

Outcomes of the SAVA TIES project

Preserving Sava River Basin Habitats through Transnational Management of Invasive Alien Species

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Sava TIES

Preserving **Sava** River Basin Habitats through **T**ransnational
Management of **I**nvasive **A**lien **S**pecies

- **Sava River** ~ 1000 km
Biggest Danube tributary by
water quantity

Connecting :

- Slovenia
- Croatia
- Bosnia & Herzegovina
- Serbia

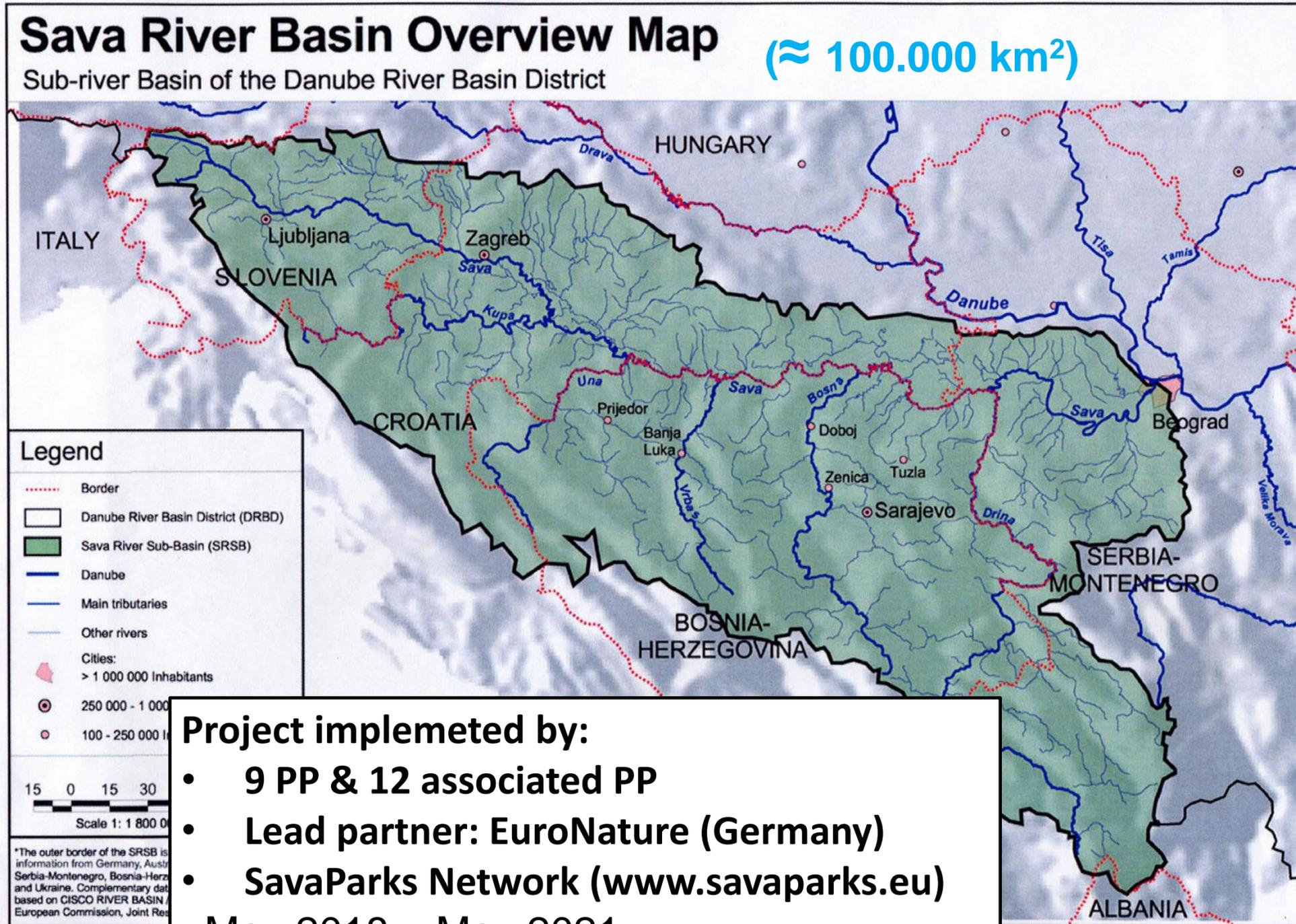
(\approx 100.000 km²)

3 biogeographical regions

Rivers are the most important corridors in the
lowlands (Forman 1983, Burchart 2001)

Floodplains are prone to invasions!

(Disturbation & Resources);



Political & legislative challenge:

- 2 States in EU (Croatia and Slovenia)
- 2 States out (Serbia - candidate; B&H not in the project time)

Strategical objective:

Improve the corridors connectivity!!

Project (outcome) objective:

Common platform for IAS management!

