

## Parittoman lohkon kohtalo

Pellosta pöytään ja suuhun, ettei joudu suden suuhun.  
Se on elämisen ehto, yksi ainoa vaihtoehto.  
Kaskettiin lohkot maahan pohjoiseen ja kylmään,  
Hallaperän perheviltjelmään.  
Metsästä pelloksi, mustikasta mansikaksi.

Jokainen lohko kasvilajinsa löytää, vaikka kasvien  
kriteerit eivät anna löysää.  
Pienelle lohkolle tarjonta on köyhää,  
iso lohko sopivan parin löytää.  
Yksi lohko vaikuttaa kalanruodolta,  
ei kulje kylvökone tuolla ulkomuodolla.  
Rinnepellolla traktori on julmassa pulmassa,  
vain purjevene kulkee vinossa kulmassa.  
Näkyv tuvan ikkunasta paras kasvu,  
nohtuu Hallaperän kaukainen pohjoinen tasku.

Tutkimusreessä analyysiä tekee koodinlukija,  
ja johtopäätöksiä vetää tutkija.  
Tuottavuus on toinen puoli,  
puuttuessaan melkoinen huoli.

Kestääkö edes sosiaalinen puoli, vaikkei petä talouspuoli?  
Mikäli ympäristö kuoli, onko kohtalona sähkötuoli?

Tuli halla ja hukkakaura, ei maata käännä enää aura.  
Hevosheinää kasvaa Hallaperän lohkot,  
pian kaunistaa kukkivat rohdot.  
Huippulohkoille lisää apulantaa,  
Hallaperän lohkoille Ryysyrantaa.  
Totuusko pitäisi mykistää, ja kaikki tasapäistää?

Pellosta suuhun, pellosta puuhun.  
Elämisen ehto, puinen kehto.  
Pellosta suuhun, pellosta puuhun.  
Puinen ehto, elämän kehto.

Lauri Jauhiainen

Highly productive  
fields

Advantageous field  
characteristics

For sustainable  
intensification

Poorly performing  
fields with disadvan-  
tages

For extensification,  
recovery and in reserve

For afforestation if no  
future food security role

## Follow Opal

OPAL-Life (2015–2020) is funded by European Commission LIFE programme and coordinated by Natural Resources Institute Finland. It aims at mitigating greenhouse gas emissions from agriculture following the principle of sustainable intensification. (LIFE14 CCM/FI/000254).



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**OPAL**·Life

Land use  
optimization  
tool



Land use optimization tool helps the farmer to identify the best and weakest field parcels on the basis of several characteristics.

Land use optimization tool allocates virtually all field parcels in Finland either to sustainable intensification (green), extensification (red) or afforestation (dark red). Sustainably intensified fields are primarily used for food production, while extensified fields are allocated for greening purposes (green fallow, nature managed fields etc.) to increase landscape diversity and recover from soil compaction or any other imperfections. Afforested fields again have too many serious defects and therefore, lack any future role for food security.

The developed land use optimization tool is implemented for all Finnish farmers via the EconomyDoctor portal of the Natural Resources Institute Finland (Luke). The tool will be launched for farmers' use with strong authentication to safeguard privacy. Farmers may grant access to advisors and neighboring farmers. The tool is routinely updated automatically when new data appears, e.g. regarding the data on NDVI-based productivity gaps.

The tool has a three-step scoring system based on seven physical characteristics and the productivity of field parcels.

The first scoring round is based on the general physical characteristics of field parcels (parcel size, shape, slope, distance to the farm center) and the second round is based on productivity estimations that are calibrated using optical satellite NDVI-values estimated for each parcel and also on the proximity to waterways. The production capacity was assessed by using satellite data for different crops from critical growth stages to determine the total biomass.

The final third scoring round focuses on the soil type and on the logistic advantages for field operations. In the case of an organic peat soil type, a field parcel with a red light according to the second stage scoring round was determined as dark red in the third scoring round. This means that the land would be directed to afforestation. If the logistic advantages were found to be high for a field parcel with a yellow light from the second scoring round, and the soil type was other than organic peat, the field parcel was allocated for intensification instead of extensification even though it had some disadvantages.

