



Sustainability Board

British Coffee Association (BCA)
6 June 2018

**ICO efforts to promote Sustainable Production and
Consumption of the Coffee Value Chain**

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Head of Operations
International Coffee Organization (ICO)

The International Coffee Organization (ICO)

- The main intergovernmental organization for coffee, bringing together exporting and importing Governments and public and private sector to tackle the challenges facing the world coffee sector through international cooperation.
- Set up in London in 1963 under the auspices of the United Nations
- It administers the International Coffee Agreement (ICA) - the latest Agreement, the ICA 2007, entered into force on 2 February 2011.
- The ICO's mission is to strengthen the global coffee sector and **promote its sustainable expansion in a market-based environment for the betterment of all participants in the coffee sector.**
- It makes a practical contribution to the development of a sustainable world coffee sector and to reducing poverty in developing countries



sustainable expansion in a market-based environment for the betterment of all participants in the coffee sector:

- The production, processing, consumption and disposal of **coffee creates wealth: Income and employment**
- **Livelihood** of small coffee growers and the **environmental impact** are at stake
- **climate change** poses new challenges to the sustainable future of coffee, both for producers and consumers (mitigations/adaptation)
- We need to understand the **environmental, economic and social impact** of the coffee value chain, identify **solutions** with regards to production and consumption
- **We LOVE Coffee**...and partnership is key to assure its future





Global
challenges

76

PER CENT

OF THE POOR IN THE DEVELOPING
WORLD LIVE IN RURAL AREAS
AND RELY ON AGRICULTURE
FOR THEIR SURVIVAL



BY **2050**

WORLD POPULATION WILL REACH

9.6 BILLION

*WE WILL NEED TO PRODUCE AS MUCH
FOOD AS WAS NECESSARY IN THE
PREVIOUS 10,000 YEARS*

25 million

households' livelihood depends on
coffee production



85% export

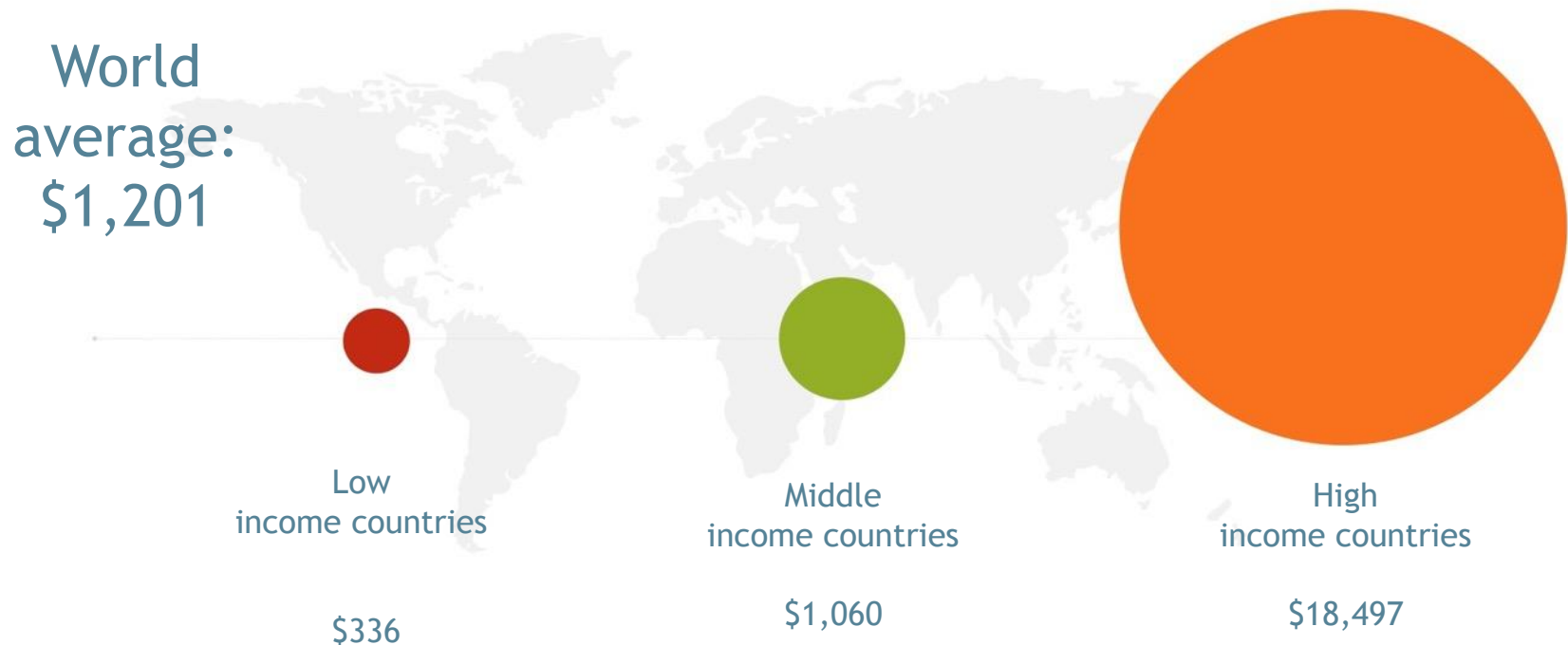
Agriculture products

BY **2050**

**COFFEE LANDS $\frac{1}{2}$
DEMAND 2X-3X**

Agricultural productivity

Agriculture value added per worker (2013)





