Adapting the cocoa sector to climate change
Climate change impacts
Climate change impacts
Mainstreaming Climate-Smart Cocoa

1. Map the impact gradient to understand the risk of climate change over time.

2. Convene value chain actors along the exposure gradient.

3. Identify and prioritize relevant CSA practices by exposure gradient and analyze costs and benefits.

4. Construct exposure specific portfolios of priority CSA practices for different investors.

**Prioritized menus of CSA options with cost-benefit analysis**

**Tailored CSA investment plans**

Areas that transition from one suitability type to another but remain suitable.

Locations where climate characteristics will not fundamentally change. Production in these zones will likely become unviable and other crops should be considered.
Low impacts – incremental adaptation

Shade and irrigation; improved crop, pest and diseases, shade, soil, water and fertility management
Intermediate impacts – pro-active adaptation

Breed new varieties; diversification into Robusta coffee or other tree crops.
High impacts – adaptation unfeasible

Move from diversification to replacing crops, emigrate to other region, off farm employment
Public-private partnerships

More intervention from the **private** sector

More intervention from the **public** sector
Impact zones in Peru

Current cocoa climate types
Impact zones in Peru

2050 cocoa climate types

- Type 1
- Type 2
- Type 3
- Mixed
- Limitations
- Unsuitable
Impact zones in Peru

Climate change impact zones for cocoa

Legend:
- Unsuitable
- Opportunities
- Novel conditions
- Strong adjustment
- Adjustment
- Incremental adjustment
Impact zones in Ghana

Current cocoa climate types

- **Type 1**
- **Type 2**
- **Type 3**
- **Type 4**
- **Mixed**
- **Limitations**
- **Unsuitable**

Region capitals:
- Brong Ahafo
- Volta
- Eastern
- Western
- Central
- Western
- Cape Coast
- Sekondi
- Accra
- Koforidua
- Ho
- Sunyani

km:
- 0
- 25
- 50
Impact zones in Ghana
Impact zones in Ghana

Climate change impact zones for cocoa

- Unsuitable
- Opportunity
- Transform to other crops
- Systemic resilience
- Systemic adaptation
- Incremental adaptation
Thank you!