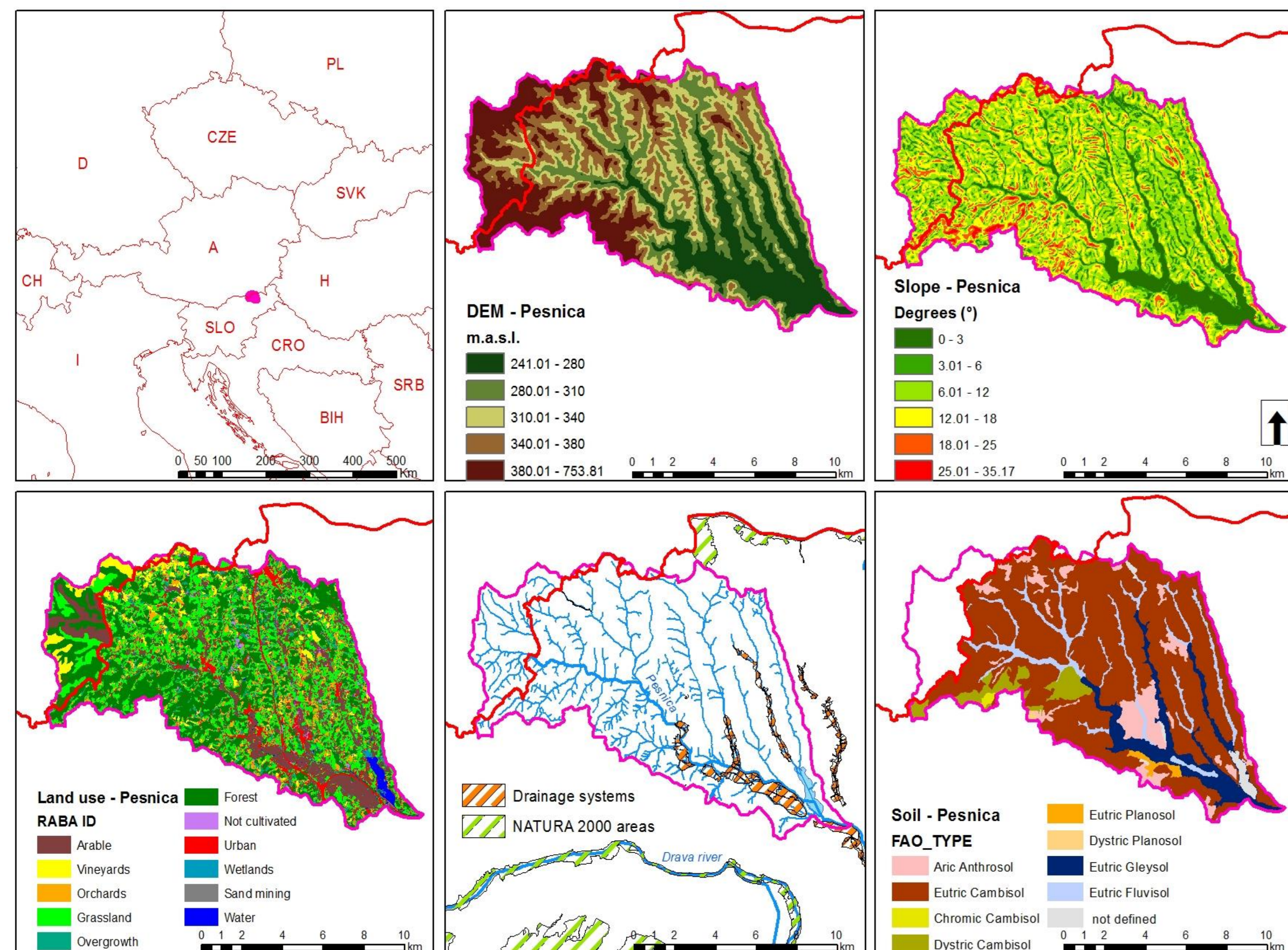


KGZ MB STUDY SITE: Pesnica River, Slovenia

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LOCATION & LANDUSE

The Pesnica river catchment is part of the Danube river basin (Pesnica/Drava river/Danube river/Black sea) and is located in north-eastern Slovenia, and it is part of Continental biogeographic region.



GENERAL INFORMATION & PROBLEMS

Valley bottoms were regulated due to the floods that occur during intense precipitation events.

The river has a mild snow-rain regime with peak flows in March, November and December.

According to data, most of the stream is in good chemical and poor to moderate ecological status. Herbicide residues and significant amounts of nitrates and phosphates in the water indicate that the main contaminant of river water is agriculture on the surrounding land.



Pesnica, Kungota (Foto: A. Lukman, 2012)

Pesnica, Pesniški Dvor (Foto: A. Lukman, 2016)

Arable land with intensive agricultural production extends almost to the riverbed. Agriculture-type is divided on a hilly area with predominating vineyards, orchards and grasslands; and on valley bottom flatland with arable fields. Primary animal production type is dairy cows, cattle for meat, pigs. Agricultural land presents 65% of the area.

With heavier rainfall, its flow increases rapidly and therefore it once regularly flooded large parts of the valley floor.

Over the last 60 years, rivers and streams have been regulated, and a number of amelioration of agricultural land have been carried out in lowland agricultural areas in order to establish more favourable soil conditions for agricultural production.

Due to land reclamation and regulation, the flora and fauna have also undergone major changes, but the biological condition has stabilized to some extent over time, despite major interventions.

EXISTING NATURAL/SMALL RETENTION MEASURES



▷ Arable land surrounds Pesnica river



▷ Pesnica streams have been regulated to prevent flooding



▷ Large farms use minimal tillage for cultivation



▷ The higher areas are suitable for orchards and vineyards, and in the lower parts there are ponds and lakes surrounded by fields.



STAKEHOLDERS

- **Farmers:** as main target group will be involved sharing local and personal knowledge and know how about agricultural and water management practices, tools and techniques, economics of technologies used in the area, which are dependent on the natural conditions (soil, climate, plant type) but also from management type (intensive, sustainable) and respected legislative rules.
- **Advisers:** Agricultural and environmental advisors are a vital link between policy makers and users of rural area. The most important contribution of their involvement is in the project approach, which respects learning by doing and bottom-up principle.
- **NGO's:** Nature protection organizations and other civil or local action groups are an important collaborative partner by recognizing problems, barriers and best practices as well as the implementation of legislative rules, which assure the better status of qualitative and quantitative of water resources.
- **Water supply companies:** are supporting organizations, which will assure data about monitoring and other essential inputs for the project.
- **Policy makers/Govern.:** Ministries and national agencies will be stakeholders to propose efficient legislation backgrounds, and which will participate in the dialogue with land users.