Building Resilient Agricultural Supply Chains

Agricultural supply chains perform well under stable conditions but are increasingly exposed to climate-related disruptions. The stability of food supply depends on their resilience and ability to adapt. At the same time, products in the European market must meet evolving regulatory standards and growing consumer expectations.

Coffee and cocoa illustrate these challenges vividly. Coffee is highly climate-sensitive, with production quantities projected to decline drastically due to climate change – some studies estimate up to a 70 % reduction – while suitable cultivation areas may shrink by around 50 % by 2050. Producers in remaining regions face increasing frequency of droughts, frosts, hurricanes, and heavy rains, threatening supply and livelihoods. Cocoa production is equally vulnerable: shifting climatic conditions in West and Central Africa may render some current production areas unsuitable, leading to supply disruptions, higher prices, and lower traded volumes, as seen in 2024 and 2025.

Shared Responsibility: The Core Strategy

Transforming agricultural production systems for coffee and cocoa requires substantial time and financial investment, yet this transformation is essential given the challenges outlined above. A central condition for successful transformation is a shared responsibility along supply chains – a model where the resilience of producers and their production is a shared objective and a condition for business sustainability and rentability. Only when all actors – from producers to end consumers – equitably share economic risks and contribute to mitigating environmental and social impacts, the sector can build the resilience needed for long-term business sustainability. Recognizing mutual dependence on stable business relationships, climate, biodiversity, and production conditions, stakeholders collectively share both risks and benefits.

Shared responsibility is not philanthropy; it is a strategic business imperative. By putting producers and origin regions at the center of the value proposition, companies can enhance supply chain resilience, improve risk management, and create differentiated products that resonate with consumers who value authenticity, traceability, and social impact.

How Shared Responsibility Benefits Businesses

- Ensures stable, resilient supply chains
- Strengthens supplier relationships and collaboration
- Supports regulatory compliance and risk management
- Enhances brand value and market differentiation
- Enables long-term cost efficiency and access to financing

The Three Pillars of Shared Responsibility

Building resilient supply chains against climate change and extreme weather events requires targeted actions in three areas. These are particularly critical when working with smallholders, who provide the majority of global supply yet are most vulnerable to climate risks and regulatory pressures.

- Biodiversity & Climate-Resilient Practices: Integrating biodiversity protection, forest conservation, and climate-adapted practices stabilizes essential ecosystem services–soil fertility, pollination, water regulation, and pest control–while buffering against climate shocks. Forests regulate local and global climates and prevent erosion, safeguarding productive farmland. Collective commitment to biodiversity-friendly landscapes strengthens resilience across the value chain.
- Stable Living Income & Disaster Resilience: Secure, fair incomes enable producers and workers to invest in sustainable practices, education, and farm improvements, enhancing productivity and supply reliability. Promoting income stability and gender equity is both a social responsibility and a strategic imperative, reducing supply risks and supporting broader climate adaptation and inclusive development goals.
- Collaborative Due Diligence: Many producers, particularly smallholders and Indigenous Peoples, face barriers to meeting regulatory requirements (e.g., EUDR, CSRD, CSDDD). Implementing joint due diligence processes, shared data systems, and harmonized reporting formats reduces risk, increases efficiency, and builds trust and transparency across the supply chain.

Further Enablers of Shared Responsibility

Building a true shared responsibility model in agri-food value chains requires coordinated action among companies, producer organizations, governments, and technical and financial partners. Two key enablers support the creation and long-term maintenance of such shared responsibility models:

- Long-term Relationships & Transparency: Stable contracts, price guarantees, and traceability systems support investments in sustainable production and ensure reliable supply for processors. Long-term collaboration also facilitates shared due diligence processes.
- Financing Strategies: Blended Finance & Co-Investment: Combining public, private, and philanthropic capital enables risk-sharing, expands intervention scope, and facilitates long-term investments that benefit both producers and companies.

Resilient, sustainable agricultural supply chains require a holistic, collaborative approach, that avoids creating small, isolated solutions and is instead anchored as broadly as possible within the industry. By embedding shared responsibility throughout all stages—from production to consumption—businesses can secure supply continuity, mitigate risks, comply with regulations, generate brand value, and drive long-term profitability.

Reach out and take responsibility

Irene Knoke: knoke@suedwind-institut.de

Friedel Hütz-Adams: huetz-adams@suedwind-institut.de

Luise Sophie König: lskoenig@oroverde.de

Ineke Naendrup: inaendrup@oroverde.de

OroVerde – Tropical Forest Foundation

Burbacher Str. 81 • 53129 Bonn

Telefon +49 228/242 90-0

This publication by OroVerde – Tropical Forest Foundation and SÜDWIND was developed and published as part of the BIOFINCAS and the DigiDeFree project.

Supported by:

Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety

based on a decision of the German Bundestag