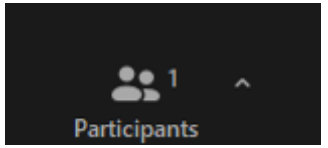
Regenerative agriculture and living income: *new evidence from coffee, lessons for every sector*

Tuesday 7 July, 14:00-15:00 BST

Session Guidelines



RECORDING

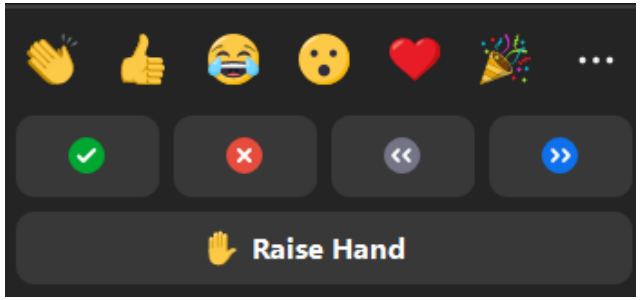
- This session is being recorded and this will be shared with all participants on the Living Income webpage in the upcoming days.

INTRODUCE YOURSELF

- Introduce yourself in the chat

HOW CAN I ASK A QUESTION/COMMENT?

- Attendees will remain muted during this session
- Please use the chat to introduce yourself.
- Please use the chat box to share any ideas or reflections.



TECHNICAL DIFFICULTIES?

Reach out to Carla in the chat box or to livingincome@isealalliance.org

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SUSTAINABLE FOOD LAB

LICOP facilitators

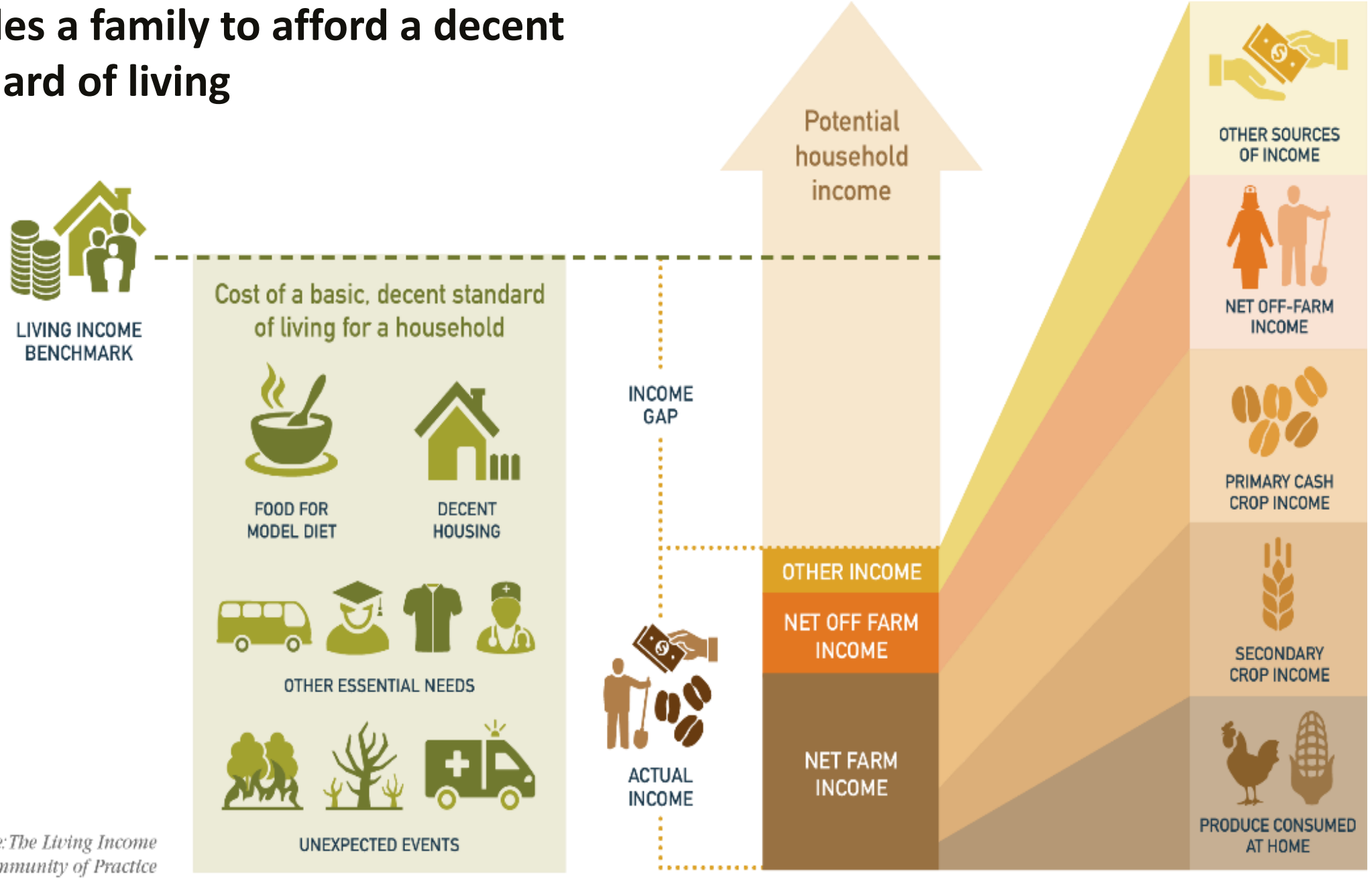
Molly Leavens
Program Manager
Sustainable Food Lab

Tech support:
Carla Rodriguez
Senior Project Coordinator, Impacts and Innovations
ISEAL

Agenda

1. Define living income and regenerative agriculture
2. Haki Pamuk and Valerie Janssen (WUR) present
3. Paul Stewart (TechnoServe) presents
4. Participant Q&A

Living income is the income level that enables a family to afford a decent standard of living



Source: The Living Income Community of Practice

Technoserve Regenerative Coffee Farming Framework

1 

Renovation, Rehabilitation, and Coffee Varieties

Rejuvenating aging and replacing diseased/ poorly managed coffee trees with new trees or improved coffee varieties capable of producing higher yields and/or better qualities

2 

Agroforestry Systems and Shade

Growing trees, coffee plants, and other crops within the same plot (intercropped and around edges), creating multiple vegetation layers similar to a natural forest

3 

Soil Conservation and Cover Cropping

Activities that protect topsoil against water and wind erosion, as well as improve soil health and water retention

4 

Integrated Weed Management (IWM)

Preventative and corrective measures that limit weed introduction and spread, help coffee outcompete undesirable weeds, and prevent weeds from adapting to management measures

5 

Integrated Pest & Disease Management (IPDM)

A pest and disease management strategy based on regular monitoring and the timely application of nature-based prevention and control measures

6 

Integrated Nutrient Management (INM)

The efficient and balanced use of mineral fertilizers, along with the management of organic resources to ensure optimal crop nutrition, sustain soil health, and minimize negative environmental impacts

7 

Efficient Water Use

Minimizing production and post-harvest water footprint by reducing use and loss of water, promoting water recycling, and avoiding contamination of water sources

8 

Wastewater Management

Actions to limit or eliminate the negative effects of residual water from postharvest processing on natural resources and human health, and reduce the carbon footprint of coffee production

9 

Waterbody Protection[1]

Actions to limit or eliminate the contamination waterbodies that are on or near coffee farms

