

Target Setting and Burden Sharing in Sustainability Assessment beyond the Farm Level

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Abstract

While great progress has been made towards monitoring agricultural sustainability through the use of indicators, setting sustainability indicator targets that motivate the transformation of farming systems for sustainability and resilience is often overlooked. This paper examines the role of target setting and benchmarking comparisons in sustainability assessment. A review of 186 indicator metrics and their targets from 12 sustainability assessment frameworks showed a preponderance of practice-based rather than performance-based measures. Many targets were implicit and embedded within the way ratings or standards were measured rather than explicitly derived from external information or processes. Ratio scales were rarely used for indicator measurement. Given these limitations, most assessment frameworks are weak tools for the comparison of agricultural sustainability between sectors, regions or nations. We then considered the equity implications of sustainability burden and benefit sharing and drew lessons from recent international climate change negotiations to recommend guidelines when erecting production level sustainability targets and benchmark comparisons between farms, regions, sectors and countries in the way being considered by the TempAg network. Equitable participation by multiple stakeholders in the process of erecting targets is important to achieve fair outcomes that underpin lasting commitment to sustainability. Scrupulous application of equity and fairness is more likely to change values of the farming families, food processors and distributors and consumers for collective action. Adjusting targets to match local social, economic and ecological constraints on farming performance may be fairer, but this local tuning also challenges the design of and use of targets and benchmarks that have been upscaled to regional and national levels for informing sustainability policies across temperate agriculture as a whole. So will TempAg targets and benchmarking help or hinder transformation for sustainability and resilience?