



Ministry of Interior



Ministry of Agriculture

The 2nd River Basin Management Plan and measures for a sustainable agriculture

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The 2nd River Basin Management Plan (2000/60/EC Directive)



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Surface water (aim ecological protection)

- **ecological status, which is based on:**
 - **biological status**
 - **hydro-morphological status**
 - **physical-chemical status**
 - **specific pollutants**
- **chemical status**

Groundwater:

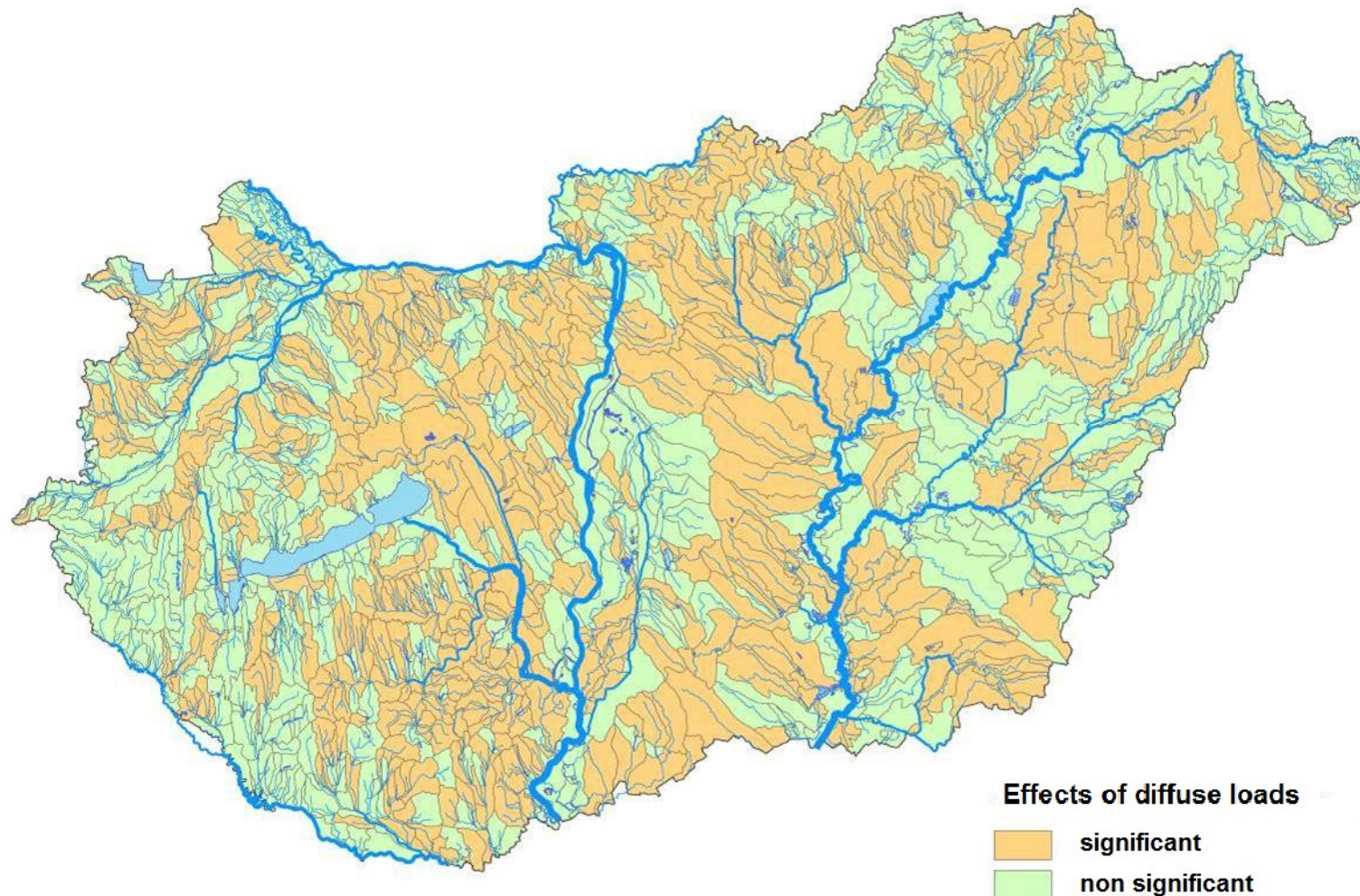
- **chemical status**
- **quantitative status**

Effects of diffuse nutrient loads catchments on basins of surface water bodies

(MONERIS model, RBM-2, figure 3.18, 2009-2012)



