

A sustainably intensified system? Crop residues are stored for animal feed, while a cow threshes the grain. But will the residues be stored efficiently, or will they be spoiled? Is the soil being depleted of carbon, or have cover crops been sown? Photo: J Hammond.

Context

- Discerning the overall effects of our program activities in any one place can be hard
- We provide an approach which allows for a systematic, integrative understanding of landscape-level impacts
- We have piloted this approach in four regions of Ethiopia, as part of the Africa RISING program.

Our innovative approach

- · Data collection through RHoMIS household survey
- Calculation of 30 indicators representing five domains of sustainability
- Normalised comparison possible using expertderived locally appropriate thresholds for each indicator
- Visualisation and trade-off analysis to identify hot topics at landscape and household levels



CLIMATE CHANGE & GREENHOUSE GAS REDUCTION

Benchmarking of Sustainable Intensification at Landscape and Household Levels

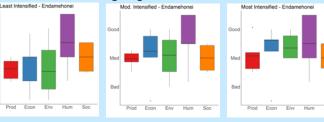
- A snapshot assessment of multiple dimensions of sustainability at landscape level
- Identifies which issues are locally changeable, which are sturdy (static and in a good condition), and which are stubborn (static and in a bad condition)
- Allows identification of synergies and trade-offs when comparing between households using or not using specific practices



LIVESTOCK & ENVIRONMENT

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\rightarrow Increasing degree of intensification \rightarrow



Mean number of introduced technologies still in use:

2.3

2.5

Each chart shows aggregated indicator scores for five domains of sustainability – Agricultural Productivity, Economic, Environment, Human Wellbeing, and Social The three charts represent households from Tigray, Ethiopia, and are organised according to the degree of intensification measured per farm. The results show that intensification here was associated with increased use of the promoted technologies, improved economic and environmental indicators, and did not damage wellbeing or social indicators.

Future steps

- Use of the approach in wider number of locations will give intelligence for evaluating and planning further work
- Much of the data required is already in the RHoMIS database, post-hoc evaluations could be done in a large number of locations.
- Developing the process into a user-friendly "tool" or process could facilitate wider use.

Partners

ILRI, Africa RISING Ethiopia, Sustainable Intensification Innovation Lab.



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