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COCOA SUSTAINABILITY

ROLE FOR DIGITAL IN IMPROVING FARMING PRODUCTIVITY

**MIKE GEARY,
DIRECTOR COCOA R&D, MONDELEZ
JULY 2023**

LITTLE BIT ABOUT MONDELEZ ... WE ARE A GLOBAL SNACKING LEADER!



BISCUITS & BAKED SNACKS

2022 NET REVENUES:
\$15.6 BILLION



#1

in Biscuits



#3

in Cakes & Pastries



#3

in Snack Bars



CHOCOLATE

2022 NET REVENUES:
\$9.5 BILLION



#2

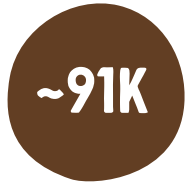
in Chocolate



A TASTE OF WHO WE ARE

MDLZ

AT MONDELÉZ INTERNATIONAL, INC. (NASDAQ: MDLZ)
WE MAKE IT OUR MISSION TO EVOLVE THE ROLE
SNACKING PLAYS IN CONSUMERS' LIVES BY DELIVERING THE
RIGHT SNACK, FOR THE RIGHT MOMENT, MADE THE RIGHT WAY.



We have approximately **91,000 diverse and talented employees** around the world



Our snacks are enjoyed in more than **150 countries***



2022 net revenues of approximately **\$31.5 billion**



~40% of 2022 net revenues from **emerging markets**



\$50+ million charitable contributions in local communities in 2022**

AWARDS

FORTUNE

World's Most Admired Companies
America's Most Innovative Companies

BARRON'S

Most Sustainable U.S. Companies

DOW JONES S&P

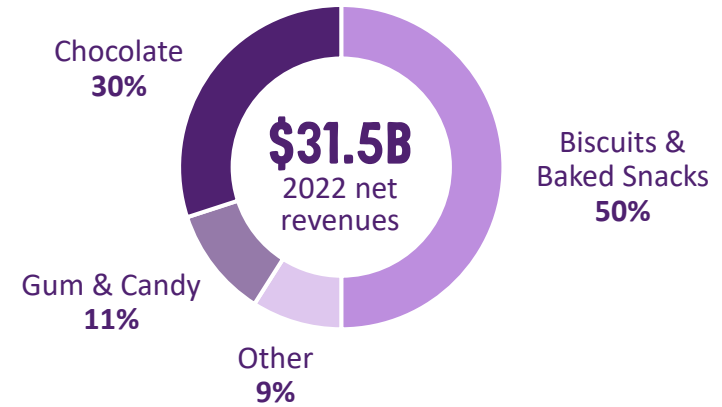
Dow Jones Sustainability Index
S&P Global Sustainability Yearbook

