

Socio-economic performance of agroecology – Evidence from different studies

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ISARA, Lyon, France

Agroecology Europe Webinar, 22 June 2026



CENTRE FOR LIVING
AGROECOLOGY
AND FOOD SYSTEMS



Context

- One of the evidence gaps in agroecology
- Policy makers are asking for it
- Farmers are waiting for proof that economically it works
- Conventional/industrial agriculture cannot show good economic performance in many cases (promises of green revolution do not hold anymore). External cost not taken into account (e.g. environment, water pollution).
- Farms disappearing, farms enlargement, dependence on agroindustry – domination of prices, costs exploding



Global study on socio-economic performance

Agronomy for Sustainable Development (2024) 44:19

<https://doi.org/10.1007/s13593-024-00945-9>

REVIEW ARTICLE

The socio-economic performance of agroecology. A review

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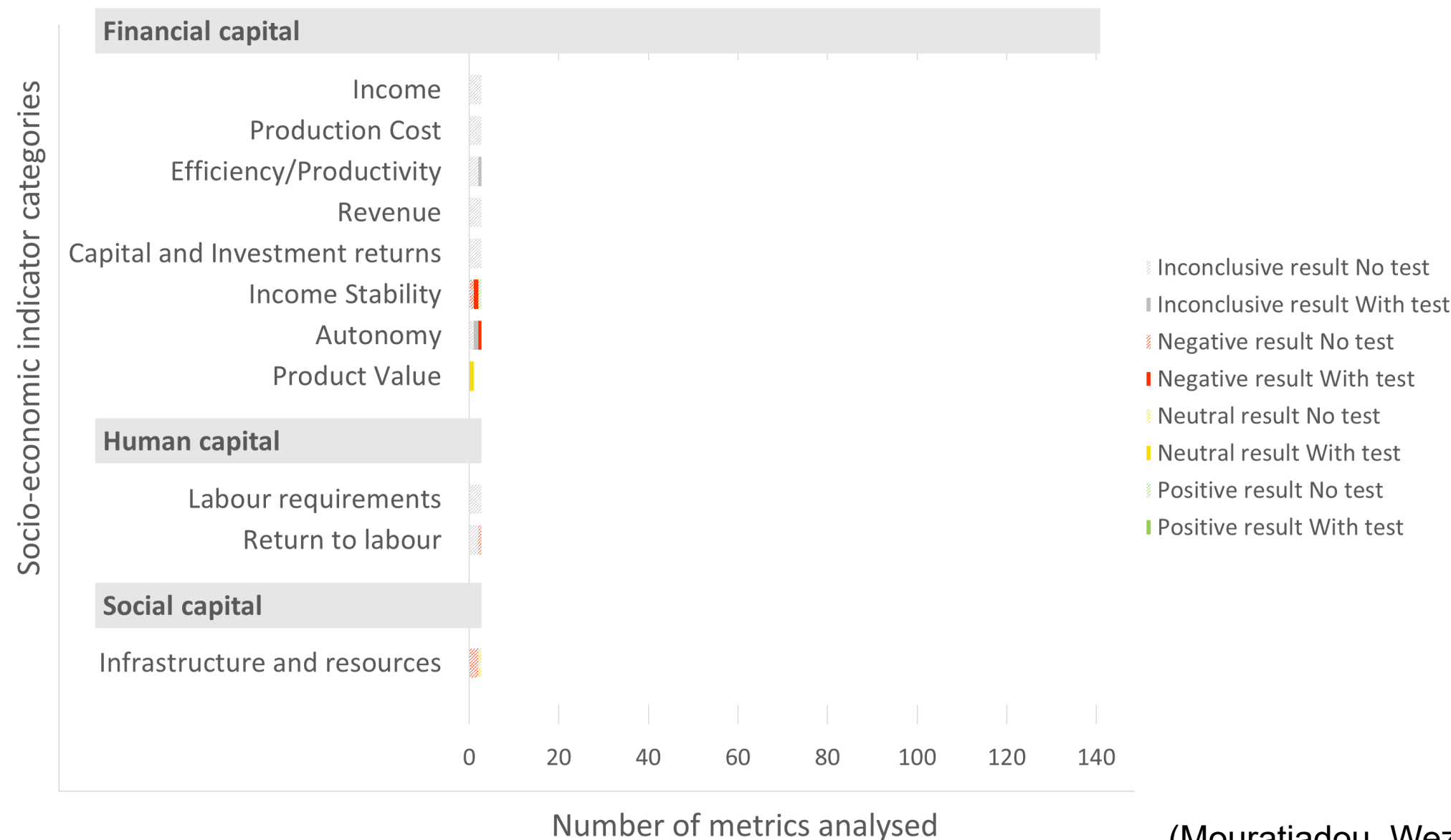
- more than 13,000 publications (between 2000 and 2022) screened to retrieve evidence on the socio-economic outcomes of the implementation of agroecological practices
- Evidence retrieved from 80 publications, most from the global south

(Mouratiadou, Wezel et al. 2024)

