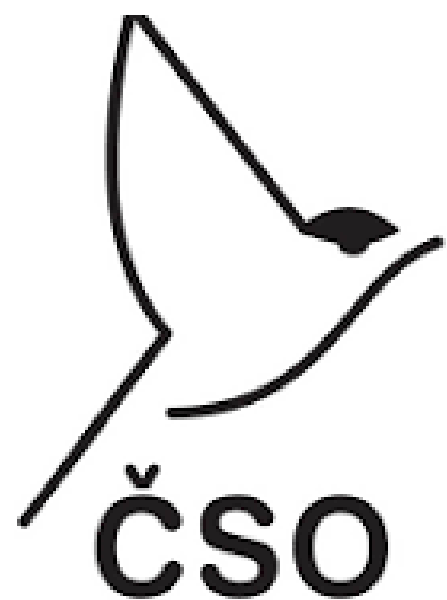


Moving forward - Agroforestry in the Czech Republic



Zámečník V., Kotrba R., Lojka B., Svobodová L., Houška J.
Birdlife Czech Republic,
Czech Agroforestry Association,
Czech University of Life Sciences Prague,
Ministry of Agriculture of The Czech Republic,
Landscape Research Institute

Photo: Čermák, 2023



PROBLEMS OF THE CZECH LANDSCAPE/AGRICULTURE

- **Dual structure of farms**
- **Large field blocs**
- **Minimum of landscape features**
- **Intensive agriculture having ideal conditions for erosion**
- **High loss of biodiversity**
- **Tendency to continental climate, therefore big risks of climate change impact**



One of the most fertile areas of Southern Moravia 12 August 2018

AGROENVIRONMENTAL MEASURES ARE NOT FOR PRODUCTION, BUT AGROFORESTRY HAS A COMBINATION OF PRODUCTIVE AND NON PRODUCTIVE EFFECTS (ECOSYSTEM SERVICES) AT ONES

Corn

Non „productive“ landscape orchard

Corn

Biostripe for wild game

Ecofarm of Petr Marada in Southern Moravia, Šardice, 14 August 2019



PREPARATION OF AGROFORESTRY MEASURES SINCE 2019

Experience from abroad and CZ

Outputs from
international projects
(e.g. AGFOSY,
AGFORWARD, AFINET),
experiences with
agroforestry shared in
the framework of
workshops (CZU, Czech
Agroforestry Association)

Discussion and consultation in the working group

MoA
MoE
Nature Conservation Agency
State Ag. Intervention Fund

Research organizations
CZU, MENDELU
Expert advisors

NGOs
ČSAL, ASZ, ...

Implementation with Czech specifics

**73% of land managed by
tenants**

**large land blocks
almost without
landscape features**

potential for invasiveness
of non-native tree species



AGFOSY- INTERNATIONAL PROJECT

- Creation of educational materials for AF
- Partners CZ (ASZ, ČSAL), SK (NLC), HU (UniSopron), BE (ELO), FR (AFAF), ES (OpA)
- Period 10/2018-9/2020, budget 300 000 EUR
- Current status of AF in participating countries
- AF case studies (30)
- Methodological sheets for the establishment and management of AF
- Short educational videos
- Study materials



