

Management Statement

Sustainability is at the heart of Barry Callebaut. The launch of Forever Chocolate in 2016, Barry Callebaut's plan to make sustainable chocolate the norm by 2025, was the next step in their journey to drive a sustainable cocoa and chocolate supply chain. Barry Callebaut's fourth progress report, covering fiscal year 2019/20, shows that, despite the challenges of COVID-19, the projects they put in place in the previous years continue to create scalable impact. In the past fiscal year Barry Callebaut continued to explore innovative ways of facilitating progress towards their Forever Chocolate goals and intensified their efforts to create an enabling policy environment by reaching out to public stakeholders for support.

Barry Callebaut is confidently progressing towards systemic change in the chocolate value chain. There remains a lot to be done, but through assessing, learning and investing, the Company is confidently increasing the adoption of innovative approaches to drive impact, and make sustainable chocolate the norm by 2025.

This report presents a summary of the Forever Chocolate and GRI relevant activities and key performance indicators (KPIs) implemented during the year 2019/20 (based on Barry Callebaut's materiality assessment). It is based on the work performed by Barry Callebaut and its subsidiaries as well as partners Barry Callebaut collaborates with on implementing its activities. The reported KPIs are reviewed by PricewaterhouseCoopers LLP (PwC) at Barry Callebaut's offices, cocoa communities in the countries where Forever Chocolate activities are implemented as well as in Barry Callebaut sites.

This report, covering the financial year ended 31 August 2020, presents the results of a limited assurance level verification following the ISAE 3000 assurance standard, providing Barry Callebaut's stakeholders with an enhanced level of confidence in relation to progress towards the Forever Chocolate targets. The exact scope, nature and conclusion of assurance are highlighted in the Independent Assurance Report of PricewaterhouseCoopers LLP on pages 2-3.

Barry Callebaut selected and applied appropriate policies and processes in preparing the data in this report. The Company believes that the KPIs presented are complete and accurate. At the same time the Company believes that the assessment criteria is suitable for the purpose of measuring and evaluating the KPIs presented in the report.

Barry Callebaut is confident with the results and is responsible for the information presented in this document being complete and accurate, and prepared in accordance with the Reporting Criteria in Appendix A to this document.



Antoine de Saint-Affrique
CEO, Barry Callebaut



Pablo Perversi

Chief Innovation, Sustainability & Quality Officer, Barry Callebaut

Date 26-11-20

Date 26.11.20

For and on behalf of Barry Callebaut Sourcing AG.



Independent Limited Assurance Report to the Directors of Barry Callebaut Sourcing AG

The Board of Directors of Barry Callebaut Sourcing AG engaged us to provide limited assurance on the information described below and set out in Barry Callebaut Sourcing AG's Forever Chocolate Progress Report for the year ended 31 August 2020.

Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information for the year ended 31 August 2020 has not been prepared, in all material respects, in accordance with the Reporting Criteria.

This conclusion is to be read in the context of what we say in the remainder of our report.

Selected Information and Reporting Criteria

The scope of our work was limited to assurance over the KPIs (the "Selected Information") presented alongside the Reporting Criteria in Appendix A'. Our assurance does not extend to information in respect of earlier periods or to any other information included in the Forever Chocolate Progress Report for the year ended 31 August 2020.

Professional standards applied and level of assurance

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' and, in respect of the greenhouse gas emissions, in accordance with International Standard on Assurance Engagements 3410 'Assurance engagements on greenhouse gas statements', issued by the International Auditing and Assurance Standards Board.

Our Independence and Quality Control

We comply with the Institute of Chartered Accountants in England and Wales (ICAEW) Code of Ethics, which is at least as demanding as the IESBA Code Parts 1, 3 and 4B, and which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Control (UK) 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our work was carried out by an independent team with experience in sustainability reporting and assurance.

Understanding reporting and measurement methodologies

The Selected Information needs to be read and understood together with the Reporting Criteria, which Barry Callebaut Sourcing AG is solely responsible for selecting and applying. The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time. The Reporting Criteria used for the reporting of the Selected Information are as at 31 August 2020.

Summary of work done

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information. In doing so, we:

- made enquiries of Barry Callebaut Sourcing AG's management in Switzerland, Côte d'Ivoire, Ghana, Cameroon, Brazil and Indonesia;
- made enquiries of operational staff, Farmer Group management teams and cocoa farmers aligned with Barry Callebaut's sustainability program, including the Sustainability Reporting team and those with responsibility for Sustainability Reporting management and group sustainability reporting;
- obtained an understanding of the key structures, systems, processes and controls for managing, recording and reporting the Selected Information. This included analysing and virtually visiting a number of Farmer Groups and Cocoa Farms in Côte d'Ivoire, Ghana, Cameroon and Brazil selected on the basis of their inherent risk and materiality to the group, to understand the key processes and controls for reporting site performance data to the local and group reporting teams;
- performed limited substantive testing on a selective basis of the Selected Information at the head offices and in relation to sites in Côte d'Ivoire, Ghana, Cameroon and Brazil to check that data had been appropriately measured, recorded, collated and reported; and
- considered the disclosure and presentation of the Selected Information.

Directors' responsibilities

As explained in the Management Statement, as found on page 1 of the Forever Chocolate Progress Report, the Directors of Barry Callebaut Sourcing AG are responsible for:

- designing, implementing and maintaining internal controls over information relevant to the preparation of the Selected Information that is free from material misstatement, whether due to fraud or error;
- establishing objective Reporting Criteria for preparing the Selected Information;
- measuring and reporting the Selected Information based on the Reporting Criteria; and
- the content of the Forever Chocolate Progress Report.

Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Selected Information is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Directors of Barry Callebaut Sourcing AG.

This report, including our conclusions, has been prepared solely for the Board of Directors of Barry Callebaut Sourcing AG in accordance with the agreement between us dated 24 September 2020, to assist the Directors in reporting Barry Callebaut Sourcing AG's Selected Information. We permit this report to be published on Barry Callebaut AG's website, subject to an access controlled click through disclaimer, in relation to the Forever Chocolate Progress Report for the year ended 31 August 2020, to assist the Directors in responding to their governance responsibilities

by obtaining an independent assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors and Barry Callebaut Sourcing AG for our work or this report except where terms are expressly agreed between us in writing.



PricewaterhouseCoopers LLP
Chartered Accountants

London

26 November 2020

ⁱThe maintenance and integrity of Barry Callebaut Sourcing AG's website is the responsibility of the Directors; the work carried out by us does not involve consideration of these matters and, accordingly, we accept no responsibility for any changes that may have occurred to the reported Selected Information or Reporting Criteria when presented on Barry Callebaut Sourcing AG's website.

Appendix A – Forever Chocolate Reporting Criteria

This section summarizes the basis of preparation for the performance indicators within this report, presenting clarification and definition of the terminology used within the reported performance indicators.

A set of general definitions is first presented, as well as specific guidance in relation to each of the reported performance indicators.