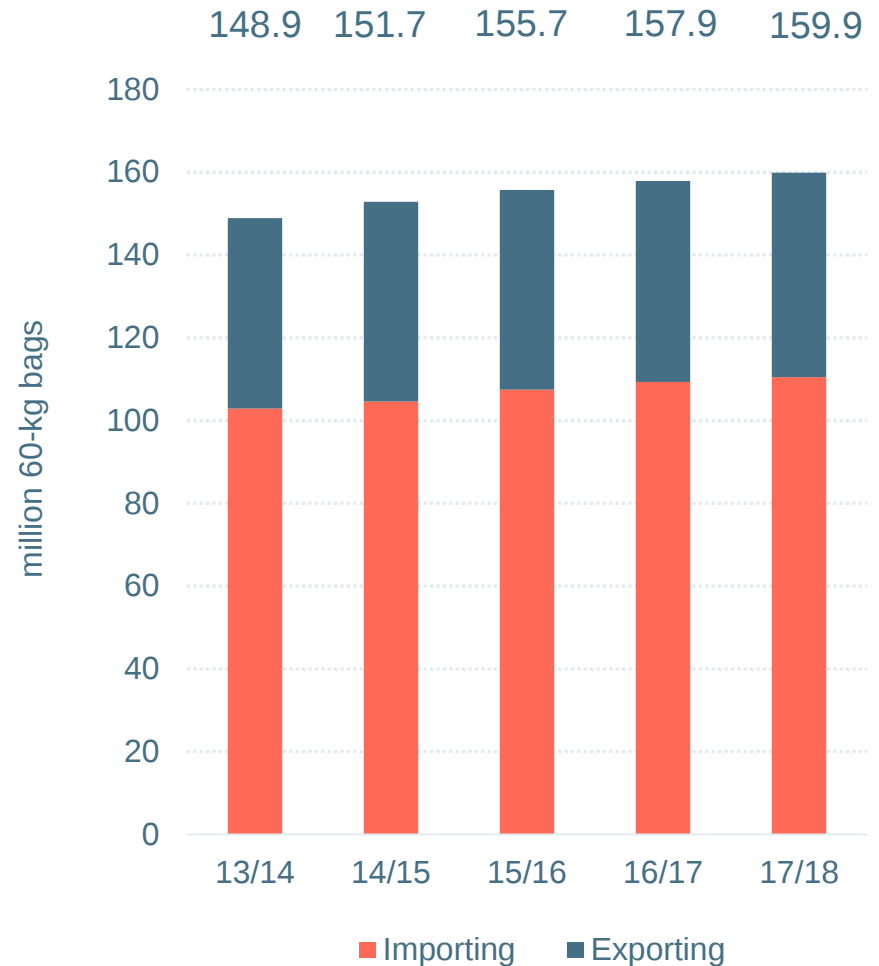
SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



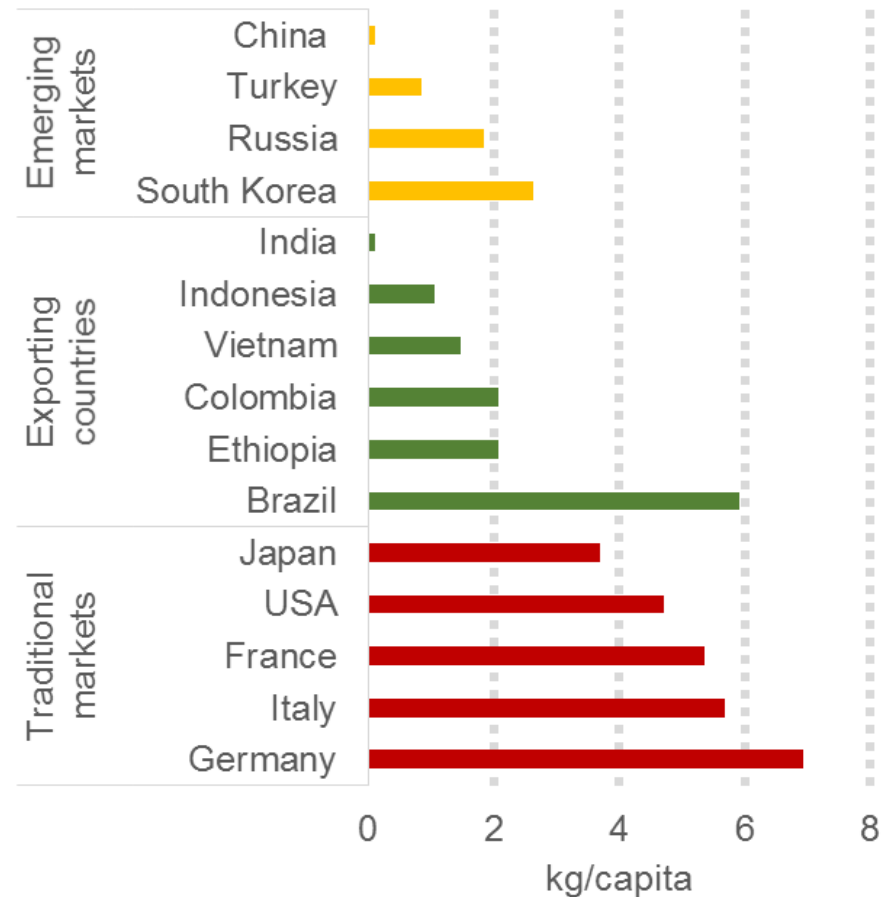
Global demand

- Increasing by 1.3% in coffee year 2017/18
- Still strong demand in many countries, particularly some traditional markets
- But biggest potential is in emerging markets and exporting countries

