



FOOD VALUE CHAINS – A COMPANIES VIEW

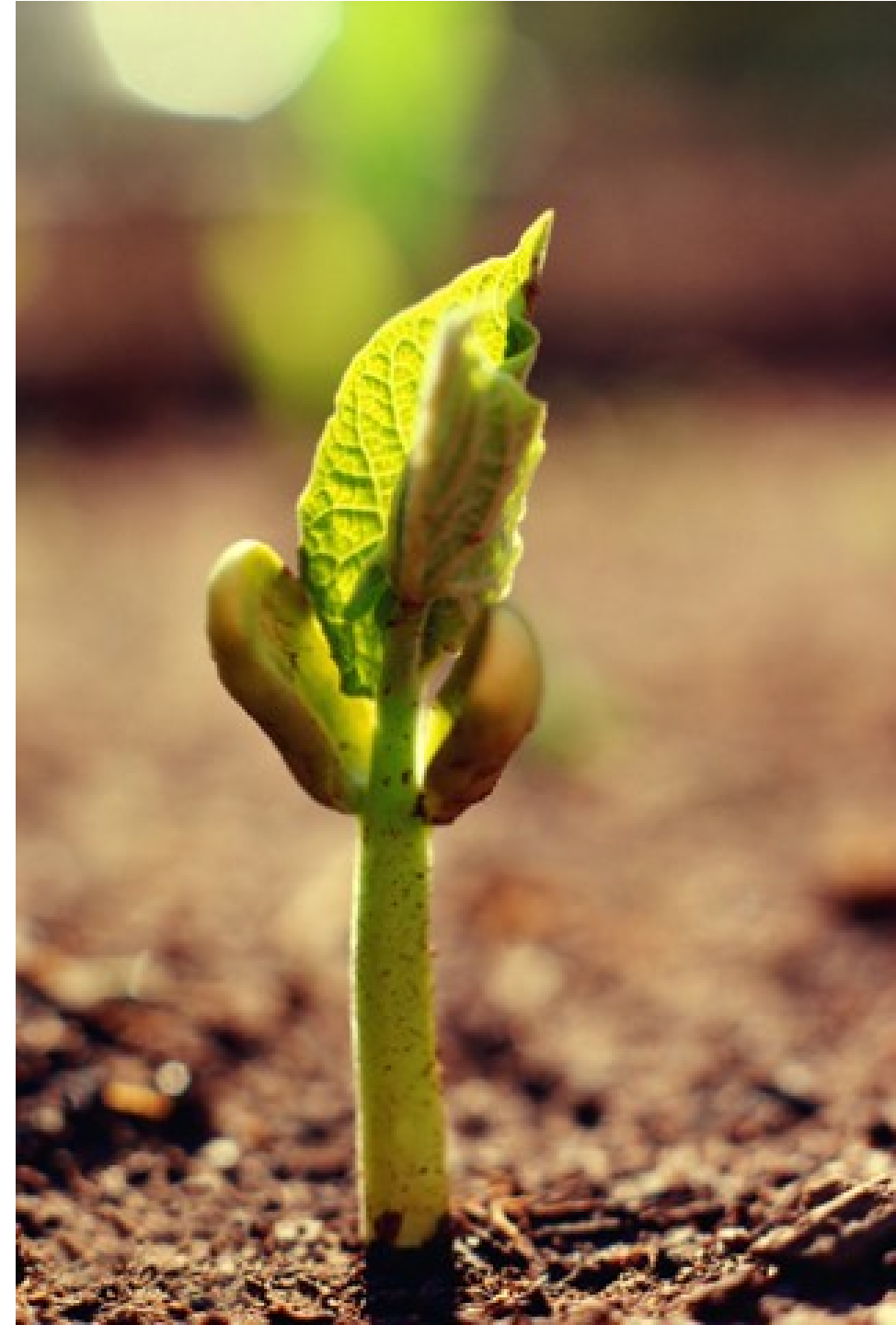
OPPORTUNITIES AND ACTIONS IN COMPLEX MARKETS

Melissa Barrett,
Managing Director Sustainability
and Consumer Goods Strategy

Accenture, April 2019

“The greatest thing we can do to advance nutrition and advance the livelihoods of the likes of smallholder farmers is to help build an economy and do business in Africa.”

