDN / SLM process

LDN and SLM

LDN WORKING GROUP continue work
in SLM implementation - crucial

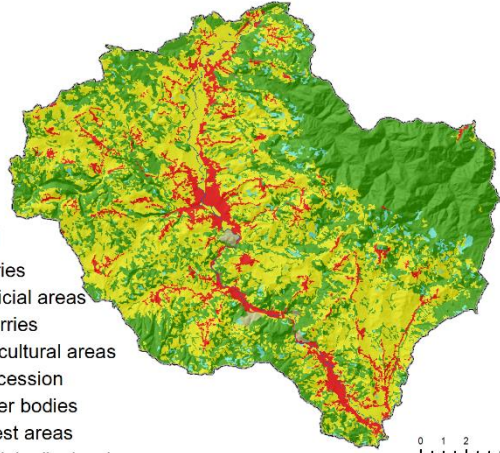


- IDENTIFICATION OF PRIORITY AREAS FOR INTERVENTIONS IN INDIVIDUAL MUNICIPALITIES
- IDENTIFICATION OF SLM
- PREPARATION OF MAINSTREAMING STRATEGY
- IMPLEMENTATION OF SLM
- CAPACITY BUILDING

LAND capability study as a basis for planning at local level

By using defined soil bonity categories, land capability study defines the natural potential of soils in terms of agricultural production and food production, and defines the zones for various land use types.

Srebrenik municipality
Land cover

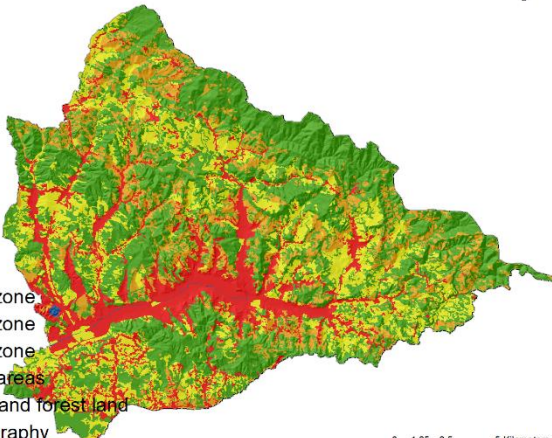


- Legend**
Categories
- Artificial areas
 - Quarries
 - Agricultural areas
 - Succession
 - Water bodies
 - Forest areas
 - Municipality border

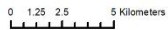


Source: Faculty of Agricultural and Food Sciences, University of Sarajevo

Tuzla city
Agrozones



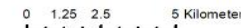
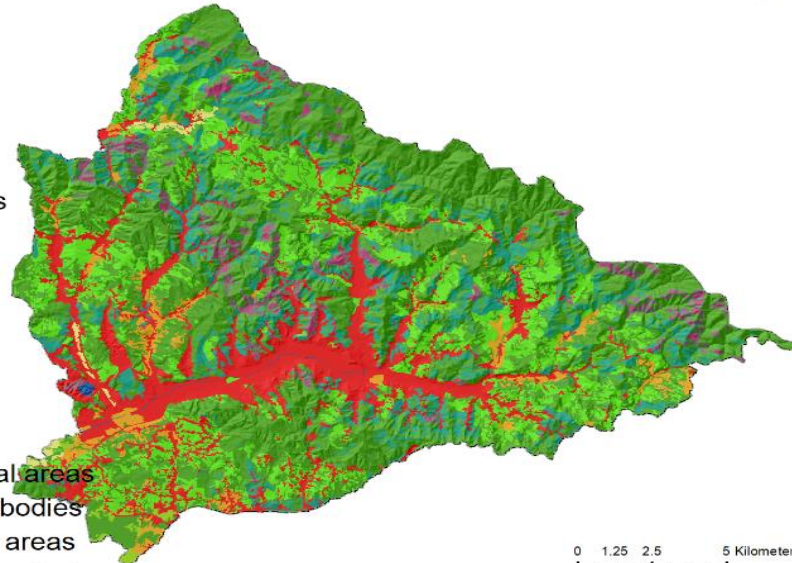
- Legend**
Agrozones
- 1 agrozone
 - 2 agrozone
 - 3 agrozone
 - Urban areas
 - Forest and forest land
 - Hydrography
 - Municipality border



Source: Faculty of Agricultural and Food Sciences, University of Sarajevo

Tuzla city
Land capability (bonity)