MORNINGSTAR SUSTAINALYTICS

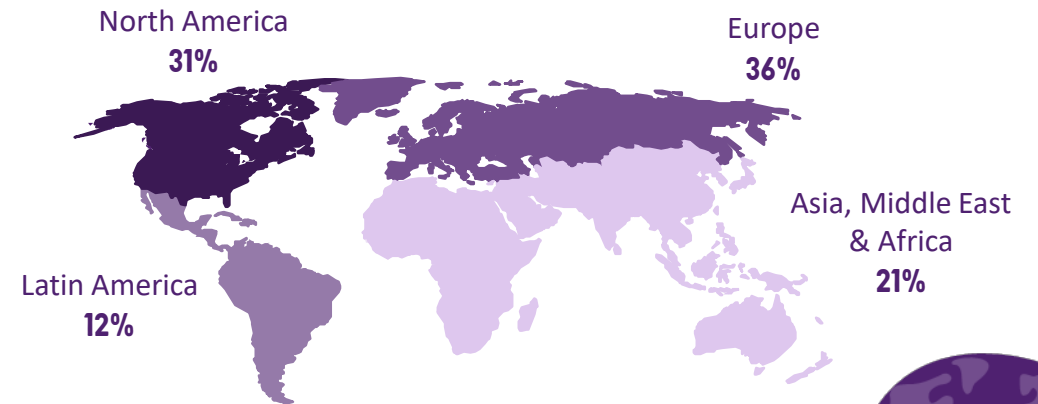
ESG Industry Top Rated

Newsweek
Most Trustworthy Companies

% OF 2022 NET REVENUES BY CATEGORY



% OF 2022 NET REVENUES BY GEOGRAPHY



* 2022 category position. Source: Euromonitor

**Includes both cash and product donations

POWERFUL PORTFOLIO OF ICONIC AND INSPIRING BRANDS

WE OFFER A BROAD RANGE OF DELICIOUS, HIGH-QUALITY SNACKS FOR CONSUMERS WHO SEEK BOTH NUTRITION AND INDULGENCE

MOST LOVED SNACKING BRANDS

ICONIC
>\$1B BRANDS*



LEADING "TASTE OF NATION"
LOCAL JEWELS



*Nielsen Value Sales 2022

SCALE SUSTAINABLE SNACKING



**LEAD
WHERE WE MATTER MOST**



INGREDIENTS

COCOA & WHEAT



SOCIAL

HUMAN RIGHTS

**DRIVE CHANGE
WHERE THE WORLD NEEDS IT MOST**



CLIMATE

CO₂ EMISSIONS



PACKAGING

WASTE



SCALE SUSTAINABLE SNACKING



		2022 RESULTS ¹	2025 GOALS
INGREDIENTS 	Cocoa volume for Chocolate brands sourced via Cocoa Life	~80% ²	100%
	Maintain 100% Palm Oil volume RSPO ³ certification	~100%	100%
SOCIAL 	Child Labor Monitoring & Remediation Systems (CLMRS) coverage in Cocoa Life communities in West Africa	~>70%	100%
CLIMATE 	CO _{2e} emissions reduction from scope 1&2 (vs 2018)	~-23%	NET ZERO BY 2050 ⁴ -15% -10%
	Reduction in Food Waste in internal manufacturing (vs 2018)	~-26%	
	Reduction in Absolute Water Usage in priority sites (vs 2018)	~-15%	
PACKAGING 	Packaging designed to be Recyclable	~96% ⁵	100%

1. Preliminary estimated 2022 results [subject to change]; final 2022 results will be published in Snacking Made Right report in Q2

2. Mass balance sourcing method

3. Roundtable on Sustainable Palm Oil

4. As part of joining SBTi Business Ambition for 1.5°C, we are currently updating our Scope 3 footprint to capture and reflect the impact of our ongoing mitigation strategies

5. Indicator covers Nov '21 to Oct '22 period



SCALE SUSTAINABLE SNACKING



COCOA IS THE ESSENCE OF OUR CHOCOLATE LOVED BY MILLIONS OF PEOPLE AROUND THE WORLD.

COCOA IS LIFE FOR US, THE FARMERS WHO GROW IT, AND THEIR COMMUNITIES.

OUR **COCOA LIFE** PROGRAM HOLISTICALLY TACKLES THE COMPLEX CHALLENGES COCOA FARMERS AND THEIR COMMUNITIES FACE, INCLUDING CLIMATE CHANGE, DEFORESTATION, GENDER INEQUALITY, POVERTY AND CHILD LABOR.

COCOA LIFE IS DEDICATED TO MAKING AN IMPACT ACROSS THE COCOA SUPPLY CHAIN, NOT JUST IN FARMING COMMUNITIES, BUT IN THE CHOCOLATE WE ALL ENJOY.



\$1 billion
investment
by 2030



Goal of sourcing
100% cocoa volume
for our chocolate
brands through
Cocoa Life by 2025



Holistic approach
leveraging external
advisors and partners with
KPIs measured through
third party verification



MONDELEZ BASED IN 7 COCOA COUNTRIES, 3 IN AFRICA



COCOA LIFE COUNTRIES

Cocoa Life runs across seven cocoa-growing countries:
Ghana, Côte d'Ivoire, Indonesia, Dominican Republic, India, Brazil, and Nigeria.



COCOA FARMING FACES MANY COMPLEX CHALLENGES

SUSTAINABLE AGRICULTURE - PEOPLE, PROFIT, PLANET
[2022-MDLZ-SNACKING-MADE-RIGHT-ESG-REPORT.PDF \(MONDELEZINTERNATIONAL.COM\)](https://www.mondelezinternational.com/2022-mdlz-snacking-made-right-esg-report.pdf)

PEOPLE



LOW FARMER INCOMES

Poverty limits adoption of new technologies.