General definitions

A **Farmer Group** is defined as an organized group of farmers such as a cooperative or similar. See definitions for each specific country:

- **Côte d’Ivoire:** These are partnered agricultural cooperatives and Barry Callebaut owned direct sourcing company, SACO.
- **Cameroon:** These are partnered agricultural cooperatives and Barry Callebaut owned direct sourcing company, SIC CACAO.
- **Ghana:** These are districts / branches that form part of Barry Callebaut’s direct sourcing licensed buying company, Nyonkopa Ltd.
- **Indonesia:** These are suppliers of cocoa beans to Barry Callebaut. They can be either Buying Stations or Supplier Warehouses.
- **Brazil:** There are no Farmer Groups in Brazil. Farmers work individually and sell their cocoa to Buying Stations, which might be independent or part of Barry Callebaut.

Treatment of Material Adjustments

In circumstances that result in a significant change to a methodology and have a material impact to a KPI result, either through refining the approach, receiving new information, a change in business structure, or from other events, Barry Callebaut will initiate a recalculation of previous years' numbers.

KPI #	KPI	Assessment Criteria
1.1	262,791 farmers in our sustainability program	<p>A farmer is considered to be a part of our sustainability program if they are registered as an active member of a farmer group that is allocated to either Cocoa Horizons, a specific client as expanded upon below, or a specific certification program on whose behalf we undertake sustainability activities between 1 September 2019 and 31 August 2020, or has taken part in at least one of the following sustainability activities:</p> <ol style="list-style-type: none"> 1. Delivered sustainable cocoa in 19/20 2. Received farm service activities (Farm Business Plans, Productivity Packages, cocoa seedlings, shade tree seedlings, income diversification) 3. Received cookstoves 4. Attended training or sat the Cocoa Horizons accreditation 5. Participated in a child labor survey, identified cases of child labor, or a child labor remediation activity 6. Had a farm mapped in 19/20 7. Participated in a census survey in 19/20 <p>These sustainability activities include all activities that contribute to our Forever Chocolate pillars and are supported either directly by Barry Callebaut or as part of a client or certification specific program. When part of a client or certification specific program, it is Barry</p>

		<p>Callebaut who designs (either independently or in partnership with the stakeholder), implements, and monitors the activities on the stakeholder's behalf, and for which a premium is paid.</p> <p>In Côte d'Ivoire these are: Cocoa Horizons, Mondelez, Mars, Unilever, Nestle, Hershey's, Ben & Jerry's, Danone In Ghana these are: Cocoa Horizons, UTZ, Mondelez In Cameroon these are: Cocoa Horizons, Rainforest Alliance, UTZ In Indonesia these are: Cocoa Horizons, Mars, Mondelez, Nestle In Brazil these are: Cocoa Horizons, Nestle, Organic</p>
1.2	70.88% full data farmers	<p>To be considered as a full data farmer, a farmer must be an actively registered member of a farmer group within the year from 1 September 2019 to 31 August 2020, and have had both a census survey and at least one of their farm plots mapped with a GPS polygon between the below dates up to 31 August 2020. The KPI is calculated by dividing the number of active full data farmers over the total number of active farmers in our sustainability program.</p> <p>Our census activities started in each origin as follows: Côte d'Ivoire - 2016 Ghana - 2017 Indonesia - 2017 Cameroon - 2018 Brazil - 2019</p> <p>Our mapping activities started in each origin as follows: Côte d'Ivoire - 2018 Ghana - 2018 Indonesia - 2018 Cameroon - 2018 Brazil - 2019</p> <p>More information about census surveys can be found in KPI 1.5. More information about mapping can be found in KPI 5.2.</p>
1.5	291,377 farmers with a census survey	<p>This indicator relates to the cumulative number of farmers, up until the year ended 31 August 2020, who have ever taken part in a census interview performed either by a member of Barry Callebaut staff or by external consultants appointed by Barry Callebaut.</p> <p>The census survey includes questions regarding, amongst other things:</p> <ul style="list-style-type: none"> • Information about the farmers themselves (such as date of birth, preferred language, education level); • Information about the farmer's family; • Information about the facilities at home; • Information about the farm, farming and agriculture; and • Information about sources of income (including cocoa, non-cocoa agricultural and non-agricultural income).

		<p>A census survey is conducted with farmers by field staff who are trained on a) using the tool (historically paper survey, since 2018 the K-App) and b) on the specific questions included in the survey by the local M&E teams. To date, farmers are only surveyed once. Each year, as many yet to be surveyed farmers as possible are surveyed. Since 2018 these have been immediately captured in our Katchilè database through the use of the K-app. Prior to this, the survey was taken on paper.</p> <p>Our census activities started in the following origins in the following years: Côte d'Ivoire - 2016 Ghana - 2017 Cameroon - 2018 (paper only) Indonesia - 2017 Brazil - 2019</p>
1.6	144,631 active farmers with full data in FY 2018/19	<p>This indicator relates to the number of active farmers, up until the year ended 31 August 2019, who had:</p> <ol style="list-style-type: none"> 1. completed at least one census interview; and 2. had at least one of their farm(s) mapped via GPS. <p>More information surrounding both census interviews and mapping of farms is in the criteria for KPI 1.5 and KPI 5.2 respectively.</p> <p>Our census activities started in the following origins in the following years: Côte d'Ivoire - 2016 Ghana - 2017 Cameroon - 2018 (paper only) Indonesia - 2017 Brazil - 2019</p> <p>Our mapping activities started in the following origins in the following year: Côte d'Ivoire - 2018 Ghana - 2018 Cameroon - 2018 Indonesia - 2018 Brazil - 2019</p>
2.1	46.61% of agricultural raw materials sustainably sourced	<p>This indicator is calculated as the combination of sustainably sourced cocoa and non-cocoa ingredients over the total volume of cocoa and non-cocoa ingredients sourced.</p> <p>See below for detailed definitions and methodology for cocoa and non-cocoa sourcing.</p> <p>Formula for calculation:</p> $\% \text{ of sustainable agricultural raw materials sourced} = \frac{(\text{Cocoa Sustainable} + \text{Non-Cocoa Sustainable} - \text{Cocoa Sustainable Nyonkopa})}{(\text{Cocoa Sustainable} + \text{Cocoa Conventional} + \text{Non-Cocoa Sustainable} + \dots)}$

