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CONFERENCE 2017

Local Impact From Global Action: Examples & Opportunities

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PLATFORM



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Tchibo

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Managing Water Scarcity



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- Projections of severe drought risks to coffee growing areas
- Strengthen coffee production with technical solutions and/or drought tolerant varieties

Progress:

- Identified one drought tolerant Robusta variety
- Studies about coffee tree water dynamics and water management
- Studies to improve nurseries and planting practices

Deliverables:

- Short term (2018): Recommended practices for optimised root systems - propagation, irrigation, SAP (Super Absorbent Polymers)
- Medium term (2019): Tools for variety selection – physiological + sugars as potential markers for water stress tolerance
- Long term (2020+): New tolerant Robusta varieties identified, locally validated and released

More pre-competitive collaboration would enable:

- **Faster and more widespread adoption of recommended practices**
- **Faster and broader validation of promising varieties**
- **More efficient propagation of validated varieties**

Partners

Nestlé R&D
Blaise Pascal University (FR)
INRA (FR)
IRD (FR)
Wageningen University (NE)
NARO (UG)

Funding

Nestlé



Coffee Nematode Pests

- Nematodes cause >10% reduction of global production
- High nematode infested farms more affected by climate change/drought
- Current detection methods complex & expensive,
- Few solutions to reduce nematodes: Healthy trees and root system with good fertilisation, planting new tolerant material, or grafting plant to high tolerant roots

Result delivered:

- New/Proven fast detection method for multiple coffee nematodes based on DNA Technology in soils from coffee farms (South America and Asia)

Next steps:

- Test new method to access tolerance level of a Robusta material to different coffee nematodes

More pre-competitive collaboration would enable:

- **Better understanding nematode presence and expansion**
- **Guarantee nematode-free certified nurseries**
- **Accelerate selection and planting of nematode tolerant coffee trees**
- **Develop anti-nematode field treatments**

Partners

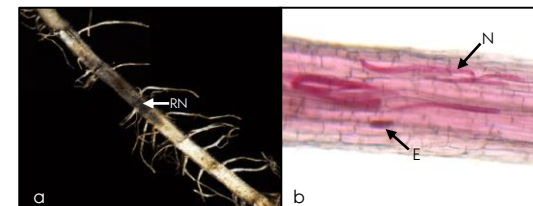
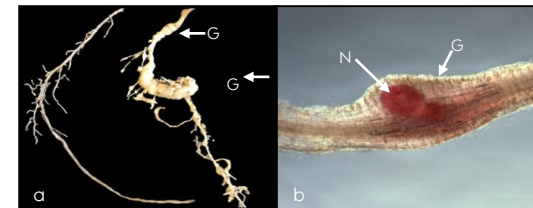
Leeds University (UK)
Nestlé R&D / Agriservices
Lavras University (BR)
WASI (VN)
Lampung University (ID)

Funding

UK BBSRC
Nestlé



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More Coffee with Less Water

Phase I – 2011 / 2013



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- Improve water productivity/efficiency in Vietnamese coffee production
- Reduce water consumption
- Formulate water policy

Result delivered:

- Proven high yield with 40-60% less water used in irrigation rounds
- Lower cost of production with less energy used in irrigation
- Water saving potential = AHC 28% national Vietnamese population

Impact delivered:

- Vietnamese authorities approved findings and dissemination through mass media and farmer trainings
- Project recommendations included in Official Irrigation Supply Standards and widely disseminated
- New practice incorporated in farmer trainings provided by various programs

More pre-competitive collaboration would enable:

- **Faster adoption: Greater water savings; Lower cost of production**

Partners

EDE Consulting
SDC (CH)
Nestlé
WASI (VN)
IWMI (VN)

Funding

SDC (CH)
Nestlé



More Coffee with Less Water

Phase II – 2014 / 2017



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- Identify water scarce hotspots and implement action plans
- Optimise water management on farm via weather forecasting system
- 50'000 farmers trained and adopted good water management practices

Result delivered:

- Proven no long term decline in groundwater levels. Excess irrigation water temporarily trapped, unavailable in dry season.
- Water scarce hotspots in higher altitudes of basalt plateau.
- Short term weather forecasting in test phase, with farm management guidelines in development
- 110'000+ farmer training contacts, adoption increased vs. baseline

Next steps:

- Water demand optimisation
 - Monitor weather and water variables to quantify impacts
- Water supply enhancement
 - Managed aquifer recharge

More pre-competitive collaboration would enable:

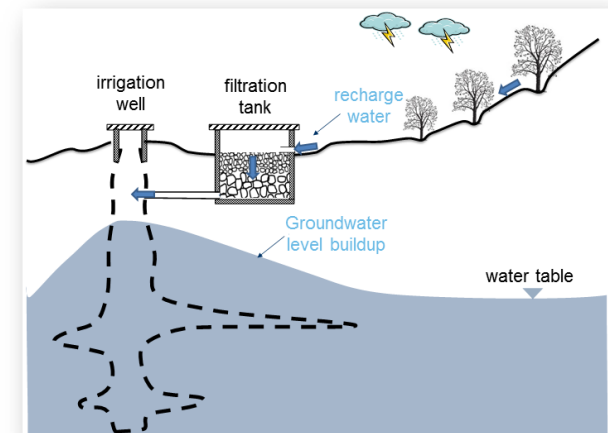
- **Faster adoption: More efficient water management**

Partners

EDE Consulting
SDC (CH)
Nestlé
MARD+Provinces (VN)
Hanoi University (VN)
IWMI (VN)
Neuchatel University (CH)

Funding

SDC (CH)
Nestlé





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NKG BLOOM UGANDA

TRANSFORMING SMALLHOLDER FARMER LIVELIHOODS THROUGH IBERO UGANDA'S SUSTAINABLE SOURCING STRATEGY

Catalina Eikenberg

Bernhard Rothfos GmbH

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UGANDA



What's at the heart of our innovation?

Part 1: FARMER-CENTERED PRODUCT DESIGN

Value-creation fertilizer advance:

- High quality fertilizer is brought to their door
- Disbursed at the time of the year when fertilizer application needs to take place
- Specific fertilizer recommendation based on their specific farm need

Consumption-smoothing cash advance:

- Via mobile money
- Disbursed upon request to be a real safety net in times of emergencies

In both cases, repayment schedules according to the coffee harvest seasons



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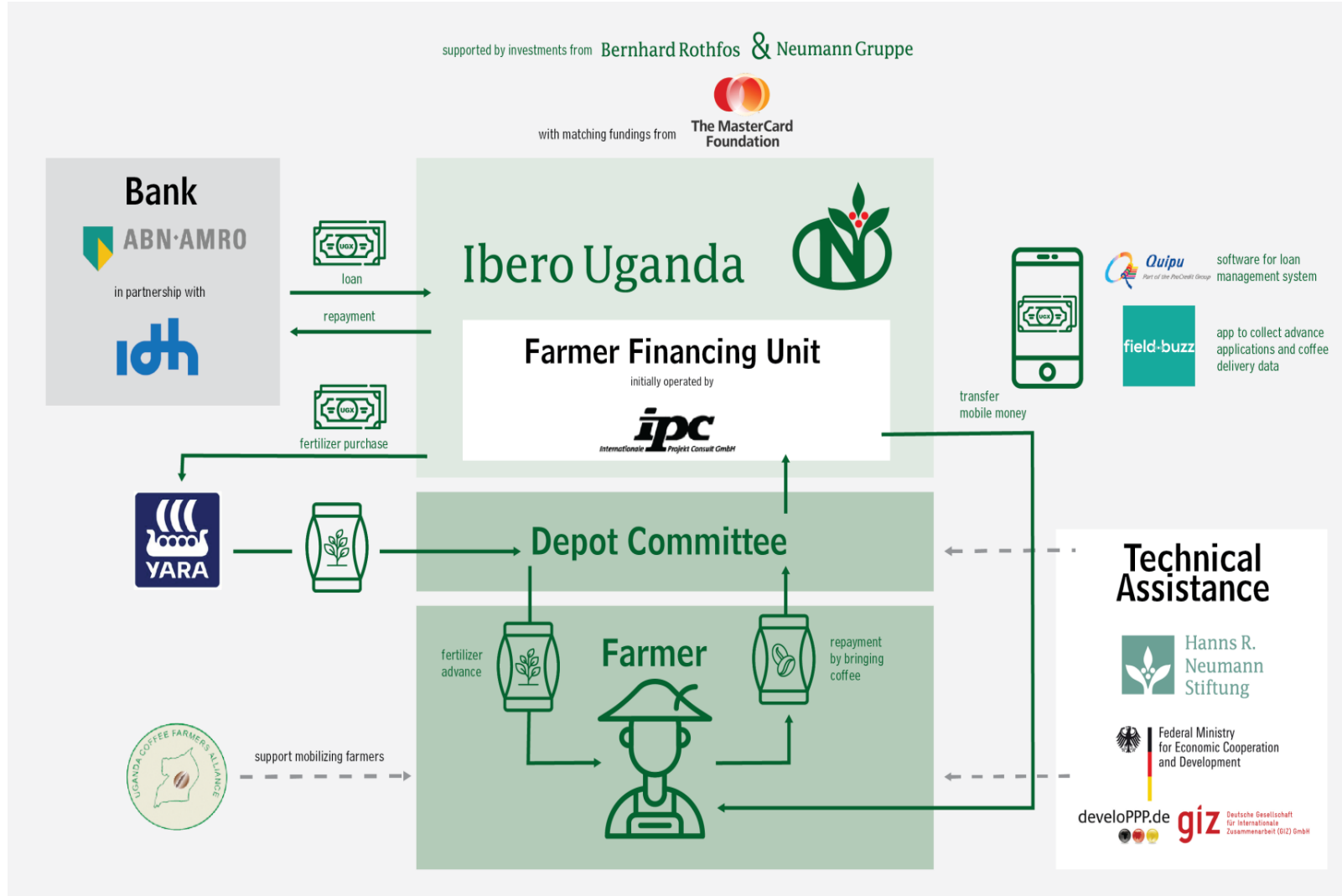
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What's at the heart of our innovation?