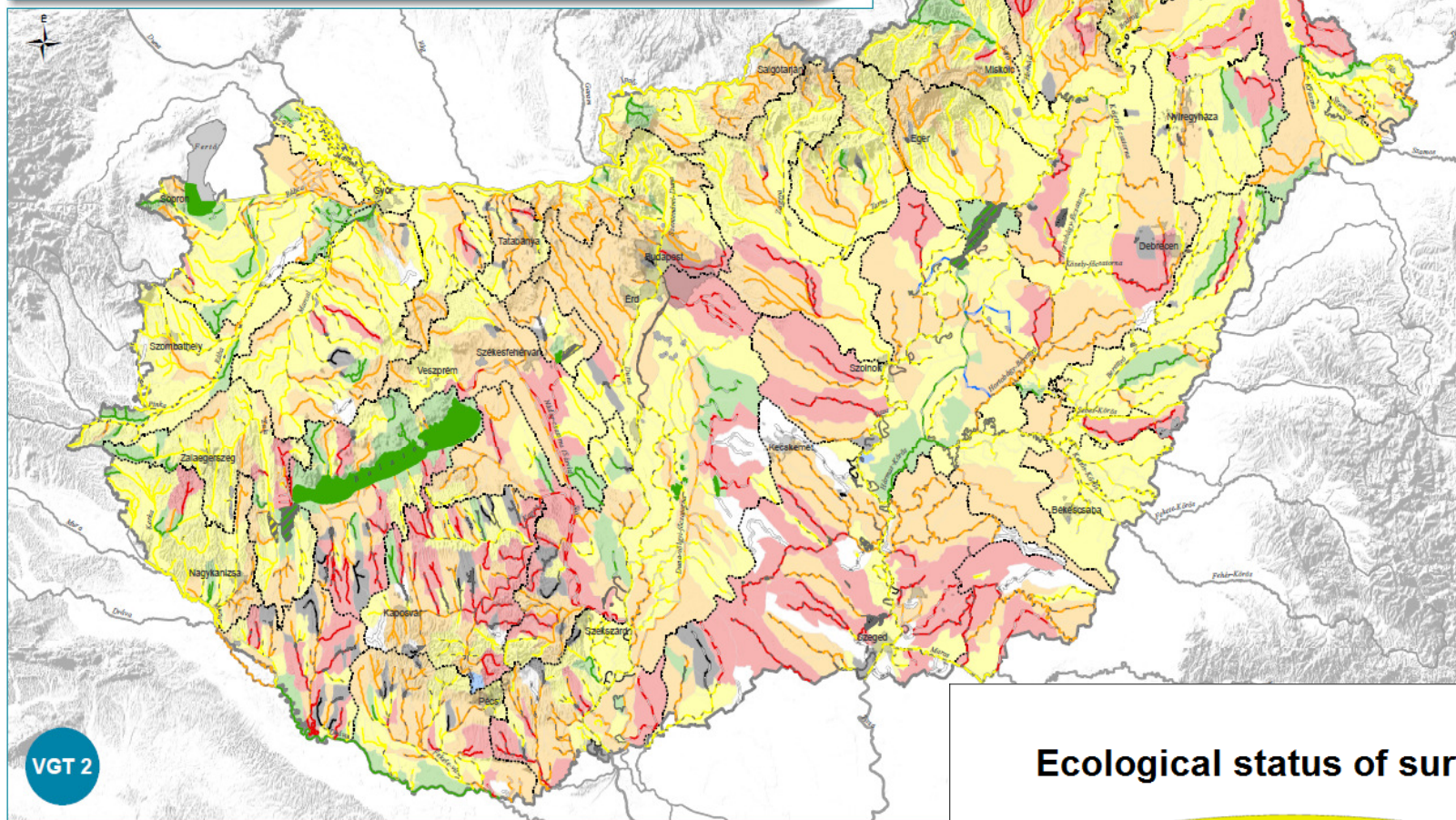
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A Duna-vízgyűjtő magyarországi része
FELSZÍNI VÍZTESTEK ÖKOLÓGIAI MINŐSÍTÉSE



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Jelmagyarázat

— országhatár
--- alegységhatár

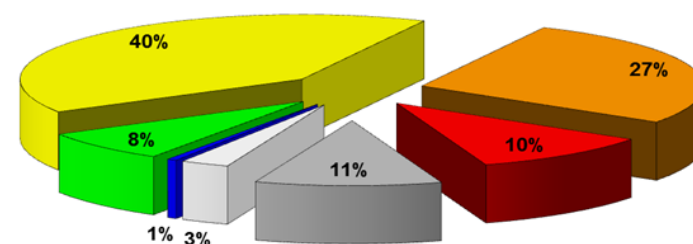
Ökológiai állapot / potenciál

— kiváló
— jó
— mérsékelt
— gyenge
— rossz
— nem alkalmazható minősítés
— adathiány