John Mendesh, General Mills



SUSTAINABLE DEVELOPMENT GOALS





Supply

Demand

Rules of the Game

Supply: companies face increasing threats due to water scarcity, climate risk, & substitutes

Water scarcity is threatening global agricultural production

70%

Water scarcity has a huge impact on food production, with agriculture accounting for approx. 70% of global water withdrawals¹

9bn

This strain on a natural resource is set to only increase: as the global population heads for more than 9bn people by 2050, demand for food is expected to surge by more than 50%²

So what? Agricultural water use for crops will have a **direct impact on crop and food availability**

Climate change is increasing risk exposure for upstream commodity producers & traders



Climate change is a significant risk for agriculture and food systems, impacting average growing conditions, driving climate / weather variability, and creating uncertainty in predicting climate, weather and input availability⁴

20-30%

20-30% of plant and animal species are likely to be at increased risk of extinction if global average temperature exceeds a 1.5-2.5°C rise⁵

So what? This changing landscape will affect **commercial crop / animal growth, rearing and consumption**, transforming the kind of products brought to market

Substitutes are transforming food ingredient requirements

257%

Consumers are rapidly moving away from traditional sources of protein; 2010 to 2016 saw a 257% increase in the number of food and drink products launches which included vegan claims⁶



Food processing & commodities trading companies are already pivoting to capture this value e.g. ADM is developing a new 80% pea protein in the US due early 2019⁷

So what? This will have a **direct commodity trading and sourcing implications** as crops such as soy, wheat, and vegetables become more in demand for companies that go beyond 'standard-issue' gluten-free

Demand: consumers and customers are increasingly demanding sustainable products & services



High demand for local produce
>50% of global consumers are willing to pay more for locally produced foods

LOCAL PRODUCE



Embedding traceability & transparency
63% of consumers refuse to buy from companies they don't trust

TRACEABILITY



Increased demand for natural products
Organic, natural & Fairtrade brands retail at higher prices with 39% of consumers willing to pay more

NATURAL & ORGANIC



Efficient processes, products & packaging
Green consumer actions could reduce the EU's CO₂ footprint by 25%

RESOURCE EFFICIENCY



Appeal for ethical stores and brands with a purpose
Annual growth rate for sales at 8.5% vs 4.5% for other products

PURPOSE



The future is circular
Globally more than 1/3 of millennials are using an asset-sharing service

CIRCULAR ECONOMY



Digital consumerism forcing responsibility
92% of consumers trust peer reviews; only 20% of trust a company's own claims

DIGITAL CONSUMER



Water scarcity & security
67% of consumers are willing to pay a premium for products if the company is increasing access to clean water

WATER

Rules of the game: regulatory, social licence and digital transformation are changing the landscape

Stakeholder demands

UN SDGs provide a blueprint for government & business to help build a sustainable future



The 2018 UN Climate Change Conference convened stakeholders to review/implement the 2015 Paris Agreement

Business has become an active partner in delivering the global ambitions



Regulatory and legislative initiatives

Food waste is topical, with national plans/commissions by regulators in Central America (Argentina, Peru)¹



'Sugar tax' indicates a growing concern with sugar content of certain foods, applied in some US states (2015)², the UK (2018)³

'Fat tax' has been introduced in some geographies, such as Kerala, India (2016)⁴



Digital transformation



Automation, robotics, and hardware supporting or replacing manual labour in the supply chain



Rapid prototyping, 3D printing and virtual reality is enabling reduced time to market



Artificial Intelligence can enable shift to proactive, precise maintenance of food manufacturing equipment



Digital production using connected IOT, mobility, cloud and automation to improve productivity and traceability of agriculture

FOOD SECURITY – CORPORATE ACTION

1

Resilience, yield & productivity
Maximising resilience, crop yield, and land productivity

2

Sourcing strategies
Strategically selecting sourcing countries and investment

3

Fortification
Increasing the nutritional value of food, and reducing nutritional losses

4

Traceability (and action)
Getting visibility and being able to track to origin sourcing markets

5

Farmer Enablement
Empowerment and support of smallholders and communities

6

Partnerships
Multi-stakeholder and bi-lateral collaboration

7

Reducing Losses
Proactive reduction of post harvest losses

8

Using By-Products
Reducing waste and increasing product potential

Innovation: Agri-businesses are developing new ingredients and traceable supply chains



- PURIS, the largest North American producer of pea protein, and Cargill have signed a joint venture agreement to accelerate a new wave of great tasting, sustainable and label-friendly plant-based foods¹
 - Working toward a 100% transparent, traceable and sustainable palm oil supply chain by 2020, and claims that 96% of its volume is already traceable to mills and 55% is traceable back to plantations
-



- Launched TasteSolutions to explore and develop protein-based ingredients and products like pea²
 - Joined a public-private research consortium to invest in the Plant Meat Matters project with Unilever and Ingredion, exploring vegetable protein as a solution to vegetarian 'steak'³
-



- Traceable supply chains are key, aiming to source 100% of primary palm oil derivatives from certified sources and achieve 100% traceability of strategic raw materials by 2020
 - Symrise joined WBCSD in 2017, recognising that embedding 'sustainability in its business model' is key to deliver real impact⁶
-



- The potential from alternative protein sources like peas rather than the bigger commodity crops like soybean, corn, and wheat to meet growing consumer demand, hence building its own pea processing plant, signing contracts with farmers to buy and grow yellow peas, and studying another 30 types of protein options, including nuts and seeds⁷

Innovation: Consumer companies are innovating their products, value chains & business models...