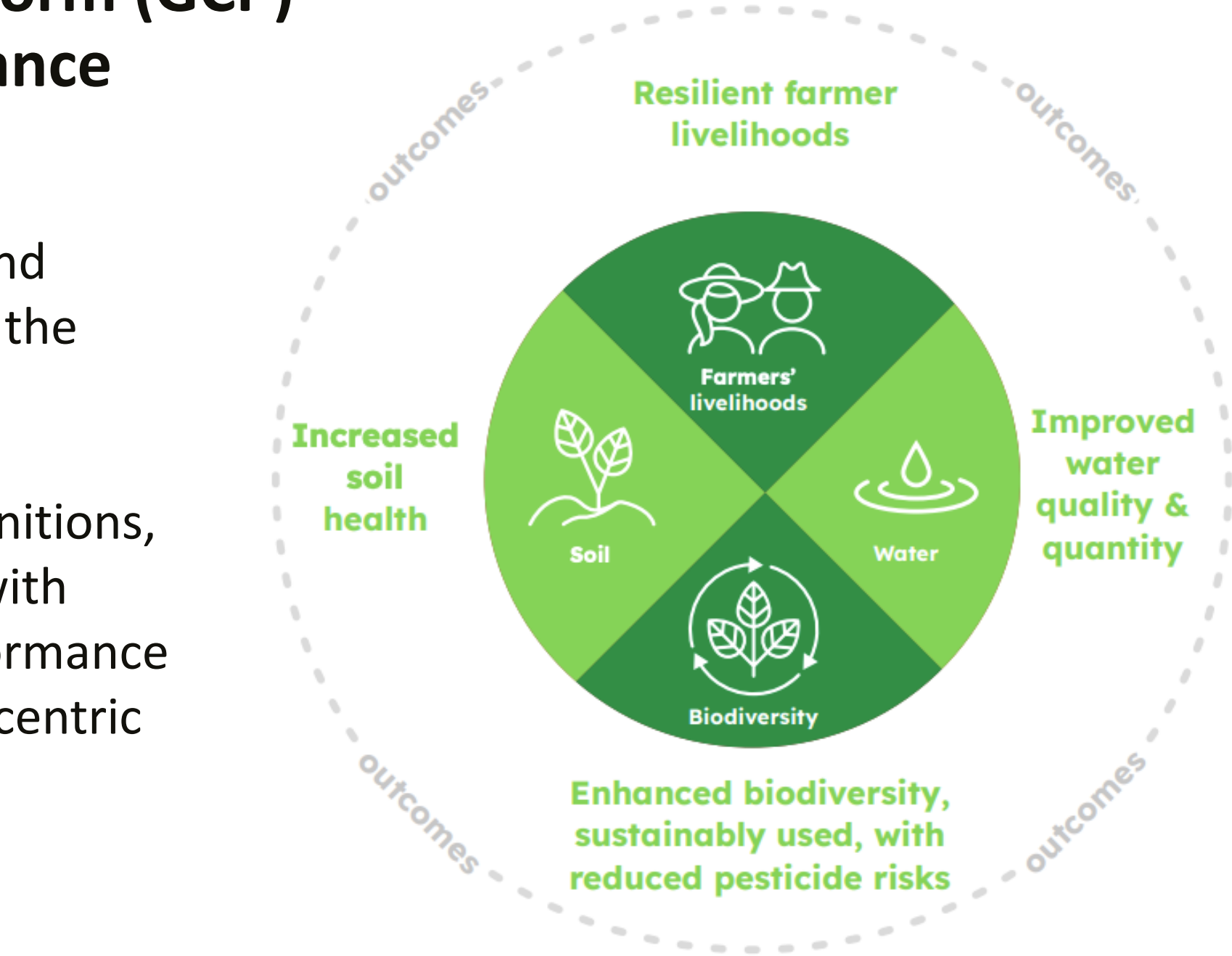
10 

Waste Valorization and Production of Organic Inputs[2]

Recycling and converting organic waste and crop residues into products that can be used on the coffee farm, thereby reducing the need for external inputs

Global Coffee Platform (GCP) RegenCoffee Guidance

- A common language and foundational guide for the coffee sector.
- Covers objectives, definitions, principles, outcomes with standardized Key Performance Indicators and farmer-centric practices.



What does regen ag look like in practice?

Intercropping

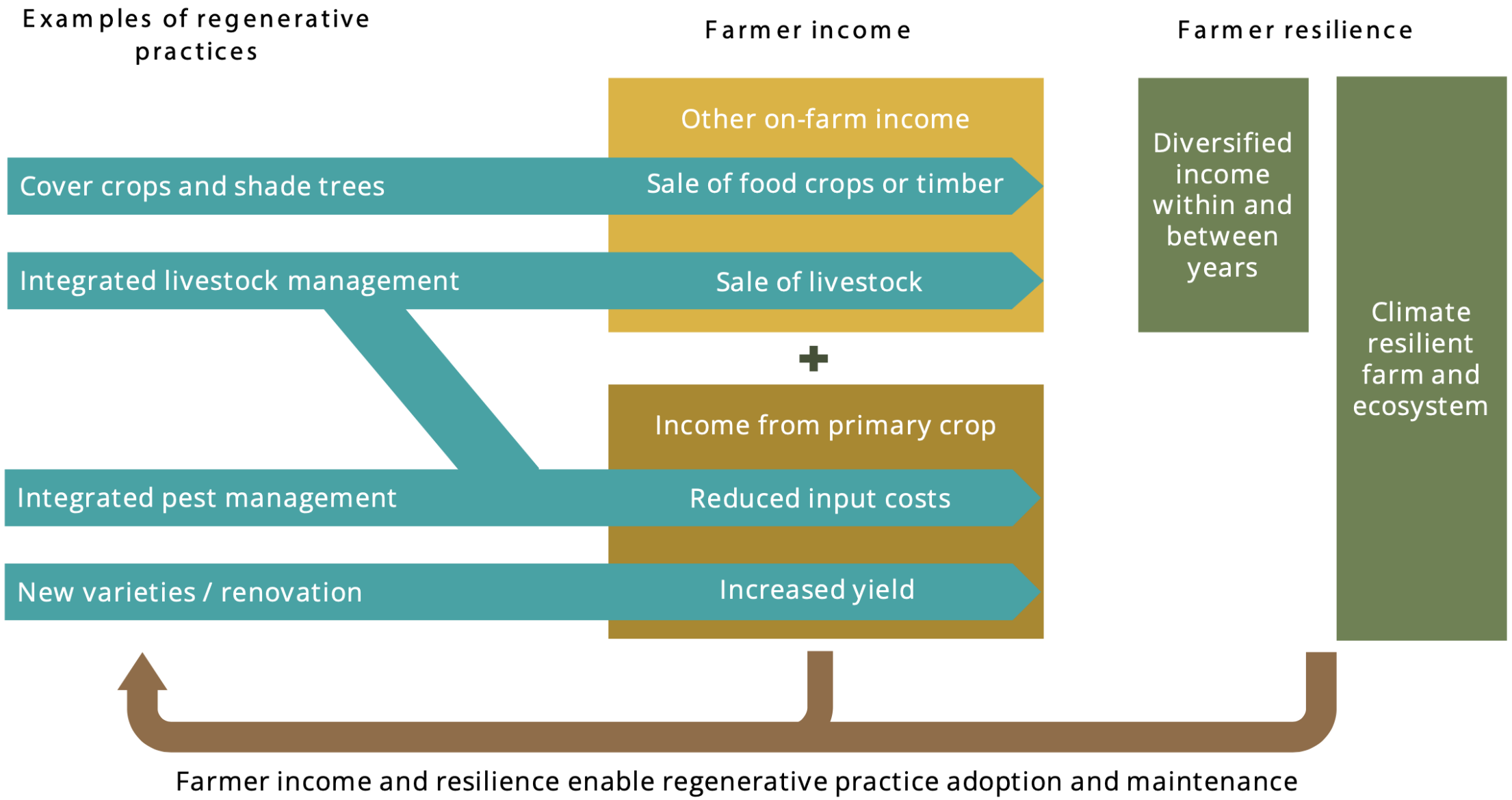
Agroforestry

Coffee plant rehabilitation

Organic fertilizer

Soil cover

Regenerative agriculture, farmer income, and resilience reinforce each other



Investing time and money: can advanced farm management enable living incomes for coffee farmers?