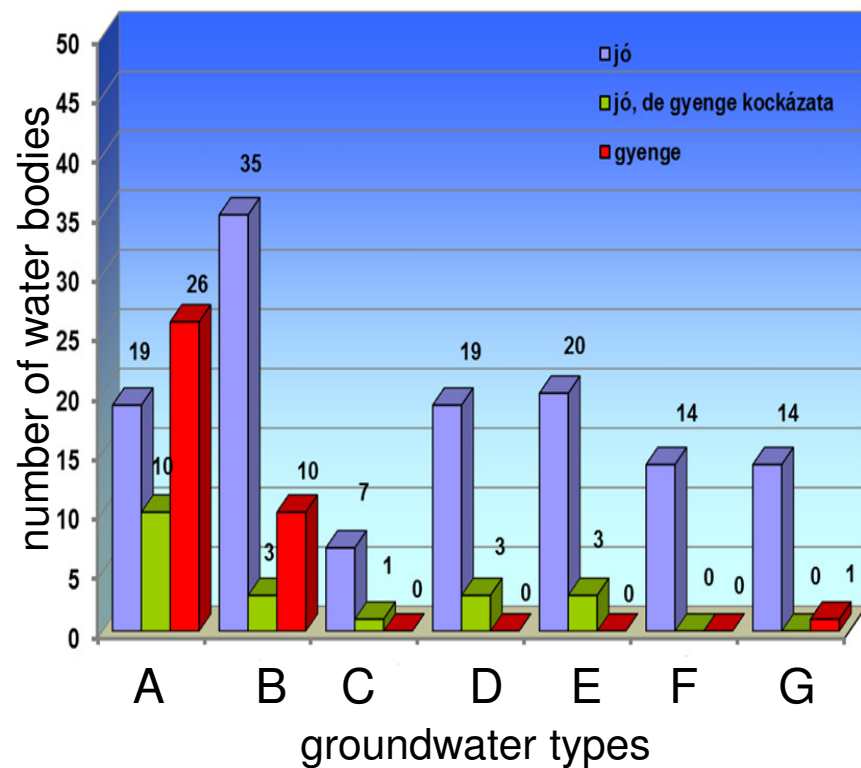
Víztestek kategóriái

— mesterséges
— erősen módosított

Ecological status of surface waters

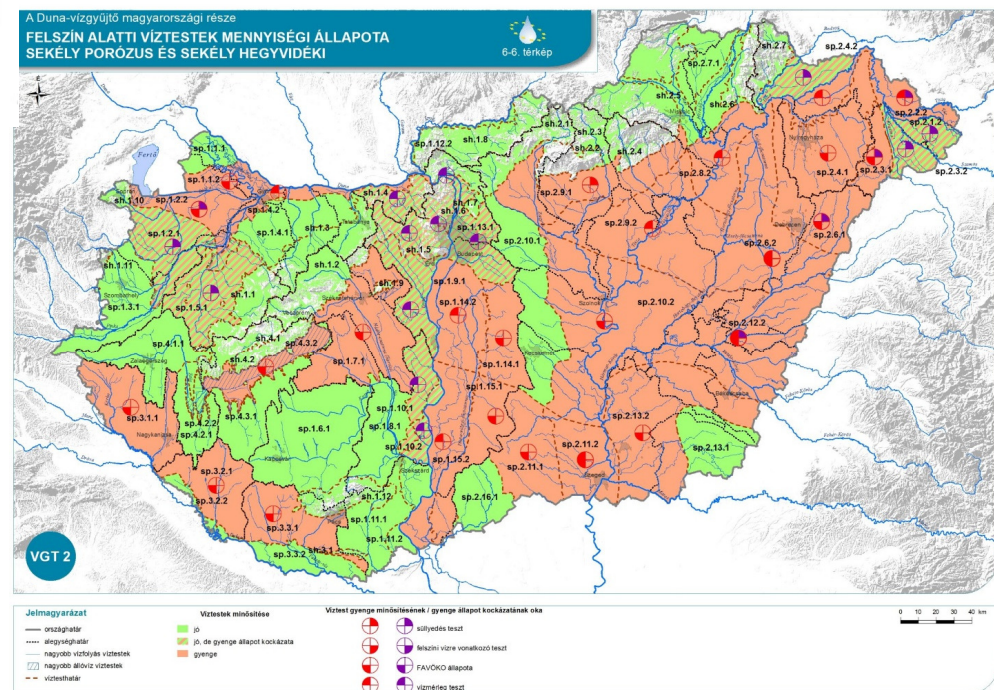


■ excellent ■ good ■ moderate ■ poor ■ bad ■ no data ■ unclassified



- A – shallow porous
- B – porous
- C – porous thermal
- D – shallow mountainous
- E – mountain
- F – karst
- G – thermal karst

Quantitative Status of Groundwater Bodies



EAFRD Regulation Article 46.

