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## Societal vision vs. farmers' reality: an approach to evaluate if agricultural intensification is sustainable

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There is broad agreement that agriculture has to become more sustainable in order to provide enough healthy food at minimal economic, environmental and social costs. But what is “more sustainable”? More often than not, different stakeholders have opposing opinions on what a more sustainable future should look like. In this study, we present an approach to assess the sustainability of agricultural development based on societal visions. We illustrate the approach by linking observed changes in agricultural land use intensity in a Swiss case study area with desired change according to three contrasting visions. The three visions, from a liberal think-tank, the Swiss Farmer Association, and the agroecological movement, cover a wide spectrum of sociopolitical interest groups in Swiss agriculture. The observed developments aligned most closely with desired developments of the liberal think-tank. Farmer interviews revealed that farms increased in size (+ 57%), became more specialized, and more productive (+ 223%) over the past 20 years. In addition, interpretation of aerial photographs indicated that farming became more rationalized at the landscape level, with increasing field sizes (+ 34%) and removal of solitary field trees (-18%). The case study example highlights the potential of societal visions to assess changes in land use intensity and outcomes in various sustainability dimensions. The main advantages are that the approach accommodates multiple stakeholder goals, while explicitly addressing their narratives and respective systems of values and norms, thus being more informative to the wider public. For these reasons, we argue that future assessments of sustainability should focus on contrasting observed developments with desired change by various stakeholder groups. This could help identify mismatches between desired and actual development and pave the way for designing appropriate new policies.