LICoP webinar

07/07/2026 | Haki Pamuk & Valerie Janssen

Enveritas

Can investing time and money in advanced farm management practices close the living income gap?

What do we do?

- Enveritas data: 2023-2024 coffee season, robusta and arabica producing regions (% 75 of global coffee production)
- Focus on four country groups: Vietnam (N=4349), large-scale farmers in Brazil (N=870), the Americas (Colombia, Honduras, Peru; N=7435) and Africa–Asia (Indonesia, India, PNG, Tanzania and Uganda; N=26,604).

Advanced farm management practices vs. farm profits

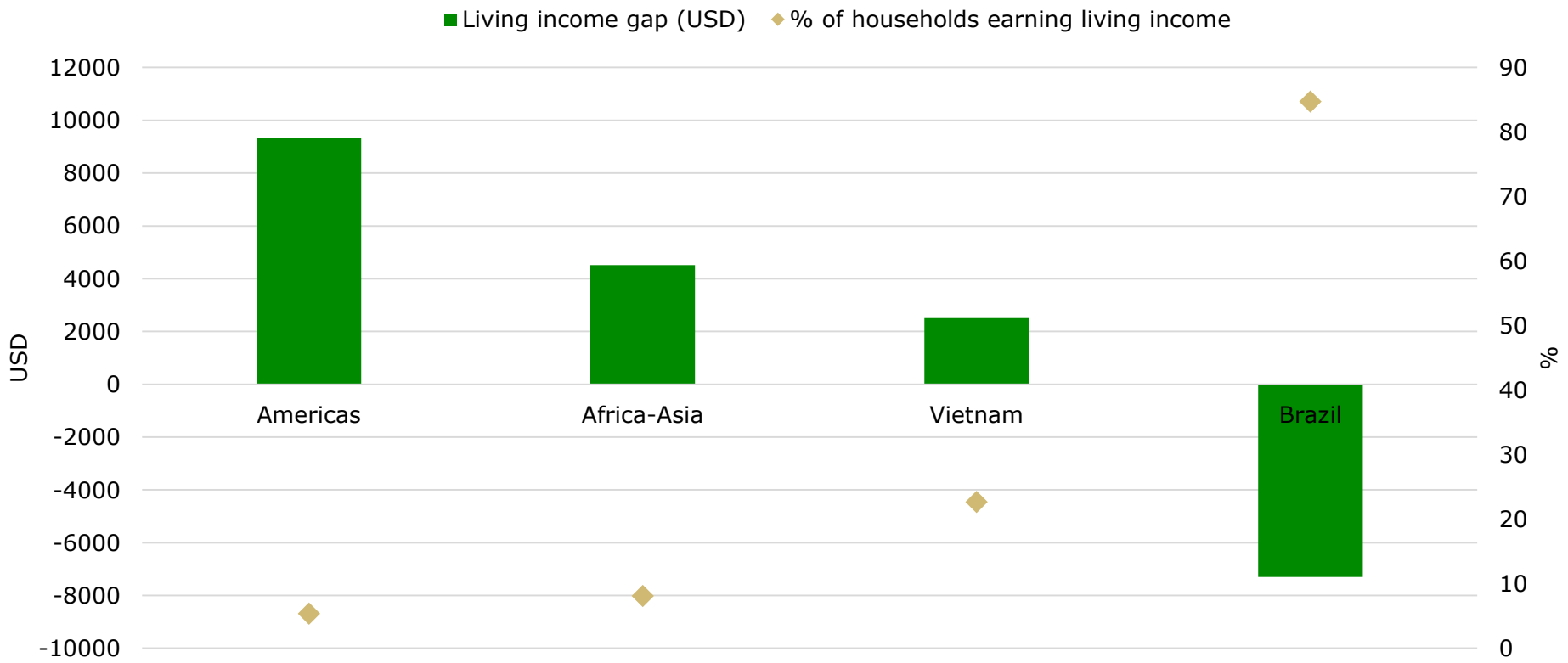
- Develop **three scenarios for farm-management profiles**, including regenerative, capital and input-intensive practices
- Estimate the change in coffee farm profits, farmer incomes and the living income gap under each profile, using econometric models.
- Replicated the estimations only for regenerative practices

Advanced farm management practices vs. returns to labour and living wages

- Identified the labour needed to implement each farm-management profile (for each scenario)
- Estimate the returns to labour (farm profits ÷ labour requirement) and compare these with living wages.

Only in Brazil majority of the farmers are earning a living income

Figure 1 Living income gap and % of farmers earning a living income by country segment, Source: Enveritas data



Three scenarios of farm management profiles

Enveritas data: Household level practices at no, low, medium and high levels of adoption → sophistication of adoption but not necessarily the extent.

Farm management profiles for simultaneous adoption

1. Minimum profile: no adoption of any of the practices
2. Medium profile: most common level of adoption for each practice per country group
3. Advanced profile: high level of adoption for each practice

Regen ag	Input and capital intensive
Erosion control	Inorganic fertiliser
IPM	Irrigation
Mulch cover crops	
Organic fertiliser	
Pruning	
Rejuvenation	

→ Our model estimations confirms that adoption of the advanced profile corresponds to much higher yields than the other two profiles. Especially inorganic fertiliser and irrigation adoption have strong relationships with yields.

Results: Coffee revenues, expenses net incomes for all practices

Net coffee incomes do not always increase in the advanced profile

- Revenues increase as farm management profiles get more advanced
- In Vietnam and Brazil net coffee income is highest under the advanced profile

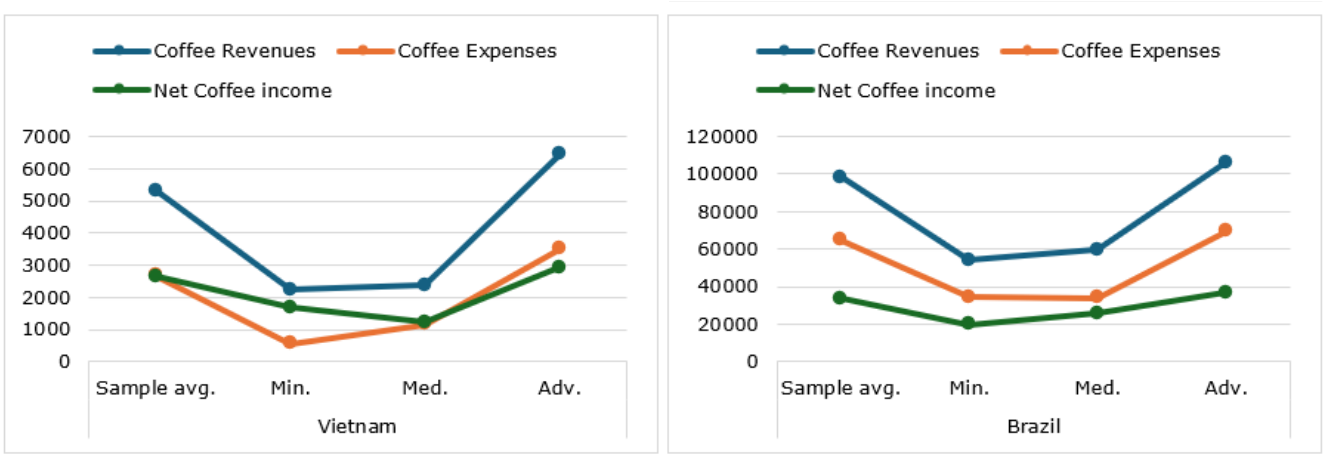


Figure 6a Average (predicted) coffee revenues, expenses and net income by country groups and changes in farm management profiles for all (input- and capital-intensive and regenerative) practices and country groups, USD.