(European Agricultural Fund for Rural Development)



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Existing irrigation installation:

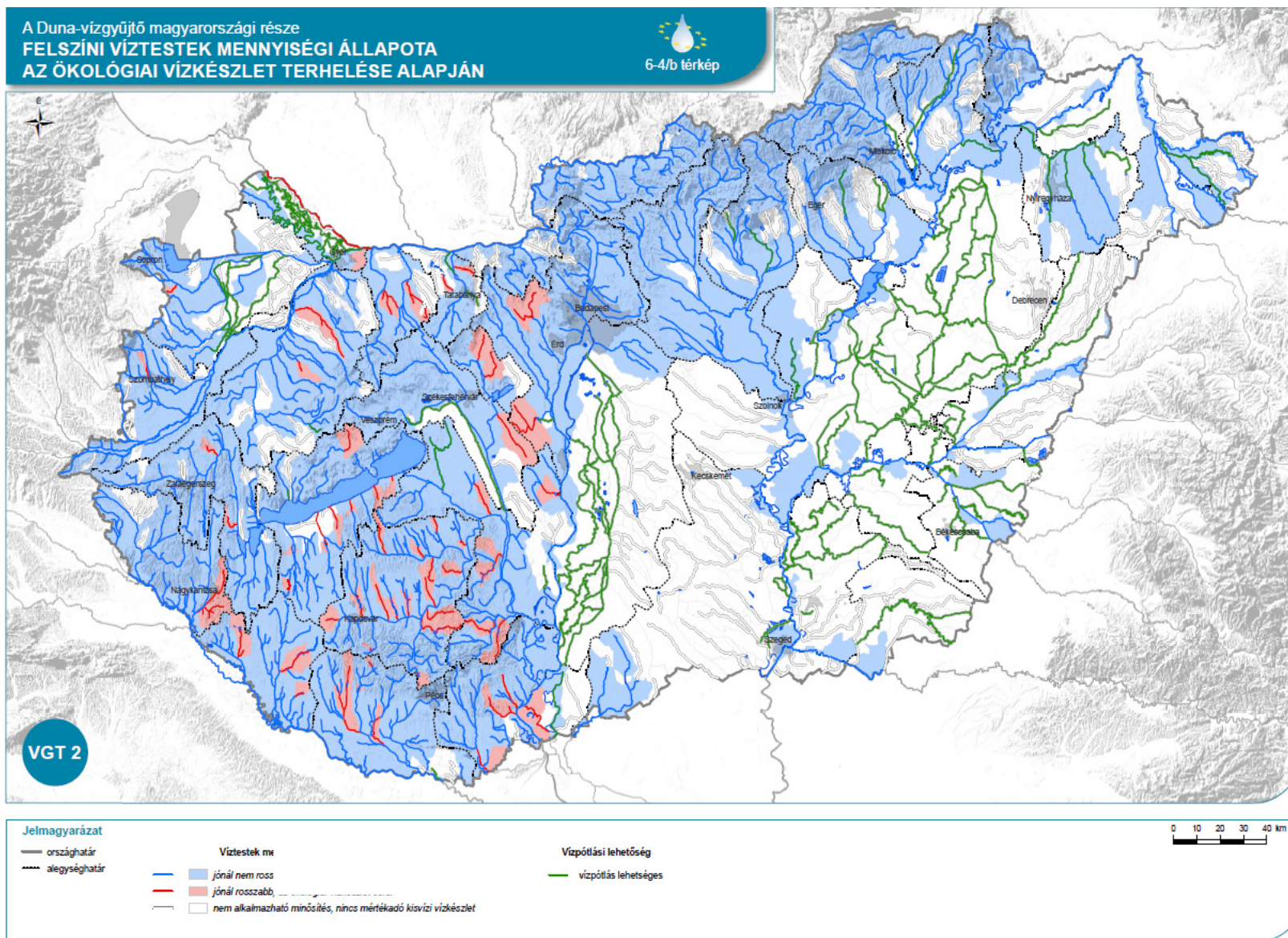
- Good - min. 5-25% water saving
- Less than good - min. 50% water saving
- Exception - energy saving, creation of reservoir, water reuse

Increase in irrigated area affecting a given body of ground or surface water:

- Not less than good (water quantity)
- No significant negative environmental impact (based on EIA)

Areas irrigated in the recent past may be considered as irrigated areas.