		<p>Non-Cocoa Conventional – Cocoa Sustainable Nyonkopa).</p> <p>Nyonkopa is removed because the sustainable volumes purchased by Nyonkopa are also recorded under BC Sourcing (Europe). By removing Nyonkopa, we are ensuring no duplication.</p> <p>Sustainable cocoa sourced Sustainably sourced cocoa is considered that which comes from certified or verified sustainable sources. Cocoa certifications considered sustainable in this context are: Rainforest Alliance, UTZ, Fairtrade, Fair for Life, Mondelez, Cocoa Horizons, Organic, and any combination of those.</p> <p>Cocoa is considered sourced at the posting date between 1 September 2019 and 31 August 2020, which is the date from when an invoice and the delivery documentation are booked into the system.</p> <p>Sustainable non-cocoa sourced Ingredients are considered sourced at the point of delivery and should have been logged as delivered between 1 September 2019 and 31 August 2020.</p> <p>All non-cocoa raw materials are based on agricultural materials sourced for chocolate production. Ingredients are: beet sugar, cane sugar, dairy, palm oil, soy and soy lecithin, vanilla, coconut oil, hazel nuts and other similar ingredients. Rare cases and amounts of synthetic flavors (such as vanilla) or sweeteners (based on starch from e.g. potatoes, wheat, tapioca) are considered part of this calculation as they are used for chocolate production. Excluded are purely chemical raw materials (such as additives), plastic packaging, as well as indirect materials not contributing to chocolate production.</p> <p>Sustainably sourced non-cocoa raw materials are considered to be those which are purchased from certified or verified sustainable sources from external sustainability certification schemes. These are:</p> <p>Beet Sugar: SAI FSA min. silver level or benchmarked standard (Red Tractor, REDCert, REDCert2, Unilever SAC) Cane Sugar: Bonsucro Dairy: VisionDairy or benchmarked standard (e.g. Unilever SAC, Origin Green, Red Tractor) Palm Oil: RSPO (Credits, MB, SG) Soy (soy lecithin): RTRS, Proterra, Donausoja Vanilla: Volumes from our own program with Prova (in FY 2017/2018) Other ingredients: SAI FSA min. silver level or benchmarked standard, ISCC Fairtrade and Organic</p>
2.2	37% cocoa and chocolate products sold that contain sustainable cocoa	This indicator measures the proportion of cocoa and chocolate products sold that contain sustainable cocoa against the total number of cocoa containing products sold by Barry Callebaut between 1 September 2019 and 31 August 2020.

		<p>Sustainable cocoa is considered that which comes from certified or verified sustainable sources. Cocoa certifications considered sustainable in this context are Rainforest Alliance, UTZ, Fairtrade, Fair for Life, Mondelez, Cocoa Horizons (QPP), Organic, and any combination of those. A product must contain only cocoa from these sustainable sources in order to be considered in this calculation.</p> <p>Cocoa is considered sold when delivered to third party customers.</p> <ol style="list-style-type: none"> 1. The sales volumes are assessed to exclude any products not containing cocoa as an ingredient. Cocoa ingredients to be included are Beans, Butter, Liquor, Powder, Nibs, Cake. 2. All invoices or products which carry a certification (as above) are flagged at invoice level and the total sales volume of product is considered sustainable. 3. This is divided by the total volume of certified and conventional products from step 1. to get the % of cocoa and chocolate products which contain sustainable cocoa.
3.1	71,972 farmers who have received Farm Service activities	<p>A farmer is considered to have received Farm Service activities if they are a registered member of our sustainability program (as per KPI 1.1) and have benefitted from any one of the following between 1 September 2019 and 31 August 2020:</p> <ul style="list-style-type: none"> • received a Farm Business Plan (as per KPI 3.5) • signed a contract for a Productivity package (as per KPI 3.6) • received cocoa seedlings (as per KPI 3.8) • received shade tree seedlings (as per KPI 6.6) • received support for income diversification (as per KPI 3.9)
3.2	143,233 cocoa farmers above the WB International Poverty Line of US\$1.90/day	<p>This indicator is a measure of how many farmers in the Barry Callebaut supply chain are above the World Bank International Poverty line of US\$1.90/day based on data collected from census survey interviews with farmers cumulatively to 31 August 2020.</p> <p>Our census activities started in the following origins in the following years: Côte d'Ivoire - 2016 Ghana - 2017 Cameroon - 2018 Indonesia - 2017</p> <p>This indicator is determined by:</p> <ul style="list-style-type: none"> • Obtaining survey information from farmers in Côte d'Ivoire, Ghana, Cameroon and Indonesia regarding their household income generation from cocoa and other activities, as well as the size of their household; • Using in-country market prices for cocoa and other crops to determine an average income level for those farmers; and • Comparing this average income level to the International Poverty Line threshold for extreme poverty of US\$1.90 per day set by the World Bank, adjusted for purchasing power and cost

		<p>of living in Ghana, Côte d'Ivoire, Cameroon and Indonesia.</p> <p>With this calculation we obtain a general percentage for the farmers that are above the poverty line. This percentage is then multiplied by the farmers that are registered as active in the farmer groups in our master data in the fiscal year under consideration. These farmer groups can be divided into the following:</p> <ul style="list-style-type: none"> • Active farmers registered to farmer groups registered with our Cocoa Horizons program. These are farmers in our Cocoa Horizons sustainability program and participating in activities under this program. These farmer groups are delivering sustainable cocoa. • Active farmers registered to farmer groups participating in our client programs and participating in activities in those programs. These farmer groups are also delivering sustainable cocoa. • Active farmers registered to independent farmer groups, which are not participating in a client program or in our Cocoa Horizons program. These farmer groups are delivering sustainable and conventional (non-sustainable) cocoa. <p>Survey information</p> <p>Census surveys were undertaken with farmer households in Côte d'Ivoire, Ghana, Cameroon and Indonesia up until 31 August 2020. The results from the surveys were then sense checked against literature studies from an independent center of expertise and education for sustainable development, KIT Royal Tropical Institute. The census surveys and KIT study provided estimates over the following key metrics:</p> <ul style="list-style-type: none"> • the average yield per farm • income from cocoa farming • other income-generating activities • cocoa farm size • production cost • the number of household members • the number of financially dependents on the farmer <p>Outliers from the census results have been removed and in some instances, the census results have been calibrated to match literature studies, in order to provide a more prudent analysis of the results. The assumptions and data calibration were performed by Barry Callebaut and are summarized below.</p> <p>It is important to note that the assumptions that refer to the KIT study "Demystifying the cocoa sector in Ghana and Côte d'Ivoire", are only applicable in the context of Ghana and Côte d'Ivoire, as the study was only performed there. As no similar literature was available for Cameroon and Indonesia, we have used this study to approximate similar values for these origin countries.</p> <p>For all countries, the following assumptions have been applied:</p>
--	--	--

		<ul style="list-style-type: none"> • Census surveys where the farmers have declared 0 for cocoa yield and other income have been discarded. • The cocoa farm size declared by the farmers were replaced with the GPS farm size captured on Katchilè if all plots of their farms have been GPS mapped. • Census surveys where the farmers did not answer/declare any cocoa harvested in the year have been discarded. The commodity market price (cocoa and non-cocoa products) are based on local team knowledge of the market. • Census surveys where the farmers have questioned with zero as an answer have been discarded. • If a farmer declared more than 100 tons of rubber or 15 tons of palm oil, then it is assumed to be in kg and converted to tons. • We have added one to all declared household members and financial dependents (if asked in the countries), to amend that the farmer does not take himself into account. • We have discarded surveys whereby the number of financial dependents is lower than the number of household members. <p>For Côte d'Ivoire, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared equal or more than 30 household members have been discarded. • Census surveys where the farmers have declared more than 50 financial dependents have been discarded. • All self-declared plots over and equal to the determined hectare limit (157.02 ha) have been removed as deemed unrealistic. • All yields above 1,100 kg/ha and equal to or below 100 kg/ha have been excluded from the calculation. • Farmers who have non-agricultural income of equal to or more than 5,000,000 CFA have been excluded from the calculation. • The cocoa income declared by the farmer was deducted by the average production cost inferred from KIT studies. The average production cost was repartitioned such that a farmer having declared a higher cocoa yield would incur a higher production cost. • If the farm size is unknown (after filling in values from mapping activities from general assumptions), we take the country average from mapping activities. • Due to a significant mismatch with literature in the number of declared household members with a value of 1 or 2, we have resampled the population to make sure the number of declared household members with a value of 1 and 2 now matches literature (to 2% and 5% of the population, respectively). • For Côte d'Ivoire, we divided the total household income by the number of declared financially dependents. <p>For Ghana, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared more than 30 financial dependents have been discarded.
--	--	--