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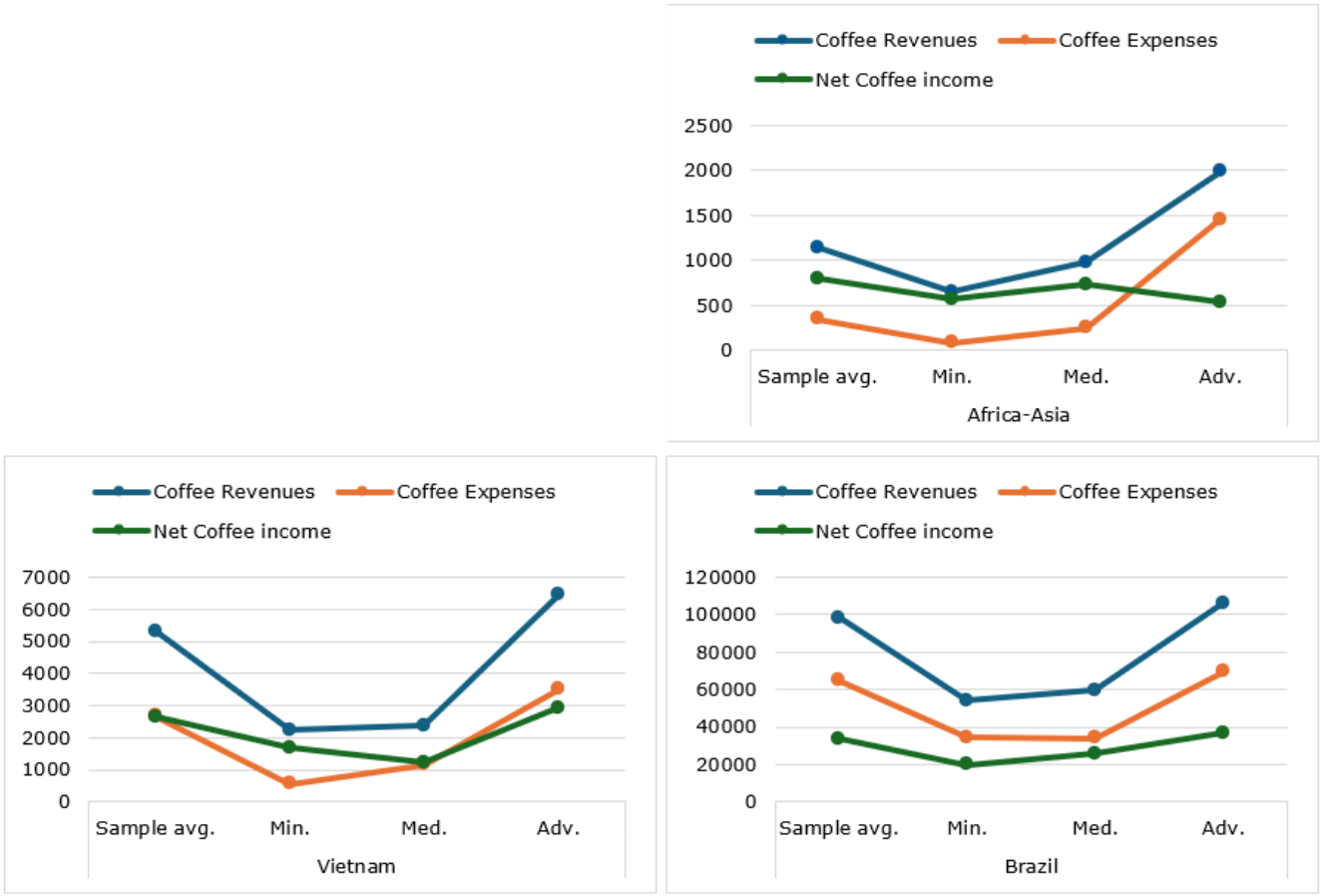

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- In the Americas and Africa-Asia, expenses increase more than the revenues in the advanced farm management profile
  - Due to high cost of advanced inorganic fertiliser and irrigation adoption

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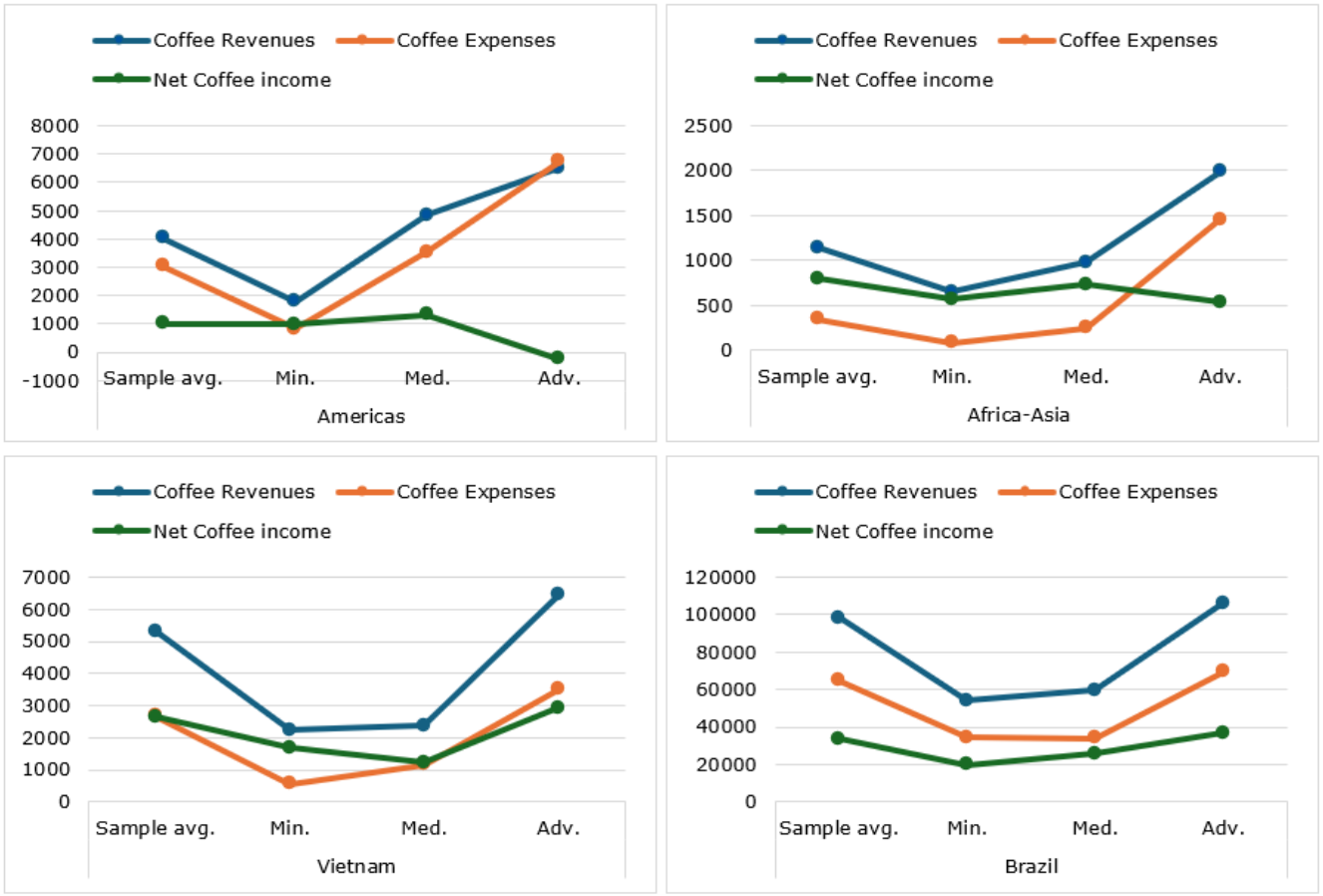

