



Implementation of climate change mitigation measures in selected demo sites – demo sites in agriculture land

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EU LIFE Programme project
“Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland”



Demo site in agricultural land – Action C3

LVC305 Controlled drainage of grassland considering even groundwater level during the whole vegetation period



Demo site in agricultural land – Action C3



Zemkopības ministrijas nekustamie īpašumi
MELIORĀCIJAS KADAŠTRA IZDRUKA

LVC305 demonstrācijas objekta atrašanās vieta



Demo site in agricultural land – Training and Research Farm «Vecauce»

Cadastral number	Area (ha)	Soil type	Soil texture	Content of organic matter (%)	Soil pH _{KCL}	Content of mobile phosphorus (mg/kg)	Content of mobile potassium (mg/kg)
46250020022	2.26	Humus – mucky sod gley soil	Sandy loam	39.8	6.7	75 (very low)	359 (average)
46250020022	5.37	Humus – mucky sod gley soil	Sandy loam	23.6	7.1	158 (low)	310 (average)

Demo site in agricultural land – Training and Research Farm «Vecauce»



Environmentally friendly drainage systems:

- Sedimentation pond;
- Two-stage ditch;
- Bottom dam;
- Meandering;
- **Controlled drainage;**
- Constructed wetland.

Ministru kabineta noteikumi Nr. 600
Kārtība, kādā piešķir valsts un Eiropas Savienības
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Description of controlled drainage

Double-sided water control structures located in control wells of drainage systems or at outlets of drain collectors

Criteria:

- Control wells or receiver wells shall be equipped with vertical boards or pipes to control the water level, or other structure to regulate the water level.
- Pipe plugs with metal ropes are installed at outlets of drain collectors, where one end of the rope is attached to the outlet and other to the plug.

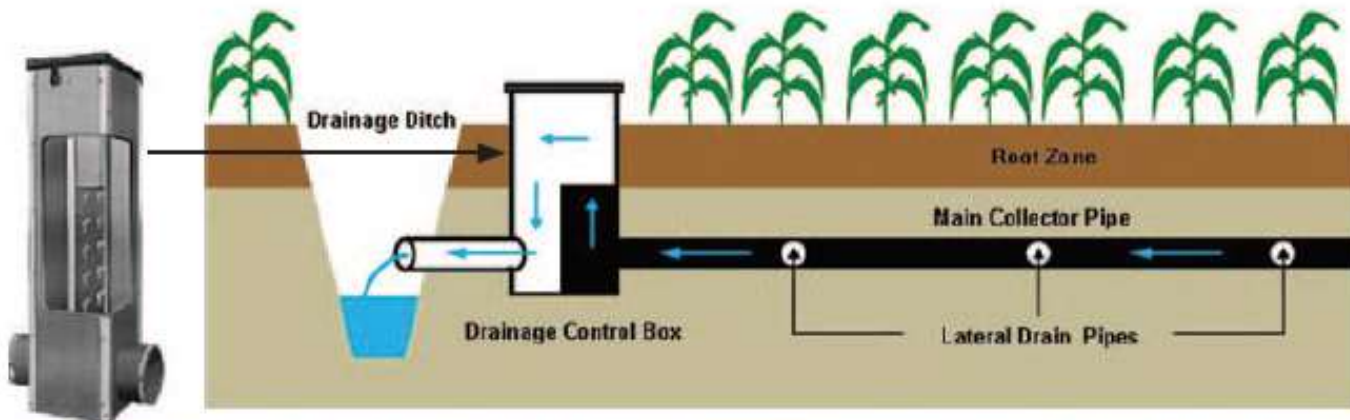
Description of controlled drainage

Potential benefits:

- ✓ Reduced emissions of CO₂ and N₂O from nutrients rich organic soils, variable effects on CH₄ emissions;
- ✓ Reduced drainage and nutrient losses to recipient waterbodies;
- ✓ Additional water might be available to meet crop water requirements during the summer period.

Description of controlled drainage

Drainage management structures for subsurface drains and open ditch outlets.





Thank you for your attention!

Any questions, comments or suggestions?



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