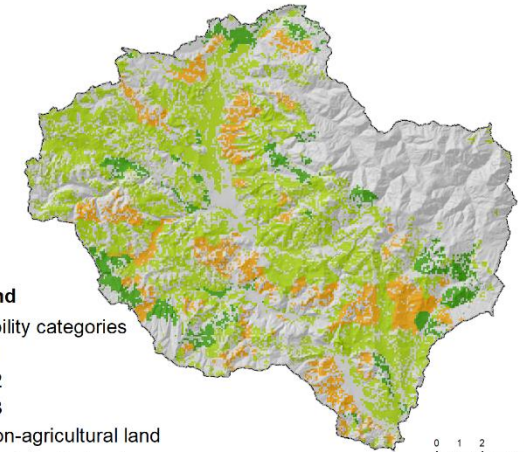
- Legend**
Categories
- II
 - III
 - IVa
 - IVb
 - V
 - VI
 - VII
 - Artificial areas
 - Water bodies
 - Forest areas
 - Municipality border



Source: Faculty of Agricultural and Food Sciences, University of Sarajevo



Srebrenik municipality
Land suitability for cereal production



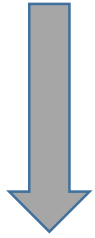
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Suitability categories
- S1
 - S2
 - S3
 - Non-agricultural land
 - Municipality border



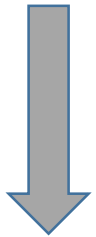
Source: Faculty of Agricultural and Food Sciences, University of Sarajevo

Mainstreaming strategy

LDN TARGETS AND SUBTARGETS



SELECTION OF LDN MEASURES
SUITABLE FOR CANTON



SLM



DS-SLM mainstreaming strategies should:

- Establish a pathway for integrating SLM into national and decentralized policy, planning and finance related decision-making processes that can facilitate SLM implementation and scaling out.
- Establish activities for mainstreaming SLM in coordination with key institutions and stakeholders.
- Provide long-term support for the implementation of SLM.

Mainstreaming strategy (LDN – SLM)

LDN WG SELECTED LDN TARGETS AND MEASURES SUITABLE FOR TUZLA CANTON:

Target 1. Improve land quality and protection and restore degraded land functions in specific ecosystems or minimize adverse environmental impacts

Sub target 1.1. Land management in support of environmental protection and spatial planning system

MEASURES :

- ✓ **Remediation of degraded land**
- ✓ **Full scale approach in land erosion protection**
- ✓ **Water supply for agriculture and population supporting the function of sustainable development in hilly-mountainous areas**
- ✓ **Construction of flood protection infrastructural facilities**
- ✓ **Development of land capability study (soil bonity)**

SLM TECHNOLOGIES SELECTED

- 1) Cultivation of blueberries on infertile/degraded soils using plant pots
- 2) Addressing shallow landslides by using wooden pole structures
- 3) Contour ploughing
- 4) Fish bone for erosion protection
- 5) Agro-forestry as an approach in sustainable land management
- 6) Land consolidation
- 7) Construction of water reservoirs
- 8) Construction of irrigation systems
- 9) Flood protection, rehabilitation and regulation of river basins and tributaries
- 10) Vegetated buffer strips

Mainstreaming strategy (LDN – SLM)

In Eur



Godina	Investicija	Prihodi	Troškovi	Dobit ¹
0	51.787,85			
1		0	18.929,59	-18.929,59
2		0	18.929,59	-18.929,59
3		36.810	18.929,59	17.880,41
4		61.350	18.929,59	42.420,41
5		61.350	18.929,59	42.420,41
6		61.350	18.929,59	42.420,41
7		61.350	18.929,59	42.420,41
8		61.350	30.990,32	30.359,68
9		61.350	18.929,59	42.420,41
10		61.350	18.929,59	42.420,41
11		61.350	18.929,59	42.420,41
12		61.350	18.929,59	42.420,41
13		61.350	18.929,59	42.420,41
14		61.350	18.929,59	42.420,41
15		61.350	18.929,59	42.420,41
IRR² (Interna stopa povrata investicije)				