Project implemented by:

- 9 PP & 12 associated PP
- Lead partner: EuroNature (Germany)
- SavaParks Network (www.savaparks.eu)

May 2018 – May 2021

Improving the transnational Sava River ecological corridor functionality:

Reduce habitat fragmentation by efficient IAS management.

- Cross-sectoral cooperation
- Common platform
- Policy impact



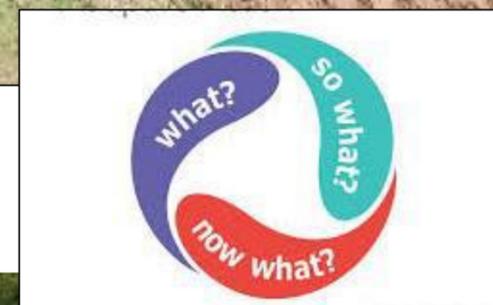
We started from: Land Use Analyses

(Reveal gaps & synergies)

Target sectors: Agriculture, Forestry,
Water management, Tourism...

- Knowledge about IAS?
- Do they consider IAS in their management plans?
- How their land management practice affect IAS?
- Conflicts and synergies

Multilingual Google Survey ([Link](#))



7 Pilots - IAS management

Methods: Grinding + grazing OR Bioballer (*Amorpha*);
 Wiping by herbicides (**milkweed**), Extractigator (*Ailanthus, Impatiens g.*);
 Cutting + Injecting herbicides (*Reynotria*); Cutting + Covering nylon sheets
 (*Reynotria*); wetland rejuvenation (*Amorpha*).

Never neglect local
Circumstances and the policies!

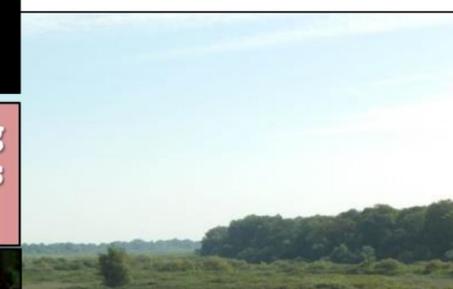
Issues:

- Conflict in conservation objectives (corncrake VS invasive plants);
- Bioballer canceled for high border tax (Hungary to Croatia);
- Fragmented ownership preventing full IAS eradication (small land parcels inherited by several descendants);
- Complex public procurements in non-member states (Interreg PRAG procedure);
- Imprecise TOR for Contract service (soil excavation, deposition);
- Two entities sharing restoration site;
- Princess goats (did not want to browse *Reynotria*)



Potential usage compatible with eradication

Newly emergent shoots in the spring can be controlled by grazing of goats and cattle.



