

A full-page background image of a lush, green landscape. In the foreground, there are rows of tea plants. A dirt path winds through the middle ground, leading towards a small cluster of buildings. The background consists of rolling hills and mountains under a sky with scattered white clouds.

WWF BANKABLE NATURE SOLUTIONS CASE STUDIES

September 2023



BANKABLE NATURE SOLUTIONS CASE STUDIES SEPTEMBER 2023

To further elevate noteworthy Bankable Nature Solutions (BNS) projects, the [BNS Network](#) shares brief write-ups about excellent case studies. The following first set of 4 BNS case studies have been selected from over 40 publicly announced projects that have received support from 3 of the BNS funds & facilities with the engagement of WWF since 2021: the [Dutch Fund for Climate and Development](#) (DFCD), [Landscape Resilience Fund](#) (LRF), and [Mobilising More for Climate](#) (MoMo4C). These projects work in sustainable agriculture and sustainable forest management sectors in Africa and South America, and seek opportunities for collaboration and further scaling.

CONTENTS



Koa – Sustainable agriculture (cocoa pulp products) – Ghana – Landscape Resilience Fund – pg. 3



Chanzi – Alternative protein production – Tanzania, Kenya, Zambia, South Africa – Dutch Fund for Climate and Development – pg. 4



Forest Africa Zambia – Sustainable forest management (wild fruit products) – Zambia – Mobilising More for Climate – pg. 5



Colorquimica – Sustainable agriculture (natural colourants) – Colombia – Dutch Fund for Climate and Development – pg. 6

BNS CASE STUDY #1: KOA

WWF LEAD: LANDSCAPE RESILIENCE FUND (LRF),
PROJECT LEAD: JAMES RAWLES

Project snapshot

Local partner/operator: Koa

Sector: Sustainable agriculture (cocoa pulp products)

Country: Ghana

Funding and TA support: CHF2m loan by Landscape Resilience Fund in 2022, mobilising additional investment from IDH FarmFit Fund

Financial instrument: Debt

Proof of concept: Scaling-up of successful business model



Overview: Koa is a social enterprise that is developing a new decentralised value chain around previously unused cocoa pulp. With the help of a loan from the LRF, they will create an additional income stream for up to 10,000 cocoa farmers by constructing a new factory to maximise local processing and value generation. Koa also provides training for farmers in sustainable agricultural practices such as agroforestry and post-harvest processing.

Current status: Factory is almost complete, with commercial production expected to start before the end of 2023. New farmers are being onboarded, new offtake agreements with major buyers have been secured, and a new working capital facility arranged.

Investment and operating model:

Loan is made from the LRF (a Swiss foundation) to the Koa Swiss entity, which then on-lends to the Koa Ghanaian entity. Koa buys cocoa pulp from smallholder farmers, extracting the pulp on-farm using solar-powered mobile processing units before pasteurising it in a local factory. The pulp is distributed as a juice, concentrate, or powder to the global food industry, with a special focus on chocolate, beverage, and ice-cream manufacturers.