Part 2: PARTNERSHIPS



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JDE Responsible Sourcing Program: Supplier Initiative

JDE

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Collaboration & Collective Action: Indonesia



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JDE

Enveritas

NedCoffee

LDC

UTZ

Daniel Martz

David Browning

Stefanie van der Kaaij

Rozenn Kerviel

Han de Groot

Corporate Responsibility At JDE

We are driven by our passion for coffee & tea, care for people and respect for the environment



At The Source

Supporting coffee & tea farmers



Within Our Company

Reducing our environmental footprint



For Our Consumers

Everyone deserves the coffee they love



At The Source | Supplier Initiative



OUR GOAL

- Identify and address *priority issues* in our supply chain
- Partnerships to set up *corrective measures* and *remediation programs*
- Launch in *8 countries in 2017*

At The Source | Supplier Initiative

Risk Assessment of JDE Coffee Supply Chain & Selective Remediation of Identified Sustainability Issues

Over 150 coffee suppliers & 8 countries

Farms & Processing Units

Non-certified / non-verified coffee supplied to JDE

Conducted every 2 years



At The Source | Supplier Initiative

1. Management information system

2. Decent working conditions

Child labour
Forced labour
Freedom of association & collective bargaining
Minimum wages
Health & Safety



3. Protection of Natural Resources

Agrochemicals
Forest & protected areas
Water pollution



First, we learn from our Suppliers through open, direct communication



Better farming
Better future

Then, we compare supplier risk assessment with UTZ and third-party targeted assessments



Finally, we partner with Suppliers / NGOs / Governments to address these challenges

NedCoffee's action plan on the risks from the production end of the supply chain

STRATEGY: Addressing core issues rather than symptoms

PROJECT CONCEPT: Empowering Smallholder Farmers for Coffee-Garden Rejuvenation and Agroforestry to Strengthen and Diversify Incomes (EMPOWER)

ACTIVITIES: Agroforestry Trainings; Tree Nurseries; Farmer Demonstration Trials (FDT's); Harvest and Post-Harvest Management Training; Exit Strategy

EXPECTED OUTCOMES:

- Improve cultivation and management practices of about 4000-6000 farmers
- Train 40 farmer extension specialists
- Set up 3 "enterprises" (similar entity to cooperatives)
- Improve quantity and quality of Robust coffee and agroforestry commodities available in local value-chains



ICCRI
Indonesian Coffee and Cocoa
Research Institute



World
Agroforestry
Centre

LDC – Partnership for sustainable progress

JDE C&T Supplier Initiative:

- Co-responsibility
- Supplier's consultation and active participation
- Non-certified/verified farmers
- Progressive process

