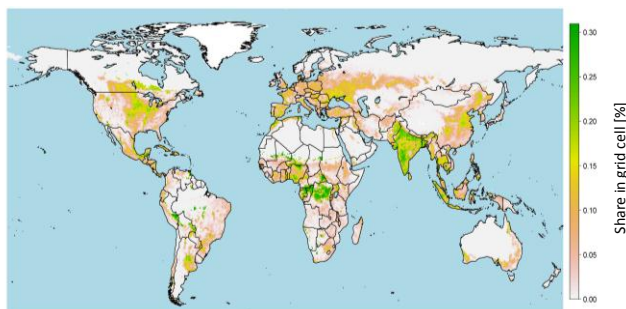


What is GLUES* – Models & Scenarios

In the GLUES project, different models are applied to derive climate change scenarios and biophysical impacts, to explore future pathways of the land use system and to undertake structured analysis of complex interactions within the land system. GLUES makes distinction between mid-term and long-term scenarios by using different models:

- **Mid-term scenarios** (to 2030) combine long term trends such as population growth and short term policy driven trends.
- **Long-term scenarios** (to 2050) based on coupled environmental and socio-economic models provide a consistent set of possible future trends in climatic and environmental conditions, food production, greenhouse gas emissions and economic variables.

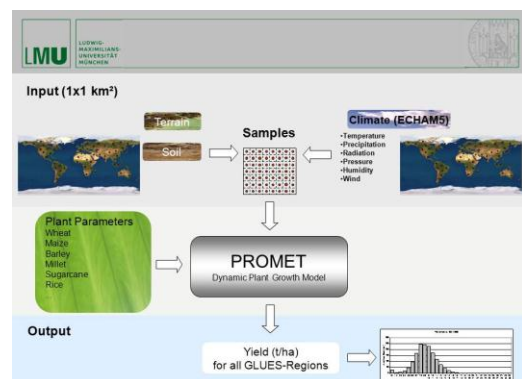
Figure 1: Simulated distribution of cropland areas in 2055 based on the global land use optimization model MAGPIE



Objective of GLUES Models & Scenarios

- Support regional projects in their efforts to model and assess the impacts of land use change on greenhouse gas emissions and ecosystem services.

Figure 2: Approach of modelling potential yields for global relevant crops



'GLUES Models & Scenarios' provides and delivers:

- Global dataset on bio-physical parameters such as crops yields, greenhouse gas emissions from agriculture, soil characteristics and ecosystem change
- Global datasets on socio-economic parameters such as population growth, Gross Domestic Product, changes in agricultural prices and quantities and trade

*GLUES = Global Assessment of Land Use Dynamics, GHG emissions and ecosystem services

For further information please contact:

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