



Protecting the Diversity of Cocoa Prospects for Ensuring Sustainable Production and Diversified Markets

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Cacao diversity in CATIE, Costa Rica. Credit: A. Mata/ W. Phillips

Protecting the Diversity of Cocoa

- The problem and top priority
- Why is cocoa genetic diversity so important?
- Why the urgency?
- How is genetic diversity of cocoa to be protected?
- How can diversity contribute to niche markets and impact mainstream cocoa production?
- How can producer countries meet cocoa demand?

The problem and top priority

- The chocolate industry faces multiple threats to the supply of its key ingredient, cocoa, even while demand for cocoa increases by 3 percent on average annually.
- Good quality, locally adapted planting materials are continuously required whatever country, region or farming system.

CocoaAction:

Development and access to improved planting materials to farmers for farm rehabilitation and productivity increases.

The first work stream:

Substantially scale-up effective and delivery of improved planting material to farmers.



Why is cocoa genetic diversity so important?

The need for improved, diverse varieties is urgent:

- Pest and disease pressure
- Environmental pressure
- Markets
- Smallholder production
- Quality
- Flavours

We need to keep all our options open for the future.



Cocoa farmer in Côte d'Ivoire (D. Pokou,).

Why the urgency?

Threats to genetic diversity:

- Spread of pests and diseases
- Habitat loss due to natural disasters, extreme weather, and deforestation.
- Loss of traditional varieties grown.
- Climate change causing shifts in production.



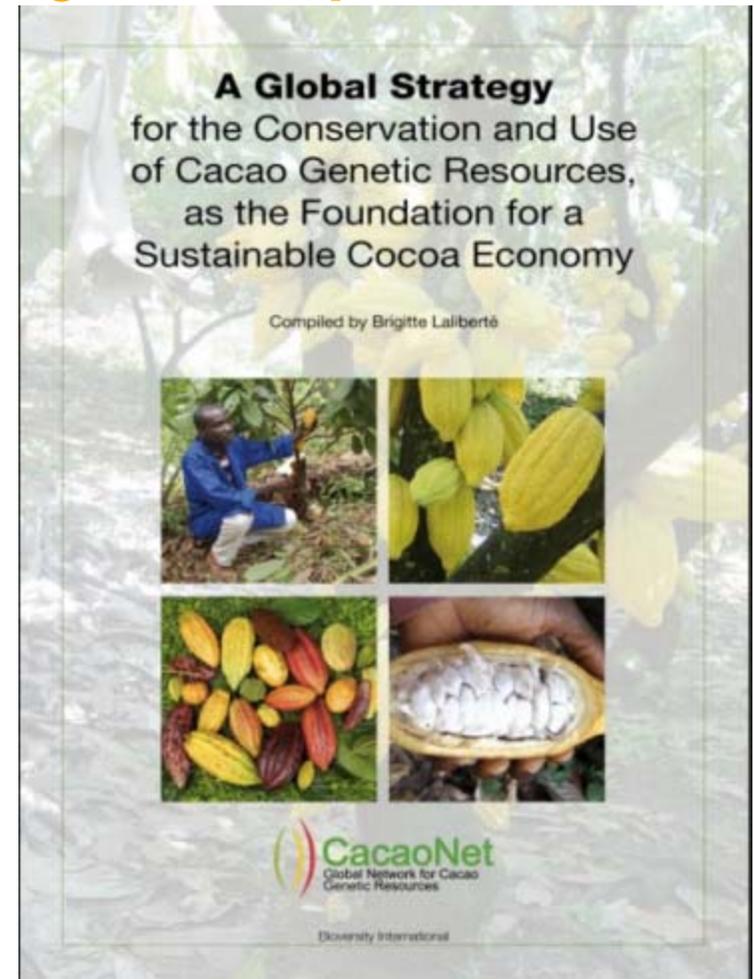
C. Lanaud, Ecuador

Threats to conserved materials:

- Collections in developing countries are at risk.
- Lack of funding for adequate management of *ex situ* collections.
- Few collections have safety duplication of unique materials.

How is cocoa genetic diversity to be protected?

- Only 2 international collections:
 - Cocoa Research Centre (CRC) Trinidad and Tobago
 - Centro Agronómico Tropical de Investigación y Enseñanza (CATIE) in Costa Rica.
- International Cocoa Quarantine Centre at the University of Reading, (ICQCR), allows for the safe transfer of germplasm around the world.
- *In situ* and on farm conservation
- Support the growing, robust system to conserve and use genetic diversity to support breeding programs in producing countries in West Africa, Latin America, the Caribbean, and Asia.
- *Global Strategy for the Conservation and Use of Cocoa Genetic Resources.*



How can diversity contribute to niche markets and impact mainstream cocoa production?

- Access to greater genetic diversity is critical to a sustainable cocoa sector and improves farmers' incomes, quality of life and secure the future of cocoa.
- Diversity of cocoa flavors from all growing regions provides opportunities for an increasing differentiation of cocoa into higher-valued and diverse qualities and flavors.



How can producer countries meet cocoa demand?

- Investing in genetic resource preservation.
- All countries are highly dependent on genes and varieties conserved and evaluated in other countries and regions.
- The efforts necessary can only be achieved and carried out through international (inter-regional) collaboration and by bringing together players in public and private sectors.





Thank you

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