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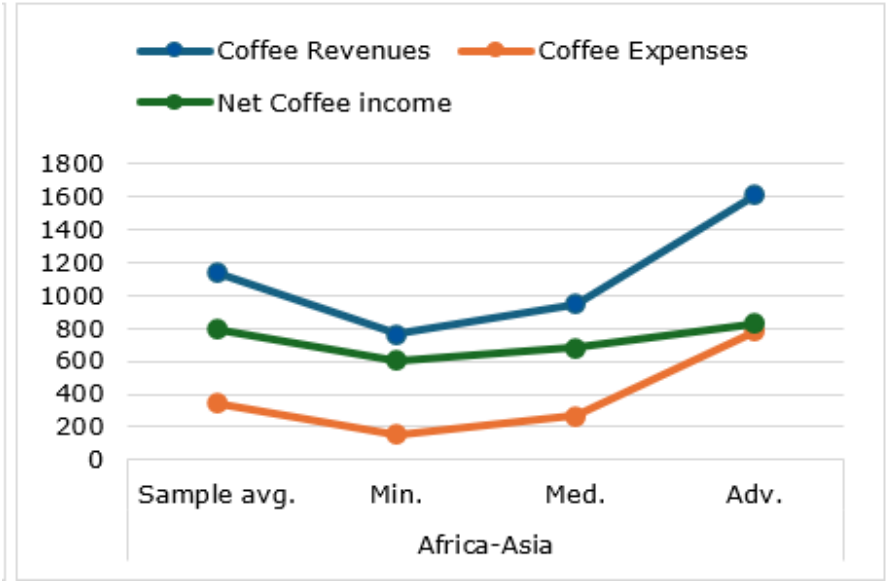
Results: Coffee revenues, expenses net incomes for only regen. ag.

Focusing on regen ag. is the most efficient strategy in Africa-Asia

- Brazil and Vietnam: optimal strategy remained to have full adoption of all practices, including irrigation and inorganic fertiliser
- Africa-Asia: regen ag only leads to the best financial outcomes.

Figure 6b Average (predicted) coffee revenues, expenses and net income by country groups and changes in farm managemen profiles for only regenerative practices and country groups, USD.



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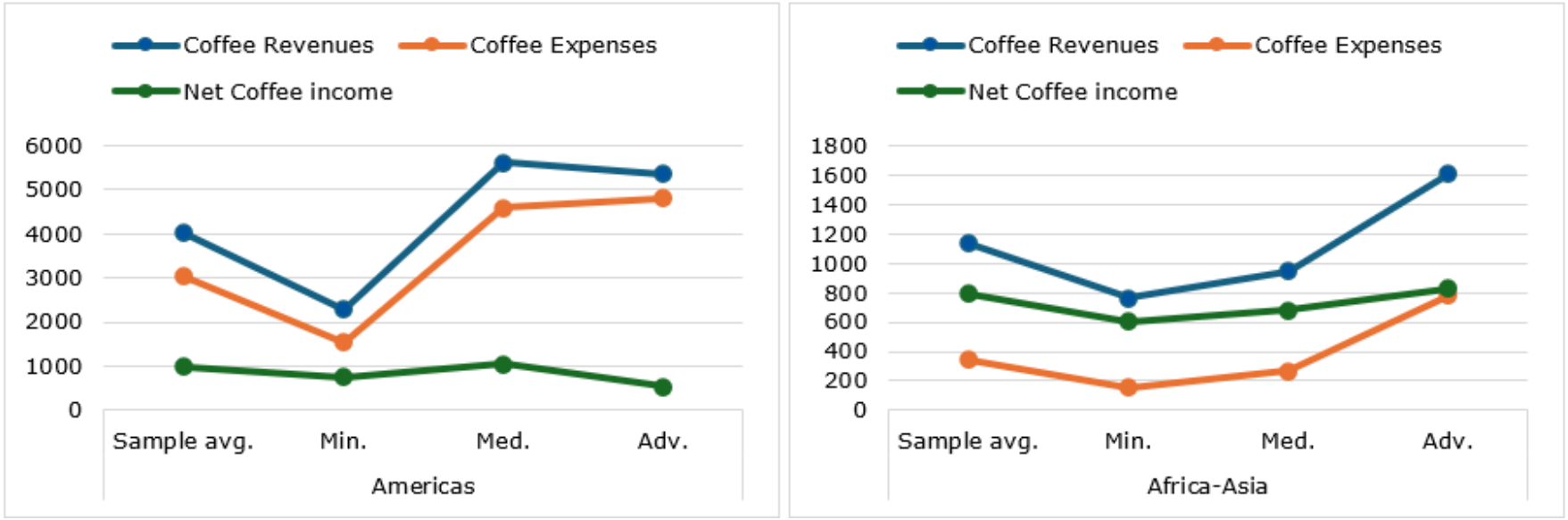
Focusing on regen ag. is the most efficient strategy in Africa-Asia

- Brazil and Vietnam: optimal strategy remained to have full adoption of all practices, including irrigation and inorganic fertiliser
- Africa-Asia: regen ag only leads to the best financial outcomes.
- Americas: Focusing only on regen had fewer negative outcomes for the advanced profile, but the optimal strategy remained the medium profile.

Figure 6b Average (predicted) coffee revenues, expenses and net income by country groups and changes in farm managemen profiles for only regenerative practices and country groups, USD.



Results: Returns To Labour

Farms that provide labor returns above the living wage outnumber those offering a living income.

Variables	Unit	Americas	Africa-Asia	Vietnam
Required coffee labour investment per hectare	Days, annual	134	173.3	162.3
Coffee revenues minus input costs per farm	USD, annual	2155	864	3220
Returns to labour	USD per farm-working day	11.2	6.8	15.9
Farms with labour returns over the living wage benchmark	%	11.9	25.9	59.8
Living income earners	%	5.4	8.1	22.6