Hydrological (quantitative) status of surface waters



IRRIGATION



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Demand for abstraction from ground water at the part of the country where there is no enough surface water.

Regional environmental impact assessment on the cumulative effects of the planned water uses

- Hungarian Chamber of Agriculture
- Ministry of Interior
- Ministry of Agriculture
- Ministry responsible for Rural Development program Hungary

Legalizing the illegal water production wells (incentives and penalty moratorium)

- The Hungarian Chamber of Agriculture
- Ministry of Interior



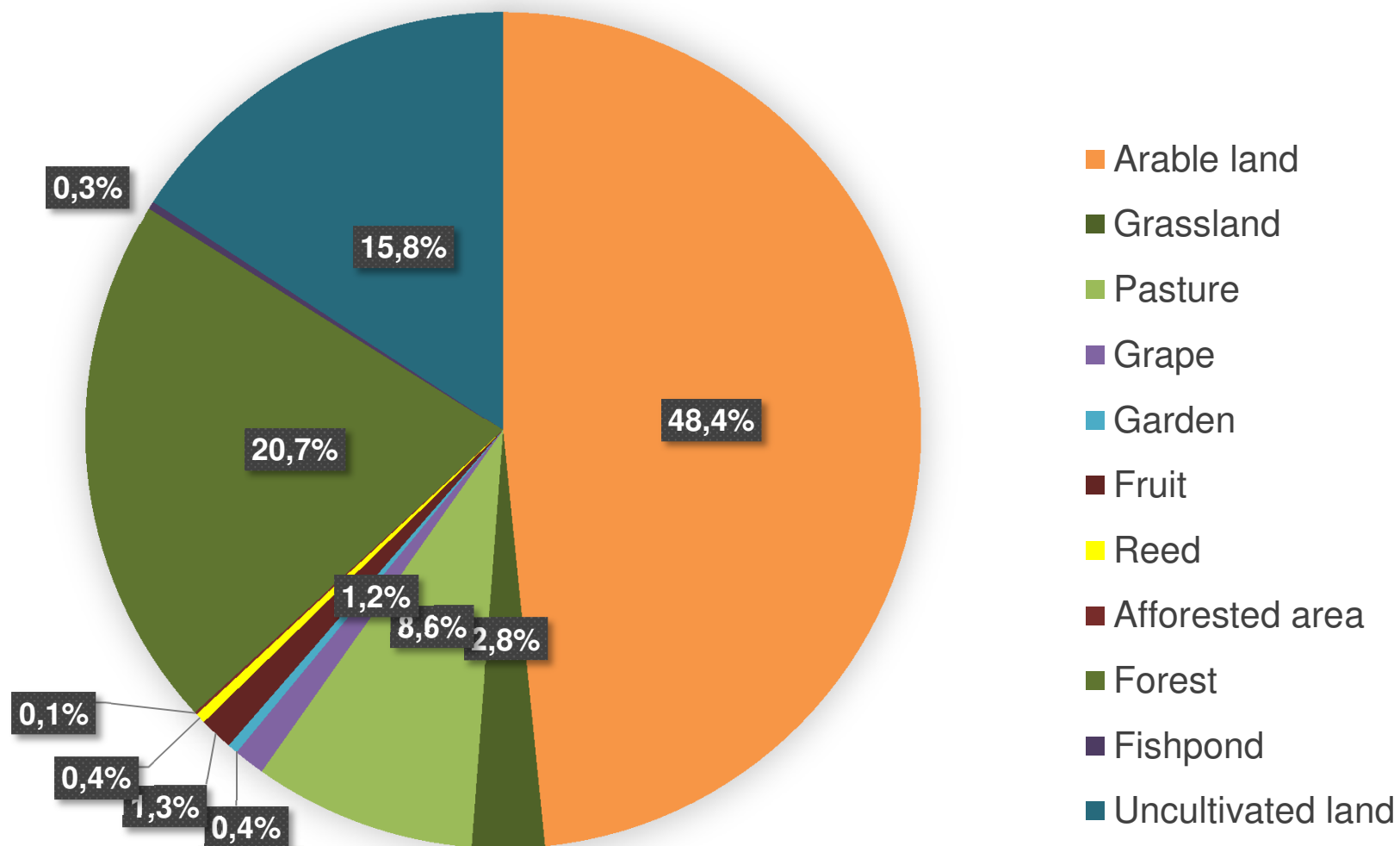
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Agriculture and rural development in Hungary