Lampung, Indonesia

Increase the earning capacity of the farmer on a long term perspective

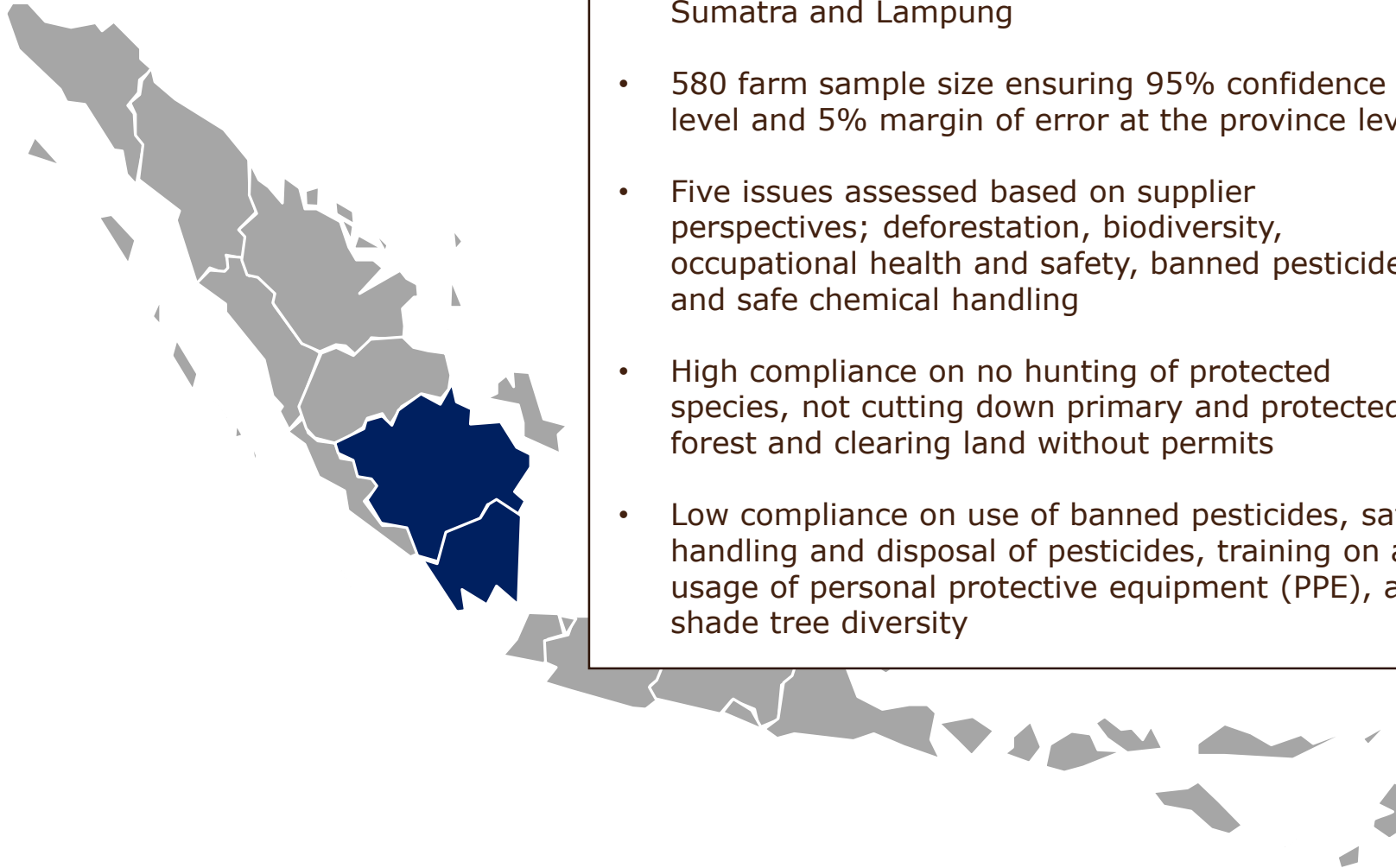
Main issues identified in Lampung province, Indonesia:

- Poor working conditions, risks on Health and Safety
- Lack of knowledge on agro-chemicals handling
- Deforestation (coffee plantations located at the boarder of protected areas) to increase the cultivated area

Project proposal shared to address these issues based on a coordinated approach and specific training.