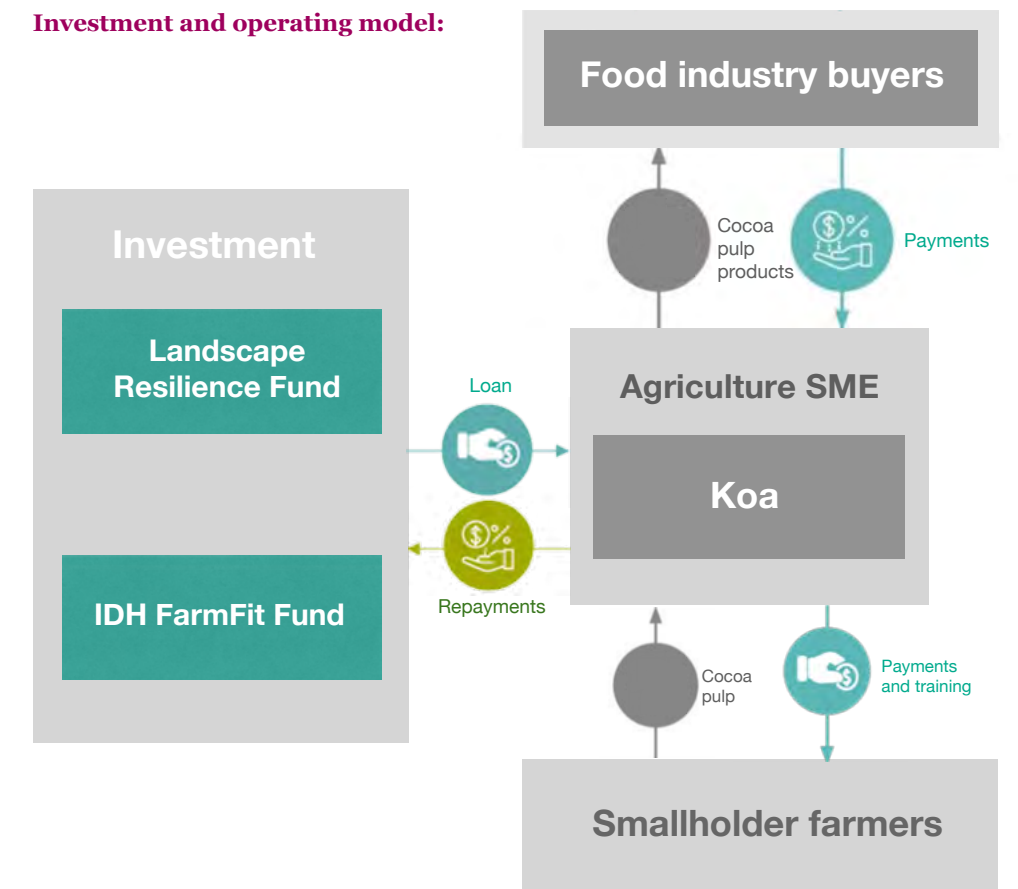
Impact measurement: Impacts that are monitored include number of farmers trained, area under sustainable agriculture practices, and income increase for trained farmers.

Scalability and replication potential: Business model is highly scalable, with over 2 million cocoa farmers in West Africa, and could be replicated in other geographies.

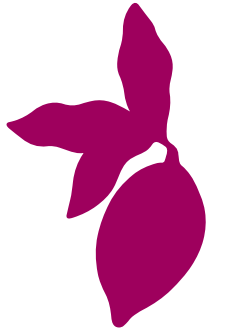
Successes or innovative features:

Most important innovation of Koa is the development of new cocoa pulp products and processing technologies, to unlock a new income source for cocoa farmers. Other key features are local processing to keep more value in-country, direct access to global high-value markets, and transparent/traceable supply chains.

Investment and operating model:



Learn more:
[LRF Investment
Announcement](#)



Up to
10,000
cocoa farmers with
an additional income
stream, engaging
in sustainable
agriculture
practices