Asociace
soukromého
zemědělství ČR



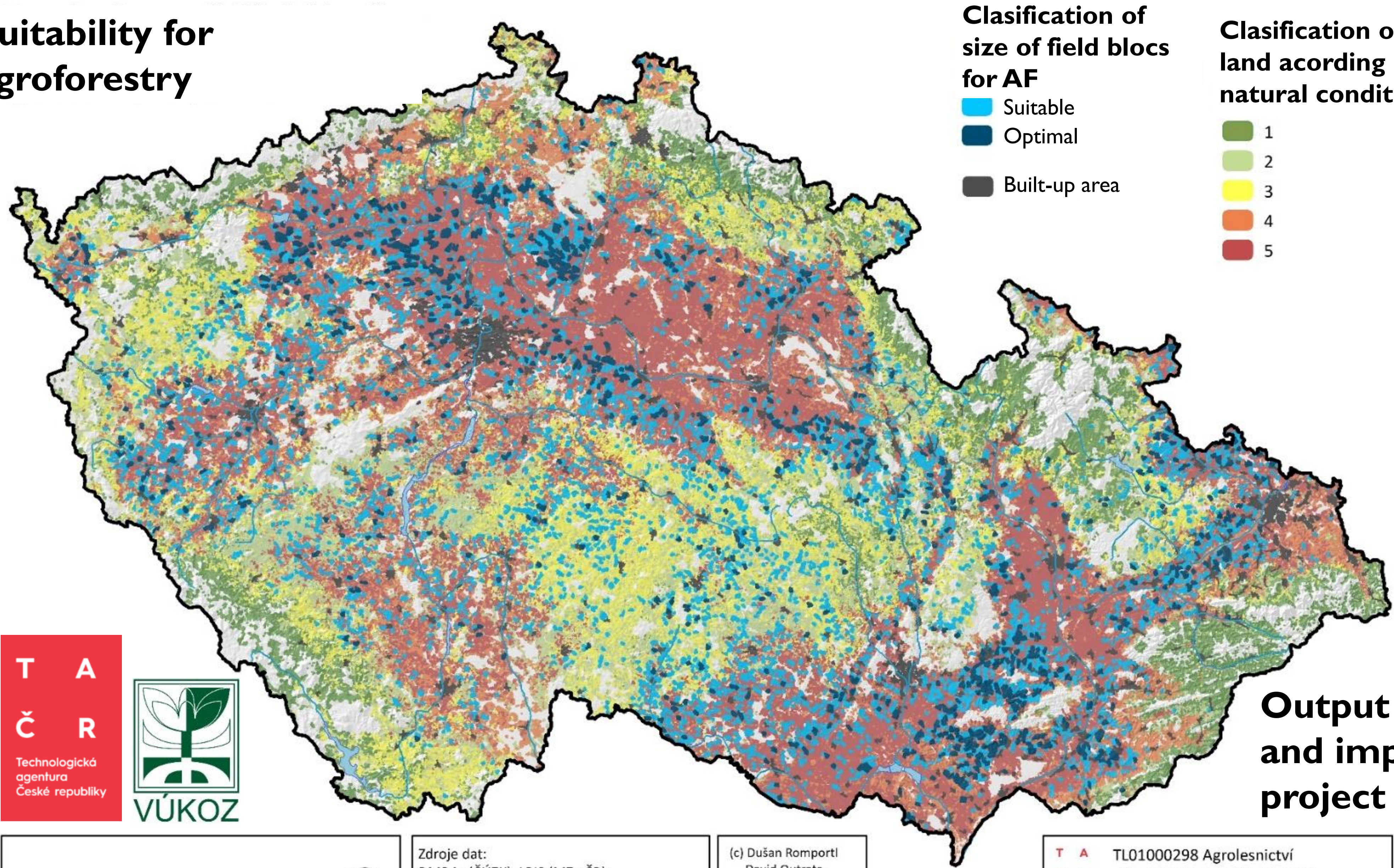
SOE KKK NONPROFIT KFT.
Soproni Egyetem Kooperációs Kutatási Központ
Nonprofit Korlátolt Felelősségű Társaság



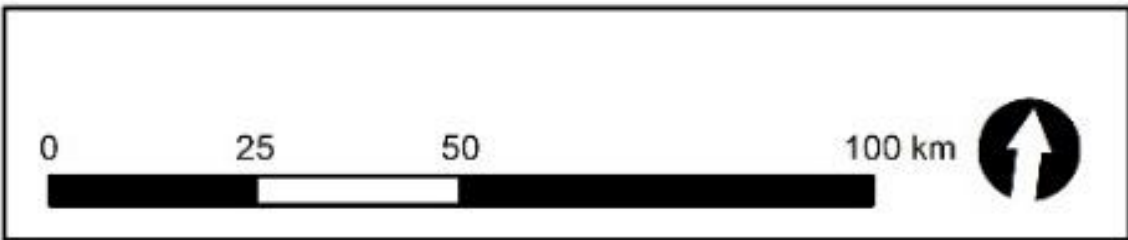
<https://www.agroforestrysystems.eu/en>

Typology of Czech landscape based on natural conditions, erosion vulnerability and size of field blocs

Suitability for agroforestry



Output of research and implementation project



Zdroje dat:
DMR4g (ČÚZK), LPIS (MZe ČR),
BPEJ (VÚMOP), Atlas podnebí Česka (ČHMÚ)

(c) Dušan Romportl
David Outrata,
Jan Weger
VÚKOZ, v.v.i.; 2019

T A TL01000298 Agrolesnictví
Č R - šance pro regionální rozvoj
Technická agentura a udržitelnost venkovské krajiny
Česká republika



AGROFORESTRY IN THE CZECHIA CAP STRATEGIC PLAN 2023 - 2027

Target	900 ha
Total allocation	5,274,900 EUR

- ✦ In the CAP Strategic Plan for the period 2023 – 2027, **the target was 900 ha**
- ✦ Agroforestry has been perceived as a measure with a **comprehensive benefit for mitigation of climate change and improvement of the environment**
- ✦ Its **certain advantage/disadvantage** is that it brings both ecosystem and economic benefits, but in the medium to long term
- ✦ The measure is established by a **government decree** and is a claim measure
- ✦ Investment measures for **establishment (4,353 EUR/ha)**, 5-year tree **maintenance (754 EUR/ha)**
- ✦ **Modification will be considered**, or modification of the program document.