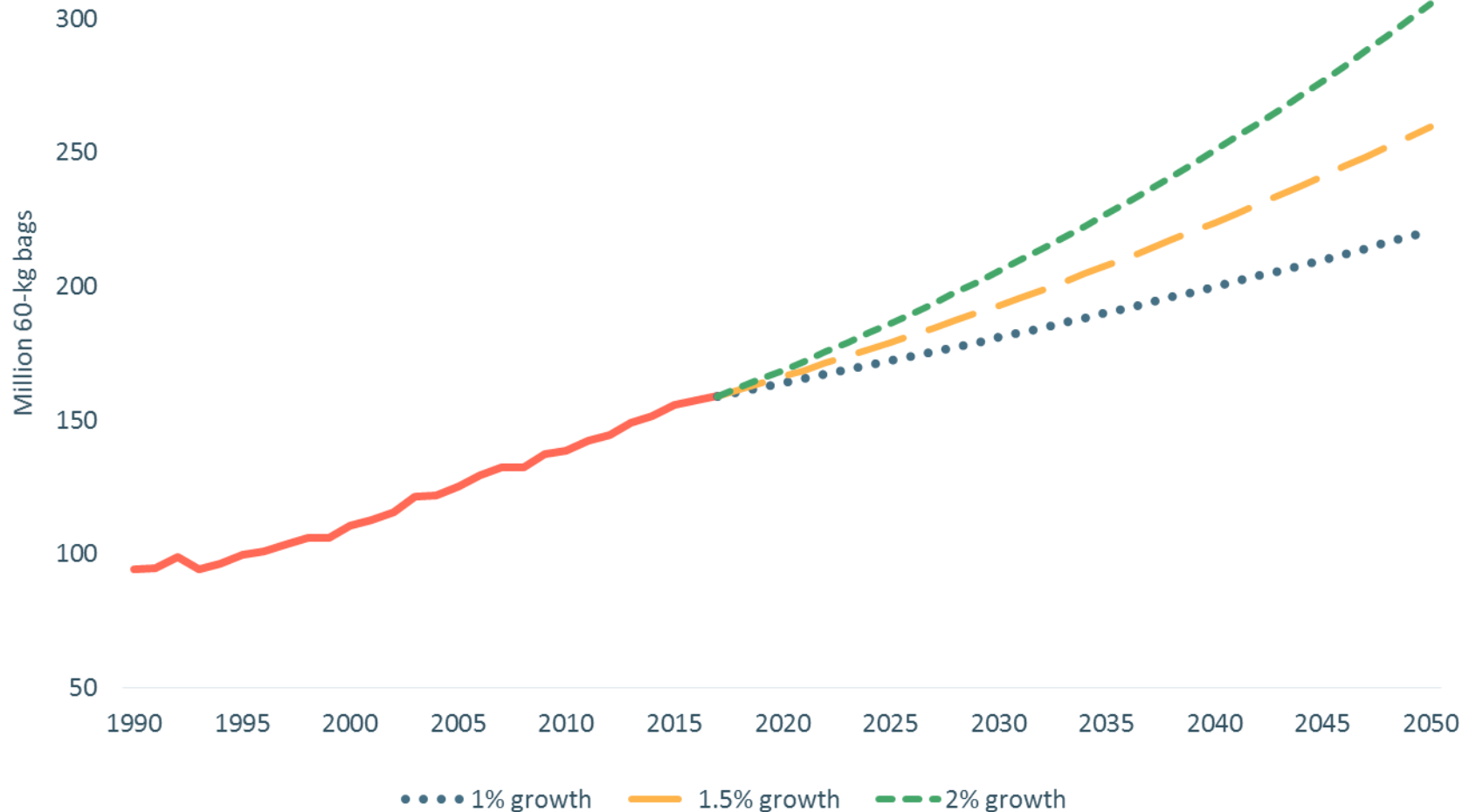


Demand for coffee by market

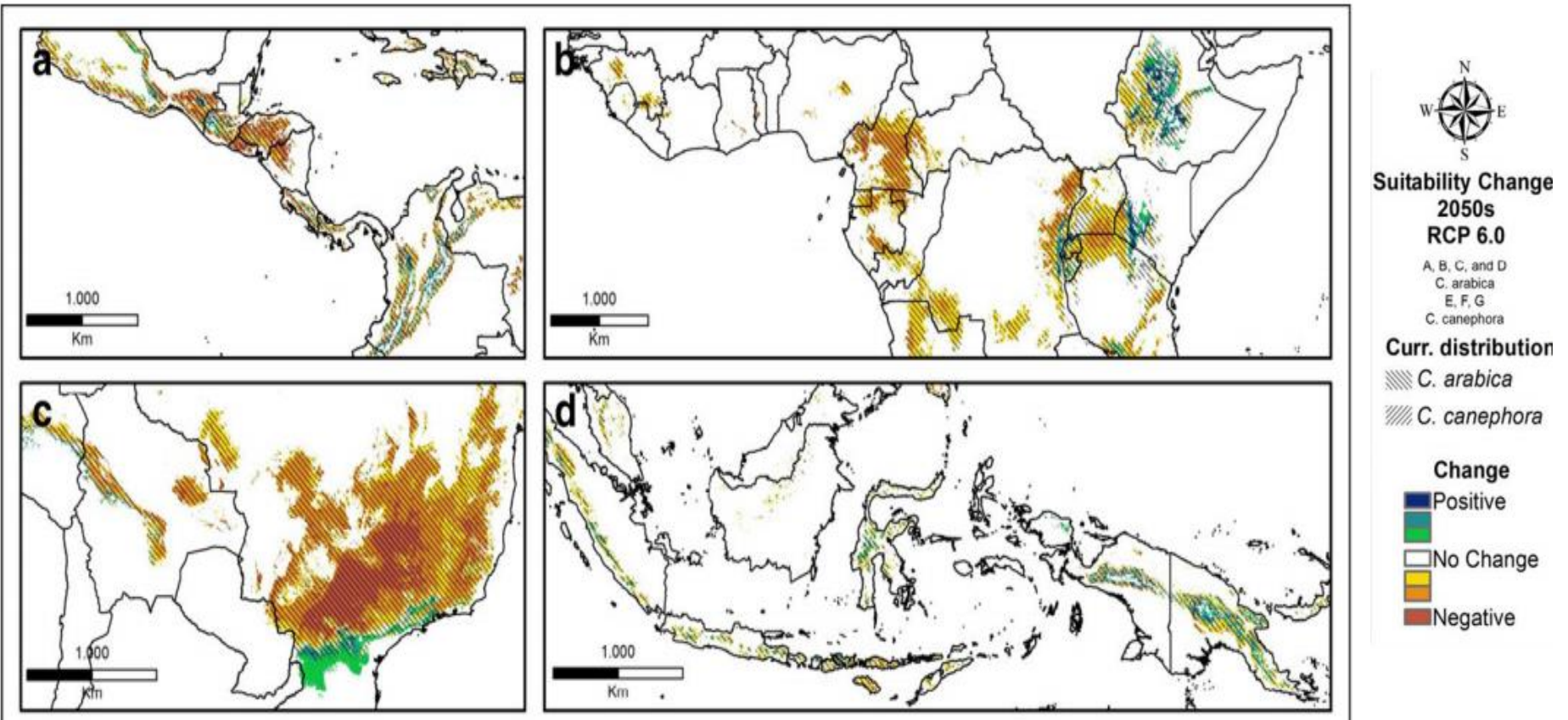
- Large potential for further growth in exporting countries and emerging markets
- Per capita rates still well below those in traditional markets
- Particularly in countries with large populations (China, India, Indonesia)
- Brazil as the model for other countries to emulate (domestic consumption)