		<ul style="list-style-type: none"> • All self-declared plots over and equal to the determined hectare limit (69.34 ha) have been removed as deemed unrealistic. • An adjustment factor of 0.404686 has been applied to adjust declared plot sizes from acres to hectares. • Estimated yields above 1,400 kg/ha and equal or below 100 kg/ha are considered abnormal and have been excluded from the calculations. • Where the number of household members question was answered as the highest radio-button option of "8 or more" this has been converted to be 9. • Due to a significant mismatch with literature in the number of declared household members with a value of 1 or 2, we have resampled the population to make sure the number of declared household members with a value of 1 and 2 now matches literature (to 2.5% and 6% of the population, respectively). • For Ghana, we divided the total household income by the number of declared financially dependents. <p>For Cameroon, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared more than 30 household members have been discarded. • Census surveys where the farmers have declared more than 30 financial dependents have been discarded. • All self-declared plots over and equal to the determined hectare limit (67.69 ha) have been removed as deemed unrealistic. • Estimated yields above 1,100 kg/ ha and lower limit to 100 kg/ha are considered abnormal and excluded from the calculation. • Due to a significant mismatch with literature in the number of declared household members with a value of 1 or 2, we have resampled the population to make sure the number of declared household members with a value of 1 and 2 now matches literature (to 2% and 5% of the population, respectively). As literature for Cameroon was not available, we have taken the number for Côte d'Ivoire here, due to the similarity in the supply chain in countries. • For Cameroon, we divided the total household income by the number of declared household members. <p>For Indonesia, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared more than 20 household members have been discarded. • All self-declared plots over and equal to determined hectare limit (14.00 ha) removed as deemed unrealistic. • Estimated yields above 1,400 kg/ha and equal to or below lower limit to 100 kg/ha are considered abnormal and excluded from the calculation. • For Indonesia, we divided the total household income by the number of declared household members.
--	--	---

		<p>Market prices Barry Callebaut relies on its knowledge of origin markets to determine prices of cocoa and other crops. This information comes from the local M&E teams, who gather the information on the prices from the local markets by the end of the Fiscal Year.</p> <p>International Poverty Line The US\$1.90 per day worldwide extreme poverty threshold, known as the International Poverty Line, set by the World Bank has been used to determine the number of farmers out of poverty. The US\$1.90 poverty line has been adjusted for each country to reflect the purchasing power and cost of living in Côte d'Ivoire, Ghana, Cameroon and Indonesia. This has been taken from the World Bank database.</p> <p>Purchasing Power The US\$1.90 per day worldwide extreme poverty line was determined in 2012, using 2011 prices. Using World Bank inflation data, we have adjusted the poverty line to 2019 levels (from 2011 levels, 2019 was the latest data available), and have converted the 2019 level extreme poverty line to the local currency using World Bank private consumption PPP 2019 factors, to also account for difference in purchasing power.</p> <p>Brazil is not included in this KPI because:</p> <ol style="list-style-type: none"> 1. current data collection scope does not yet cover a representative sample of the farmers in our supply chain; 2. data collected is relatively different from elsewhere due to different context and so cannot be combined; and 3. the local context is different which still needs to be assessed and accounted for to enable aggregation and comparison with elsewhere.
3.2a	104,645 cocoa farmers above the World Bank International Poverty Line of USD 1.90/day in FY2018/19	<p>This indicator is a measure of how many farmers in the Barry Callebaut supply chain are above the World Bank International Poverty line of US\$1.90/day at the end of the fiscal year 18/19, based on data collected from census survey interviews with farmers cumulatively to 31st Aug 2019.</p> <p>Our census activities started in the following origins in the following years: Côte d'Ivoire - 2016 Ghana - 2017 Cameroon - 2018 Indonesia - 2017</p> <p>This indicator is determined by:</p> <ul style="list-style-type: none"> • Obtaining survey information from farmers in Côte d'Ivoire, Ghana, Cameroon and Indonesia regarding their household income generation from cocoa and other activities, as well as the size of their household;

		<ul style="list-style-type: none"> • Using in-country market prices for cocoa and other crops to determine an average income level for those farmers; and • Comparing this average income level to the International Poverty Line threshold for extreme poverty of US\$1.90 per day set by the World Bank, adjusted for purchasing power and cost of living in Ghana, Côte d'Ivoire, Cameroon and Indonesia. <p>With this calculation we obtain a general percentage for the farmers that are above the poverty line. This percentage is then multiplied by the farmers that are registered as active in the farmer groups in our master data in the fiscal year 18/19. These farmer groups can be divided into the following:</p> <ul style="list-style-type: none"> • Active farmers registered to Farmer Groups registered with our Cocoa Horizons program. These are farmers in our Cocoa Horizons sustainability program and participating in activities under this program. These farmer groups are delivering sustainable cocoa. • Active farmers registered to Farmer Groups participating in our client programs and participating in activities in those programs. These farmer groups are also delivering sustainable cocoa. • Active farmers registered to Independent Farmer Groups, which are not participating in a client program or in our Cocoa Horizons program. These farmer groups are delivering sustainable and conventional (non-sustainable) cocoa. <p>Survey information</p> <p>Census surveys were undertaken with farmer households in Côte d'Ivoire, Ghana, Cameroon and Indonesia up until 31 August 2019. The results from the surveys were then sense checked against literature studies from an independent center of expertise and education for sustainable development, KIT Royal Tropical Institute. The census surveys and KIT study provided estimates over the following key metrics:</p> <ul style="list-style-type: none"> • the average yield per farm • income from cocoa farming • other income-generating activities • cocoa farm size • production cost • the number of household members • the number of financially dependents on the farmer <p>Outliers from the census results have been removed and, in some instances, the census results have been calibrated to match literature studies, in order to provide a more prudent analysis of the results. The assumptions and data calibration were performed by Barry Callebaut and are summarized below.</p> <p>It is important to note that the assumptions that refer to the KIT study "Demystifying the cocoa sector in Ghana and Côte d'Ivoire", are only applicable in the context of Ghana and Cote d'Ivoire, as the study was only performed there. As no similar literature was available for</p>
--	--	---