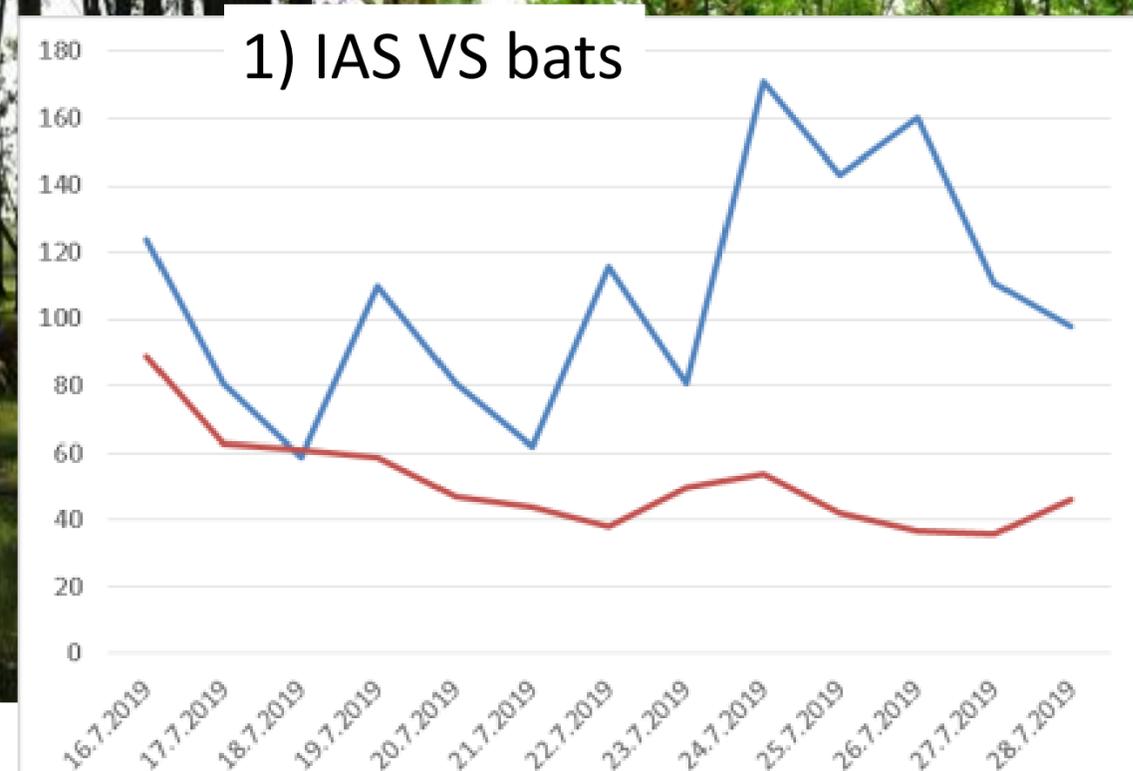
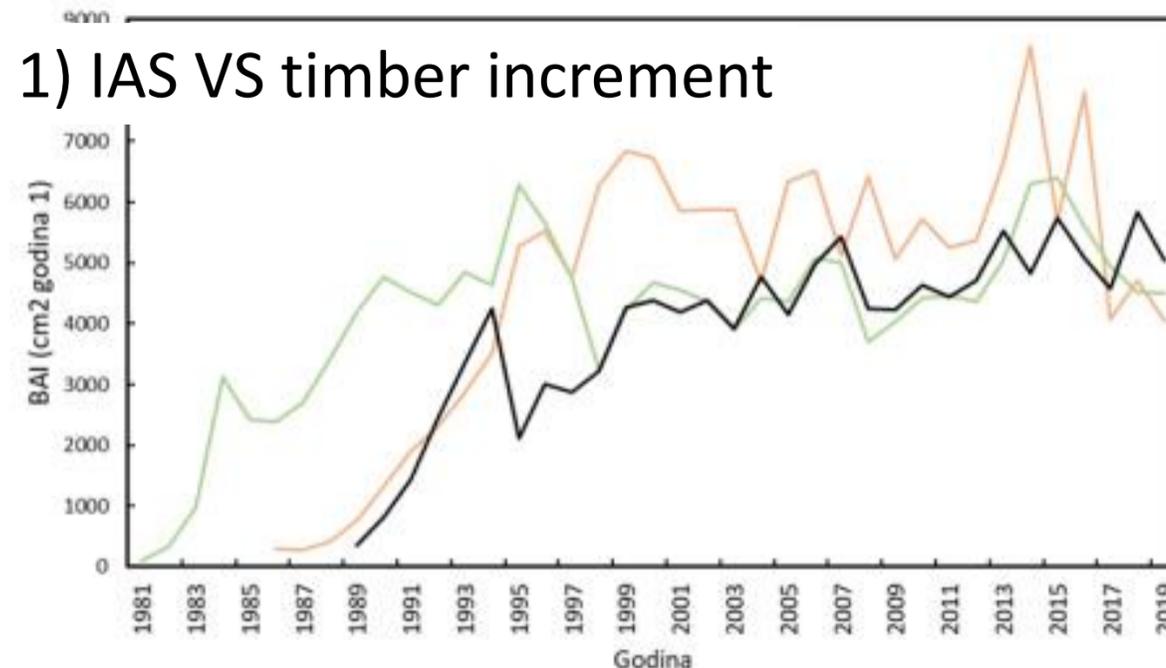
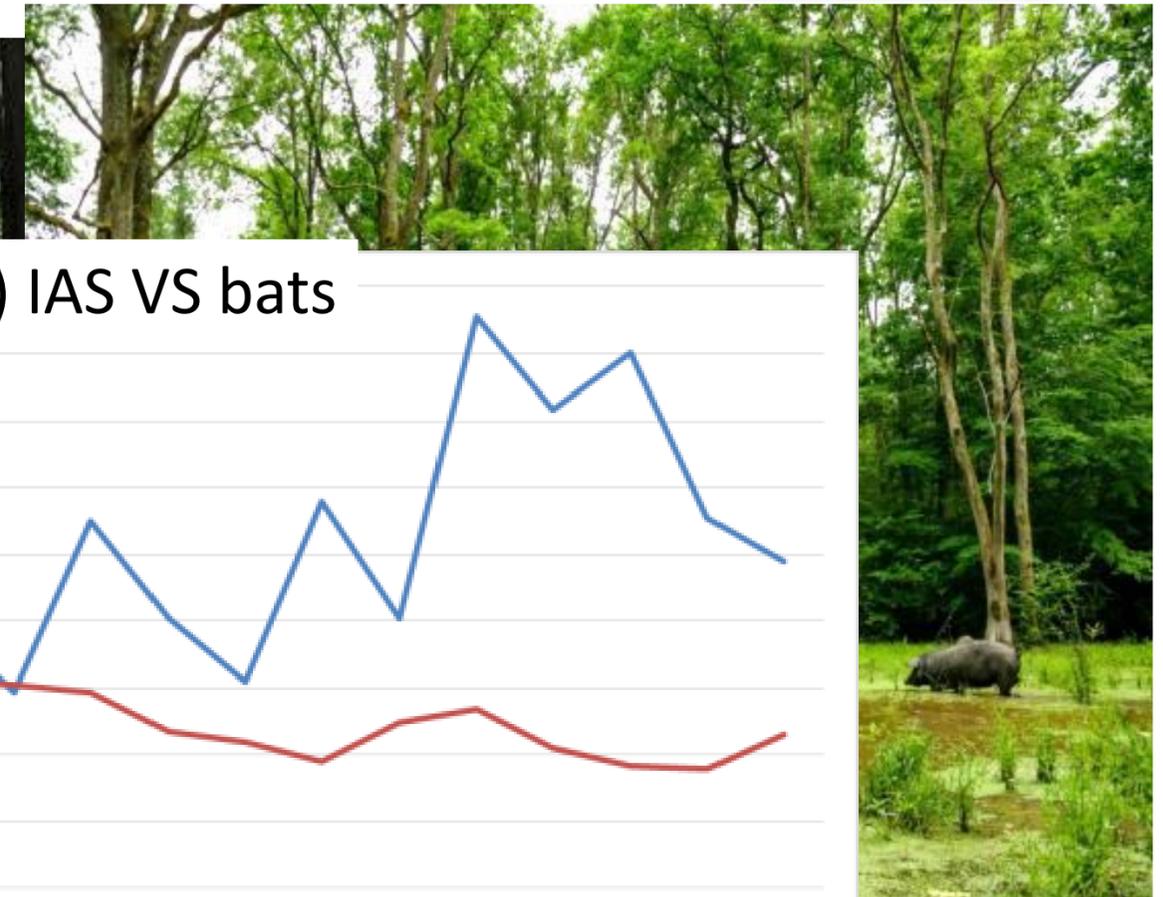