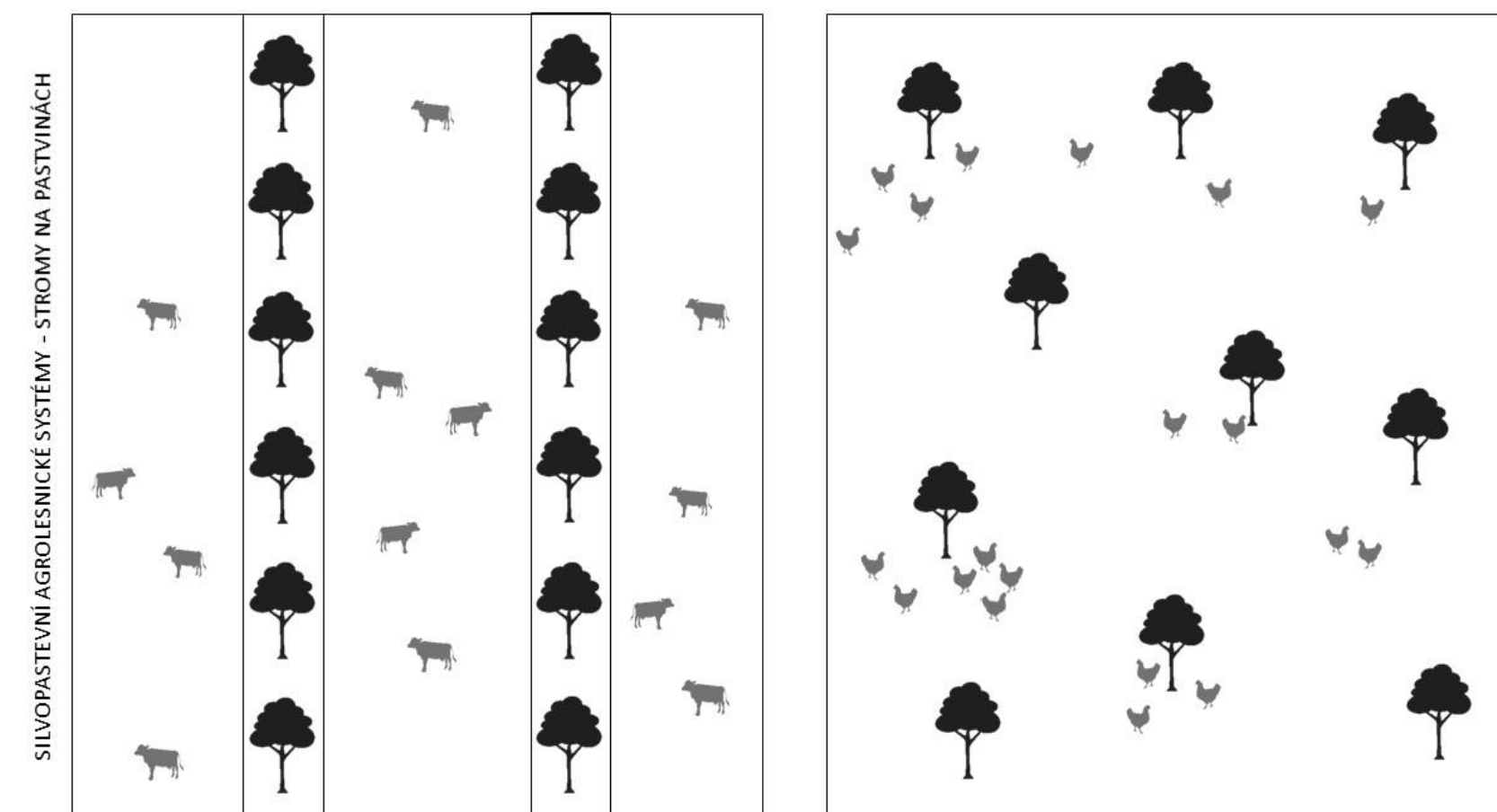
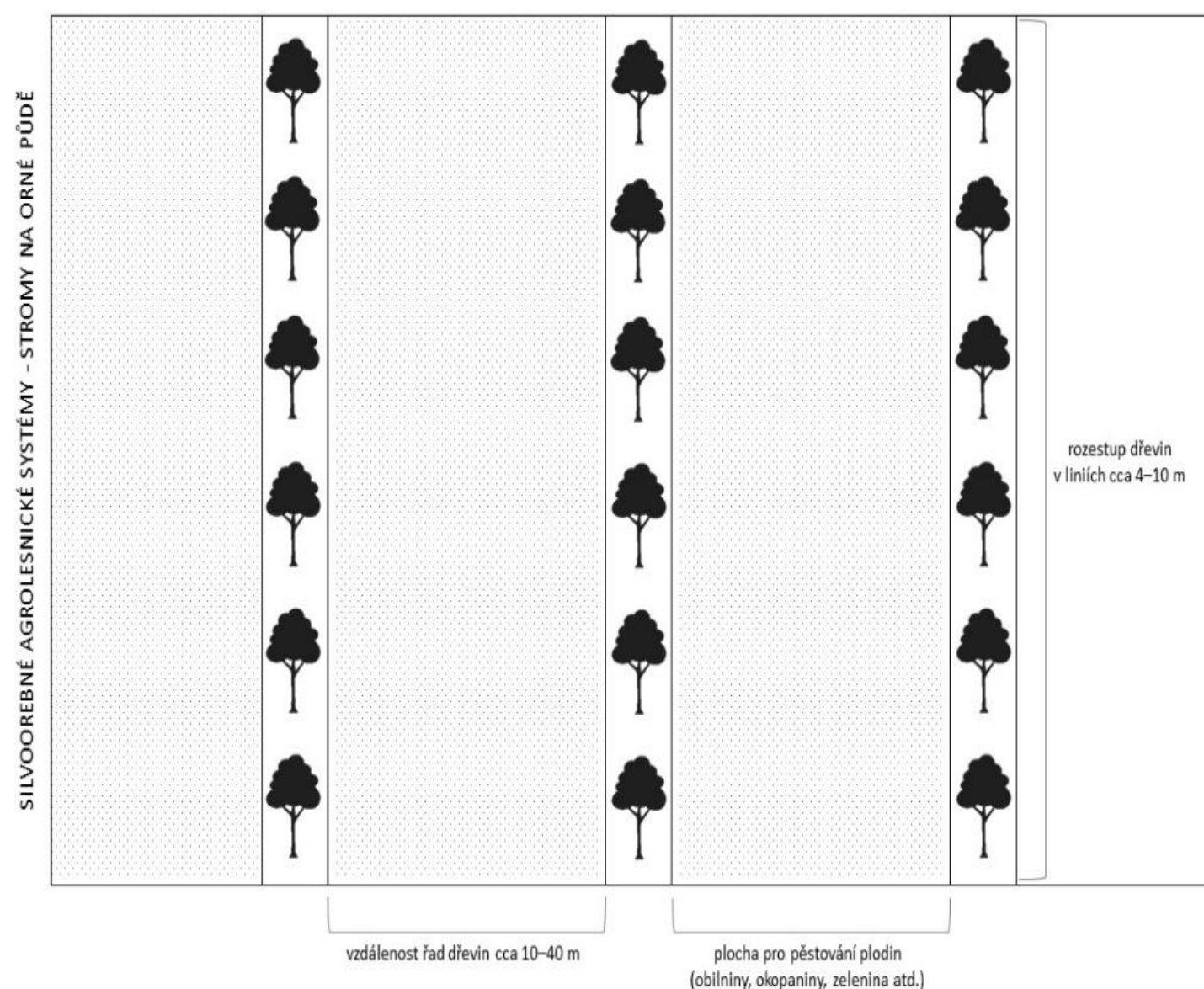
SUPPORT FOR TWO TYPES OF AGROFORESTRY SYSTEMS-PARAMETERS