- AB InBev launched plant-based protein shake Canvas in 2018. The product is a nutritious, fibre-rich breakfast drink, created from dry grain leftovers from the beer manufacturing process, helping AB InBev to utilise some of the 30m tonnes of grain leftovers produced every year during the brewing process.



- USLP is synonymous with sustainability, inclusive business and smallholder enablement
- Unilever's condiment brand, Sir Kensington's is turning food waste into upcycled products. Sir Kensington's uses aquafaba, the waste product from cooking chickpeas, to create an egg-free mayonnaise allowing them to tap into the growing plant-based market whilst simultaneously reducing food waste.



- Ben and Jerry's launched a range of vegan ice creams in 2018, using almond milk instead of dairy. With this new product launch, Ben & Jerry's hope to become vegan ice cream of choice for the growing number of consumers choosing not to eat dairy.

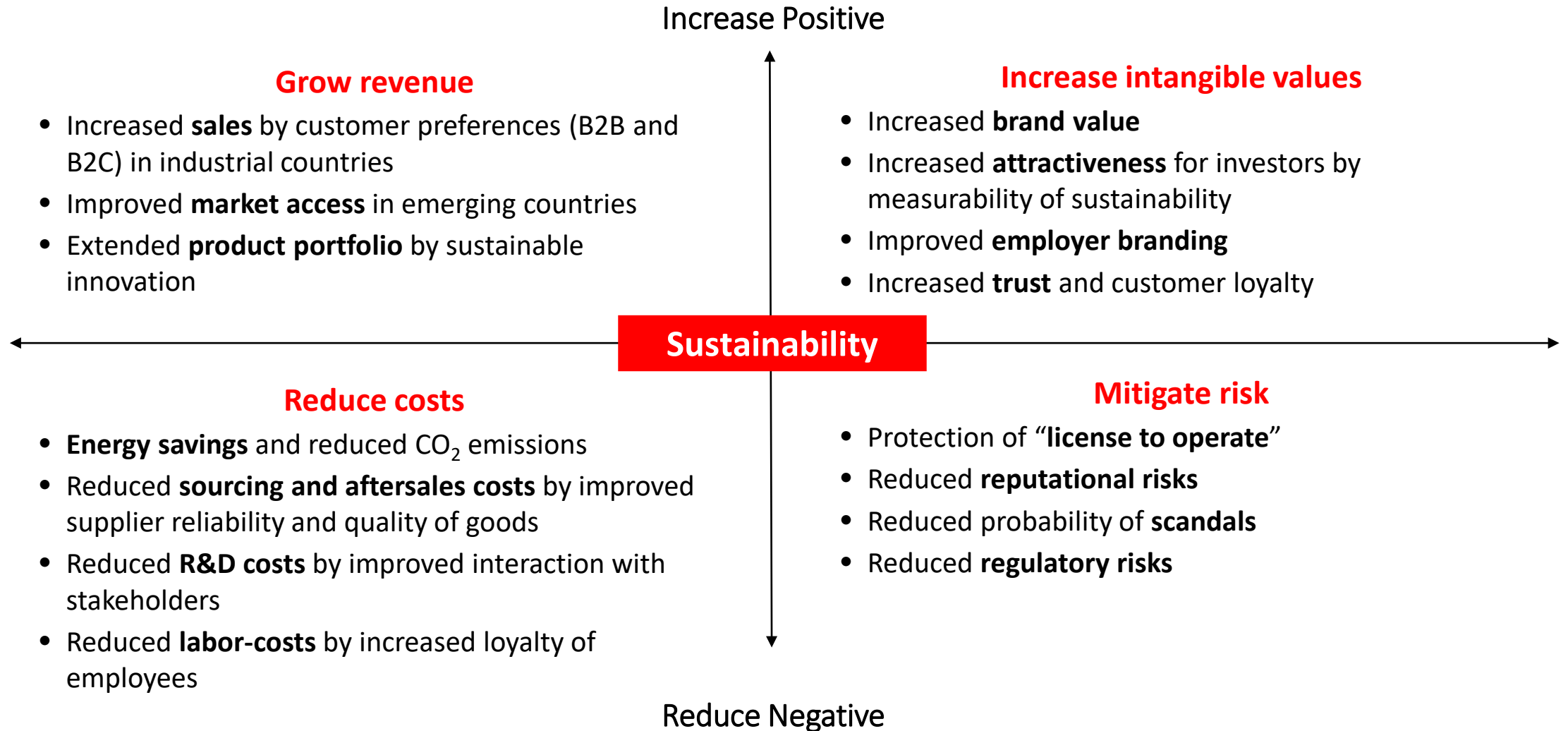


- Iceland have committed to using no palm oil in own brand products until it causes zero deforestation.
- Although Iceland's Christmas advert highlighting their new sustainability pledge was banned, it has been viewed over 300 million times on YouTube and was named the most powerful advert of 2018. Iceland's sustainability initiatives have increased brand awareness, influence and sales.