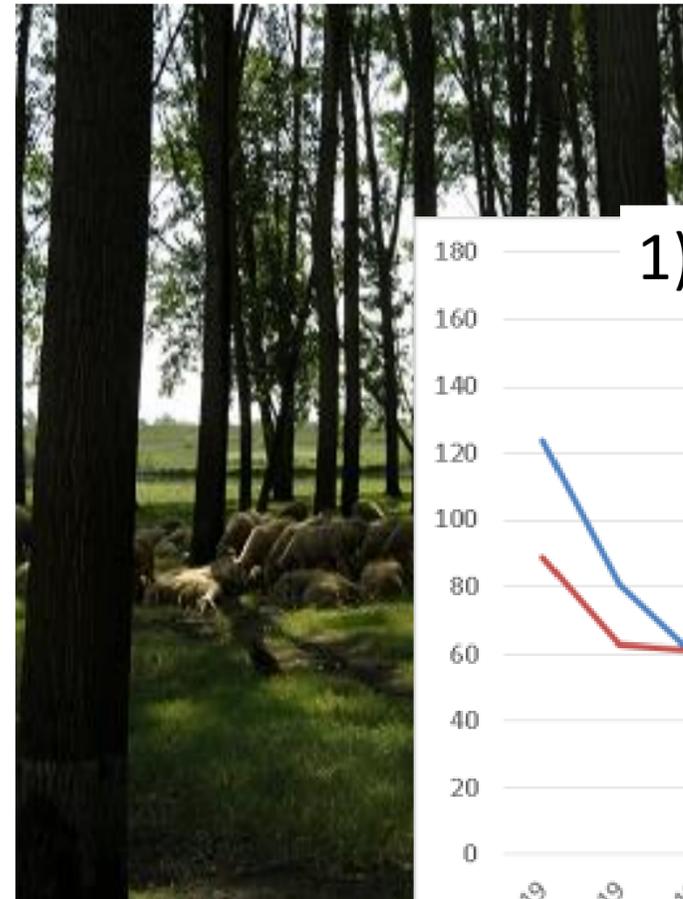
Two Pilots (research) synergies with land users