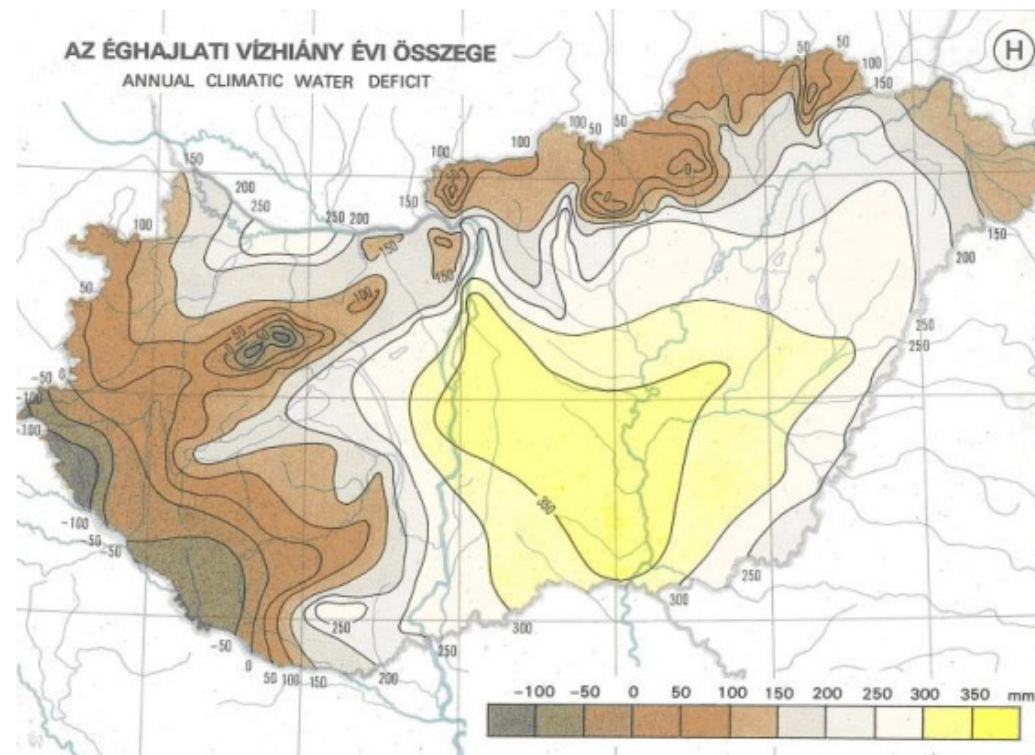
Land usage in 2014 (9 302 432 ha)





Challenges of climate change

Regional distribution of climatic water deficit



Forrás: Nemzeti Éghajlati Atlasz, 1998



Irrigation in terms

Hungary irrigates their lands below the EU average which means **8.7 %**.

After political transition the designated areas for irrigation have not grown and the size of permitted by water law has not changed.

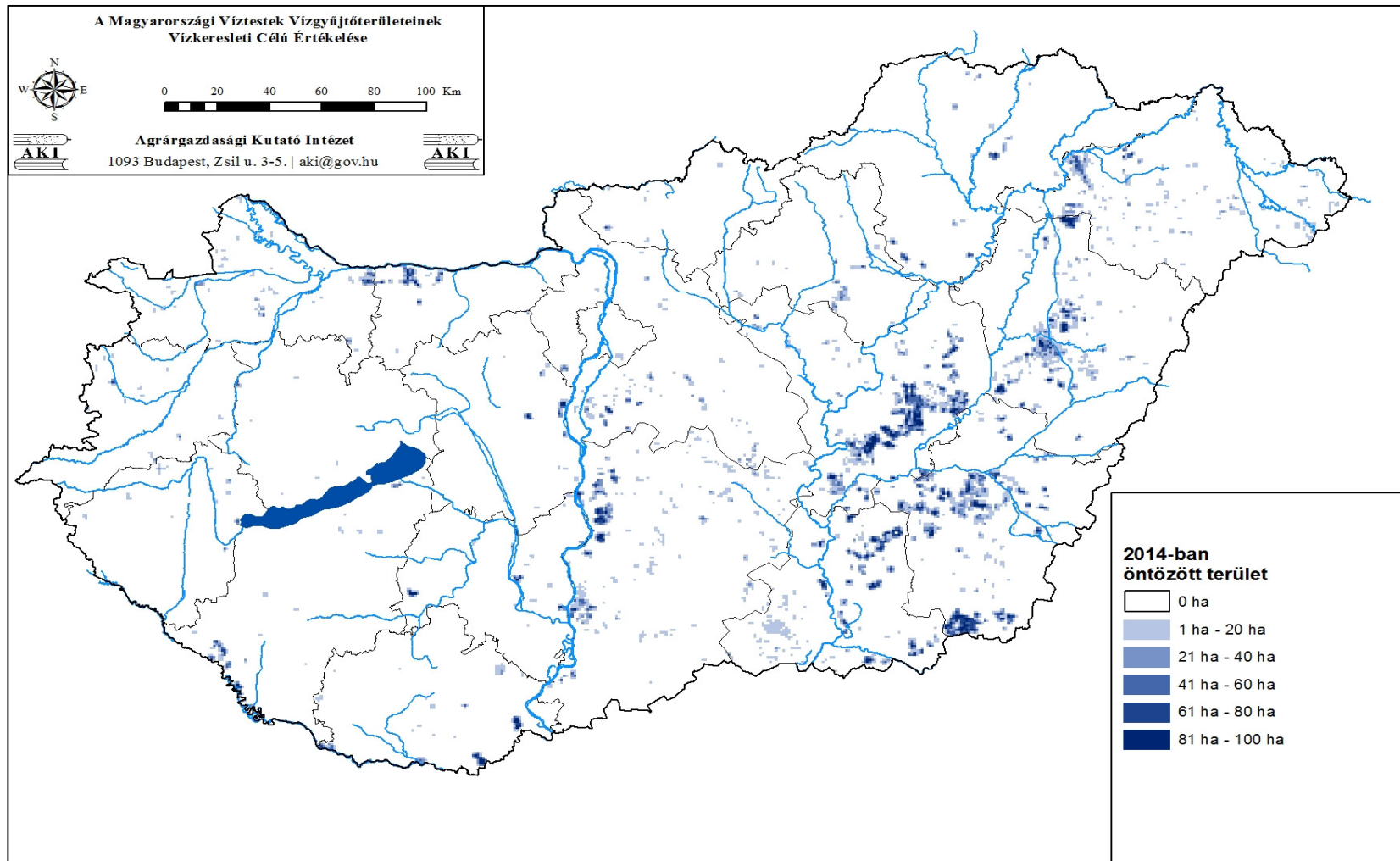
The designated area for irrigation occupies around 200 000 hectares . This number covers 1-2 % of the agricultural areas in use (2-3 % together with unauthorized water withdrawal).