		<p>Cameroon and Indonesia, we have used this study to approximate similar values for these origin countries.</p> <p>For all countries, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared 0 for cocoa yield and other income have been discarded. • The cocoa farm size declared by the farmers were replaced with the GPS farm size captured on Katchilè if all plots of their farms have been GPS mapped. • Census surveys where the farmers did not answer/declare any cocoa harvested in the year have been discarded. • The commodity market price (cocoa and non-cocoa products) are based on local team knowledge of the market. • Census surveys where the farmers have questioned with zero as an answer have been discarded. • If a farmer declared more than 100 tons of rubber or 15 tons palm oil, then it is assumed to be in kg and converted to tons. • We have added one to all declared household members and financially dependents (if asked in the countries), to amend that the farmer does not take himself into account. • We have discarded surveys whereby the number of financial dependents is lower than the number of household members. <p>For Côte d'Ivoire, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared equal or more than 30 household members have been discarded. • Census surveys where the farmers have declared more than 50 financial dependents have been discarded. • All self-declared plots over and equal to the determined hectare limit (114.76 ha) have removed as deemed unrealistic. • All yields above 1,100 kg/ha and equal to or below 100 kg/ha have been excluded from the calculation. • Farmers who have non-agricultural income of equal to or more than 5,000,000 CFA have been excluded from the calculation. • The cocoa income declared by the farmer was deducted by the average production cost inferred from KIT studies. The average production cost was repartitioned such that a farmer having declared a higher cocoa yield would incur a higher production cost. • If the farm size is unknown (after filling in values from mapping activities from General assumptions), we take the country average from mapping activities. • Due to a significant mismatch with literature in the number of declared household members with a value of 1 or 2, we have resampled the population to make sure the number of declared household members with a value of 1 and 2 now matches literature (to 2% and 5% of the population, respectively). • For Cote d'Ivoire, we divided the total household income by the number of declared financial dependents. <p>For Ghana, the following assumptions have been applied:</p>
--	--	---

		<ul style="list-style-type: none"> • Census surveys where the farmers have declared more than 30 financial dependents have been discarded. • All self-declared plots over and equal to the determined hectare limit (70.21 ha) have been removed as deemed unrealistic. • An adjustment factor of 0.404686 has been applied to adjust declared plot sizes from acres to hectares. • Estimated yields above 1,400 kg/ha and equal or below 100 kg/ha are considered abnormal and have been excluded from the calculations. • Where the number of household members question was answered as the highest radio-button option of "8 or more" this has been converted to be 9. • Due to a significant mismatch with literature in the number of declared household members with a value of 1 or 2, we have resampled the population to make sure the number of declared household members with a value of 1 and 2 now matches literature (to 2.5% and 6% of the population, respectively). • For Ghana, we divided the total household income by the number of declared financial dependents. <p>For Cameroon, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared more than 30 household members have been discarded. • Census surveys where the farmers have declared more than 30 financial dependents have been discarded. • All self-declared plots over and equal to the determined hectare limit (111.24 ha) have been removed as deemed unrealistic. • Estimated yields above 1,100 kg/ ha and lower limit to 100 kg/ha are considered abnormal and excluded from the calculation. • Due to a significant mismatch with literature in the number of declared household members with a value of 1 or 2, we have resampled the population to make sure the number of declared household members with a value of 1 and 2 now matches literature (to 2% and 5% of the population, respectively). As literature for Cameroon was not available, we have taken the number for Cote d'Ivoire here, due to the similarity in the supply chain in countries. • For Cameroon, we divided the total household income by the number of declared household members. <p>For Indonesia, the following assumptions have been applied:</p> <ul style="list-style-type: none"> • Census surveys where the farmers have declared more than 20 financial dependents have been discarded. • All self-declared plots over and equal to the determined hectare limit (20.60 ha) have removed as deemed unrealistic. • Estimated yields above 1,400 kg/ha and equal to or below lower limit to 100 kg/ha are considered abnormal and excluded from the calculation. • For Indonesia, we divided the total household income by the number of declared household members.
--	--	---

		<p>Market prices Barry Callebaut relies on its knowledge of origin markets to determine prices of cocoa and other crops. This information comes from the local M&E teams, who gather the information on the prices from the local markets by the end of the Fiscal Year.</p> <p>International Poverty Line The US\$1.90 per day worldwide extreme poverty threshold, known as the International Poverty Line, set by the World Bank has been used to determine the number of farmers out of poverty. The US\$1.90 poverty line has been adjusted for each country to reflect the purchasing power and cost of living in Côte d'Ivoire, Ghana, Cameroon and Indonesia. This has been taken from the World Bank database.</p> <p>Purchasing Power The US\$1.90 per day worldwide extreme poverty line was determined in 2012, using 2011 prices. Using World Bank inflation data, we have adjusted the poverty line to 2018 levels (from 2011 levels, 2018 was latest data available for the fiscal year 18/19), and have converted the 2018 level extreme poverty line to the local currency using World Bank PPP 2018 factors, to also account for difference in Purchasing Power.</p> <p>Brazil is not included in this KPI because:</p> <ol style="list-style-type: none"> 1. current data collection scope does not yet cover a representative sample of the farmers in our supply chain; 2. data collected is relatively different from elsewhere due to different context and so cannot be combined; and 3. the local context is different which still needs to be assessed and accounted for to enable aggregation and comparison with elsewhere.
3.5	41,178 farmers who received a Farm Business Plan	<p>This indicator measures the number of farmers, of those registered in our sustainability program (as per KPI 1.1), who received a Farm Business Plan between 1 September 2019 and 31 August 2020.</p> <p>A Farm Business Plan is conducted by our field staff with selected farmers on one of their cocoa plots. The field staff input relevant data into the Farm Services App (FS App) on the state of the cocoa plot and cocoa trees, and farmer's maintenance activities and knowledge. The App produces, through the use of an algorithm, a recommended package for the farmer to improve the productivity of their plot over the following season. The farmer then has a choice to sign a contract for the recommended package, take a different package, or to not take a package at all.</p> <p>In Brazil, the Farm Business Plan is still conducted on paper and analysis for the recommended package is done manually. However, it follows the same considerations as the algorithm.</p>