How to meet future demand for coffee?



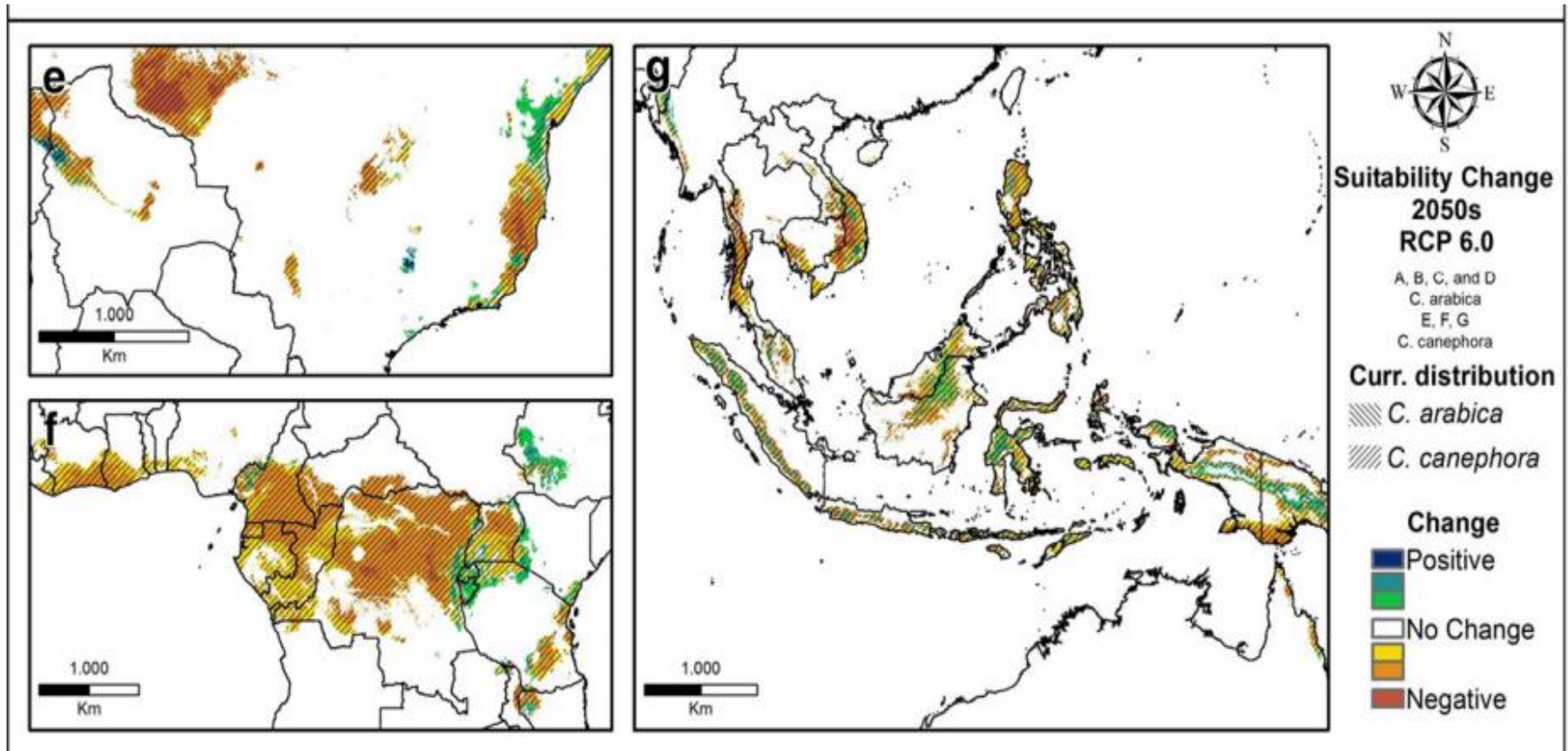
Suitability of current Arabica area in 2050



Source: Bunn et al. 2015



Suitability of current Robusta area in 2050



Source: Bunn et al. 2015



ACHIVING SUSTAINABLE COFFEE



Environmental



Economic



Social

Sustainability:

a dynamic continuum and can best be perceived as an ongoing process rather than a static achievement.” ICO

Coffee is grown on over 10 million hectares in the tropics

600 billion cups of coffee every year

coffee is a US\$22 billion global industry

By 2030 half output due to climate change

\$350 million is invested annually into sustainability activities in the coffee sector.