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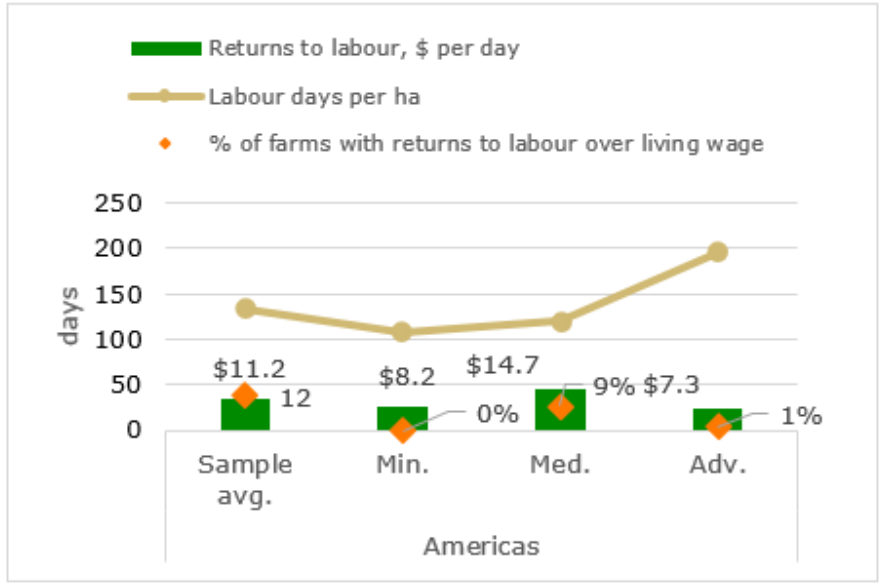
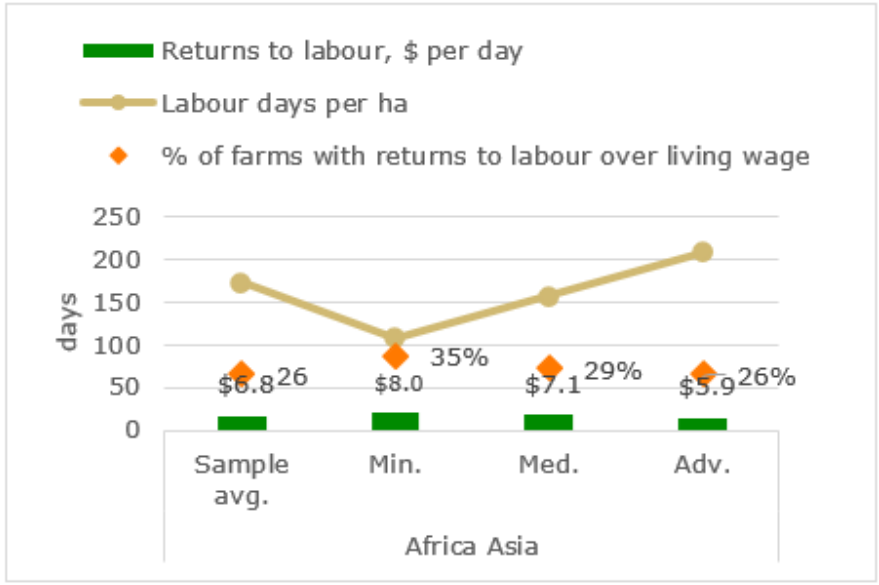
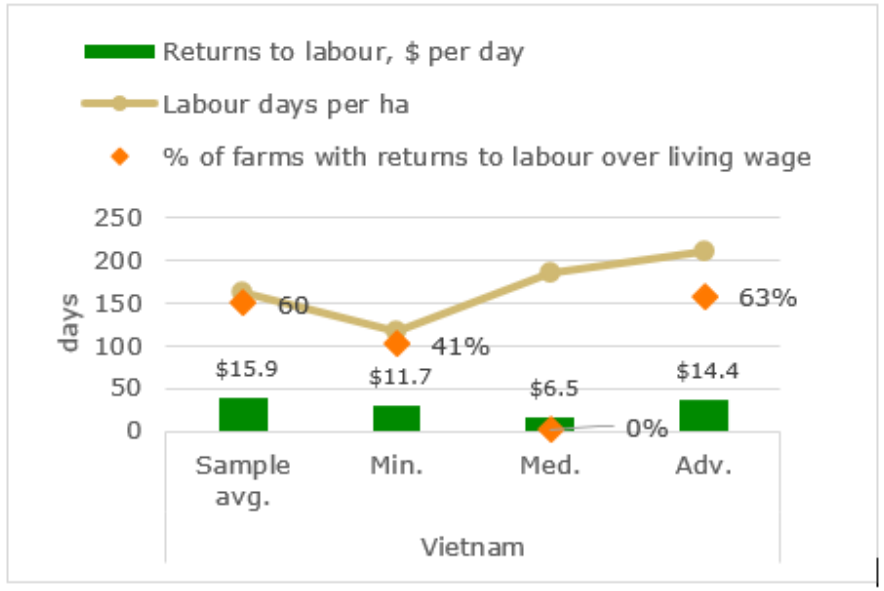
Results: returns to labour

Advanced farm management requires more investment in time

- More advanced practices require more labor time (yellow line).
- Returns on time (labour) do not significantly increase returns to time (green) and those earning a living wage (orange) do
- In the Americas, returns to labor are significantly larger in the medium profile: assuming other opportunities are available, investing more time in coffee might not be worth it.







Key implications of our research

- Important: Accounting for time spent on coffee and the higher labour and financial consequences of advanced practices
- Higher yields do not always translate into higher financial returns for farmers.
- Input- and capital-intensive practices for Vietnam and Brazil; regenerative practices for smallholders in the Americas (Colombia, Honduras, Peru) and Africa–Asia (Indonesia, PNG, Tanzania and Uganda).
- Focus on labour- and cost-efficient strategies and income diversification.

Questions?

Link to paper:
https://edepot.wur.nl/716761

Haki Pamuk: haki.pamuk@wur.nl

Valerie Janssen: valerie1.janssen@wur.nl

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FOSTERING RESILIENCE

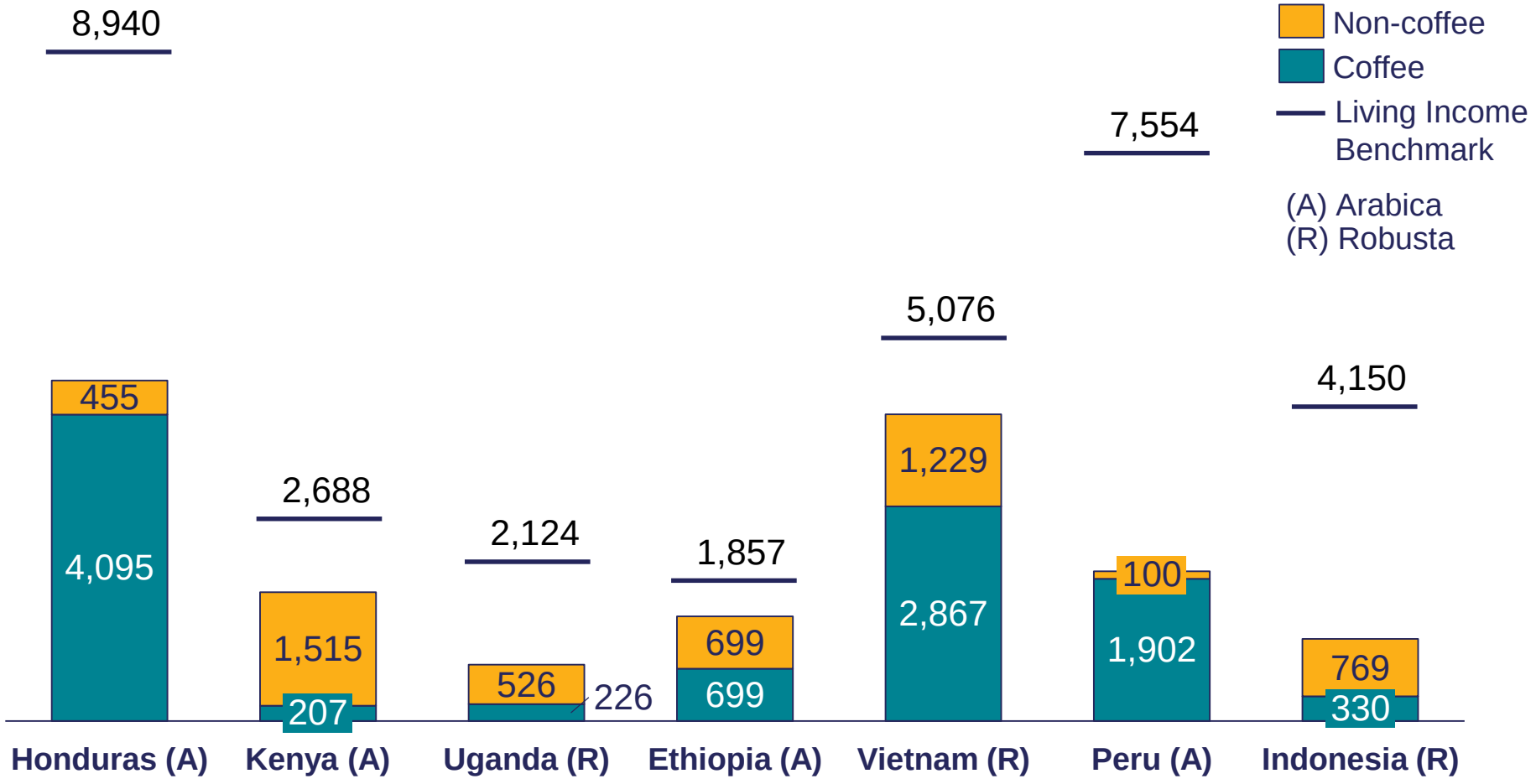
REGENERATIVE AGRICULTURE AND LIVING INCOME

Evidence from coffee, approaches for all sectors

July 2026

Across seven countries, the typical coffee-growing household falls short of a living income