BNS CASE STUDY #2: CHANZI

WWF LEAD: DUTCH FUND FOR CLIMATE AND DEVELOPMENT (DFCD), AFRICA REGIONAL LEAD: KEIRON BRAND

Project snapshot

Local partner/operator: Chanzi

Sector type: Alternative protein production

Countries: Tanzania, Kenya, Zambia, South Africa

Funding and TA support: €349,060 grant from DFCD

Financial instrument: Debt, equity, hybrid

Proof of concept: Implementation and expansion

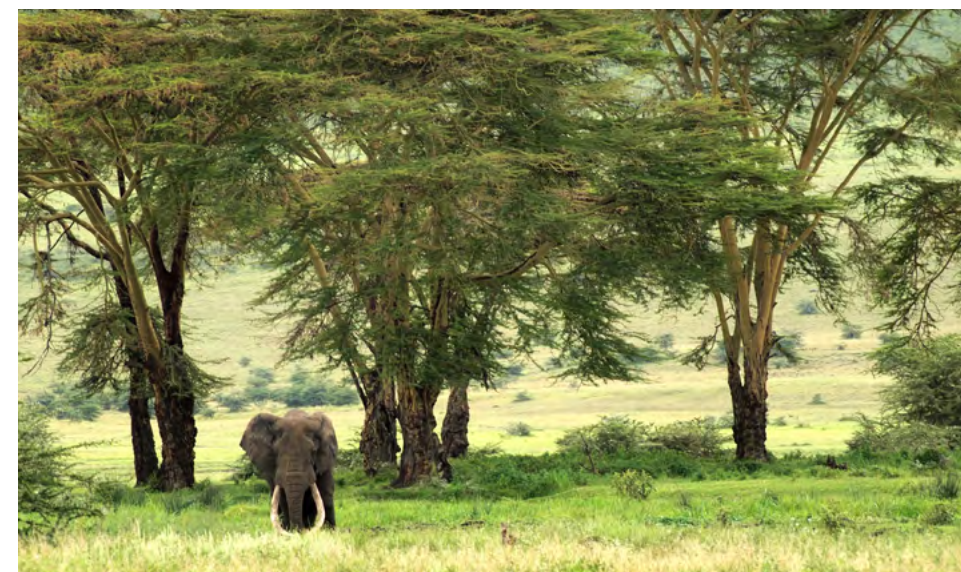


Description: A company in Tanzania using Black Soldier Fly larvae to convert food waste into nutritious protein for animal feed and organic fertiliser, reducing the dependence on overfishing and soya bean farming.

Overview: Chanzi uses Black Soldier Fly (BSF) Larvae to convert food waste into nutritious protein for animal feed. Founder and COO Sune Mushendwa, an architect by profession, began experimenting with these insects 4 years ago. He set out with the goal of finding a sustainable protein for animal feed which would reduce the industry's over dependence on environmentally ruinous fish and soya bean meal. Through iterations and meticulous data collection he developed innovative and efficient methods for breeding, growing and harvesting BSF.

Use of grant funds: Invest in R&D. Develop robust waste aggregation systems. Carbon Credit Methodology. New Biochar product.

Current status: Aims to expand to approximately 47 production sites in five countries by 2027, seeking an investment of up to €20 million upon graduation from the DFCD Origination Facility.