Source: Global Coffee Platform



A photograph of two women in a coffee field. The woman on the left is older, wearing a dark blue hijab and a dark blue long-sleeved shirt. The woman on the right is younger, wearing a light blue hijab, a green t-shirt with a cartoon graphic, and a dark blue patterned cardigan. They are both focused on harvesting coffee cherries from a branch in the foreground. The background shows rows of coffee plants in a field. Five brown text boxes with white text are overlaid on the image, each pointing to a different aspect of coffee production: 'Use of water' (top left), 'Working conditions and remuneration' (top right), 'Aging growers & plants' (middle left), 'deforestation' (bottom left), and 'Fertilizers/pesticides' (bottom right).

Use of water

Working conditions and remuneration

**Aging growers
& plants**

deforestation

Fertilizers/pesticides



**carbon-neutral
Coffee**

**Coffee husk/
waste**

Greening Roasting/packaging

A photograph of three young women sitting at a dark wooden table, smiling and holding up three black coffee cups with latte art. The woman on the left has dark hair and is wearing a grey cardigan over a white shirt. The woman in the middle has blonde hair and is wearing a denim jacket. The woman on the right has dark hair, wears glasses, and a gold patterned shawl over a white top. In front of them on the table are three small black saucers with spoons. A semi-transparent brown text box is overlaid on the image.

Use of coffee grounds

T-shirt : 3 cups of coffee grounds 5 recycled plastic bottles

Replace 500 billion disposable cups used each year.



Price for small
growers

Block chains

Climate change

Reuse coffee husks as
heating fuel

solar coffee dryer

Coffee cups.....

minimize water
consumption

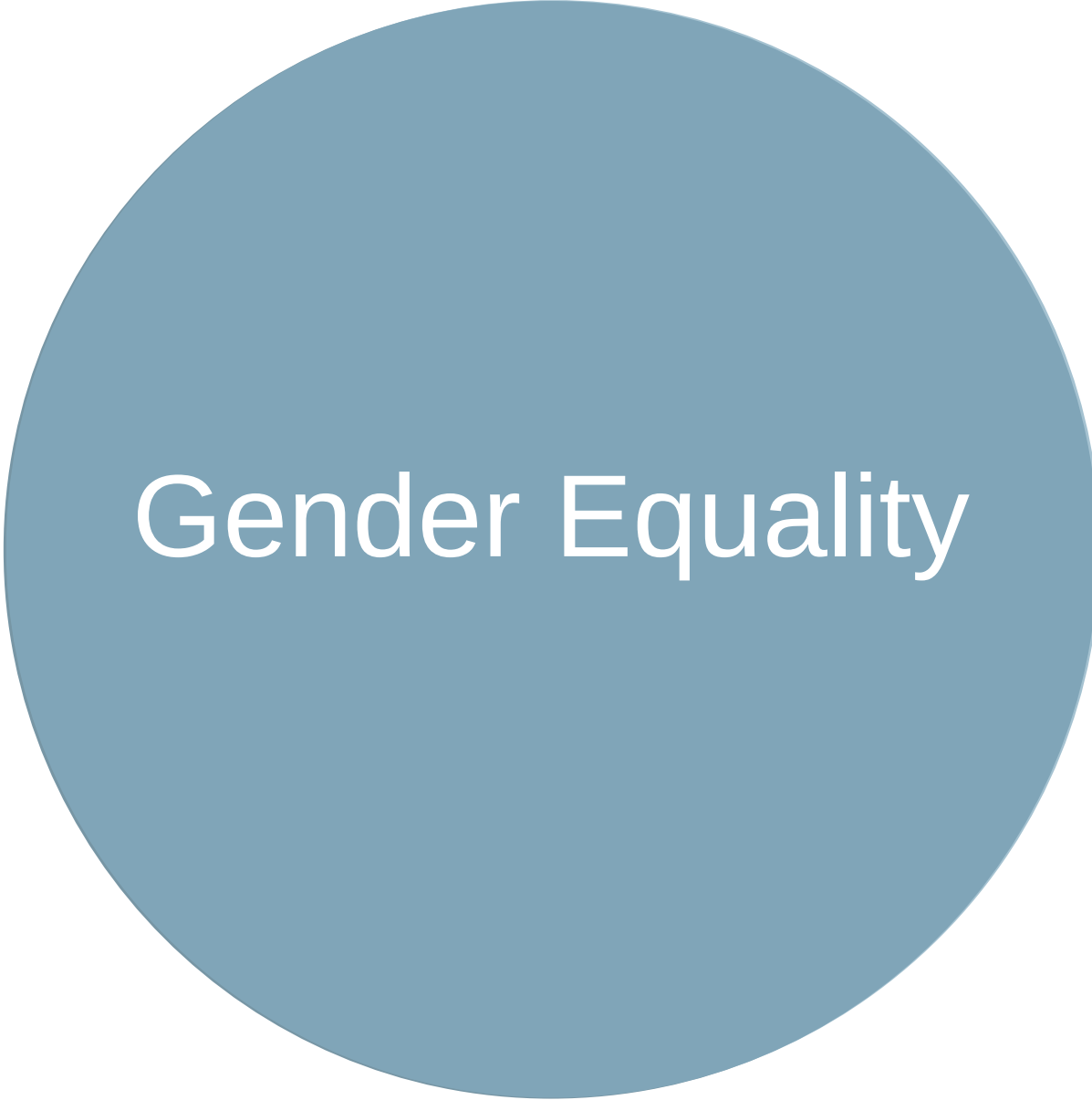
A large, solid gray circle is centered on a white background. Inside the circle, the text "Farmers livelihood and economic sustainability" is written in a white, sans-serif font, arranged in four lines.

Farmers livelihood
and
economic
sustainability

Sustainability of the coffee sector

- **A sustainable coffee economy is based on the well-being of all actors in the chain**
 - From a farmer's point of view:
 - Meet long term environmental and social goals
- AND**
- Achieve **prices** that cover production costs
 - Realise an acceptable profit margin
 - Comply with Labour standards
 - Safeguard the environment (land degradation)





Gender Equality

Lack of equal opportunities...