		<p>A farmer is considered to have received a Farm Business Plan if a diagnostic was conducted on one of their cocoa plots and they were offered a package regardless of whether the farmer then signed up for a package or not.</p>
3.6	21,841 farmers with a productivity package	<p>This indicator measures the number of farmers with a productivity package between 1 September 2019 and 31 August 2020. A productivity package is a mix of a selection of high-quality agricultural inputs and individualized coaching services provided by Barry Callebaut field staff.</p> <p>Farmers are considered to have a productivity package if they have signed up for any of the following packages between 1 September 2019 and 31 August 2020 by giving consent within the FS App (or via paper survey in Brazil), and having either paid in full or paid a % down payment where necessary. At this point they begin to receive the coaching services and inputs are delivered at the right seasonal interval for implementation.</p> <p>The list of productivity packages on offer in 2019/20 in each origin were as follows. Different origins have different packages based on farmer demand and what has been found to agronomically be needed for each context.</p> <ol style="list-style-type: none"> 1. Insecticide [IC, GH, CM, ID] 2. Fungicide [IC, GH, CM, ID] 3. Insecticide & Fungicide [IC, GH, CM] 4. Fertilizer [IC, GH, CM, ID] 5. Fertilizer & Insecticide [IC, GH, CM] 6. Fertilizer & Fungicide [IC, GH, CM] 7. Fertilizer, Insecticide, & Fungicide [IC, GH, CM] 8. Pole pruner [GH] 9. Extra spraying service with any package containing insecticide or fungicide [CM] <p>NB: In Ghana, the situation changed mid-season. Farmers were originally offered the above list of packages. However, in July 2020, the Government of Ghana prohibited the distribution of fertilizer. As such, all contracts for fertilizer in Ghana have been cancelled and farmers reimbursed for that proportion of the package. Other products within the packages will continue to be distributed. Those farmers who only took fertilizer packages are not included in this number.</p> <p>Farmers must subscribe to one, or more, of the above packages with a different payment requirement depending on origin country:</p> <ul style="list-style-type: none"> • Côte d'Ivoire - 25% down payment • Ghana - 15% down payment • Cameroon - 30% down payment • Indonesia - farmers paid 100% outright (initially packages were offered on credit with a % down payment but no financial institution would approve the credit so farmers were asked to

		<p>pay 100% immediately). Alternatively, a farmer can decide to purchase the recommended products independently whilst receiving the support coaching services from BC. These farmers are still considered to have a Productivity Package.</p> <p>NB: In all cases, a 1-2% variation in payment is allowed.</p> <p>Brazil does not have a full productivity program and so is not included in scope for this KPI.</p>
3.7	53.04% of farmers who adopted a productivity package after having a Farm Business Plan	<p>This KPI is a measure of effectiveness of the Farm Business Plan process in converting the diagnostics into contracts for productivity packages. It is calculated by dividing the number of farmers who signed a contract for any of the productivity packages after having received a Farm Business Plan (as described in KPI 3.6) over the total farmers who have received a Farm Business Plan (as described in KPI 3.5), both between 1 September 2019 and 31 August 2020.</p> <p>Brazil does not have a full productivity program and so is not in scope for this KPI.</p>
3.8	2,155,041 cocoa seedlings distributed	<p>This indicator measures the total number of cocoa seedlings distributed on behalf of Barry Callebaut between 1 September 2019 and 31 August 2020. The cocoa seedlings come from either suppliers or community nurseries.</p> <p>In Ghana, a seedling is considered to be distributed when it reaches the farmer. The seedling is distributed from supplier to Purchasing Clerk and from Purchasing Clerk to the farmers.</p> <p>In Indonesia, a seedling is considered to be distributed when it is sold from the nursery. This could be either directly to a farmer (BC or non-BC) or to a government body or other organization who go on to give them to farmers.</p> <p>In Cameroon, a seedling is considered to be distributed when a farmer has received and signed the discharge form/receipt.</p> <p>In Brazil, the seedlings are considered to be distributed when the farmer collects them from the Nursery. These can be BC farmers or non-BC farmers. The evidence will be the invoice issued at this point.</p> <p>In Côte d'Ivoire, no cocoa seedlings have been distributed since the government of Côte d'Ivoire banned the distribution of improved cocoa varieties in May 2018. Hence Côte d'Ivoire is not in scope for this KPI.</p>
3.9	827 farmers have received support for income diversification	<p>This indicator represents the number of farmers who have received support for income diversification activities since the start of activities in 2018/19. Income diversification activities are non-cocoa packages and activities that diversify a farming household's income. This KPI is cumulative year on year. However, if a farmer receives support for more than one package, they are only included once. Upon receiving a product/training, the farmer signs a participation form to</p>

		<p>acknowledge receipt.</p> <p>In Ghana, these activities started in 2018/2019 and refer to receiving support with at least one of the following.</p> <p>Activities taking place in 2019/20</p> <ul style="list-style-type: none"> • Rabbits - farmers receive rabbits for breeding and meat; along with training • Poultry - farmers receive either a) cockerels for breeding, or b) chickens for laying and meat; along with training • Soap making - farmers receive training and support to form groups • Bee keeping - farmers receive training and bee keeping products <p>Activities that took place in 2018/19</p> <ul style="list-style-type: none"> • Soap making - farmers receive training and support to form groups • Vegetables - farmers receive vegetable seeds and training <p>In Cameroon, these activities took place in 2018/2019 and refer to support for one of the following:</p> <ul style="list-style-type: none"> • Growing of vegetables - farmers received seeds and training • Electricity generation (solar panels) - farmers received solar light systems on credit <p>There was only very low interest for these activities in Cameroon and so the activities were cancelled.</p> <p>There are no income diversification activities in Côte d'Ivoire, Indonesia, or Brazil.</p>
4.1	868 Village Savings and Loans Associations established	<p>This indicator refers to the number of Village Savings and Loans Associations (VSLAs) that have been established, by or with support from Barry Callebaut, until 31 August 2020. VSLAs are used as an opportunity to implement activities that support farmers further under the three pillars. For example, a VSLA can be used for income diversification projects (growing vegetables, etc.), community seedling projects (Thriving Nature) or it can be linked to activities in the communities where there has been a high risk of Child Labor where income generating activities (IGA) projects are run with a focus on women.</p> <p>In Côte d'Ivoire, SACO worked with CARE to support the establishment of VSLAs by starting the groups, which can be women only, men only or mixed. A VSLA is considered to have been established if:</p> <ul style="list-style-type: none"> • The VSLA group has received sensitization on the subject; • Farmers agreed and organized themselves to form a group to start savings; and

		<ul style="list-style-type: none"> • The group promoter has been recruited and trained. <p>In Ghana, VSLAs are formed with support from Solidaridad. Solidaridad will conduct training for our Technical Officers on the procedures, methodology and principles of VSLA formation. The Technical Officers will then form the VSLAs and Solidaridad will support with the group strengthening. In Nyonkopa VSLAs are also referred to as NSLAs with the "N" representing Nyonkopa in place of the "V".</p> <p>A VSLA group is considered to have been established based on the following criteria:</p> <ul style="list-style-type: none"> • A constitution has been signed; and • Group has met at least once (whether started savings or not). <p>In Cameroon, Barry Callebaut worked with Asseja to support the establishment of VSLAs either by starting the groups or changing existing community groups. Some are legal associations and others are informal. A VSLA is considered to have been established if training on the subject has been delivered to the group.</p> <p>The approach is different per origin due to the different sourcing structures and expertise in each country. In Côte d'Ivoire and Ghana, local team structure and set up in the field allowed for more independent setting up of VSLAs, with support from third party organizations where needed. However in Cameroon, local team expertise was missing and relied more heavily on the third party. Furthermore, in Cameroon the process of establishing VSLAs was more dependent on converting already existing groups than setting up new ones from scratch. The criteria for establishment was thus less detailed. Going forward, as the origins become more similar in expertise and setting up of new VSLAs, the methodology will be further aligned</p> <p>There are no VSLA activities in Indonesia and Brazil and so these are not in scope for this KPI.</p>
4.2	65.37% of Village Savings and Loans Association members are women	This indicator refers to the percentage of members in the VSLAs (as per KPI 4.1) who are women. This is calculated by identifying the number of women and dividing that by the total number of members in the VSLAs.
4.3	22,965 child labor cases identified	<p>A child is considered to be in child labor if they undertake work that deprives them of their childhood, their potential, and their dignity, as per the International Labour Organization (ILO) definition. Child labor refers to work that is mentally, physically, socially and/or morally harmful to children. It interferes with their schooling by:</p> <ul style="list-style-type: none"> - depriving them of the opportunity to attend school; - obliging them to leave school prematurely; or - requiring them to attempt to combine school attendance with excessively long and heavy work.