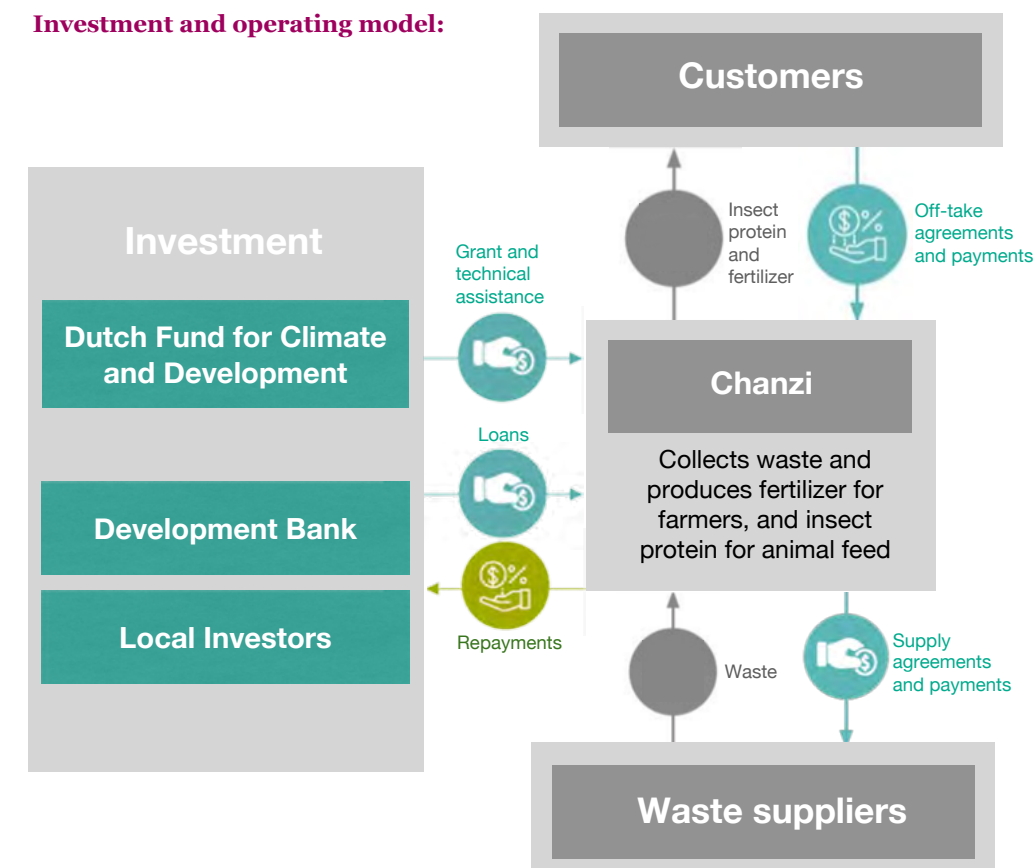


Impact measurement: Key impact metrics: Avoided greenhouse gas emissions for six facilities – 84.6 tons CO₂e daily. 150 indirect and 41 direct jobs (90% youth and 50% women) created per facility. Improved income for livestock farmers through a 37.5% reduction in cost of animal feed protein.

Scalability and replication potential: Currently in replication and scaling phase in Africa. Possible to expand globally with a franchise model.

Successes or innovative features: Chanzi developed a homegrown technology, which is customised for the local situation and is very cost-competitive. Being part of the 100+ Accelerator has helped the company to gain additional access to markets.

Investment and operating model:



Learn more:
[DFCD Grant Announcement](#)
[Chanzi Video](#)



37.5%
reduction in cost
of animal feed
protein

CASE STUDY #3: FOREST AFRICA ZAMBIA

WWF LEAD: MOBILISING MORE FOR CLIMATE (MOMO4C),
PROGRAM MANAGER: SHEPHARD ZONDE

Project snapshot

Local partner/operator: Forest Africa Zambia Limited

Sector type: Sustainable forest management (wild fruit products)

Country/Region of interest: Zambia

TA support: Technical Assistance by MoMo4C and WWF Zambia

Financial instrument: Debt and equity

Proof of concept: Implementation



Overview: Forest Africa Zambia is a company that specialises in processing of organic indigenous wild fruit products that include Mabuyu (Baobab), Musekese Tobwa (Monkey Bread) and Ngai (False Medlar). It promotes community based natural resource management and development of alternative livelihood opportunities for rural communities through ecosystem-based adaptation, as well as offering healthier nutrition options. Forest Africa has embraced a zero-waste philosophy that maximises the potential of harvested wild fruits. In the case of Baobab fruits, the powder is processed into Mabuyu Juice, the seeds are pressed into high-quality non-greasy oil for skin and hair care, the fibres are converted into antioxidant-rich red tea, and the shells are converted into eco-friendly charcoal briquettes used as energy source at the production factory. The wild fruits are gathered and supplied by women and youth from community forests. Forest Africa engages with these groups to improve their organisation and practices, and serves as a secured off-taker for their wild fruit harvests.

