Bioversity International’s approach

- **CONSUME**: Healthy diets from sustainable food systems
- **PRODUCE**: Productive and resilient farms, forests and landscapes
- **PLANT**: Effective genetic resources conservation and use
- **SAFEGUARD**: Improved ecosystem, nutrition, income and other livelihood benefits

**IMPACT**

22-25 April 2018
Maritim Hotel Berlin
Berlin, Germany
Ecosystem services and resilience

- Pollination
- Pest and disease management
- Fresh water, food, fibre, habitat and genetic resources
- Recreation and tourism
- Spiritual health, cultural identity
- Erosion prevention
- Protection from natural disasters
- Carbon sequestration and storage
- Air and water pollution control
- Nutrient cycling and soil fertility

Using an ecosystem service-based approach can increase agricultural productivity and strengthen the resilience of rural communities and their natural resource base.
Cacao Genetic Diversity
Mitigation & Adaptation - Reducing Risks – Increasing Opportunities

WORLD COCOA CONFERENCE 2018
22-25 APRIL 2018
MARITIM HOTEL BERLIN
BERLIN, GERMANY
What we know

Agroforestry

Osmotic adjustment

No osmotic adjustment

Not wilted

Wilted

Carbon dioxide enters, while water and oxygen exit, through a leaf's stomata.

Grafting Trials

Susceptible un grafted scion

Susceptible scion grafted into a tolerant prolific rootstock

22-25 APRIL 2018
MARITIM HOTEL BERLIN
BERLIN, GERMANY
What we need to do more of?

- Screen genetic diversity
- Identify tolerant materials
- Test on multi-sites
- Integrate into breeding
- Evaluate in farmers’ fields
- Propagate & distribute