- Globally, women comprise
 - 20-50% of agricultural labour force
 - 3-20% of landowners
 - Constrained access to production factors
 - Systematically lower productivity rates among female-headed households
- Gender gap



... and much to gain from equality

- Closing the gender gap could increase output of by 20 to 30%
- Improve access to finance (financial literacy, training of loan officers)
- Women's role in the marketing of cash crops need to be strengthened
- Closing the gender gap could productivity by 2-5%
- Target women through extension programmes
- Improve access to finance (financial literacy, training of loan officers)
- Women in coffee industry, distribution, barista...
- Consumers gender gap





Aging Farmers

Generational change in coffee communities

- **Rural youth** is becoming less interested in pursuing a future in farming (especially in African countries)
- Lack of opportunities in rural areas (push factors) and labour demand in urban areas (pull factors)
- Youth often better educated/more entrepreneurial
- Rural-urban migration becomes an important livelihood choice
- Incentives for entrepreneurship development



Why young people are needed

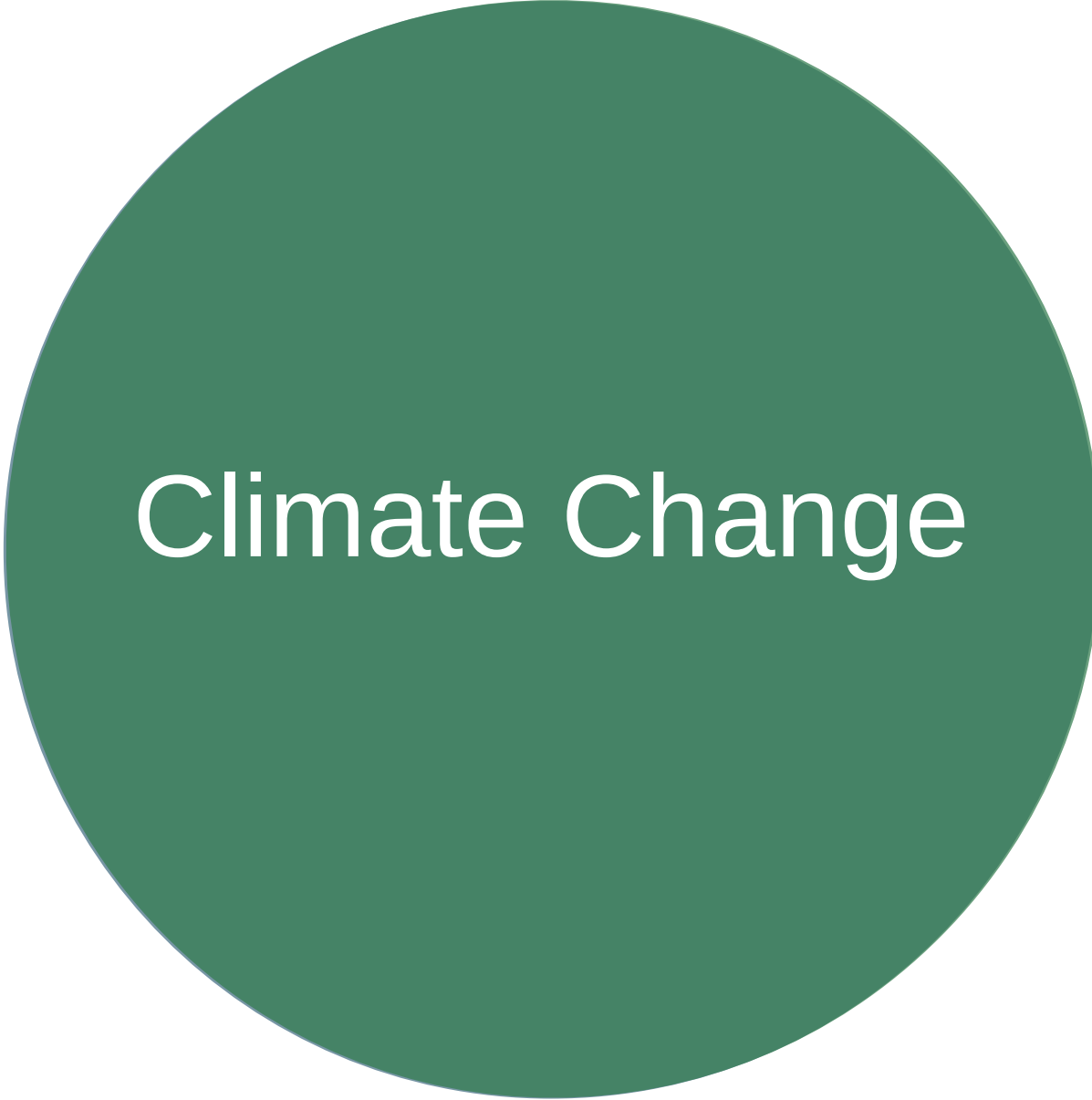
- Losing youth as driver of change comes at cost for local communities
- Youth more likely to adopt technological innovations (crucial in view of challenges, e.g. climate change)
- Lack of a new generation of young growers → supply of high quality coffee beans could be negatively affected



Making coffee farming attractive to young rural dwellers

- Increase relative economic viability of growing coffee
- Address factors which disproportionally affect young people:
 - Access to finance (financial literacy, collateral)
 - Farm succession, rental market for land





Climate Change

Impact of climate change on coffee production

- Global warming affects coffee production via two pathways
 1. Higher & changes in rainfall patterns temperatures **make regions unsuitable for production**
 2. Change in climatic **conditions facilitates spread of pests and diseases** (e.g. Coffee Leaf Rust)



Impact of climate change on coffee production (contd.)

