

AGROECOLOGY

Science versus practice

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Credit: JohnFScott/E+/Getty

Agroecology exists primarily as an academic paradigm that tries to explain and help establish methods, principles and outcomes for sustainable agriculture and development within ecosystem limits and dynamics. However, while multiple countries have tried to incorporate such ideas through policy or incentive, there remains a conceptual divergence between the paradigm and the practice.

Scotland, with the rest of the United Kingdom, has yet to make agroecology a component of farming policy. Freddie van Hulst and his team at the James Hutton Institute talked with eight scientists and seven farmers over 18 months to create ‘mental models’ that allow researchers to ‘map’ how participants think about and interact with a conceptual system. This captures the kinds of knowledge that participants bring with them and use, even if they may not be aware of it.

While the scientists were all keenly aware of agroecology and its principles, the farmers had not really heard of the concept and had limited views of what it might mean, associating it with organic and ‘low-impact’ farming that they felt was not in line with productive, profitable agriculture. However, the modelling exercise found that farmers have actually been using agroecological practices, even if they weren’t aware of the larger paradigm, and unlike the scientists’ map, the farmers incorporated and discussed livestock as a component of their farming system.

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