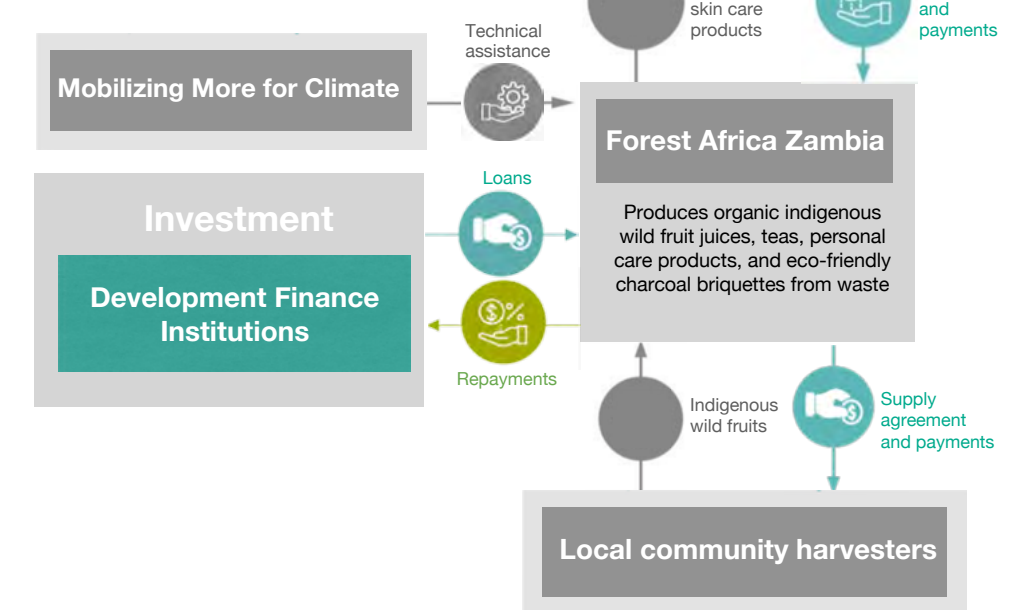
Current status: Currently, market demand has been pushing the firm to increase production in excess of 15,000 litres of juice per month, projected to grow further as the demand for its products grows. Supplying in and around Lusaka, Southern and Copperbelt Provinces of Zambia, and planning to expand to the rest of the country and the regional market such as the Democratic Republic of Congo.

Impact measurement: Key outcome indicators include the number of hectares of forest under improved climate resilient management, and the number of people working for the business case (disaggregated for gender and youth).

Scalability and replication potential: Current production capacity of the plant is 1800 bottles/hour (14,400 units/day), selling 263,000 units of Mabuyu, Ngai & Baobab Oil in 2022. Target units are expected to grow to 639,000 units by 2027, with the introduction of new product lines such as the Ngai Jam, Baobab Nut Milk, yoghurt and Baobab Tea. The inclusion of new innovative products is expected to increase the off take of wild fruits and to increase the revenue for Forest Africa.

Successes or innovative features: Through producing innovative wild fruit products, Forest Africa is successfully promoting a neglected value chain that aligns with sustainable economic development, environmental conservation, and healthier food options. Rising demand for wild fruits is expected to enhance commerce for rural communities, incentivize protection of community forests, leading to improvement of forest-dwelling community livelihoods, and to a reduction of waste through the reuse and recycling of products from factory processes.

Investment and operating model:



Learn more:
SEED Award
Announcement



Forest under
improved
climate resilient
management

BNS CASE STUDY #4: COLORQUIMICA

WWF LEAD: DUTCH FUND FOR CLIMATE AND DEVELOPMENT (DFCD), SOUTH AMERICA REGIONAL LEADS: FABRICIO DE CAMPOS AND TANIA EVIA, AND WWF COLOMBIA: SANDRA CHAMORRO

Project snapshot

Local partner/operator: Colorquimica

Sector type: Sustainable agriculture (natural colourants)

Country/Region of interest: Colombia

Funding and TA support: €134,000 grant from DFCD

Financial instrument: Debt

Proof of concept: Implementation



Overview: Colorquimica plans to expand its natural dye business line by sourcing achiote (*Bixa orellana*) from a social enterprise Achiote and Agros in the Choco Darien region of Colombia. The project aims to decrease the risk of deforestation from mining-related activities by local communities, by offering them alternative income generation.

Use of grant funds: For social enterprise: Final validation of the product & technical improvement of primary processing plant. Optimization and review of agroforestry models. Biodiversity baseline. Gender related strategy. For sponsor company: Engineering studies for plant design. Review of additional natural dyes.

Investment and operating model description: Colorquimica plans to construct a secondary processing plant for natural dyes. Achiote, the raw material, will be sourced from

the social enterprise Achiote and Agros del Choco (A&Ach), which conducts primary processing. A&Ach operates through community councils consisting of 344 achiote-producing families that employ agroforestry systems.

Impact measurement: 730 hectares of farmland under sustainable management improving resilience to climate change, with scalability potential of 2000 hectares. 61,475.9 hectares of forest under sustainable management or other improved practices, under community councils involved in the project.