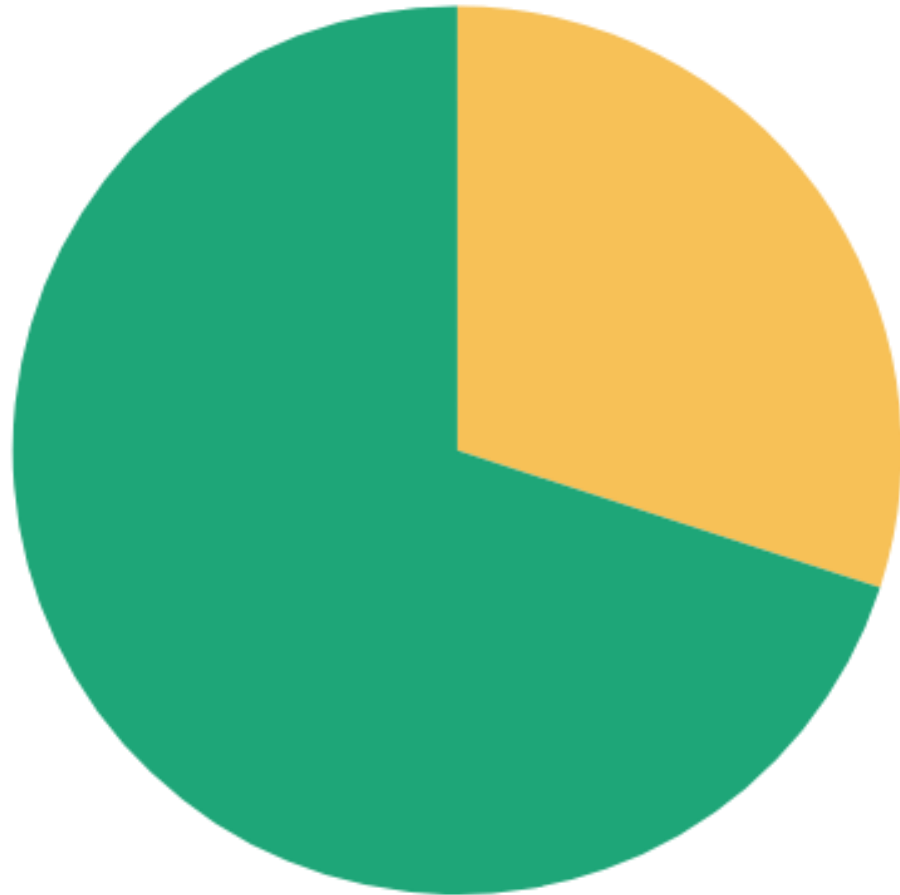
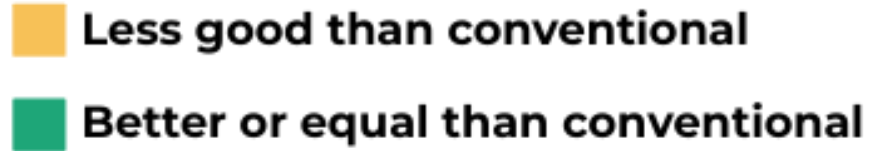
Type of management category	Agroecological practice	Number of cases
Agroforestry	Silvoarable	44
	Silvopastoral	3
	Homegarden	7
Intercropping	Intercropping	23
Cropping system diversification	Crop diversification	5
	Diversified crop rotation	4
	Improved fallow	2
Organic fertilisation	Crop-livestock integration, grassland management	2
	Mixed organic fertilisation	1
	Manure	1
	Zai/planting pits	2
	Compost	1
Pest and disease management	Push-pull strategies	3
Cover crop and mulching	Green manure	3
	Mulching	1
Tillage management	No tillage	7
	Reduced tillage	2
Management of landscape elements	Hedgerows, windbreaks, and living fences	6
	Stone wall/terracing	1
Package of practices	Sustainable rice intensification	3
	Organic farming	2
	Adaptation strategies	1
	Agroecological farming	1
Total		125

(Mouratiadou,
Wezel et al. 2024)

Use of agroecological practices and outcome on socio-economic metrics



(Mouratiadou, Wezel et al. 2024)



- 70% of socio-economic outcomes associated with agroecology surpass or match those of conventional practices
- 30% exhibit a lower performance compared to conventional farming

Financial (83%), human (16%) and social (1%) capital metrics

Financial capital metrics

Income
Production Cost
Revenue
Income Stability

Positive outcomes
51%

Negative outcomes
30%

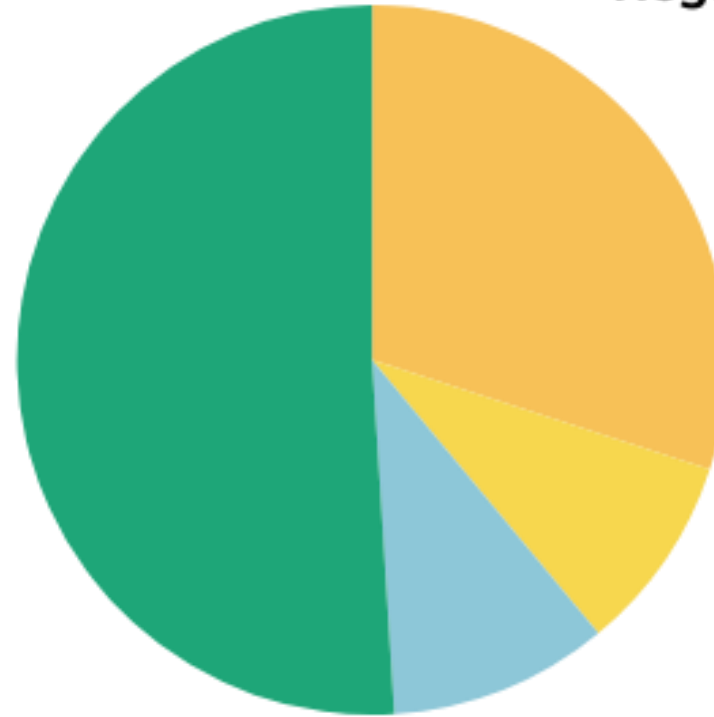
Human capital metrics

Labour requirements
Labour costs

Inconclusive 9%

Neutral outcomes
10%

Overall trends are positive, but there can be strong variation depending on the parameters analysed