Mainly carried out **on arable lands (over 90 % proportion) and 10 % are splitted between orchards, grapes and grasslands.**



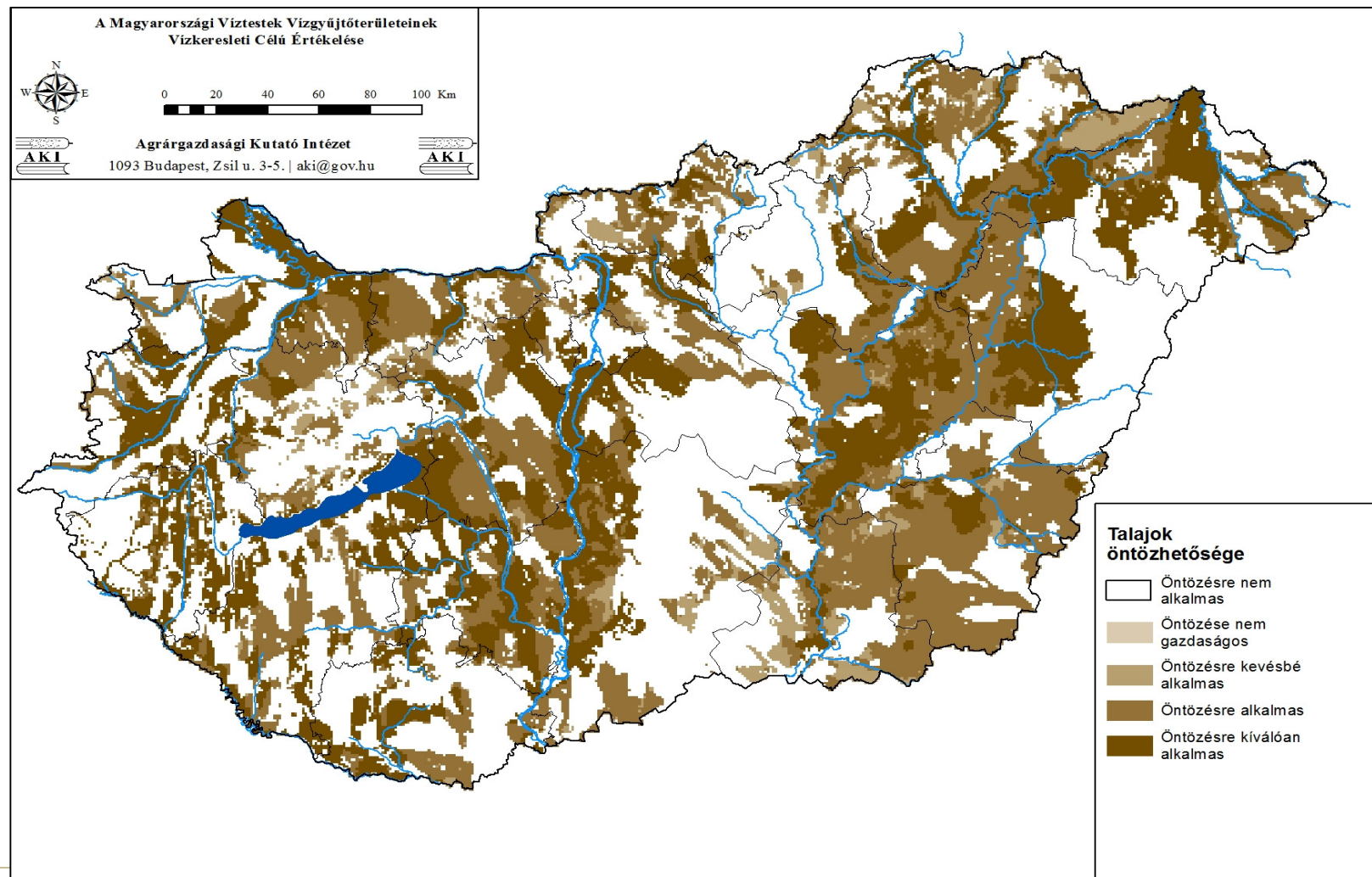
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Irrigated cultivation in 2014