Scalability and replication potential: There is potential for expansion of the project in the Choco Darien region. Colorquimica is also looking to develop the supply chain of other natural colourants e.g. from Marygold and curcumin using the same production model. The model of mobilizing community councils that aggregate producing families to promote responsible agroforestry practices, is replicable

and can enable effective collective decision-making and resource management. Addressing governance challenges is crucial to ensure equitable representation, land tenure security, and transparent financial management.

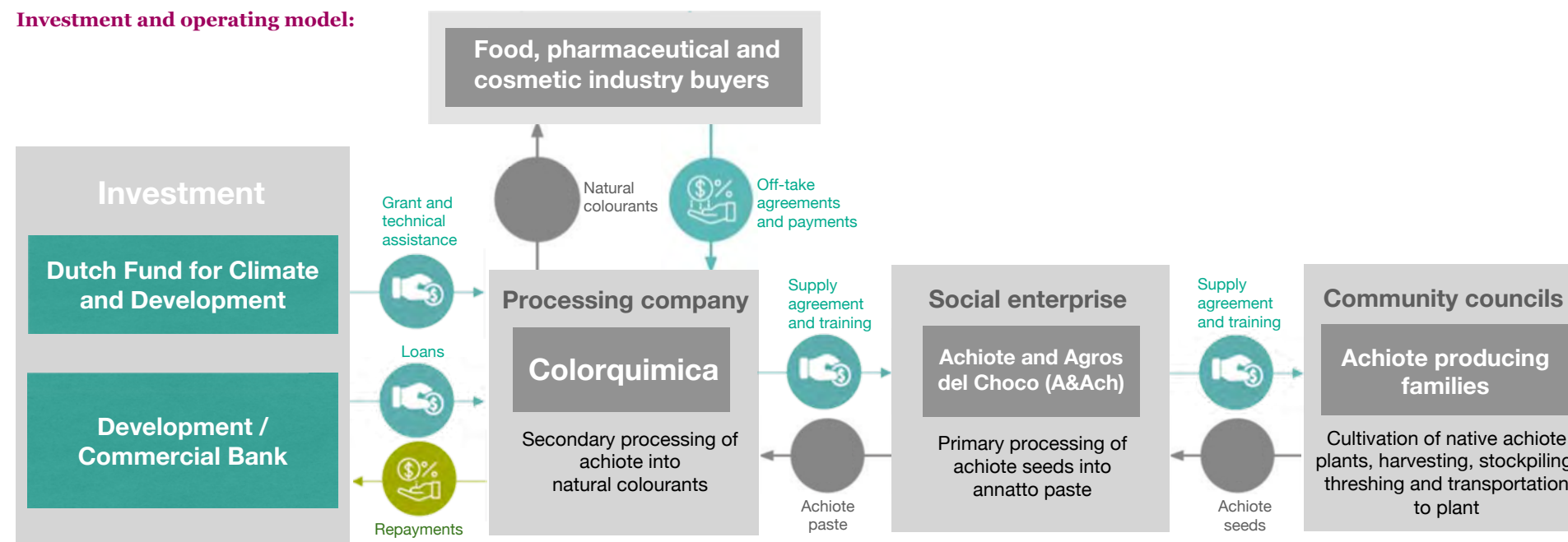
Successes or innovative features: Liaising with an anchor company to develop a locally sourced business line, plays a crucial role in fostering the growth of supplier SMEs that are integral to its distribution or supply chains. By providing these SMEs with stable and consistent business opportunities, the anchor company creates a supportive ecosystem for their development. It often collaborates with supplier SMEs, offering technical assistance, training, and financial support to improve their capacity and ability to meet quality standards. Strengthening producers' climate resiliency through agroforestry models, offers a viable and sustainable alternative to income sources that harm biodiversity, such as illegal mining.

Learn more:
[DFCD Grant Announcement](#)



61,475.9
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Investment and operating model:



OUR MISSION IS TO CONSERVE NATURE AND REDUCE THE MOST PRESSING THREATS TO THE DIVERSITY OF LIFE ON EARTH.

Imprint

Publisher WWF

Date September 2023

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Design Thomas Schlembach (WWF Germany)

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