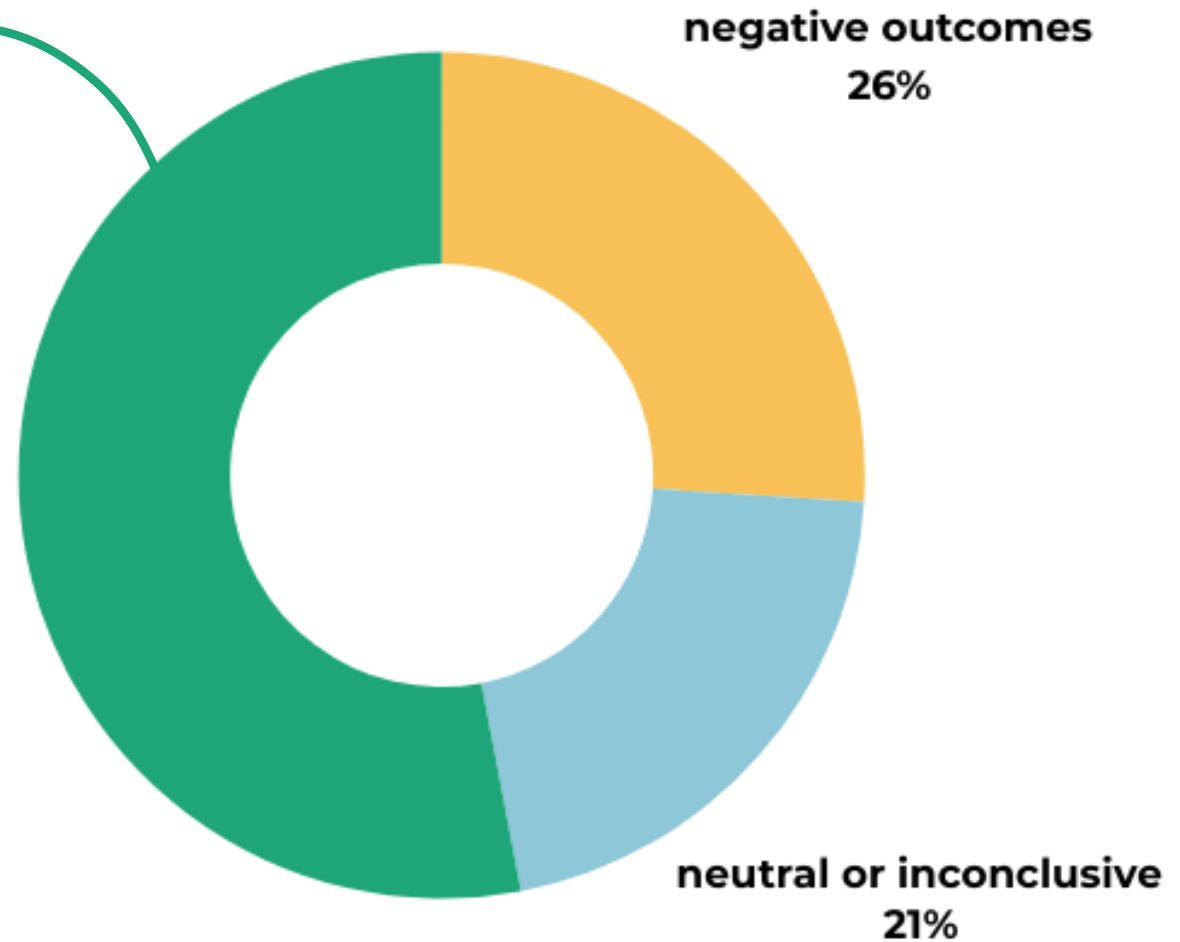


AGROFORESTRY

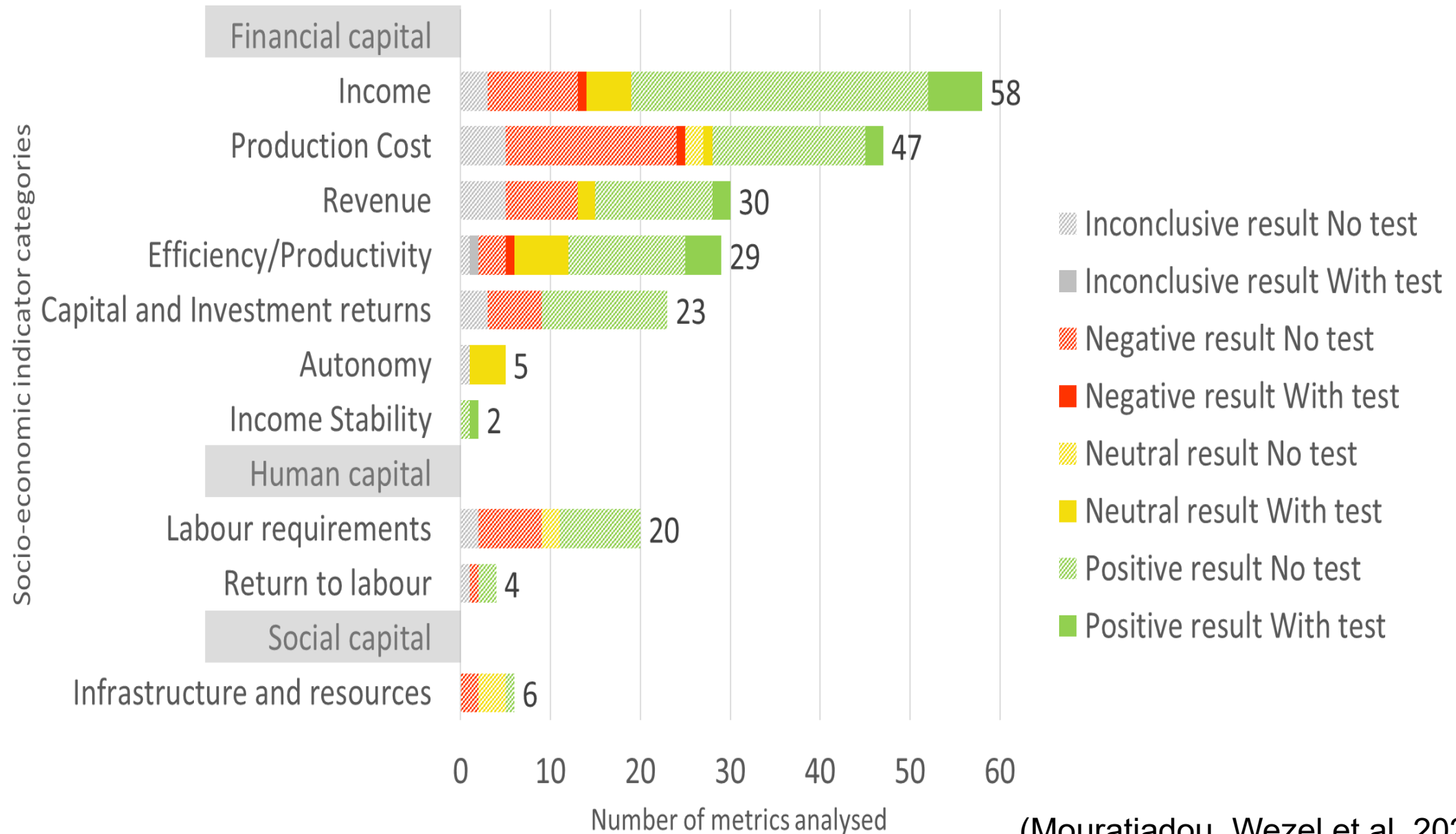
54 out of 125 cases (43%)
224 metrics analysed



