



Investing for Impact in Cacao Diversity

Reducing Risks

Increasing Opportunities

Photo: Phillips and Mata, CATIE

Brigitte Laliberté

Bioversity International, Rome, Italy

Scientist, Cacao Genetic Resources and Diversity

Coordination of the Global Network for Cacao Genetic Resources – CacaoNet

Coordination of the Cocoa of Excellence Programme

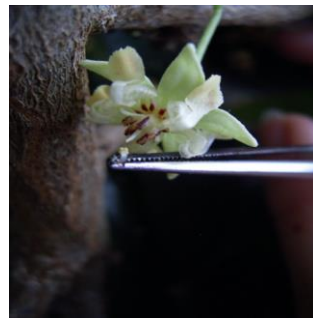
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The challenge – urgent need to adapt

- Farmers still growing low-yielding varieties, susceptible to drought, pests and diseases
 - ❖ 40 % loss of annual global production caused by pests and diseases (\$1-2 billion).
- Cocoa production relying only on a few varieties - increased vulnerability, reduced capacity to adapt to changing environment.
- Contaminants are of concern for consumer health such as cadmium intake.
- Industry sustainability programmes - Cocoa Plan, Cocoa Promise, Cocoa Life, etc - Focus mainly on GAP and inputs to increase productivity of the limited planting materials.
- Wide range of genetic diversity in *ex situ* collections and farmers' field but little information shared on performance and exchange of materials.
- Little known on capacity of cacao to adapt - lack of basic research on physiology.
- Virtually no public funding for research despite chocolate being the world's number one treat.



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



The Cocoa Route – around the world



Ref. Bartley 2005

The solution

- Possible if action is taken now in a coordinated manner.
- Tapping cacao genetic diversity held in *ex situ* collections and farmers' fields around the world.
- Developing improved planting materials for productivity, quality and flavours - resistance to pest and diseases and adapted to rapidly changing environment.
- Providing farmers with adapted planting materials as part of a package of measures to increase productivity and overall livelihood.
- Invest in research so that diversity can be put to use so that :
 - ❖ *Smallholder producers profit from the growing demand for chocolate*
 - ❖ *Global cocoa industry can meet the rising demand for chocolate.*
- ICCO World Cocoa Conference in DR urged to improve recognition, preservation and evaluation of cocoa diversity.



Opening the chocolate diversity box

Demand for cocoa-based products is increasing at an annual rate of 3%, mainly as a result of newly affluent consumers in emerging economies.

How can the 6 million smallholder producers who supply the cacao market keep up with consumer demand, and climate and pest-related pressures whilst ensuring that they make a profit? By using cacao varieties that offer improved genetic traits.

These provide tolerance to drought, resistance to pests and diseases, and are adapted to low-quality soils. But also a diversity of flavours that consumers are increasingly seeking. Sadly, these varieties and how they could contribute to sustainable production both now and in the future remain little researched.

This is where the **Collaborative Framework for Cacao Evaluation** comes in.

Photo credit: Chris Goldberg

www.biodiversityinternational.org/cacao

Through scaling research partners, breeding networks, and suppliers of plants to farmers, the **Collaborative Framework for Cacao Evaluation** will

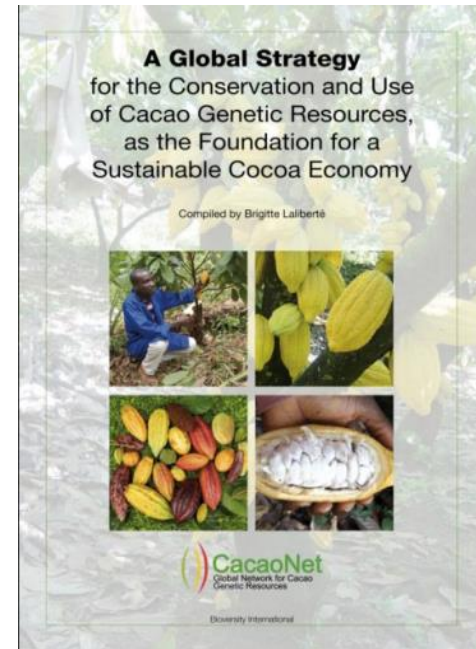
Identify
promising traits
in existing
collections of
cacao

Facilitate
international
access to and
benefit sharing
from cacao
diversity

To develop cacao trees
that are better adapted to overcome
serious threats and achieve sustainable
productivity, bigger harvests and decrease
post-harvest and processing loss.

What is the risks of doing nothing?

- ✓ Climate change scenarios happen
- ✓ Farmers move out of cocoa in marginal areas
- ✓ Young generation move away from cocoa farming to over-crowded cities
- ✓ Migration of people
- ✓ Loss of knowledge and expertise in cocoa production
- ✓ Threats to deforestation by pressure of exploring new production areas
- ✓ Loss of biodiversity
- ✓ Decreasing cocoa supply for increasing demand
- ✓ Decreasing quality and flavour of cocoa production
- ✓ Reduced diversity offered to consumers



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

Thank You / Merci / Gracias / Hvala ti



Opening the chocolate diversity box

Why cacao diversity matters for producers, manufacturers and consumers



www.bioversityinternational.org/cacao

Bioversity International is a member of the CGIAR Consortium.

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