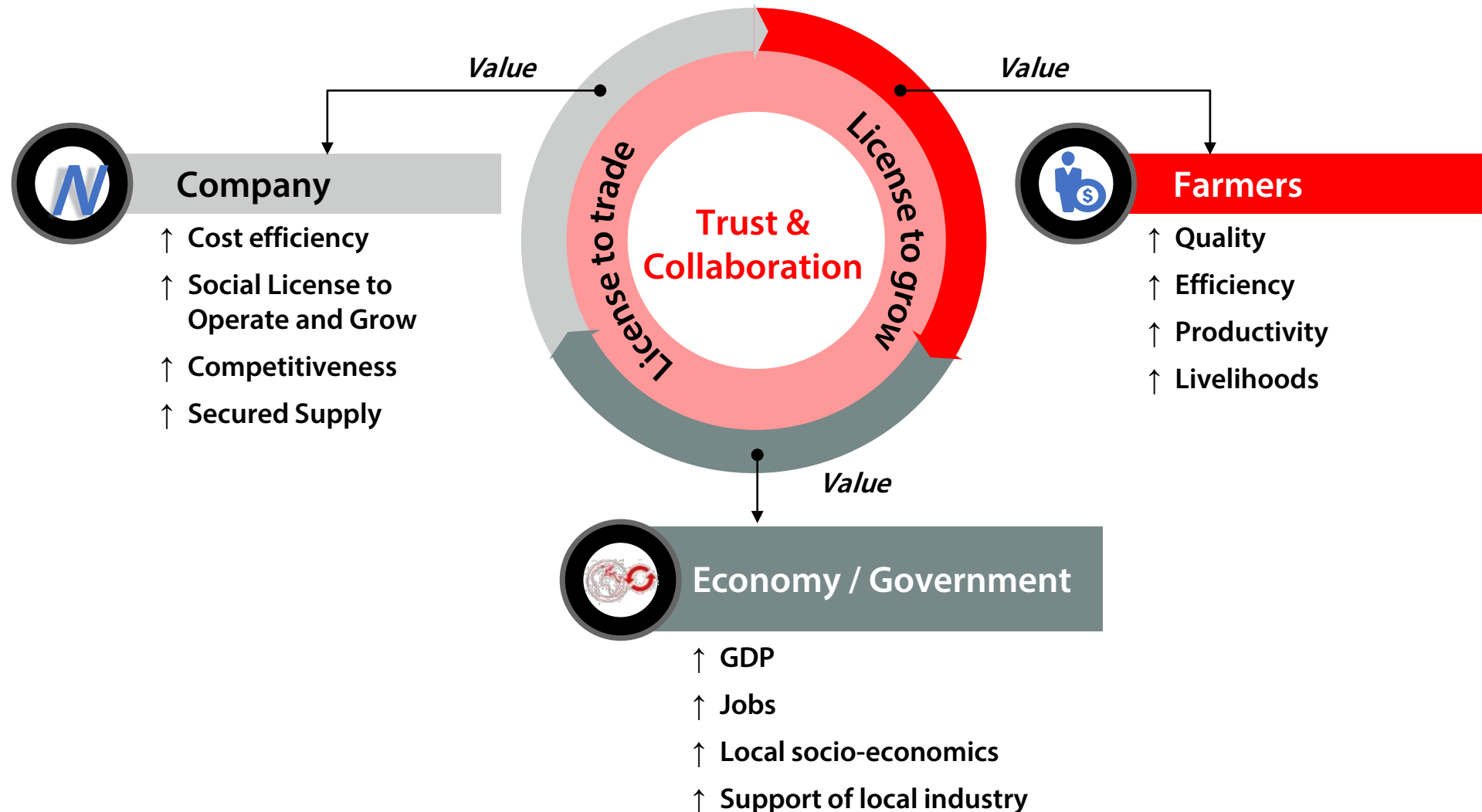


- Fortifying foods commonly eaten by vulnerable populations (through the direct addition of micronutrients to recipes) and 2) using biofortified crops in Nestlé's ingredients
- Developing supply chains for biofortified maize (also known as provitamin A-rich maize, or PVA maize)

Business value is critical for sustainable change



Companies can make significant impact in developing markets through trust and collaboration





Eagle: Brewing a local beer with local sorghum and local smallholders in Uganda



Thank you.