positive outcomes
53%



Agroforestry

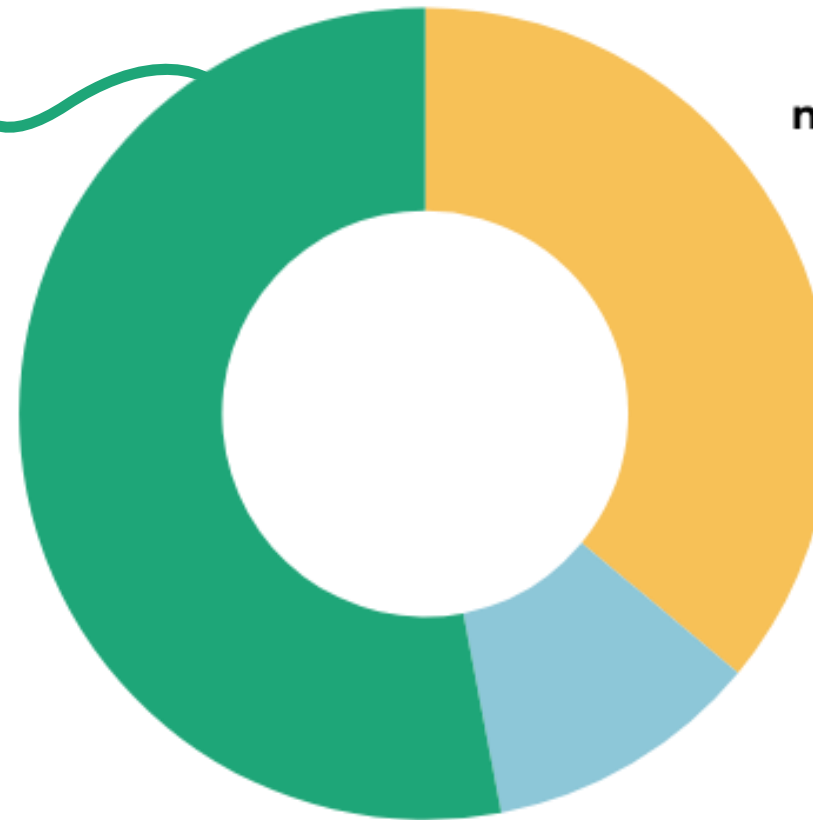


INTERCROPPING

23 out of 125 cases (18%)
126 metrics analysed



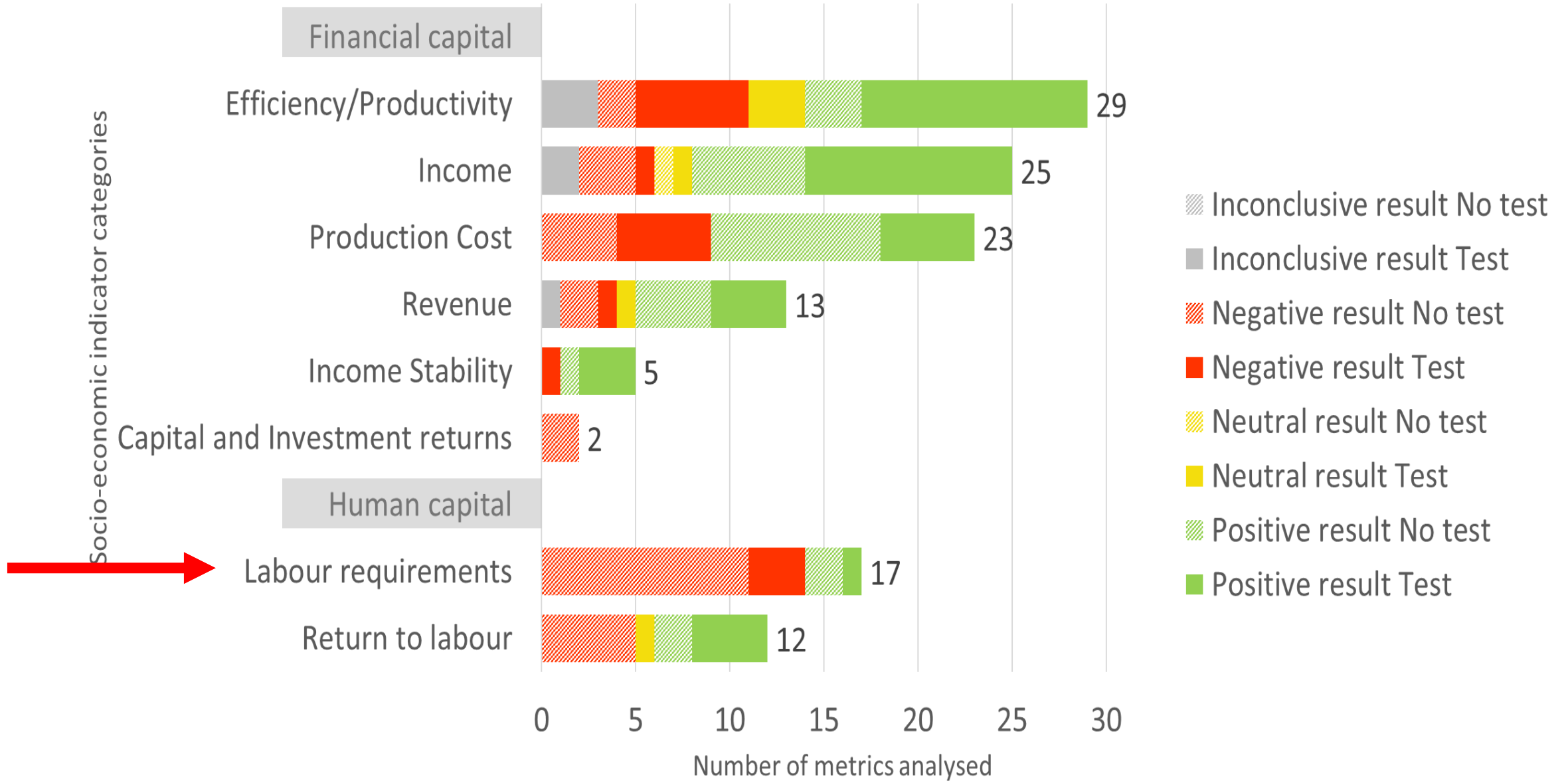
positive outcomes
53%



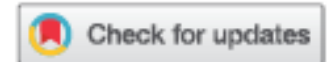
negative outcomes
36%

neutral or inconclusive
11%

Intercropping



(Mouratiadou, Wezel et al. 2024)