Annual smallholder coffee farm household net income at baseline*
US$



* Excludes value of food production consumed by the household; Modeled using 2023 prices which represent long-term historical prices; Source: TechnoServe Regenerative Coffee Investment Case, 2025

Kenya example:

$207 coffee income

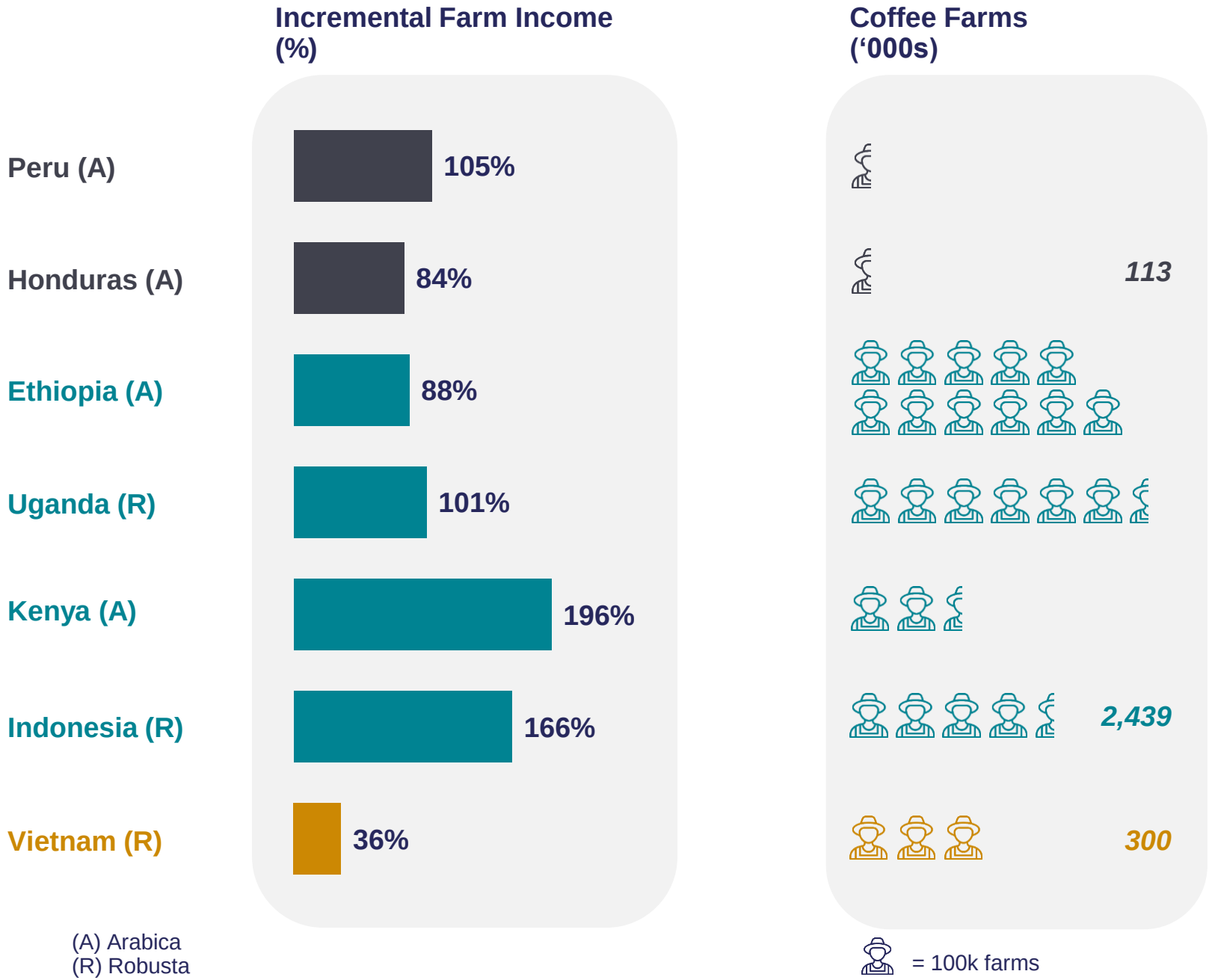
$1500 other income

0.16 hectares coffee

Yields ~half their potential

High input costs

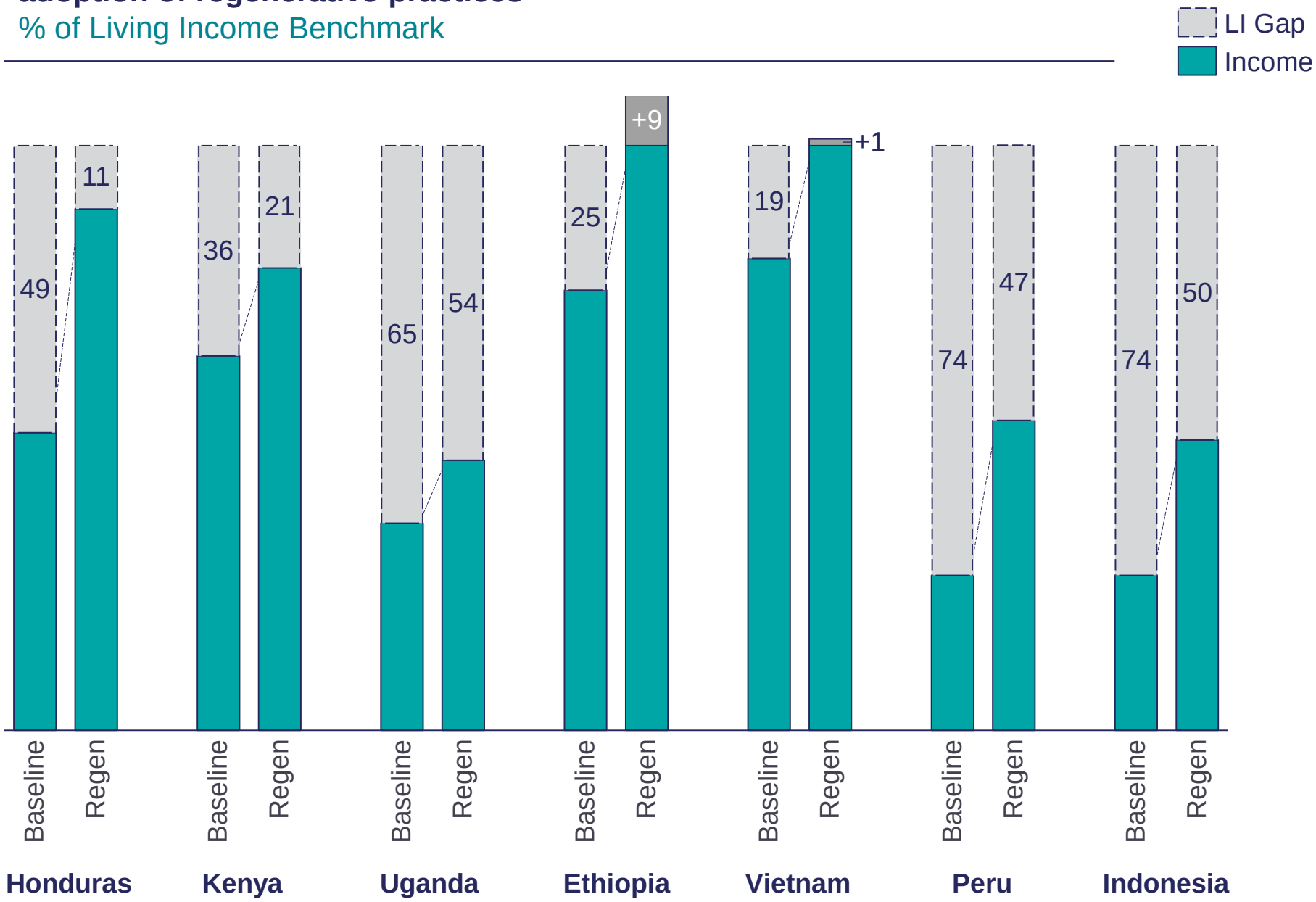
The impact of adopting regenerative practices on farm incomes varies across regions based on existing coffee cultivation practices