Possibility of irrigated cultivation based on soil capability





Governmental tools

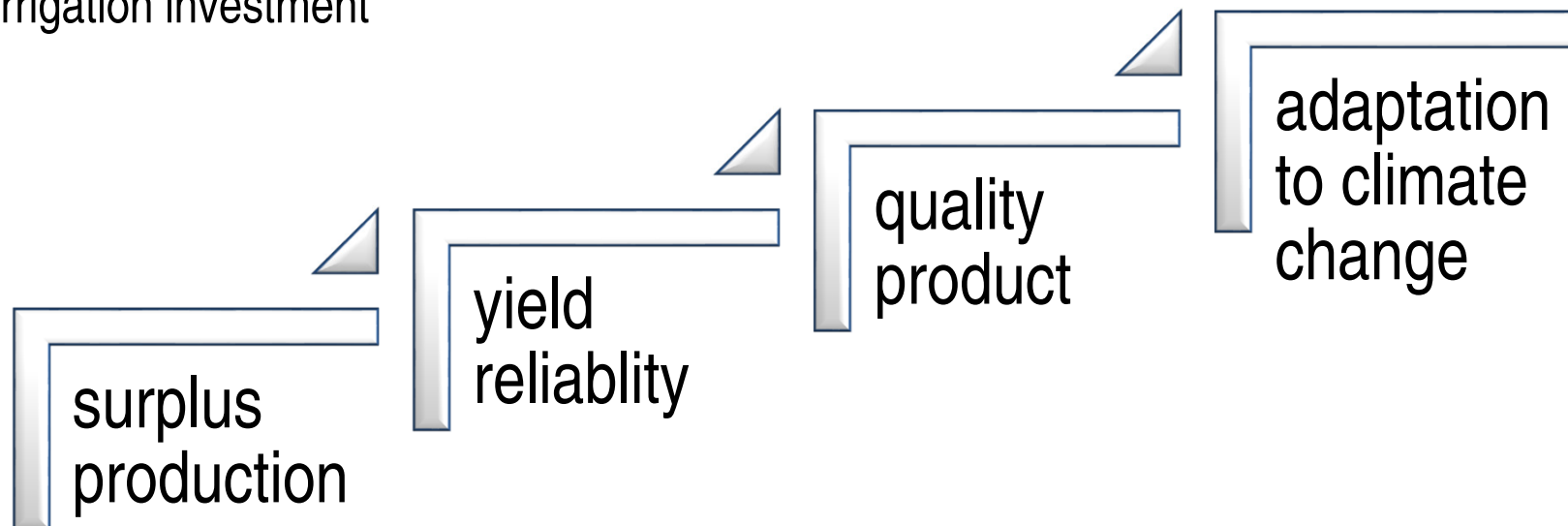
Cross-compliance

Greening

Rural Development Program 2014-2020 → „Environment and climate”

Agri-environmental Measures

Irrigation investment





Water management in Greening

Ecological Focus Areas (EFA):

- Buffer strips
- Small ponds
- Open ditches



Rural Development Programme

Agri-environment measures

Aims:

- Promoting regional water retention
- Improvement of the status of water-related ecosystems
- Reducing drought vulnerability by water retention.

Tools:

- Investment in facilities providing erosion protection
- Shaping and protecting buffer strips
- Wetland construction



Thank you for your kind attention!

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