

SUSTAINABILITY INDICATORS

Farm models need society

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The development of complex indicators and the quest for integrated indices for sustainability may lead to better quantitative measures of biological and physical components in an agricultural system, but such models cannot provide solutions if they lack the social dimension of those systems.

Paola Migliorini of the University of Gastronomic Science and colleagues compiled an Integrated Sustainability Score (ISS) index using systemic and sub-systemic indicators spanning what they see as the two major dimensions for agricultural sustainability: agro-ecological and socio-economic. Studying 12 organic farms over a three-year period, the ISS scores found that the farms were fairly

homogenous in their agro-ecological factors on the multiple systemic levels studied, but had divergent scores in socio-economic factors. The highest ISS-scoring farms saw the socio-economic dimension outweigh the agro-ecological indicators, revealing the important role that different models have on farm operations and outputs. Even this model, though, failed to truly capture the full range of social indicators that are beyond the scope of quantitative measurement, requiring further work to incorporate qualitative methods.

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