Socio-economic roundtable on climate friendly agriculture February 14, 2017

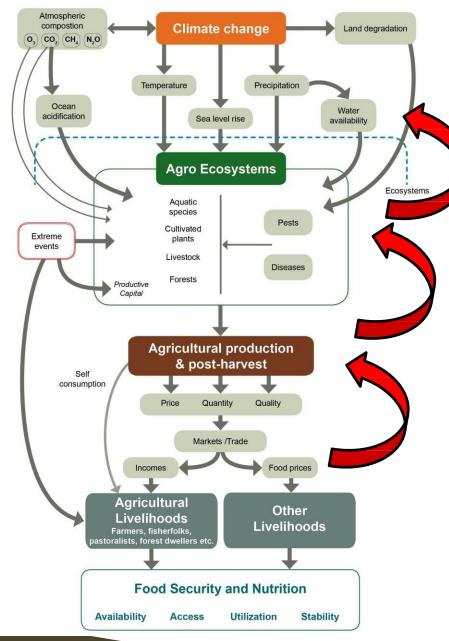


The socio-economic impact of climate friendly practices:

Experiences from the SOLMACC Project

Lin Bautze
SOLMACC Researcher







Climate change will alter:

- agricultural productivity
- production costs
- agricultural practices (e.g. new crop varieties, dairy production, irrigation, time management)

➤ Influence on farmer's income and practices?



Figure: Schematic representation of the cascading effects of climate change impacts on food security and nutrition (FAO, 2016)

Long-term sustainability



New practices must help to:

- stabilize/increase agricultural productivity
- or reduce production costs
- or to utilize new market niches to increase the market value

While:

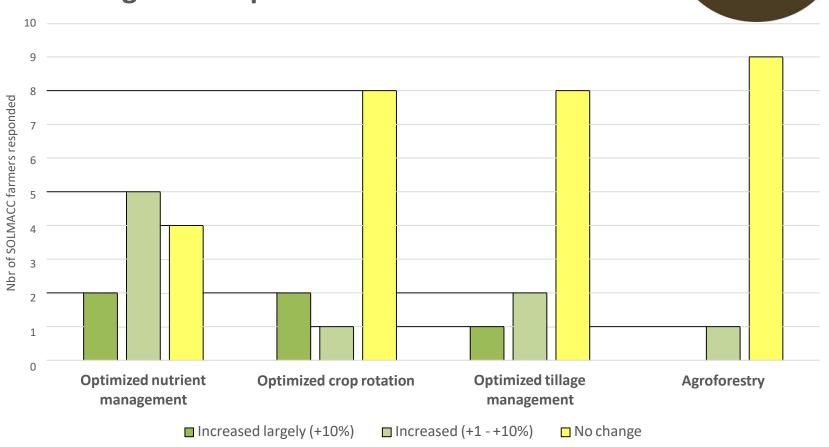
- reducing GHG emissions and adapting to climate change
- maintaining/promoting ecosystem services