A review of social and economic performance of agroecology

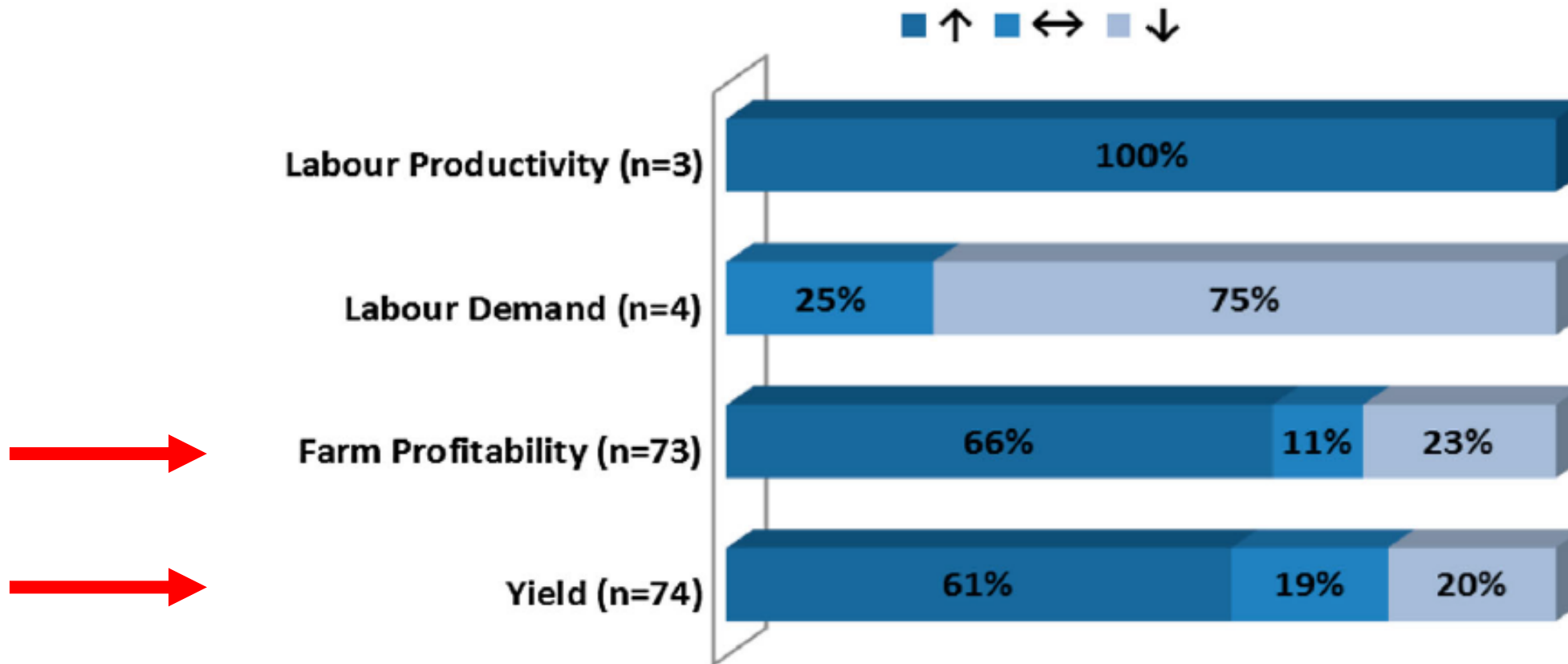
Raffaele D'Annolfo ^a, Barbara Gemmill-Herren ^b, Benjamin Graeub ^c and Lucas A. Garibaldi ^d

Nine agroecological practices considered

17 studies providing 154 comparisons between conventional and agroecological practices