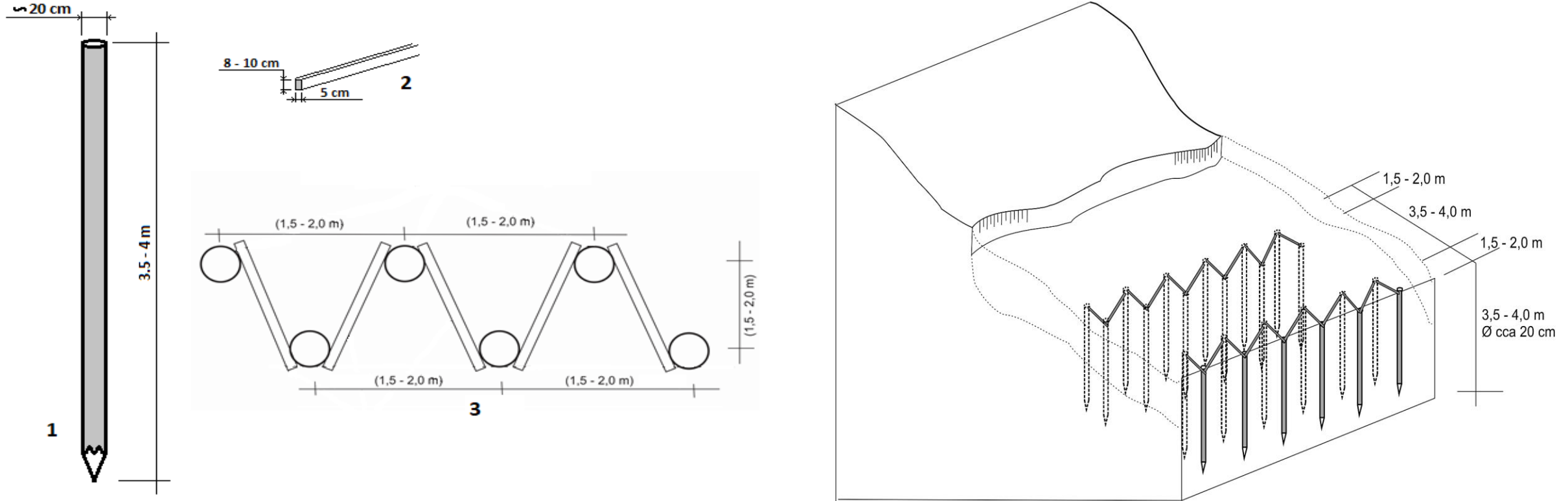
Cultivation of blueberries on infertile/degraded soils
using plant pots

Mainstreaming strategy (LDN – SLM)



Addressing shallow landslides by using wooden pole structures

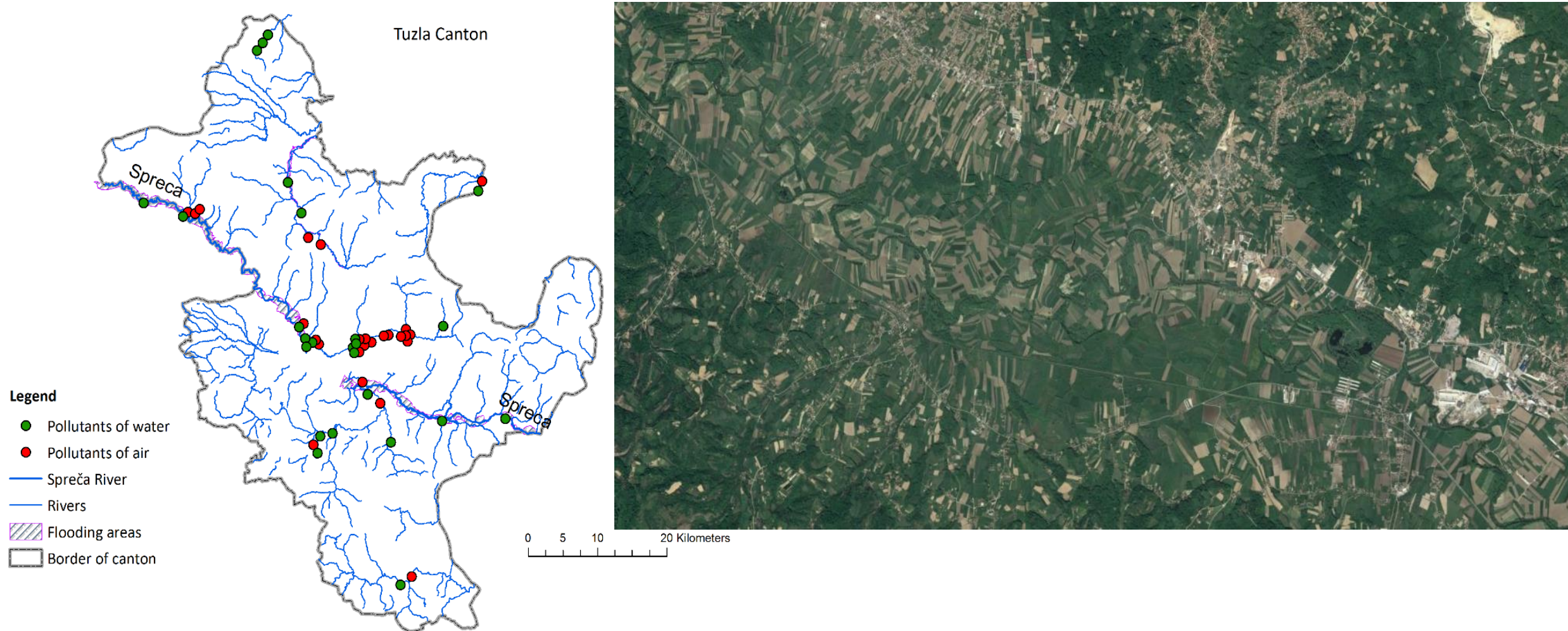
Mainstreaming strategy (LDN – SLM)