Comparative analyses of two clusters of oak and poplar forest habitats:

- Infested by IAS
- Controlled by grazing

Timber increment

Bats

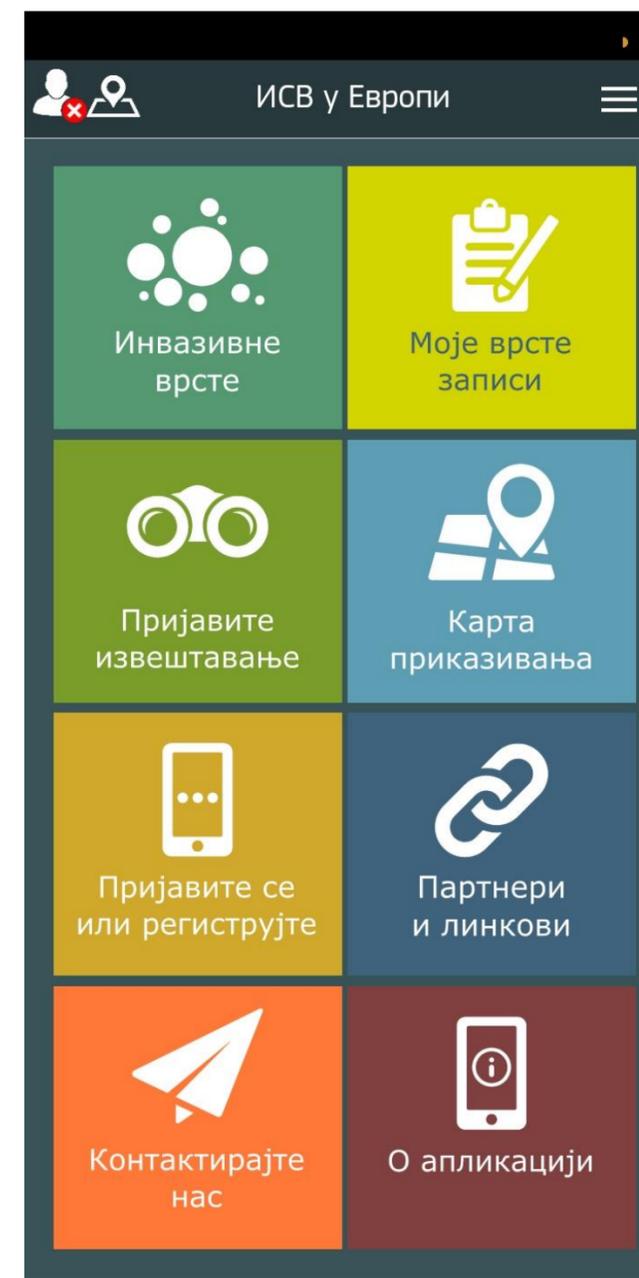
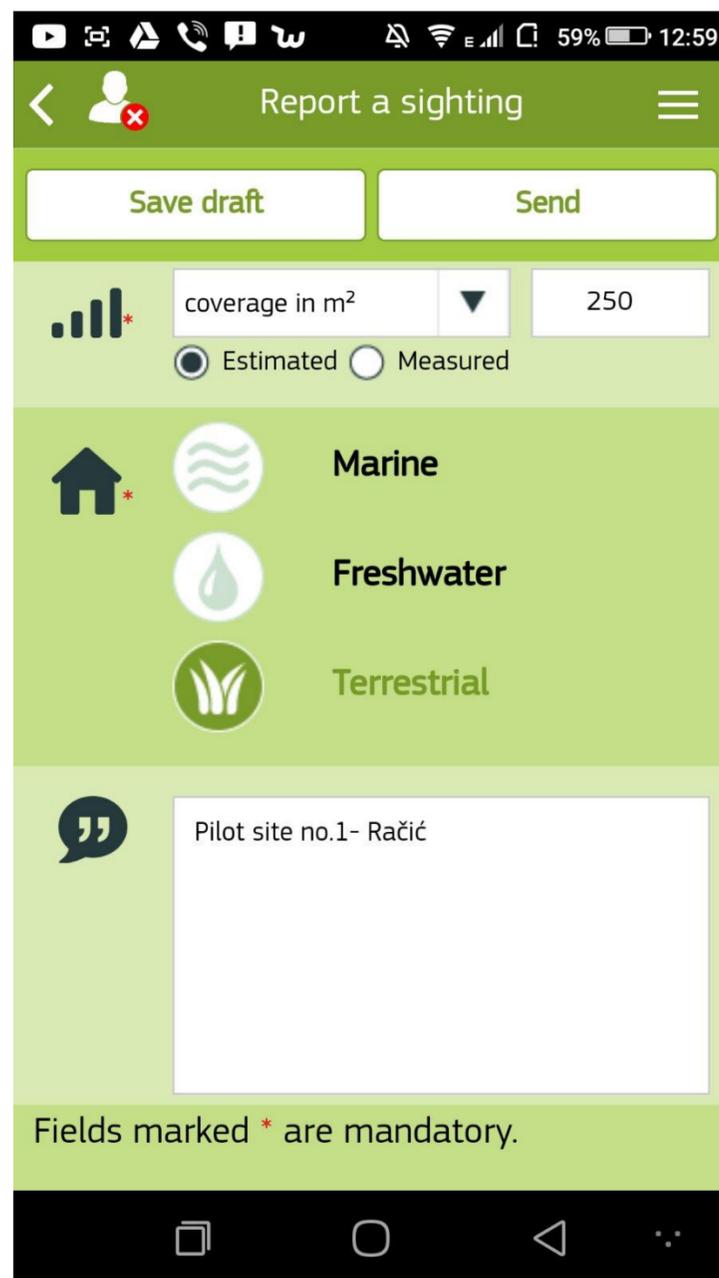