Silvoarable

The land between the belts of trees (width 1 – 10 m, distance between the strips 10 – 100 m) is farmed

- Planting **100 trees** per ha
- At least **0.5 ha** for entry
- More than **50 % of forest tree** species
- Less than **40 % of one species**
- List of **permitted trees** (46 forest + 13 fruit trees)
- List of **permitted shrubs** under trees- not calculated in trees
- height of trees **min. 120 cm**
- **75%** of viable individuals at the end after 5 years from establishment



Silvopastoral

Between the trees (planting in lines, groups, scattered) there is grazing and/or felling





Example of silvoarable system- research plot at Landscape Research Institute in Pruhonice



Example of silvopastoral system- Farm of Daniel Pitek under Milesovka hill

APPLICATION FOR THE AGROFORESTRY MEASURE

Notification

- Total size of land on which the AFS will be established announced by **15th of May**

Application for an establishment subsidy

- **Until 30 November** in the year when ALS was established/planted
- Parcel list, incl. culture in LPIS (R, G, T)
- **Agroforestry project** incl. map of agroforestry design and documents on the **origin of trees**
- **Approval** opinions, permits, Nature conservation agency

Application for inclusion in management subsidy

- Along with the request for an establishment subsidy
- **For 5 following calendar years**

Application for subsidy for the following management

- Together with annual **single request by 15th of May** (year after establishment)

Applicant: Land users registered in LPIS, minimum for entry 0.5 ha, all Czech regions except Prague

AFS	Rate amount in EUR/ha
establishment of AFS	4,353
follow-up care for 5 years from establishment	754

Example of silvopastoral agroforestry established within CAP intervention



Bohdan and Nikola Lojka Farm in Kněžice- Dubečno

Agroforestry design for AF measure within CAP



- 1st (from right)- rowan, walnut, wild cherry, linden (3x10 m)
- 2nd- apricots, almonds, sour cherry, apple, pear, rowan, linden (3x6m)
- 3rd- chesnut, wild cherry, walnut, rowan, linden (3x7m)
- 4th- chesnut, wild cherry (3x8m)



OVERVIEW OF SUBMITTED NOTIFICATIONS AND APPLICATIONS FOR THE ESTABLISHMENT IN 2023

Agroforestry measure 2023	Number of applicants	Extension (ha)		
Declaration of interest*	151	1,472.6		
Application for support**	87	Silvoarable		Silvopastoral
		Standard	Grassland	Permanent
		arable land		
		163.8	25.5	grassland
		189.3	420.8	
		610.3		

