

## Master Thesis at FiBL

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<b>Titel</b>	How does farm diversification affect sustainability?
<b>Problemstellung</b>	<p>Agricultural diversification, from the field to the farm level, has the potential to deliver a wide range of benefits across multiple dimensions of sustainability. Agro-ecological diversification at the cropping system and field level (e.g. in the number of crops, inter- and relay cropping) has been shown to lead to multiple environmental benefits (e.g. to biodiversity, fertilizer use efficiency, soil quality). Diversification at the farm level (e.g. in terms of number of enterprises, combination of animal and cropping systems) can lead to financial resilience and social benefits (e.g. income diversification, autonomy, relationships).</p> <p>The project aims assess the effects of farm diversification on sustainability performance across dimensions (environmental, social and economic). This will be done using a large, novel database of farm indicators from the SMART-Farm database (Curran et al., in press). The farms are spread across several hundred organic farms from Switzerland (and potentially other European countries). The project will result in a peer-reviewed publication that adds to the ongoing debate on diversification and sustainability.</p>
<b>Vorgehen/Methode</b>	<ul style="list-style-type: none"><li>• Literature review and selection of hypotheses to be tested on the benefits and disadvantages of diversification</li><li>• Data processing to construct indices of diversification and measures of performance using on the SMART-Farm database</li><li>• Statistical analysis of the results to find evidence of effects</li></ul>
<b>Kontaktperson</b>	Michael Curran
<b>Bearbeitungszeitraum</b>	First half of 2021
<b>Literatur</b>	Curran, M., G. A. Lazzarini, L. Baumgart, V. Gabel, J. Blockeel, R. Epple, M. Stolze, and C. Schader. 2020. Representative farm-based sustainability assessment of the organic sector in Switzerland using the SMART-Farm Tool. <i>Frontiers in Sustainable Food Systems</i> 4. Doi: <a href="https://www.frontiersin.org/articles/10.3389/fsufs.2020.554362/abstract">https://www.frontiersin.org/articles/10.3389/fsufs.2020.554362/abstract</a>

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