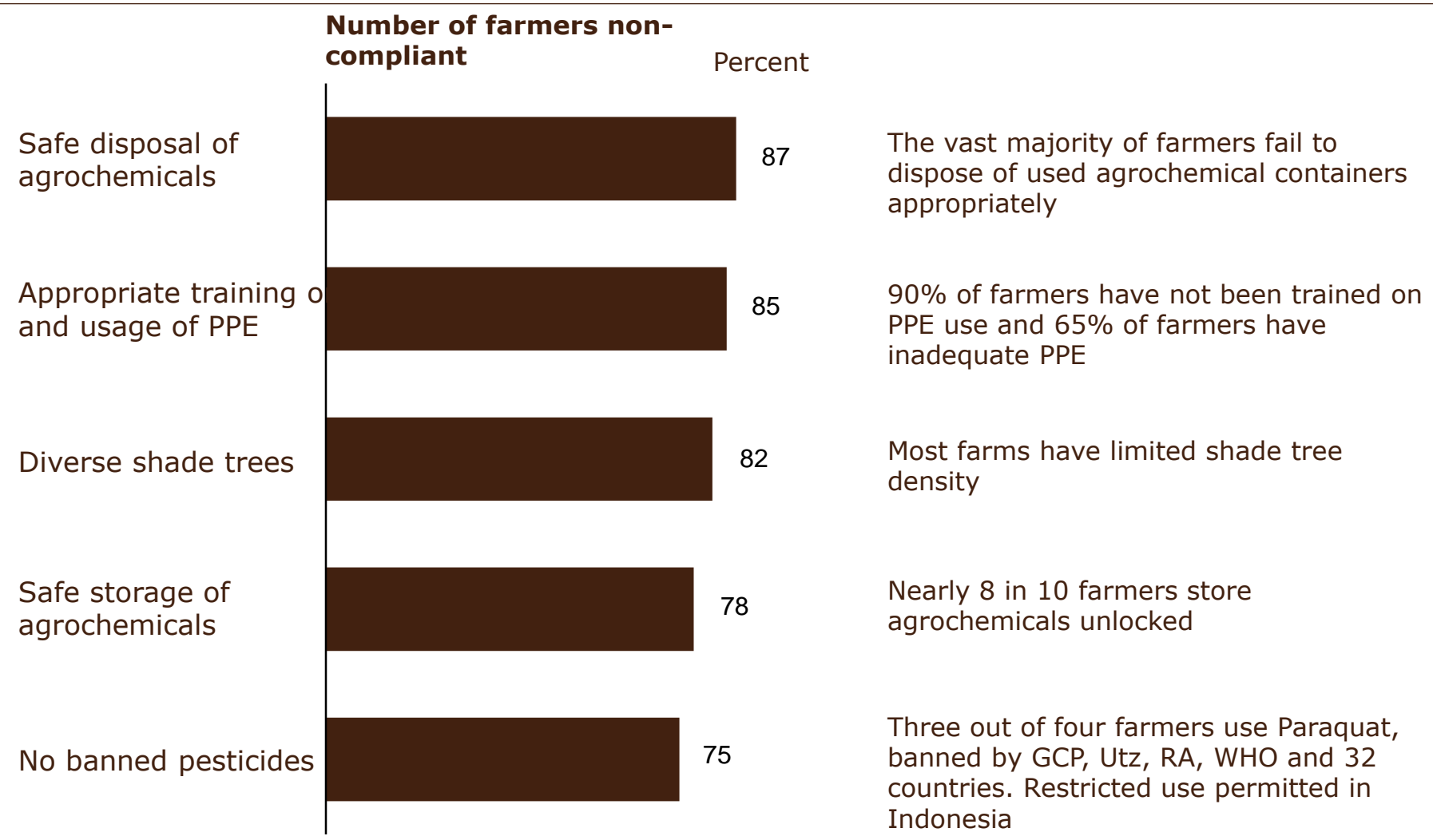


Enveritas conducted a sustainability assessment in Sumatra



- Statistically significant surveys conducted in OKU Selatan, Lampung Barat, and Tanggamus regencies representing 50% of coffee farms in South Sumatra and Lampung
- 580 farm sample size ensuring 95% confidence level and 5% margin of error at the province level
- Five issues assessed based on supplier perspectives; deforestation, biodiversity, occupational health and safety, banned pesticides, and safe chemical handling
- High compliance on no hunting of protected species, not cutting down primary and protected forest and clearing land without permits
- Low compliance on use of banned pesticides, safe handling and disposal of pesticides, training on and usage of personal protective equipment (PPE), and shade tree diversity

Most surveyed farmers were non-compliant on five issues



Why: broadening and deepening impact

Certification is at the **core** of our **approach** and it has a big impact.



Further to go: most of world's coffee, cocoa and tea are not yet sourced as certified.



Companies' sustainability programs are an **additional way** to **drive sustainability** in the sector – while **committed to certification**.

Credible sustainability initiatives:

- Must be transparent on requirements, assurance system, impact;
- Need independent monitoring and evaluation;
- Require substantial remediation budget.