Mobile application for IAS mapping (JRC EASIN)

The mobile application is 'extended' app „**Invasive Alien Species Europe**“:

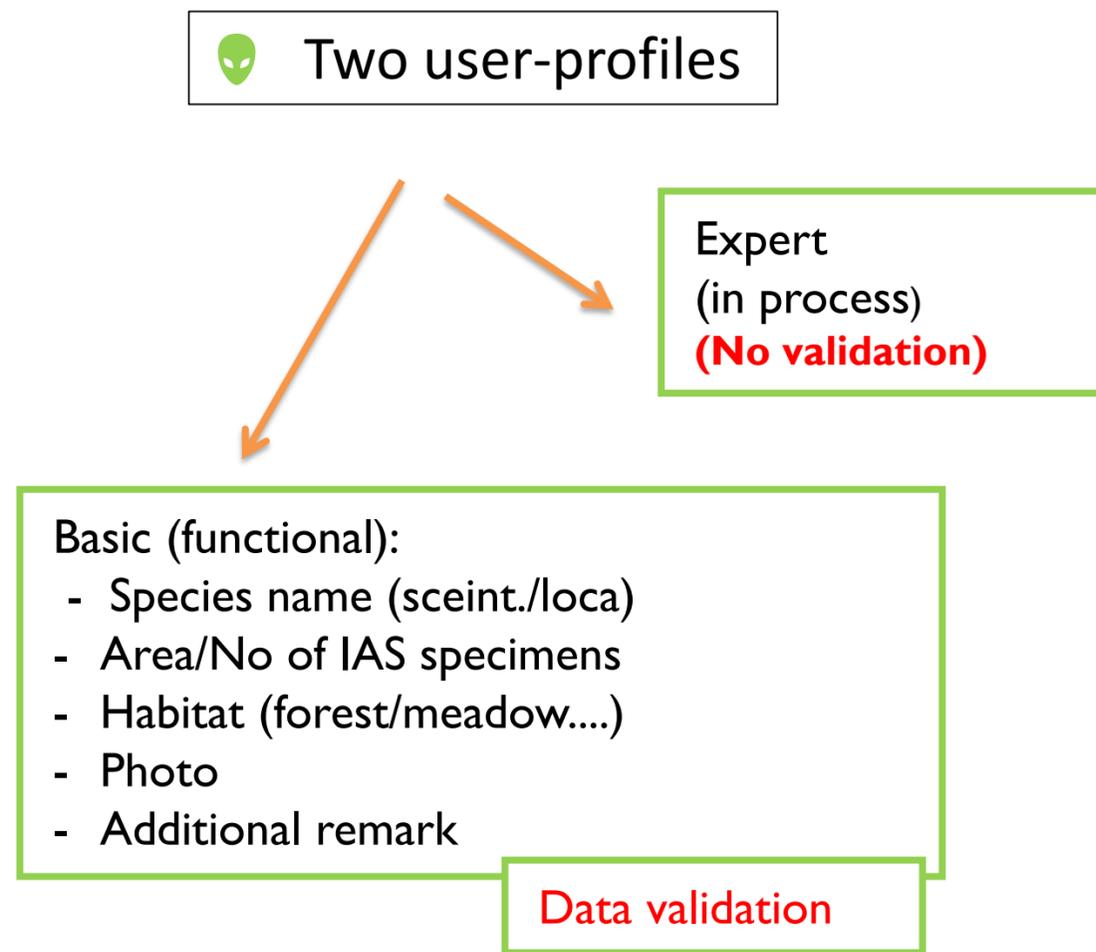
- New geographical layer Sava River Basin
- 32 key invasive plants in the basin

JRC EASIN, National languages



What is application purpose?