		<p>Within the concept of child labor are worst forms of child labor. This covers 4 major categories:</p> <ol style="list-style-type: none"> 1. all forms of slavery or practices similar to slavery such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labor, including forced or compulsory recruitment of children for use in armed conflict; 2. the use, procuring or offering of a child for prostitution, for the production of pornography, or for pornographic performances; 3. the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties; and 4. work which, by its nature or circumstances in which it is carried out, is likely to harm the health, safety or morals of children (known as hazardous work). <p>The specific criteria of child labor in each origin are outlined below.</p> <p>To identify cases of child labor, the process differs in each origin:</p> <p>In Côte d'Ivoire, child labor is defined according to ILO definition of Child Labor and hazardous child labor follows the Côte d'Ivoire CIV Decree N°2017-016 and 017 MEPS/CAB (2017), which is summarized in the ICI document Comparative analysis of child labor decrees in Cameroon, Côte d'Ivoire and Ghana. The data of the surveyed and observed children, from the CLMRS Child and CLMRS Farm surveys is analyzed following a semi-automated process, against the below criteria based on the above definition to determine if a child is in child labor or not:</p> <ul style="list-style-type: none"> • If the child has been involved in at least one task that has been designated as hazardous in the Côte d'Ivoire criteria, then the child is considered to be in child labor and as having participated in one of the worst forms of child labor. • If the type of work performed by the child is not listed on the hazardous activities as designated by the Côte d'Ivoire CIV Decree N°2017-016 and 017 MEPS/CAB (2017), the total amount of light work done by the child is calculated and compared against the maximum allowable hours for the age group of the child. <ul style="list-style-type: none"> ○ If the amount of hours work for 13-17 year old is found to be exceeding this limit for the defined age group, the child is considered to be in child labor. ○ All children 5-12 years of age who carry out light tasks (≥1hr/week) as part of an economic activity (paid or unpaid) are considered to be in child labor. ○ Children found below the age of 5 are removed from our CLMRS surveys, as these are believed to be input errors from the enumerator. • All other children who do not fall into these categories are considered to not be in child labor.
--	--	---

		<p>Based on the nature of the "causal factors" of the incidence of the child labor in the individual households, a remediation plan is charted out. Once the household where such cases are spotted and a remediation plan is in play, the CLMRS coach will revisit the household and perform a check on the status of the child, to determine if the child is still in child labor or not. Usually a case is followed 3 times, inclusive of the remediation activity, with at least 3 months apart for up to the next 12 months before there is enough evidence that the child is out of child labor.</p> <p>In Ghana, child labor is defined according to the ILO definition and hazardous child labor follows the Hazardous Child Labor Activity Framework for Ghana [HAF] (2016) , which is summarized in the ICI document Comparative analysis of child labor decrees in Cameroon, Côte d'Ivoire and Ghana. The data of the surveyed and observed children, from the CLMRS Child and CLMRS Farm surveys is analyzed following a semi-automated process, against the below criteria based on the above definition to determine if a child is in child labor or not:</p> <ul style="list-style-type: none"> • If the child has been involved in at least one task that has been designated as hazardous by the Hazardous Child Labor Activity Framework for Ghana [HAF] (2016), then the child is considered to be in child labor and as having participated in one of the worst forms of child labor. • If the type of work performed by the child is not listed on the hazardous activities as designated by the Ghana HAF (see also observation in section 4), the total amount of light work done by the child is calculated and compared against the maximum allowable hours for the age group of the child. <ul style="list-style-type: none"> ○ If the amount of hours worked for 13-17 year olds is found to be exceeding this limit for the defined age group, the child is considered to be in child labor. ○ All 5-12 year olds who carry out light tasks (≥1hr/week) as part of an economic activity (paid or unpaid) are considered to be in child labor. ○ Children found below the age of 5 are removed from our CLMRS surveys, as the enumerators and technical experts did not trust the data • All other children who do not fall into these categories are considered to not be in child labor. <p>In Cameroon, the approach explained below has been piloted as a "community model" under the comprehensive pilots. The Community Child Protection Committee (CCPC) census is conducted by the enumerators of the non-government organization (NGO), visiting all households in the communities (non-BC and BC supply chain related) and conducting a paper-based survey. The survey is conducted with the head of the household. The survey forms (hard copy) are kept by the CCPC and with the NGO, Asseja. Asseja enters the forms into Excel. Identification of child labor is determined by questions from the survey about the household member working and the type of work he/she conducts (HL6, HL7 and ED9-11). The responses are assessed to determine if a child is in child labor or not:</p>
--	--	--

		<ul style="list-style-type: none"> • If the child has been involved in a task that has been designated as hazardous by the definitions upheld by the Cameroon government, the child is considered to be in child labor and as having participated in one of the worst forms of child labor. • All other children who do not fall into the above category are considered to not be in child labor. <p>The data from the CCPC Census is collected and analyzed by the partner NGO and then shared with BC. BC then follows up to verify the location, the farmer and the child labor cases. BC logs all cases identified in the K-app under the CL Community Monitoring survey. This is entered by SIC Cacaos M&E. The survey is used as a case tracking tool. No further analysis is done.</p> <p>Methodology for analysis</p> <p>In Côte d'Ivoire:</p> <ul style="list-style-type: none"> • <13 years old - no work allowed. • 13-15 years old - only light work can be undertaken for a maximum of 2 hours per day on a school day, and 4 hour per day on a non-school day to a maximum of 10 hours per week during school term and 14 hours per week during school holidays; children between 13-15 cannot be employed. • 14-15 years old - Boys can carry 15kg, transport by railcart 500kg, transport by wheelbarrow 40kg, transport by vehicle with 3-4 wheels 60kg, transport by handcart 130kg, transport by tricycle carrier 50kg. Girls can carry 8kg, transport by railcart 300kg, transport by wheelbarrow 30kg, transport by vehicle with 3-4 wheels 35kg, transport by handcart or tricycle is prohibited. • 16-17 years old - normal/non-hazardous work, and employment, can be undertaken (apprenticeships possible from 14) for a maximum of 8 hours per day or 40 hours per week. Hazardous activities can be undertaken under the condition that i) their health, safety, and morals are guaranteed; and ii) that they have received a specific and adequate training or vocational training in relation to the activity. Boys can carry 20kg, transport by railcart 500kg, transport by wheelbarrow 40kg, transport by vehicle with 3-4 wheels 60kg, transport by handcart 130kg, transport by tricycle carrier 75kg. Girls can carry 10kg, transport by railcart 300kg, transport by wheelbarrow 30kg, transport by vehicle with 3-4 wheels 35kg, transport by handcart or tricycle is prohibited. • All: night work is prohibited for all children under the age of 18 between 7pm and 7am. • Over 18 years old is no longer considered a child.
--	--	---