- Both Arabica and Robusta are negatively affected by climate change
- Arabica shows lower yields and lower quality due to higher mean temperatures
- Robusta is affected by extreme weather events (especially droughts) in current production areas



Climate change impact on land suitability

- Studies project loss in suitability using IPCC emission scenarios (RPC 2.6/ RPC 6.0/ RPC 8.5)
- Across scenarios, models predict that 50% of current coffee area will become unsuitable for production
- Visualisation of results disaggregated by coffee species



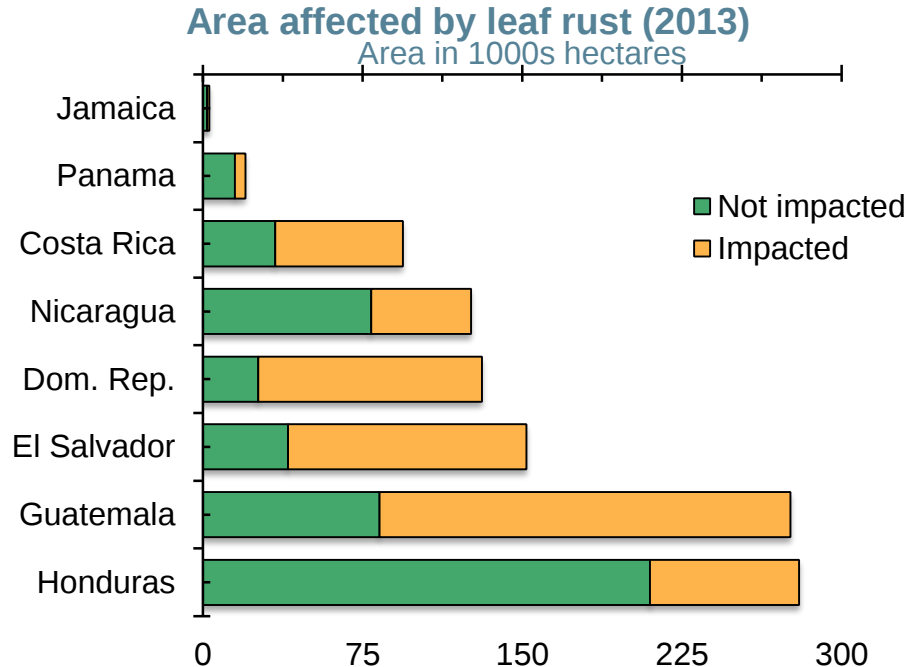
Extreme weather variability led to outbreak of coffee leaf rust in Mesoamerica (2013)



Causes:

Rain and temperature variability

Humidity: ideal conditions for spores



Impacts:

- >50% area was impacted by coffee leaf rust
- Estimated 375,000 jobs lost
- \$500 Mlns in economic loss



Mitigating actions can buffer impact of climate change...

- Agronomic techniques and genomic research provides solutions:
 - Shade trees, mulching
 - Irrigation where appropriate
 - Development & dissemination of climate stress tolerant coffee varieties



...but challenges remain...

- Coffee is a tree crop → lead times for adaptation measures (e.g. breeding & replanting) are very long
- Adaptation at farm level requires investment but producers have limited access to finance



...while migration is not a panacea either

- **Moving production into higher elevations**
 - Scope varies between countries (e.g. Ethiopia could net-gain 400% production area)
 - Negative consequences of change in land use patterns need to be considered
 - Financial and Social cost

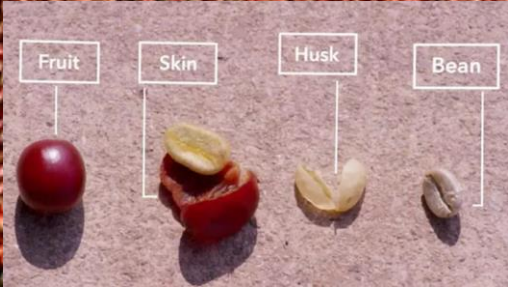
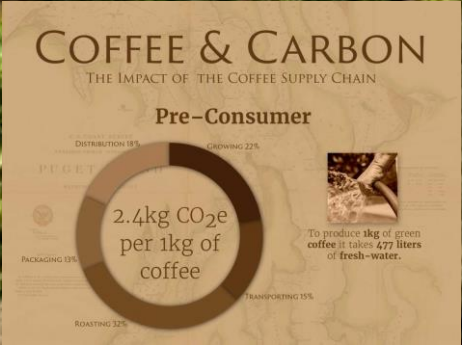




Impact on the
environment



landscapes are increasingly under threat



Environmental impact of coffee production, processing, distribution, consumption and disposal