Adoption of regenerative practices reduces the living income gap in most countries

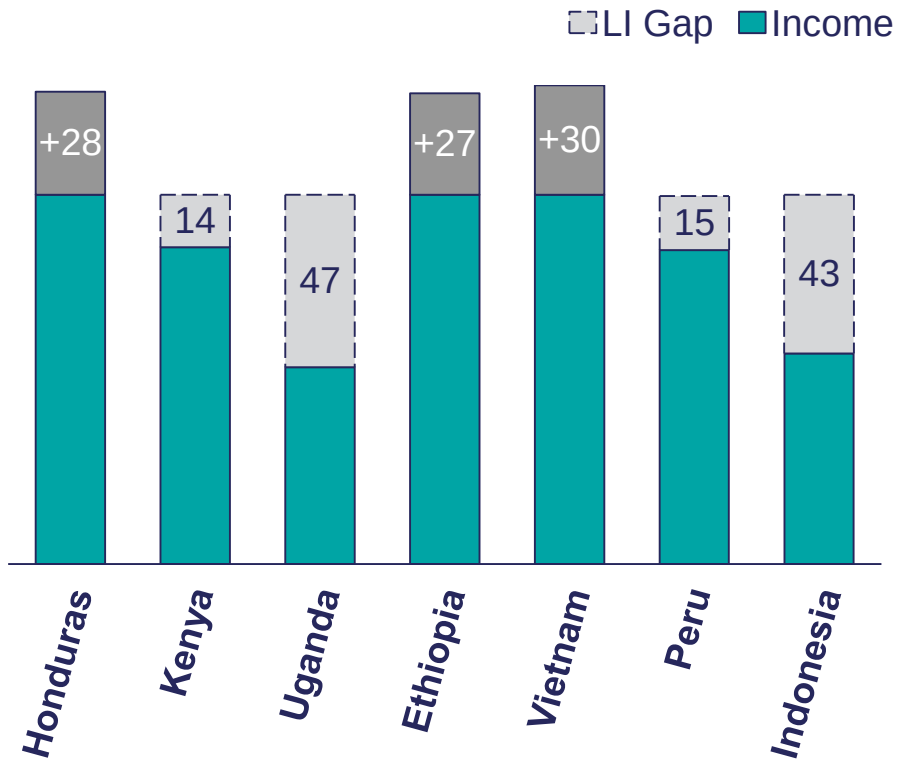
Annual smallholder coffee farm household net income baseline versus with adoption of regenerative practices

% of Living Income Benchmark

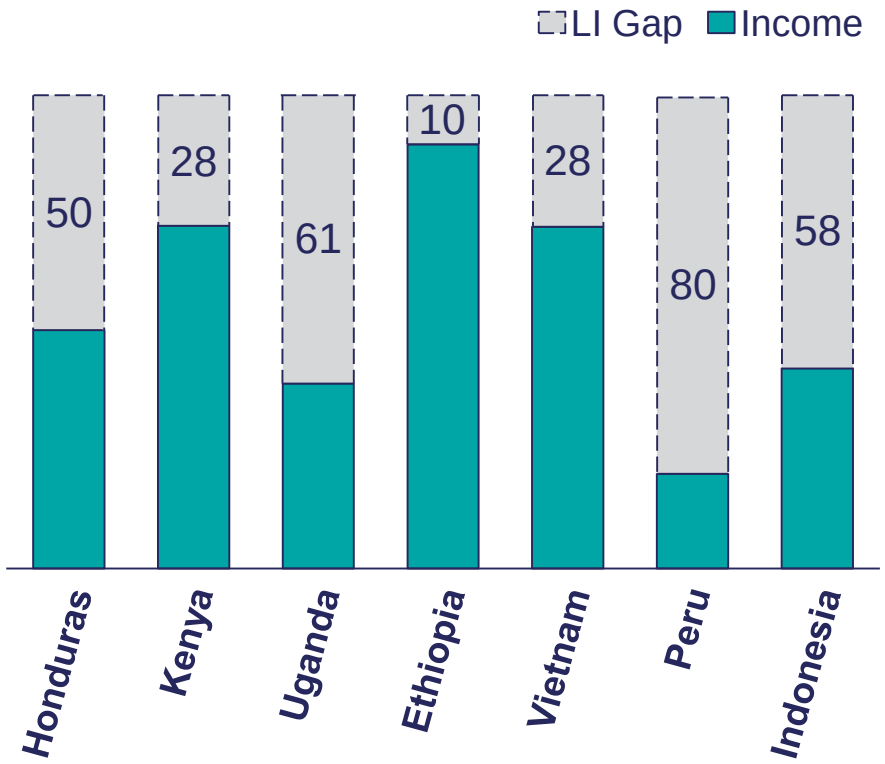


The intersection of practice adoption and coffee prices matters for living incomes

Annual smallholder coffee farm household net income with adoption of regenerative practices +25% higher prices
% of Living Income Benchmark



Annual smallholder coffee farm household net income with adoption of regenerative practices -25% lower prices
% of Living Income Benchmark



James and Lucy

Adopted composting, mulching, changed fertilizers

$1,300 in net coffee income and earned a living income (2024)

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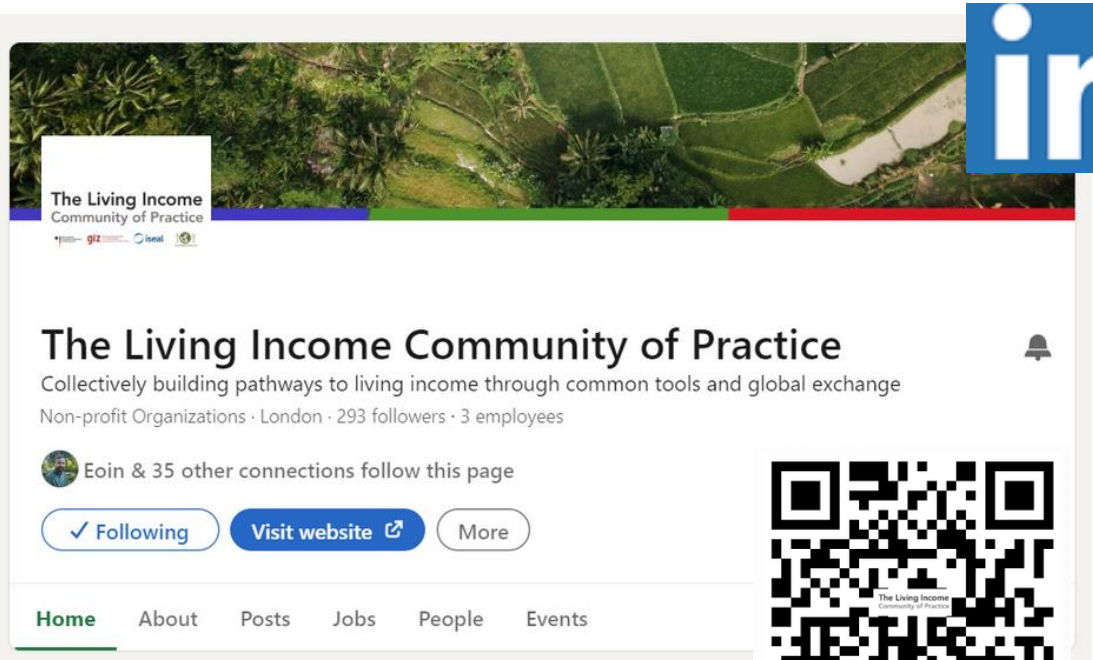

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