Agricultural Productivity



Changes in Crop Yields





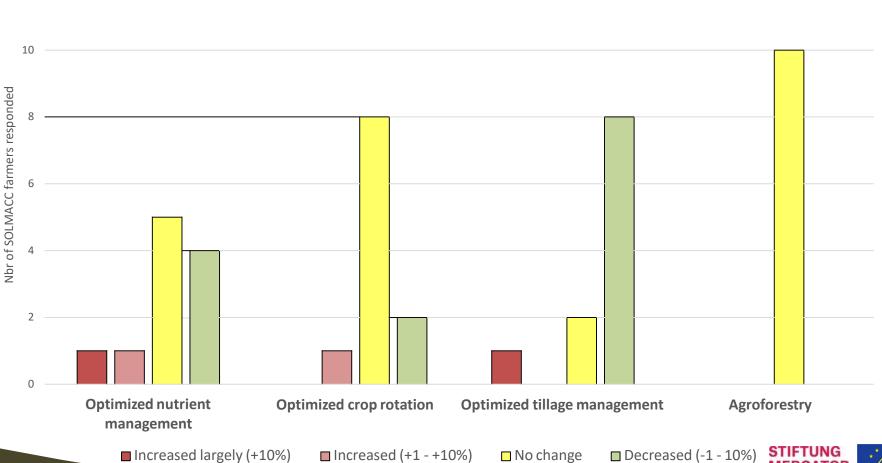


Reduction of Costs

Changes in Operational Costs

12

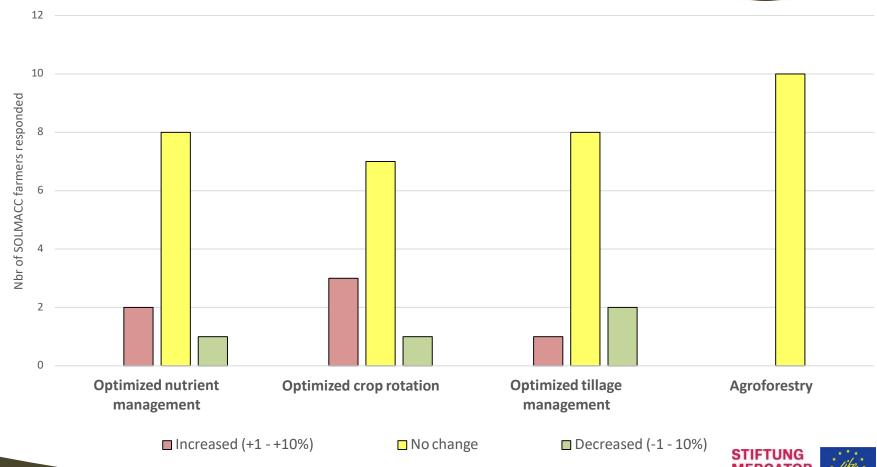




Reduction of Costs

SOL MACC ORGANIC FARMERS COUNTERING CLIMATE CHANGE

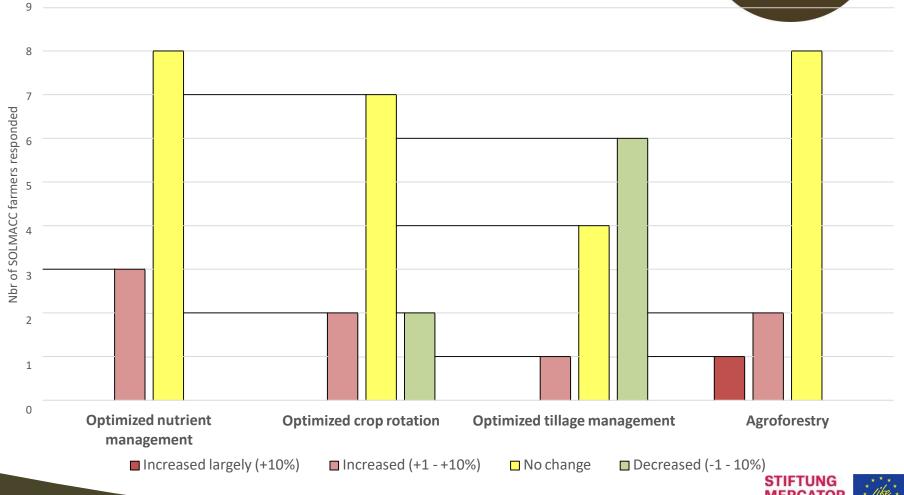
Changes in Input Costs



Reduction of Costs

Changes in Working Costs







New Potentials (Farm Level)



Economic income benefits from the SOLMACC project:

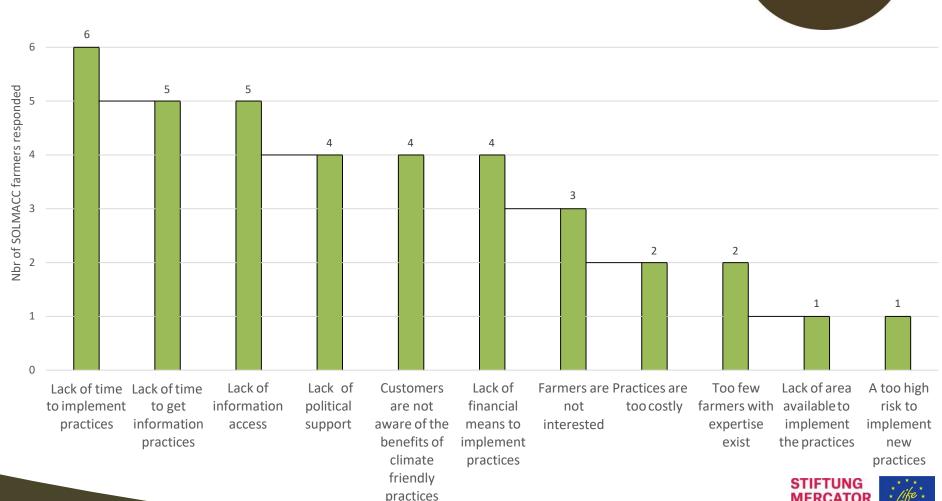
- 3/11 increased largely (more than 10%)
- 2/11 increased (+1 10%)
- 6/11 neither increased nor decreased
- Economic compensation for climate-friendly practices is needed.



Communication of Information

Hindering factors for farmers to implement climate-friendly practices





New Potential (PES)



Results of seminar work study (2015):

- Lack of information for market potential of ecosystem services
- Ecosystem services are not reflected in market prices
- Marketing them has potential (customer survey, Germany)
- Communication is essential to use potential



Conclusions



- Climate change can provide opportunities and risks
- Yield/cost changes highly depend on the practice and regional circumstances
- Communication of knowledge is a key for mainstreaming climate-friendly practices





Thank you for your attention!

Further information: www.solmacc.eu

Contact: Lin.Bautze@fibl.org