PROFIT



LOW CROP YIELDS

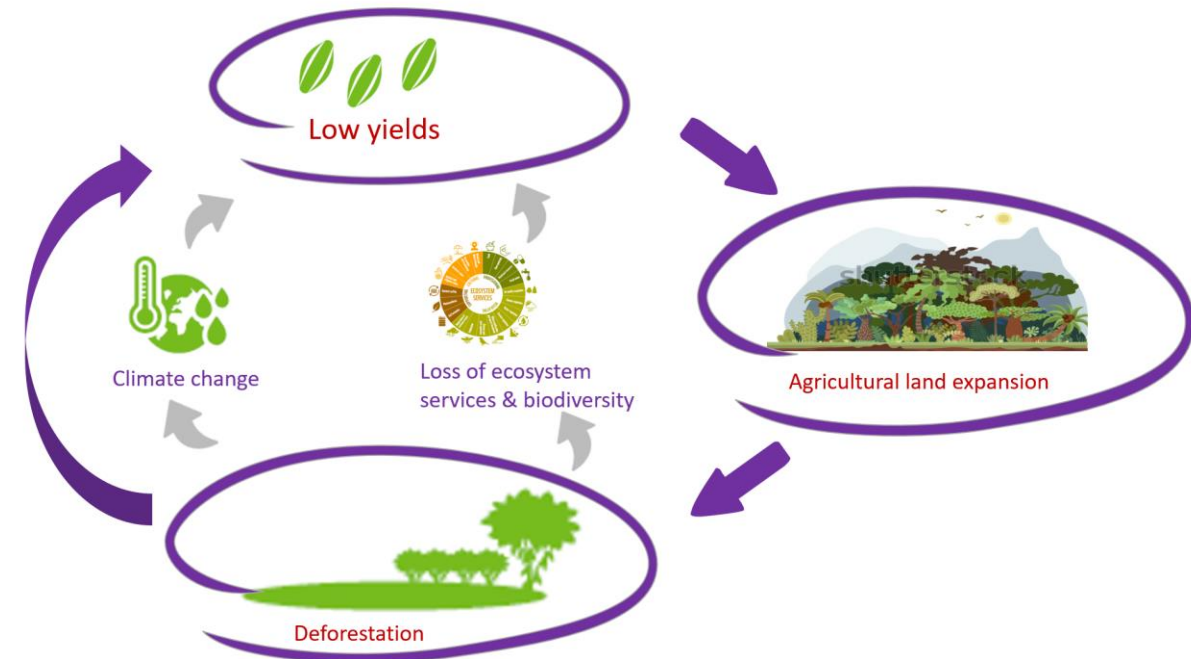
Other crops have at least doubled yields since 1960s, cocoa yields have barely moved.

PLANET



ENVIRONMENTAL

Deforestation & soil degradation.



Vicious cycle of soil degradation, low yields & further extensification/deforestation.

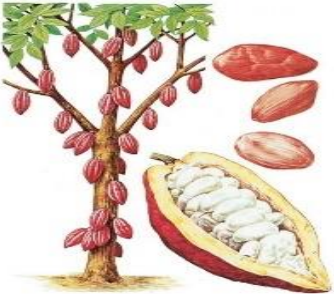
MONDELEZ R&D PROGRAM TO DELIVER SUSTAINABLE COCOA FARMING

BREEDING & AGRONOMY

HIGHER YIELDS, LOW CARBON, RESILIENCE

BREEDING SUPERIOR CLONES

- Improved planting material (yield, resilience, quality)
- Increased genetic diversity



PRECISION AGRONOMY WITH EXISTING & NEW GENETICS

- Improved fertiliser/irrigation/shade/soil management
- Alternatives to pesticides (biopesticides + early warning)
- Enhanced pollinators on-farm
- C-sequestration (agroforestry)



PATHWAYS TO SUSTAINABILITY

HIGH-TECH & MODERNIZED SMALLHOLDER FARM MODELS

Increase yields to improve farm income and reduce risks of further land use change & loss natural ecosystems.

Increased input efficiencies to reduce waste, costs and GHG emissions.

Cocoa agroforestry to enhance resilience, diversify farm income and sequester carbon.

AFFORDABLE TOOLS TO MONITOR AND CONTROL WILL BE KEY TO SCALING PRECISION FARMING

PRECISION FARMING

YIELD QUANTITY & QUALITY



*Traceability;
forecasting;
Data to inform
Continuous
Improvement*

PEST AND DISEASE



*Early Warning for
Preventative measures;
Reduced chemical use
Reduce impact of outbreak*

NUTRITIONAL DEFICIENCIES



*Targeted nutrient
application;
Resource use
efficiency;*

WATER DEFICIENCIES



*Targeted water
management
Drainage? Irrigation?
Mulching?
Minimise losses IN El Nino
and La Nina years*

TREE MORTALITY



Shade, Cocoa, other