* by the end of Sept 2023
** by the end of Nov 2023

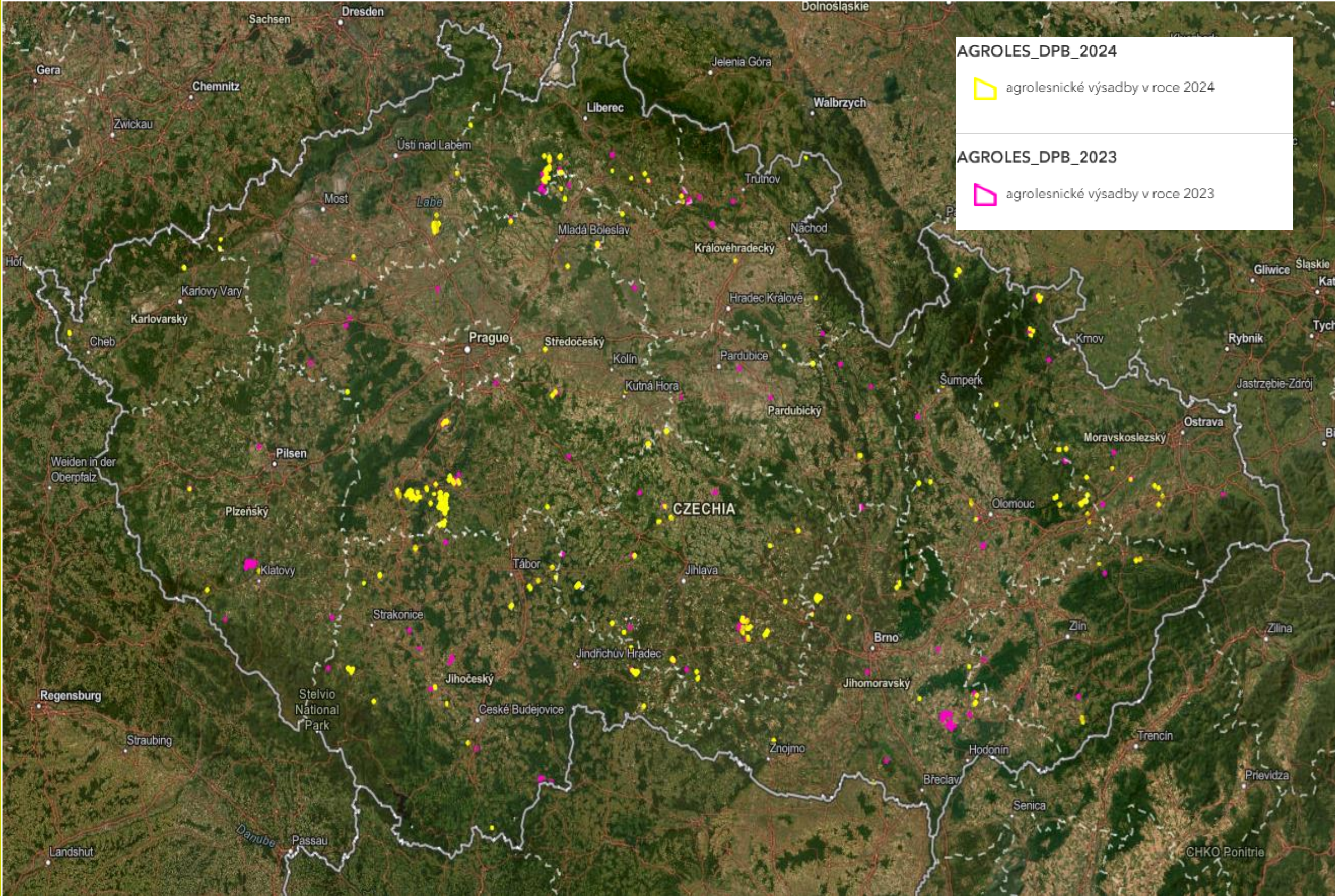
AND IN 2024

Agroforestry measure 2024	Number of applicants	Extension (ha)		
Declaration of interest*	211	3,029.0		
Application for support**	126	Silvoarable		Silvopastoral
		Standard arable land	Grassland	Permanent grassland
		532.0	42.0	566.0
		574.0		
		1,140.0		

* by the end of May 2024
** by the end of Nov 2024



DISTRIBUTION OF ESTABLISHED AFS WITHIN CZECHIA





BASIC STATISTICS OF APPLICANTS FOR SUPPORT FOR ESTABLISHING AN AGROFORESTRY SYSTEM IN 2023

AFS size per applicant	Number of applicants	Total area registered in AFS in the given size category (ha)			