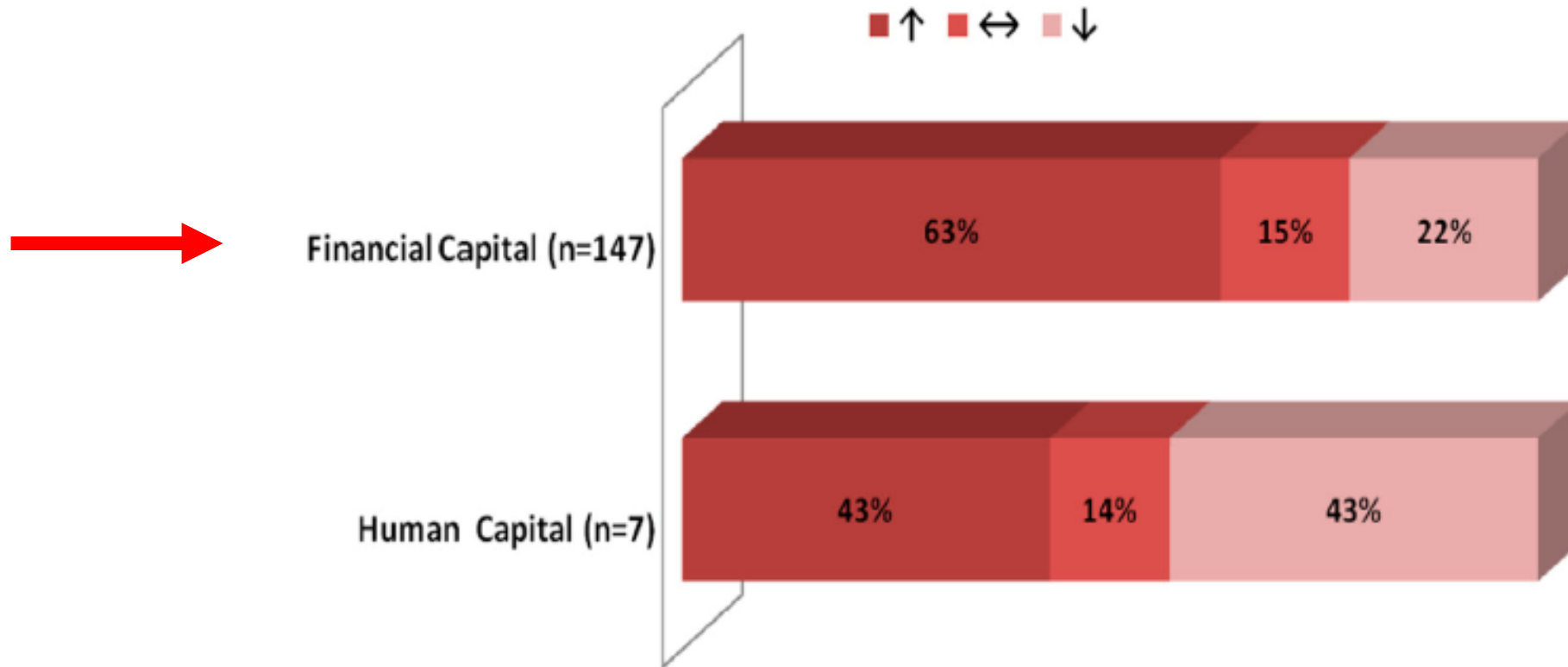
(D'Annolfo et al. 2017)

Effects of adopting agroecological practices on socio-economic indicators



(D'Annolfo et al. 2017)

Effects of adopting agroecological practices on financial and human capitals



Financial capital: Yield, farm profitability, income stability, recognition/assessment of transition costs

Human capital: Labour productivity, labour demand, % of farmers incorporating agroecological approaches

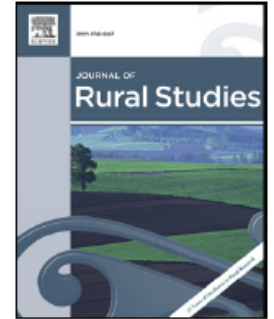
(D'Annolfo et al. 2017)



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Rural Studies

journal homepage: www.elsevier.com/locate/jrurstud



The economic potential of agroecology: Empirical evidence from Europe

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Livia Maria Costa Madureira^e, Joost Dessein^f, Zbigniew Drąg^g, Andrea Fink-Kessler^h,
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(van der Ploeg et al. 2019)

Case	Criteria	AE compared to CONV average
Netherlands, 'Farming economically'	Labour income/100 kg of milk	+ 110%
Netherlands Centre for Research in Dairy Farming	Employment generated at volume of production of 800,000 kg of milk	+ 100%
France, grassland-based farming	Family income/family worker	+ 73%
Germany, low concentrate feeding	Income per dairy cow	+ 60%
Italy, Rossa reggiana	Income per hour	+ 15%
Poland, dairy farming	Income according to level of self-provisioning for feed and fodder	+ 53%
Ireland, beef and milk	Gross margin per hectare	75-80% in a 3-4 year period
UK, sheep farming	Gross Value Added/ewe	+ 10%
Spain, Mediterranean crops	Gross Value Added	+ 35%
Portugal, vine growing	Fossil energy consumption/ha	- 30%

(van der Ploeg et al. 2019)

Performant farms - Assessment using OASIS

OASIS

THE **O**RIGINAL **A**GREOCOLOGICAL **S**URVEY **I**NDICATOR **S**YSTEM

A simple and comprehensive system for agroecological transition assessment.



Agroecology Europe
Brussels, 2021

OASIS IS COMPRISED OF 5 DIMENSIONS:

AGROECOLOGICAL FARMING PRACTICES

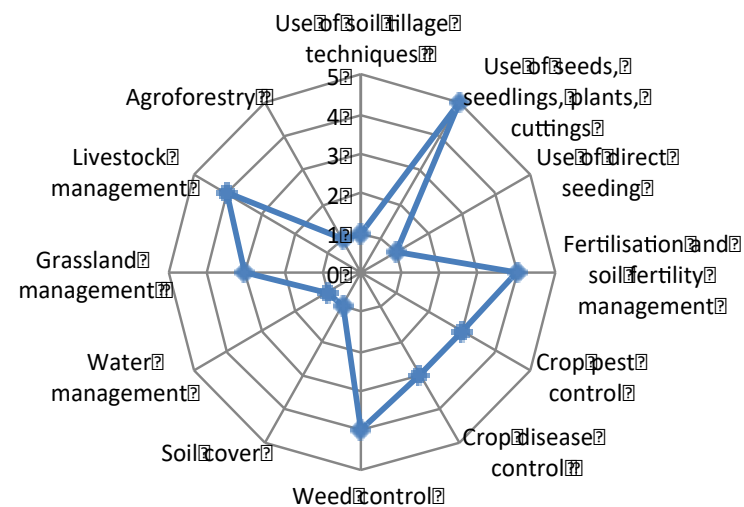
ECONOMIC VIABILITY

SOCIO-POLITICAL ASPECTS

ENVIRONMENT AND BIODIVERSITY

RESILIENCE

ADOPTION OF AGROECOLOGICAL TECHNIQUES



(Agroecology Europe, 2021)