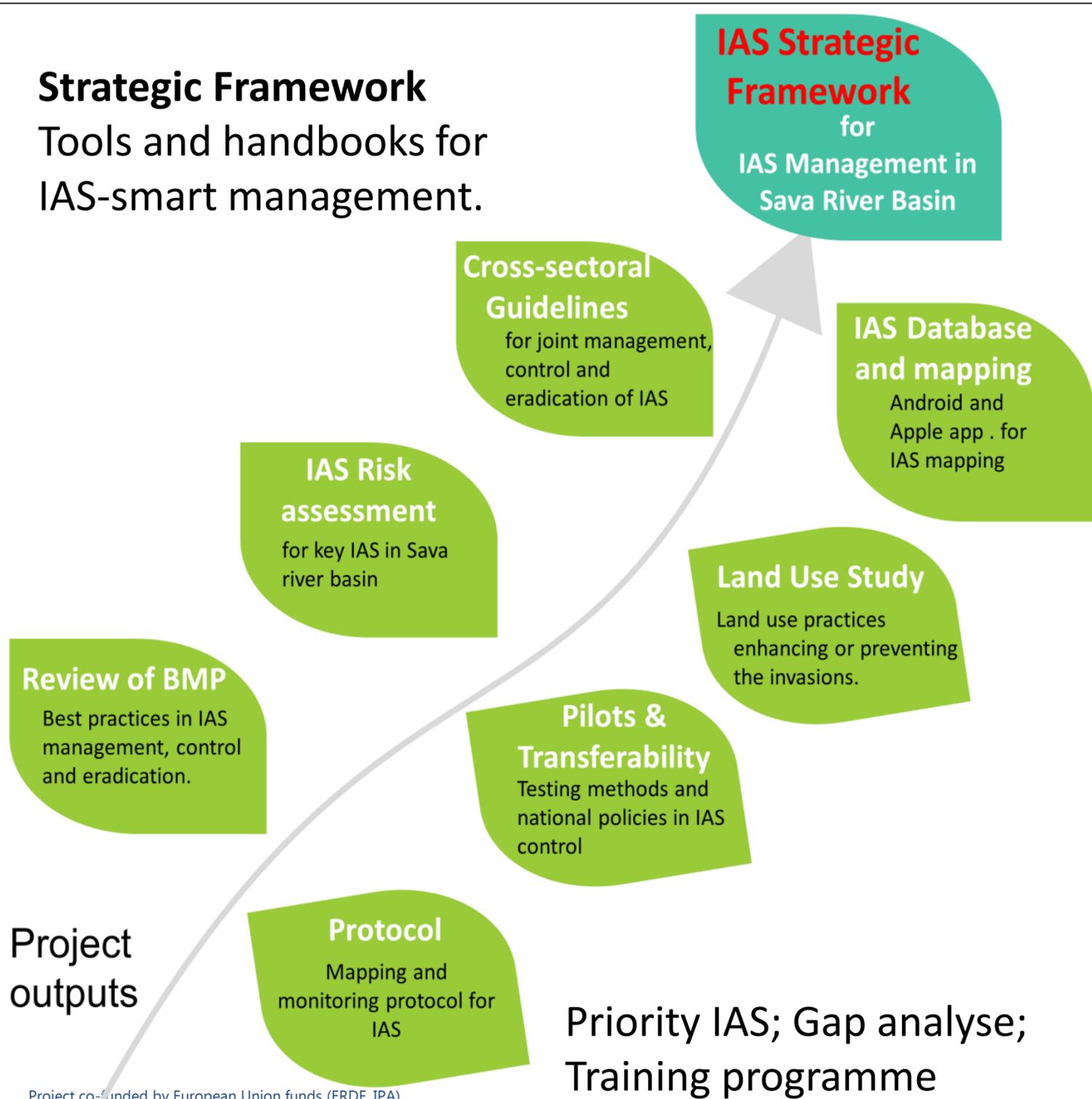
- To provide overview of the present IAS „from the both sides of the river“
- To focus on priorities, prevent conflicts!



| Habitat types (Habitat Directive): | Habitat type | % | | |
|--|--|------------|------------------------------|-----------------------------|
| | 91 E0* | 80 % | | |
| | 91 F0 | 20% | | |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |
| | | | | |
| Endangered species: | Leucojum aestivum , Armoratia macrocarpa | | | |
| Endangering factors and conservation problem: | | | | |
| The degree of degradation of the habitat: | Low | Moderate | High | |
| Spreading pathways (eg: river, ditch, road, cattle): | ditch dirt road | | | |
| Risk assesment of spreading | Low | Moderate | High | |
| Scientific name of IAS / local name | Amorpha fruticosa | Layer | Invasiveness status /density | |
| Distribution/area covered | point | tree | initial | intermediate progressive |
| | patchy | shrub | | |
| | linear | herbaceous | | |

Strategic Framework for efficient IAS management

Strategic Framework
Tools and handbooks for IAS-smart management.



Review of BMP
Best practices in IAS management, control and eradication.