		Total	Arable land	Grassland	Permanent grassland
Up to 2 ha	34	43.0	14.0	7.3	21.8
2–5 ha	22	72.6	19.0	12.8	40.8
5–10 ha	17	127.6	25.2	5.4	97.0
10–20 ha	6	83.9	34.5	0.00	49.4
20–40 ha	5	119.1	12.9	0.00	106.2
Over 40 ha	3	164.1	58.2	0.00	105.9
Total	87	610.3	163.8	25.5	420.9

Source: LPIS (export as of 5/20/2024); processing of ÚZEI

- The largest total registered area per applicant is **79.4 ha**.

Most planted tree species

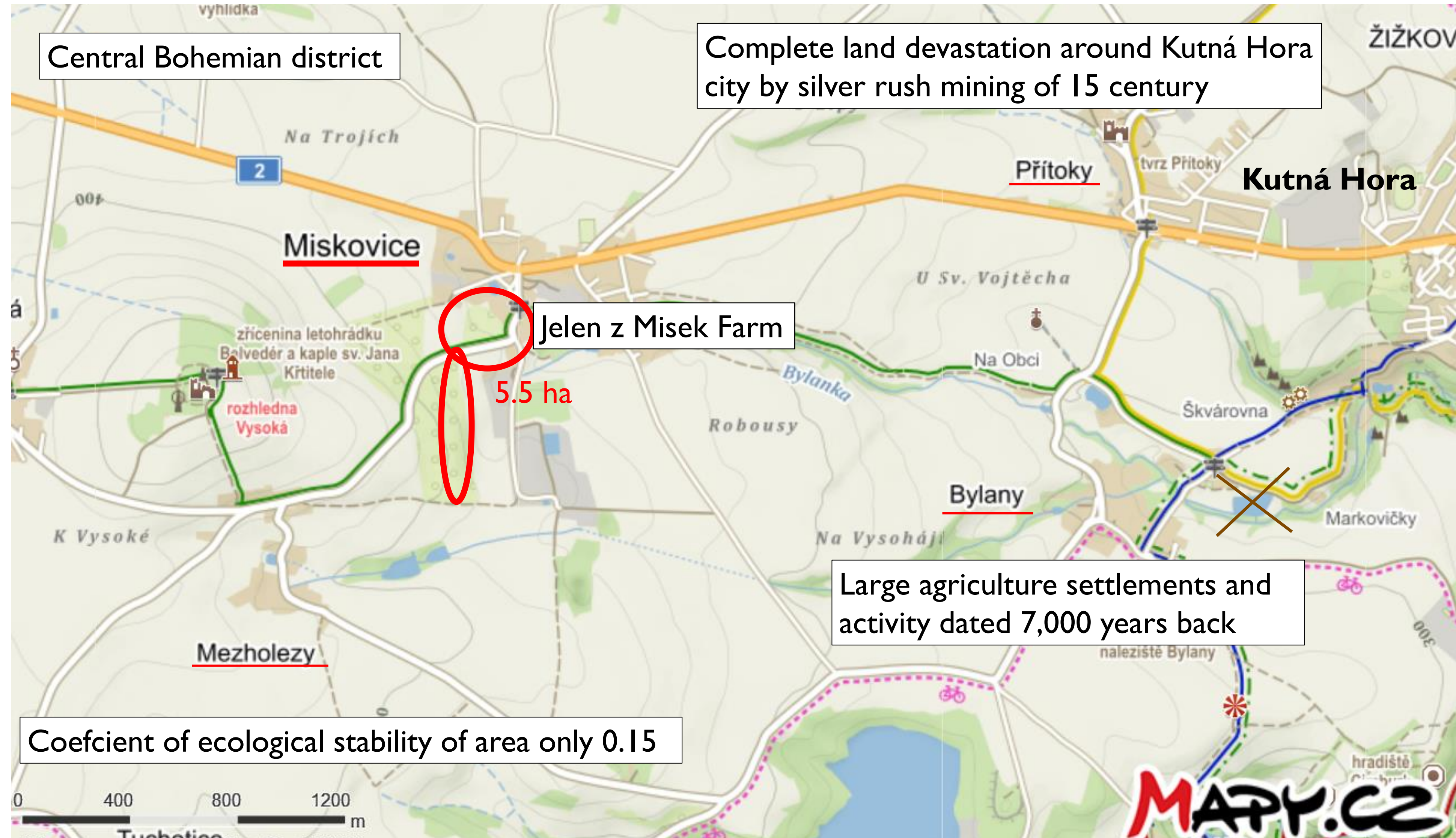
- **32 species of forest trees**, of which 5 are the most common: wild cherry, linden, hawthorn, maple, oak
- **18 types of fruit trees**, of which 5 are the most common: apple, plum, pear, cherry, walnut