Assessment of farms – using OASIS



Frontiers in **Agronomy**

TYPE Original Research

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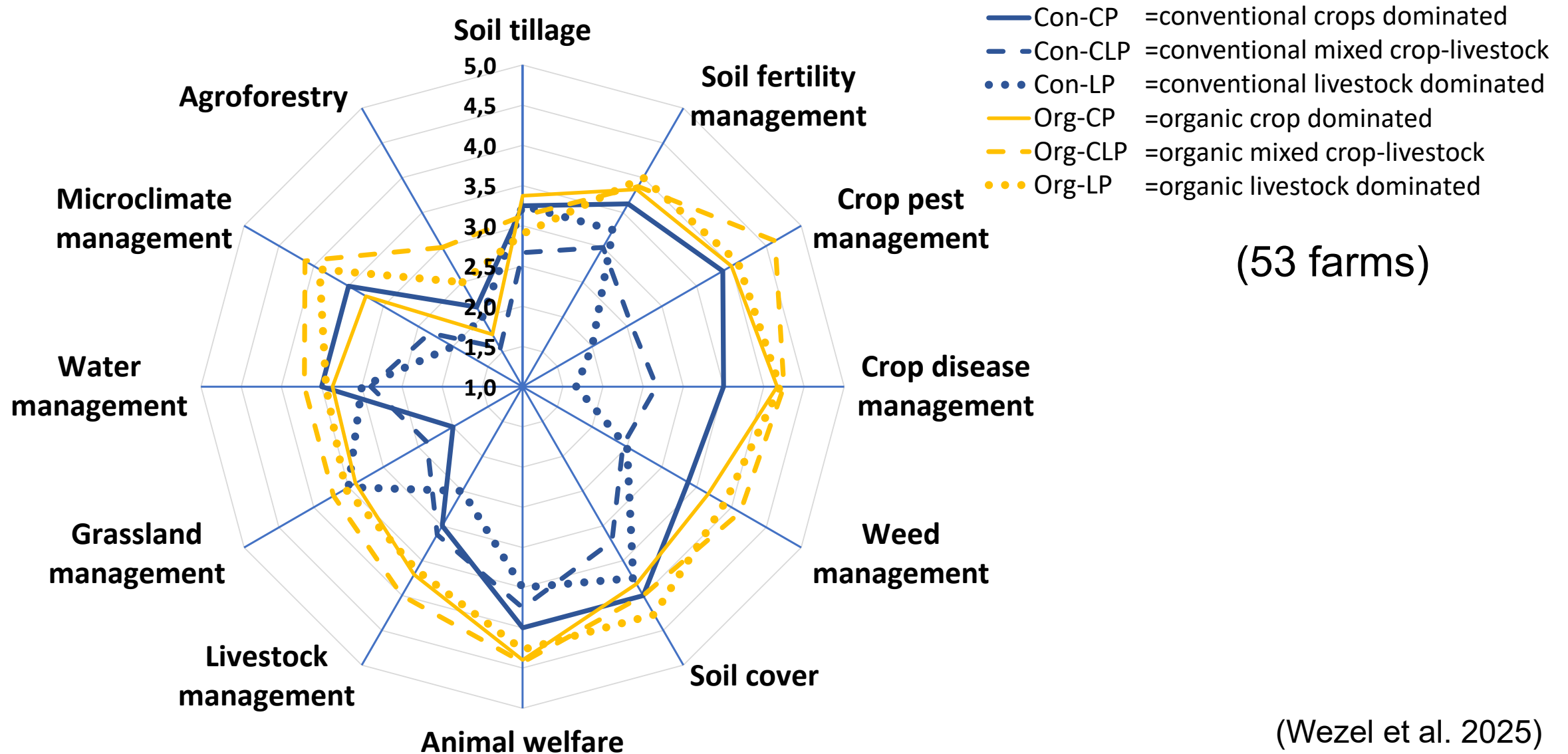
CITATION

Application of the Original Agroecological Survey and Indicator System tool (OASIS) to organic and conventional farms in Belgium, France, and Italy