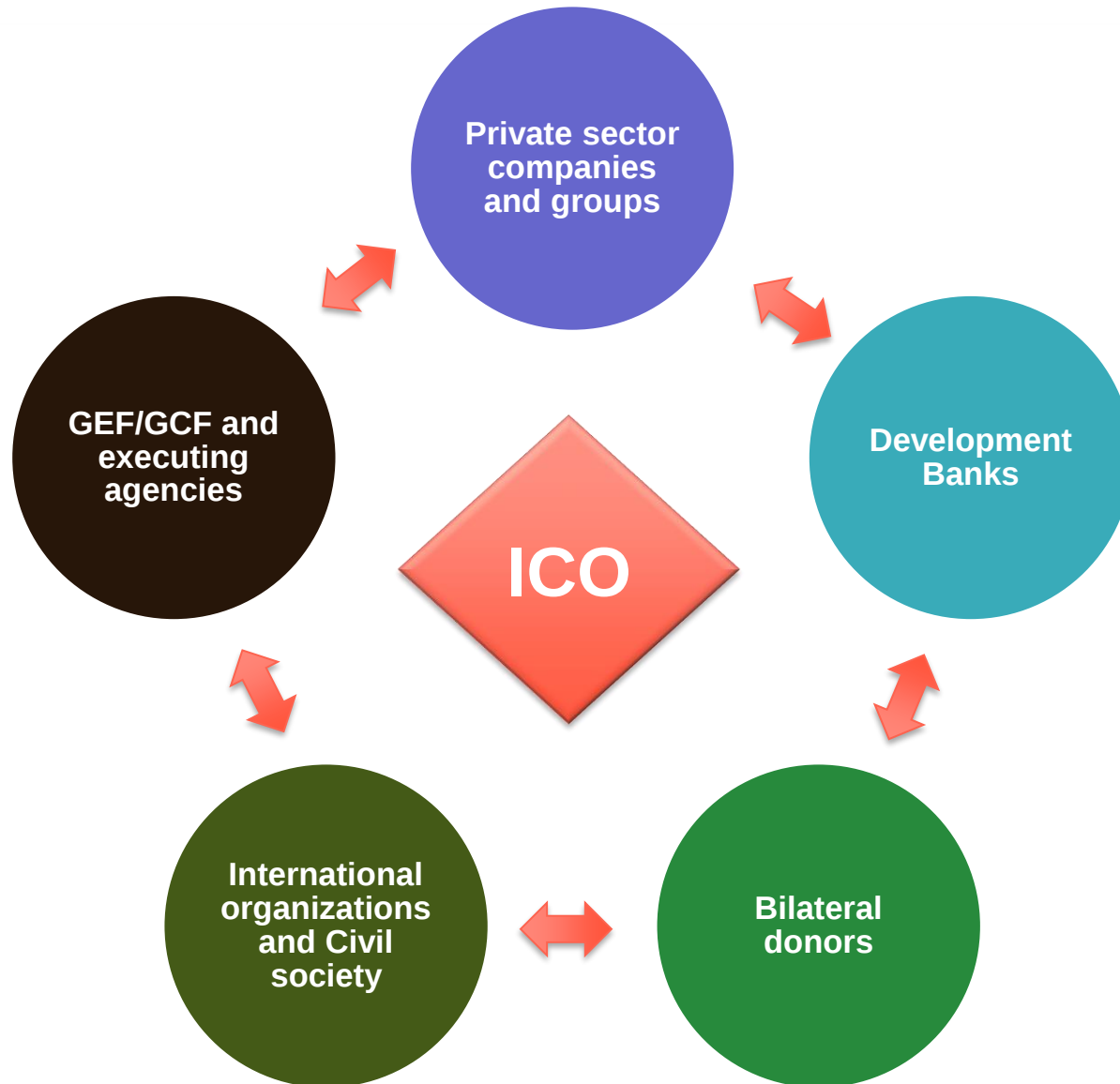
- Use of chemicals, land, water
- Processing processes
- Packaging
- Transport, distribution
- Waste and disposal



What are the solutions ?



PARTNERSHIPS for SUSTAINABLE COFFEE



SUSTAINABLE COFFEE: GEF

GEF-7 Impact Programs: The Impact Program, Food, Land Use and Restoration

In GEF-7 coffee has been added to the list of commodities included under this new Impact Program.

The goal is to promote food security, sustainable land use and habitat restoration.

In GEF-7, IPs are designed to deliver global environmental benefits across several GEF focal areas & to enhance synergies, integration and impact of GEF investments.

GEF-7

IPs

- Agricultural Commodities Supply Chains
- Food Systems
- Landscape Restoration
- Amazon Landscapes
- Inclusive Conservation
- Healthy Oceans for Sustainable Fisheries
- Wildlife for Sustainable Development
- Natural Capital IP
- Green Finance
- Environmental Security
- Sustainable Cities
- Transforming Energy Systems
- Circular Economy
- Green Infrastructure
- Green Finance

Focal Area Complementary Investments

Multilateral Environmental Agreements (MEAs)

Impact Programs

	Biodiversity	Climate Change	Land Degradation	International Waters	Chemicals and Waste
Landscape Restoration SDGs: 12, 13, 15					
Transforming Energy Systems SDGs: 9, 11, 13					
Food Systems SDGs: 2, 12, 13					
Sustainable Cities SDGs: 7, 9, 11, 13					
Environmental Security SDGs: 2, 13, 14, 15					
Healthy Oceans for Sust. Fisheries					
Natural Capital SDGs: 14, 15					
Green Finance SDGs: All					
Green Infrastructure SDGs: 2, 5, 6, 7, 9, 11					
Agri Commodities Supply Chains SDGs: 12, 13, 15					
Amazon Landscapes SDGs: 6, 12, 13, 15					
Wildlife for Sust. Development SDGs: 1, 5, 8, 10, 15					
Inclusive Conservation SDGs: All					
Circular Economy SDGs: 12, 14					
Integrated Planning MEAs/SDGs SDGs: All					

SUSTAINABLE COFFEE: GEF

- We need to work with countries to leverage STAR allocations through Impact Programs and Focal Area Investments (focal area strategies).
- The Secretariat would like to ensure that all countries have the opportunity to apply for the Impact Programs.
- As part of a transparent process, the GEF Secretariat will ask Operational Focal Points for initial expressions of interest prior to the start of GEF-7 (July 1).
- Expressions of interest will need to indicate the Impact Program that the country wants to participate in along with the desired

Circular Economy



“...an industrial system that is restorative or regenerative by intention and design, replacing the end-of-life concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse and return to the biosphere, and aims for the elimination of waste through the superior design of materials, products, systems and business models.” (WEF)



- ✓ Flip global supply chains and country/regional manufacturing/economic development strategies from take-use-dispose to redesign-reduce-reuse-repair-recycle approaches
- ✓ Initiate work on plastics because of its relevance and feasibility to further global environmental benefits, specifically to reduce GHGs, hazardous chemicals, and marine debris
- ✓ Expand to other production sectors

Conclusions

- Demand grew by more than 50% since the 1990s
- Coffee remains primary commodity with most of value-added generated in importing countries
- Prices remain low affecting small growers and both profitability and investment
- threat of climate change is looming and investment in adaptation is required
- Public-private initiatives to tackle sustainability challenges





**INTERNATIONAL
COFFEE
ORGANIZATION**

Thank you