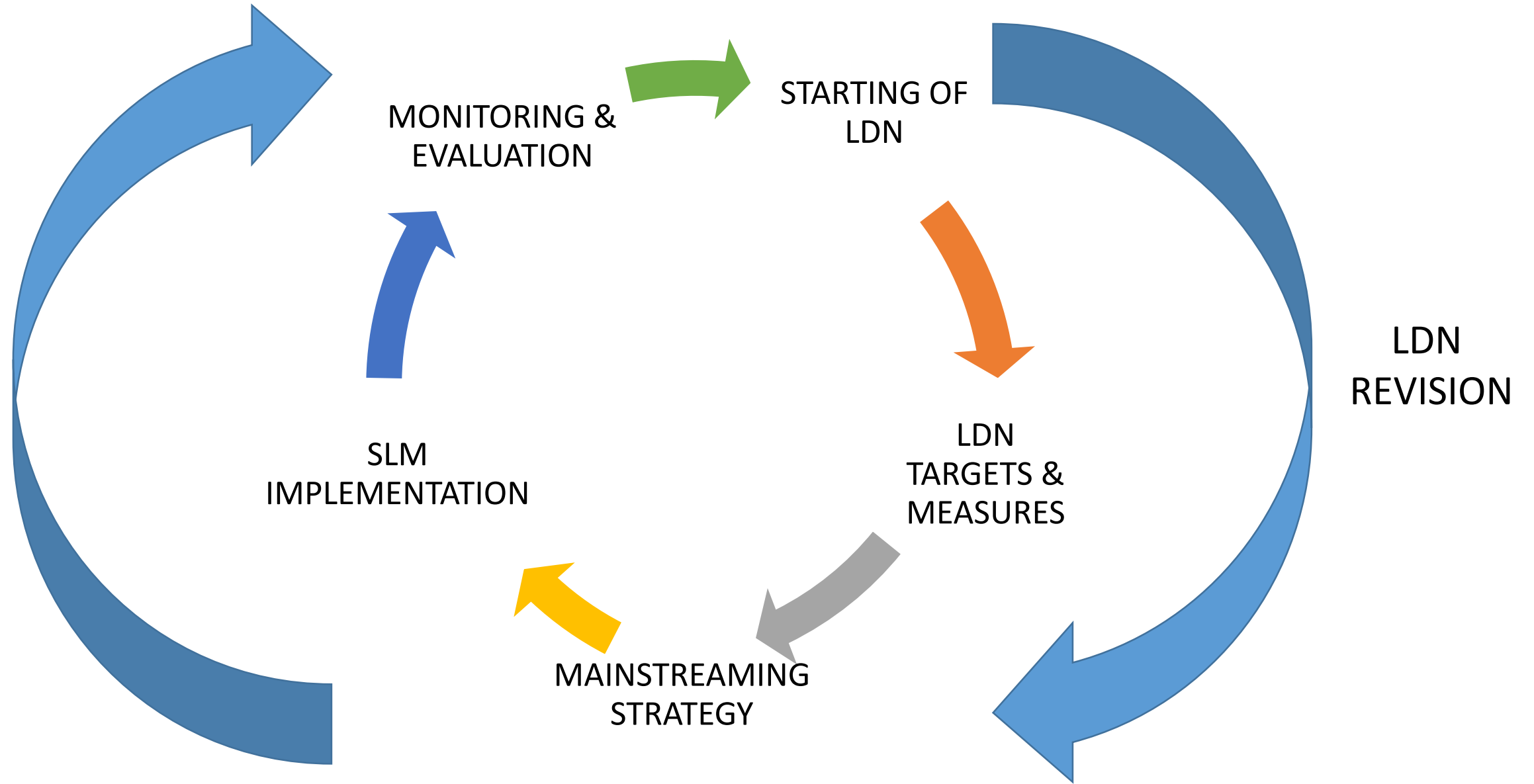
Addressing shallow landslides by using wooden pole structures

(LDN – SLM) – Transformative project

Influence of the industry on the presence of pollutants on agricultural land of the Tuzla region (pilot area of the Spreča valley)



LDN – SLM



Thank you!