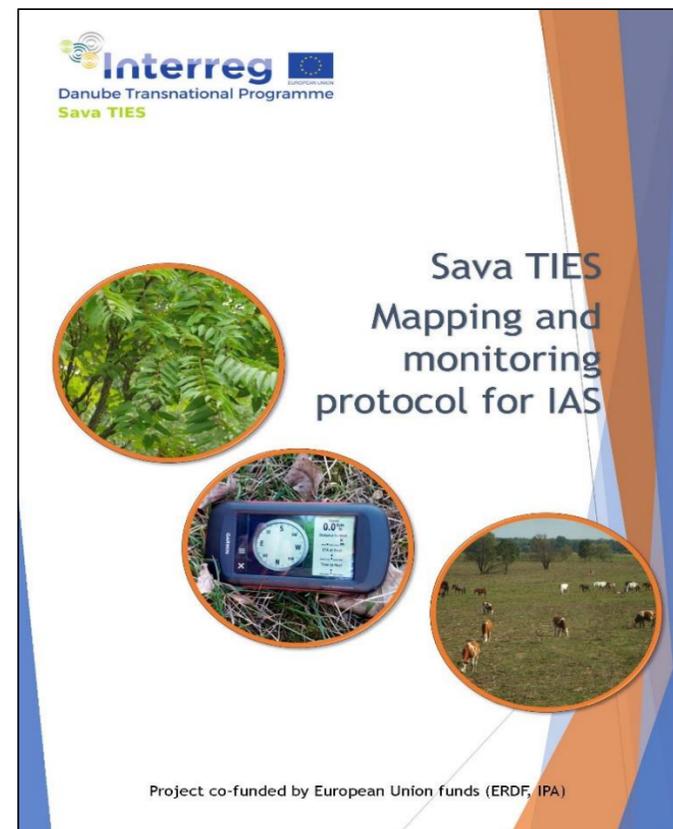
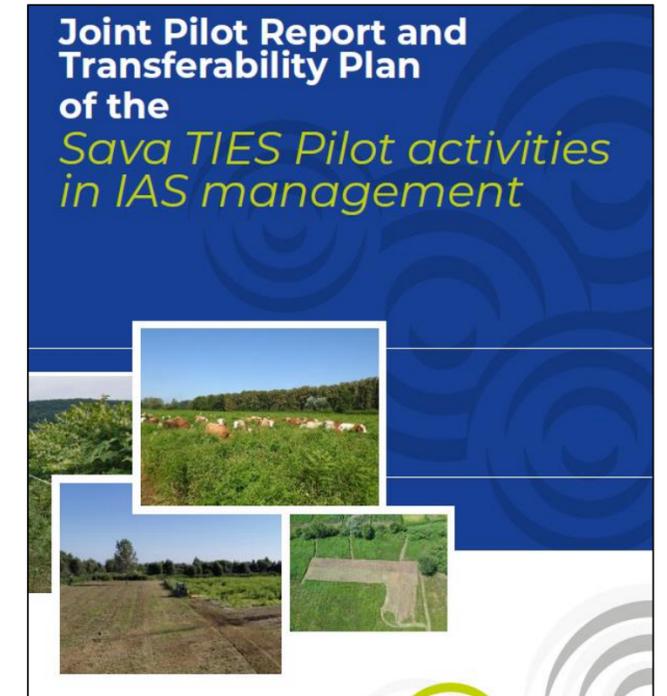
IAS Risk assessment
for key IAS in Sava river basin

Cross-sectoral Guidelines
for joint management, control and eradication of IAS

Land Use Study
Land use practices enhancing or preventing the invasions.

IAS Database and mapping
Android and Apple app . for IAS mapping

IAS Strategic Framework
for IAS Management in Sava River Basin



Trainings - Stakeholders & Schools

1) Schools along Sava River



2) Land users and governance

Invasive Alien Species and their Management

A TRAINING COURSE MANUAL

 
Danube Transnational Programme
Sava TIES

www.interreg-danube.eu/sava-ties
Project co-funded by European Union funds (ERDF, IPA)



Transfer & Outreach



11th International Conference on Biological Invasions: The Human Role in Biological Invasions - a case of Dr Jekyll and Mr Hyde?

NEOBIOTA2020
 15 - 18 September 2020
 Vodice, Croatia





Exchanging Experiences
on INVASIVE ALIEN SPECIES Projects in Europe

May 25 and 26, 2023
 Social Innovation Center. La Noria. Malaga (Spain)

THE 1ST CONFERENCE ON INVASION BIOLOGY AND ONE BIOSECURITY

2025. 03. 26.



INVASION BIOLOGY
 DIVISION



Springer Nature

Outline
Ecological Connectivity of Forest Ecosystems



Further upscaling:

Lessons learned in Sava TIES will be transferred to site „Gornje Podunavlje“ in the Horizon Europe project „Restore4Life“

Tata, Hungary
On the 4th March
2026

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Post-project achievements

1. Protected areas - Invasive species in regular management (PA management plans);
2. National Forestry Directorate: Manual in Forest management planning integrated Invasive species as an obligatory chapter in Forest management plans (FMP);
3. Each FMP is given a list of invasive plant species (private and public forests);
4. School pupils (future decision makers) along the Sava River and tributaries are engaged;
5. The Handbooks for IAS management, planning Templates, mapping Protocol, Risk Assessment, Training materials, Regional Policy Gap Analyse provides the

Strategic Framework for Efficient Invasive Species Management

1. All above without a national regulation (hard policy) on invasive species.
2. A common ground about IAS joined different sectors, harmonised attitudes and efforts towards finding win-win opportunities for common benefits.



Step into stakeholder's shoes!

Project Catchword!

Sava TIES