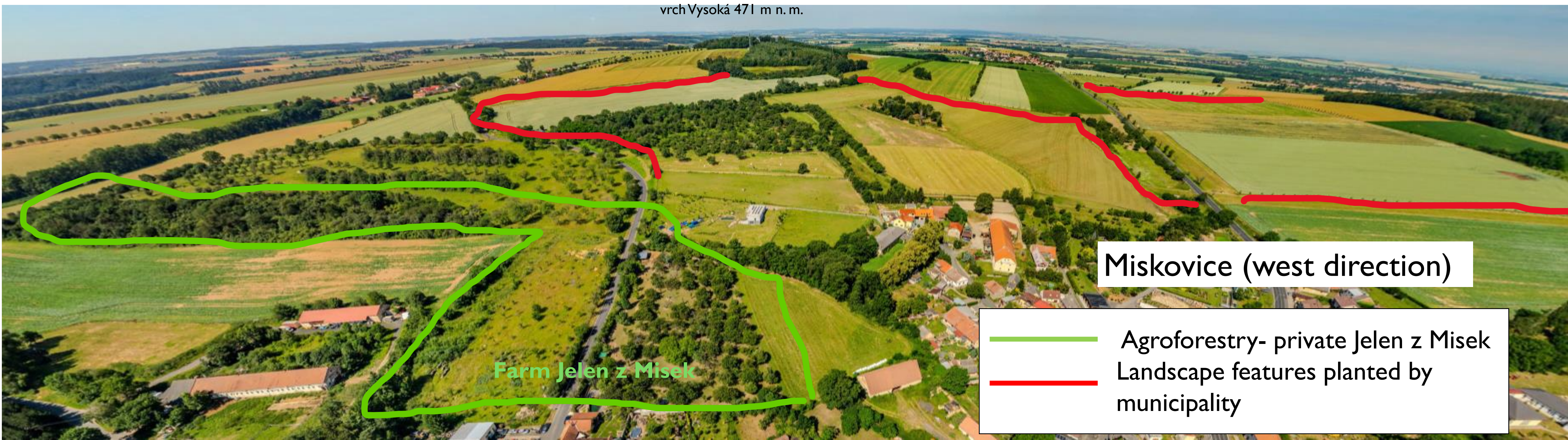
PLANS OR POTENTIAL OF AGROFORESTRY IN CZECHIA

- ✦ **Make the rules/variability for establishment of AF within CAP or other support more flexible and less strict for more diverse and unique combinations/ AF systems**
- ✦ **Fulfillment of climate change adaptation and mitigation strategies**
- ✦ **Suitable for adoption of Nature Restoration Law**
- ✦ **Meeting Biodiversity increase, carbon sequestration, lowering erosion**
- ✦ **Optimal system for more resilient, climate smart and economically more independent production**
- ✦ **Great for degraded land restoration esp. dynamic agroforestry (syntropic)**

Example of Jelen z Misek farm (Kotrba Family) based on multiple agroforestry having 48 nesting bird species, 4 amphibian species, abundant and diverse pollinators, no erosion, diverse combinations and management of plots- example like landscape after implementation of Nature restoration law might look like



LANDSCAPE FEATURES AND AGROFORESTRY AROUND MISKOVICE



OPTIMAL FUTURE?