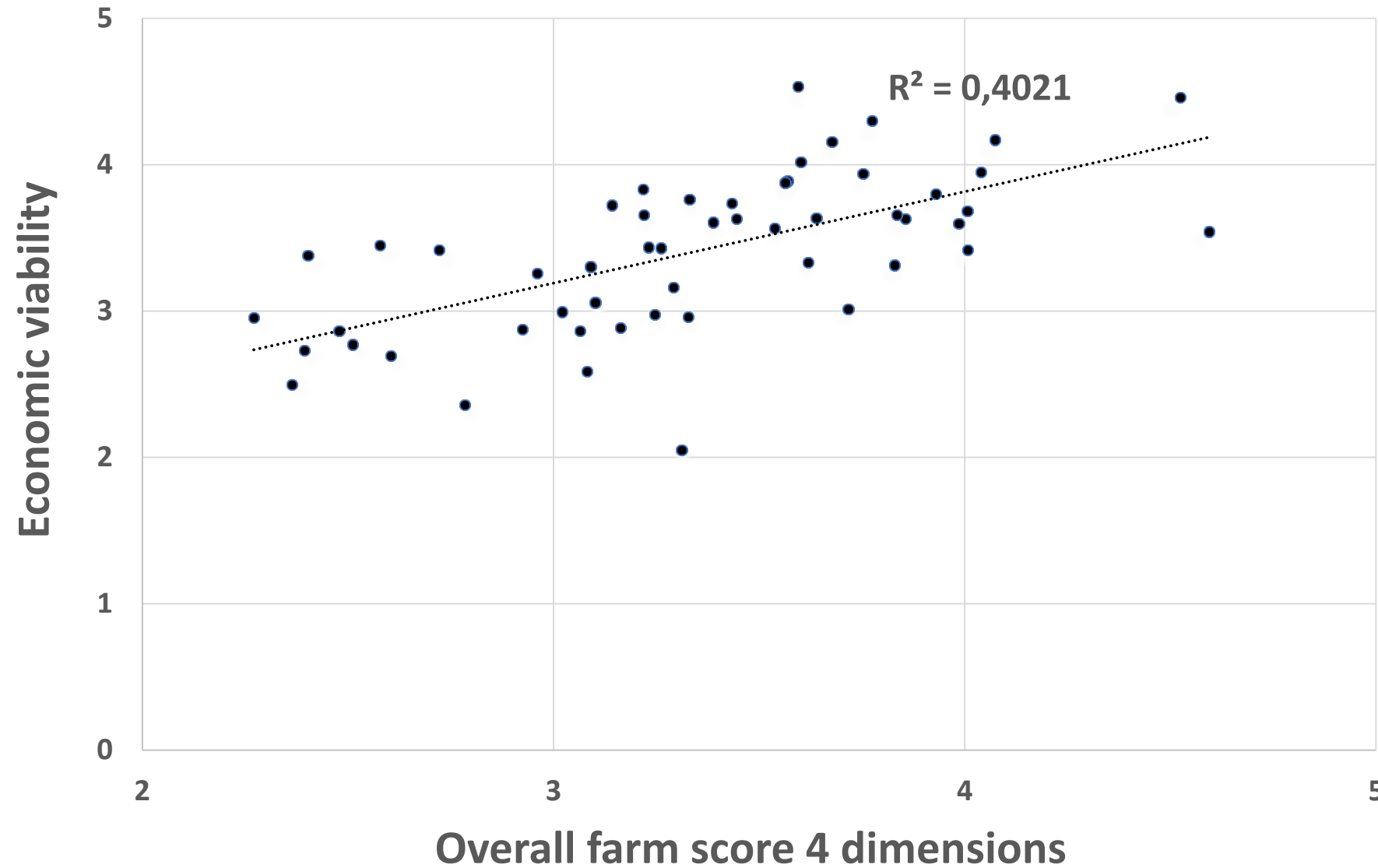
Alexander Wezel^{1,2}, Paola Migliorini^{2,3*}, Anna Brumer¹,
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Karla Škorjanc², Nicolas Allard⁵, Stefano Bocchi⁴
and Alain Peeters^{2,5,6}

(Wezel et al. 2025)

Adoption of agroecological farming practices for different farming systems in Belgium, France, and Italy



Stronger economic viability with higher agroecological overall farm score



(Wezel et al. 2025)

SYNTHESIS REPORT



Agroecology as a Pathway towards Sustainable Food Systems

M. Jahi Chappell and Annelie Bernhart,
Centre for Agroecology, Water and Resilience, Coventry University, UK

with

Lorenz Bachmann, André Luiz Gonçalves, Sidy Seck,
Phanipriya Nandul and Alvorí Cristo dos Santos

MISEREOR
IHR HILFSWERK

(Chappell et al. 2018)

Table 2: **Median farmer income and agriculture expenditures (cash and cash equivalents), in international \$ (PPP)**¹⁸

		India	Brazil - Agreste	Brazil - Sertão	Senegal
Agricultural sales	AE farms	2,372.37	3,575.80	1,623.24	722.79
	Ref	1,326.33	931.51	586.00	531.21
AE %adv (%disadv)*		79 %	284 %	177 %	36 %
Home consumption	AE farms	1,529.18	1,158.22	784.43	1,819.26
	Ref	917.57	720.55	452.05	1,590.88
AE %adv (%disadv)*		67 %	61 %	74 %	14 %
Non-farm income	AE farms	4,004.00	4,136.99	4,998.17	3,314.78
	Ref	3,973.97	5,413.70	4,887.67	3,030.05
AE %adv (%disadv)*		1 %	(24 %)	2 %	9 %
Farming costs	AE farms	1,641.64	682.65	432.88	327.23
	Ref	1,466.47	283.11	298.17	284.73
AE %adv (%disadv)*		(12 %)	(141 %)	(45 %)	(15 %)
Net income¹⁹	AE farms	6,582.73	13,423.74	8,791.10	5,529.60
	Ref	5,003.75	9,034.70	6,954.57	4,867.41
AE %adv (%disadv)*		32 %	49 %	26 %	14 %

* Figures should be read as follows: Figures without brackets show an advantage of the respective mode of production, while figures in brackets indicate a disadvantage.

¹⁸ Purchasing Power Parity, here expressed as “international dollars”, attempts to standardize income comparisons by taking into account the fact that currency exchange rates do not fully reflect that different amounts of goods can be

¹⁹ Note that the medians in each category will not necessarily add up precisely to the median net income because of slight differences in the exact distributions.

→ increase in economic viability for small-scale family farmers in all countries. Economic gains both through greater on-farm income and increased value of self-supply. (Chappell et al. 2018)

Conclusions

- **Growing evidence for the socio-economic performance of agroecology.**
- **Most examples from the Global South, few from Europe**
- **Overall trends are positive, but can be strong variation depending of parameters analysed**
- **High yield paradigm is the wrong (all type of agriculture). High yields do not necessarily mean higher economic benefit. Many opposite examples.**



Thanks for your attention



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<https://www.centreagroecologie.fr/>



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