REGENERATIVE/CARBON/PRECISE/? AGRICULTURE

(↑SOIL CARBON, ↑VEGETATION COVER, ↑ DIVERSE INTERCROP, ↓AGROCHEMICALS, ↓ EROSION)

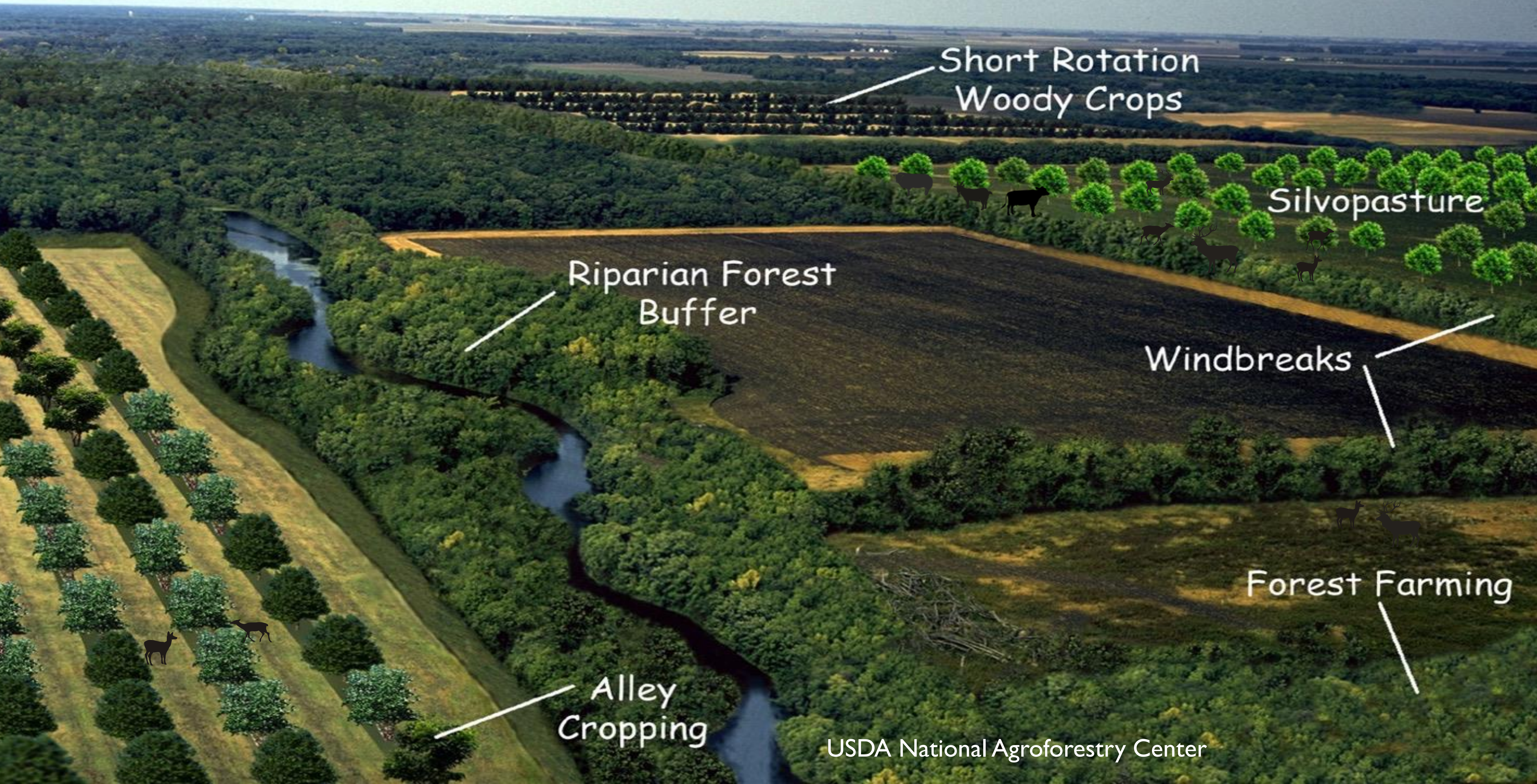
OR AT ONES

PRECISE REGENERATIVE DYNAMIC AGROFORESTRY AT ONE PLOT



©RegenFarmer, 2023

... complex management in resilient landscape and cooperation of all stakeholders



Planting rowan service tree (Italian variety) by Rowan Reid (AU) and Adolfo Rosati (IT) as tribute to EURAF 2024 conference during excursion post conference tour at Jelen z Misek farm Czechia

THANK YOU FOR YOUR ATTENTION

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More information about Czech agroforestry at www.agrolesnictvi.cz