		<p>Hazardous activities in cocoa are considered to be, according to the Côte d’Ivoire Decree #2017-016 and 017 MEPS/CAB (2017): Clearing of forest and felling of trees, removing tree stumps, digging holes, bush burning, manipulation of agrochemicals (sale, transportation, handling and application), using machetes/long cutlass for weeding or pruning, working with motorized farm machinery, harvesting overhead cocoa pods with sharp tools, breaking cocoa pods with sharp breaking knives, carrying heavy loads beyond permissible carrying weight, charcoal production, game hunting with a weapon, working long hours, night work.</p> <p>In Ghana:</p> <ul style="list-style-type: none"> • <5 years old - no work allowed. • 5-12 years old - socializing light work under adult guidance permitted. • 13-14 years old - only light work can be undertaken for a maximum of 2 hours a day and 14 hours a week; children between 13-14 cannot be employed. • 15-17 years old - normal/non-hazardous work, and employment, can be undertaken for a maximum of 8 hours per day and 42 hours per week. • All - night work is prohibited between 6pm and 6am. • All - can carry maximum 30% of body weight for walking distances up to 2 miles (3km); and up to 50% of body weight for short distances (i.e. less than 1km). • Over 18 years old is no longer considered a child. <p>Hazardous activities in cocoa are considered to be, according to the Ghana HAF (2016): Clearing of forest and felling of trees, removing tree stumps, bush burning, manipulation of agrochemicals (sale, transportation, handling and application), being present or working in the vicinity of farm during spraying of agrochemicals or re-entering a sprayed farm within less than 12 hours, using machetes/long cutlass for weeding or pruning, climbing trees higher than 2.5 meters to cut mistletoe or harvest or prune with sharp cutlass or implements, working with motorized farm machinery, harvesting overhead cocoa pods with sharp tools, breaking cocoa pods with sharp breaking knives, working without adequate basic foot and body protective clothing, carrying heavy loads beyond permissible carrying weight, working long hours, night work.</p> <p>In Cameroon:</p> <ul style="list-style-type: none"> • All - night work is prohibited between 8pm and 6am. • All - a child found to be working in hazardous work is in child labor. • What is hazardous work is defined by the Cameroun Decree #17 (27 May 1969). • Over 18 years old is no longer considered a child.
--	--	--

		<p>Hazardous activities in cocoa are considered to be, according to the Cameroon Decree #17 (27 May 1969): Manipulation of agrochemicals (sale, transportation, handling and application), working with motorized farm machinery, carrying heavy loads beyond permissible carrying weight, working long hours, night work</p> <p>In Indonesia, this KPI is not in scope for 2019/20 as CCPCs have just been established. In Brazil, there are no child labor monitoring program/systems yet in place.</p>
4.4	4,971 child labor cases under remediation	<p>Once a child labor case has been identified in our supply chain (as per KPI 4.3) it begins to go through a multiphase remediation process. To be remediated the case is 1) assessed to determine which remediation activity is most suitable for the type of child labor identified (the remediation plan, more details below); 2) the most relevant activity is carried out with the child or parents of the child; and 3) the case is monitored over a 12 month period to ensure the remediation activity has been successful. This process can take over a year and is explained in more detail per origin below.</p> <p>A child labor case is considered to be under remediation if the case was identified in the previous years, and it has a remediation plan and at least one remediation activity undertaken</p> <p>Remediation activities fall under various categories - awareness creation, items for the child, school/vocational training, Income generating activities (IGA) for parent/guardian, or community interventions.</p> <p>In Côte d'Ivoire, remediation activities are currently:</p> <ul style="list-style-type: none"> • Awareness raising: Mass sensitization, individual household sensitization. • Items for the child: School fees, birth certificates, wheelbarrow, shovel. • Schooling/Vocational training: bridging classes. <p>In Ghana, they are:</p> <ul style="list-style-type: none"> • Awareness creation: Mass sensitization, Individual household sensitization. • Items for the child: School uniform, Exercise books, School bags. • Schooling/Vocational training: Bakery & confectionery. • IGA Parent/Guardian: Soap making. • Community (other): Reading & learning clubs, child labor & environmental clubs. <p>In Cameroon, remediation activities are currently:</p>

		<ul style="list-style-type: none"> • Items for the children under 14: exercise books and mathematical sets, school bags, textbooks. • Children 14 and over: advice to parents to enroll child in vocational training. <p>The remediation process in each origin is as follows:</p> <p>In Ghana, remediation starts with:</p> <ol style="list-style-type: none"> 1. Data analysis through which cases are identified. This is done by local M&E in conjunction with the Community Development/Monitoring & Evaluation team and Global M&E teams. 2. Local M&E groups identified cases into their respective geographical areas with the number of cases for each area. 3. Terms of reference is developed for calls for proposals. 4. Requests for Proposals are sent out to potential NGOs with expertise in Child Labor remediation. 5. Potential partners submit proposals with remediation plans and budgets to go with. 6. Set criteria is used to select a partner who begins remediation by visiting communities to where cases have been identified to engage with key stakeholders such as traditional leaders and district regulatory agencies. 7. Community sensitization and awareness creation on child rights, child labor and child protection through sensitization workshops begins in the communities. 8. This is then followed by household awareness creation and sensitization. 9. Assessment of each individual child labor case is conducted to design a specific remedy. 10. Remediation interventions are developed for identified cases. 11. Remediation intervention for identified cases are then implemented. 12. Monitoring of cases are done after the implementation process. <p>In Cameroon:</p> <ol style="list-style-type: none"> 1. Cases are identified through direct questioning of the head of the household. This is done on paper and Information received is keyed into a database and analyzed. 2. From this, the number of children in child labor disaggregated by sex and age is known. 3. There are no individual remediation plans. 4. There is an operational procedure that guides steps to be taken for each case identified. 5. Cases of children in child labour below 14 years old are given school support. This is done by the partnering NGO, Child Protection Committee (CPC) and sometimes government authorities when necessary. 6. When children are handed kits, the parents sign discharge forms to acknowledge receipt.
--	--	--

		<ol style="list-style-type: none"> 7. There are then 3 follow up visits to ensure child's stability before remediation activity is considered closed. 8. Children above 14 years old in child labor, are placed in vocational training centers. 9. Forms are signed by parents (engagement letter) and the trainer (partnership agreement). 10. Based on the contract documents, the NGO has to keep all data confidential. Data concerning community can be shared with the CPC after analysis. 11. The NGO has remediation responsibility but works with the CPC since this is the first time they are involved in such activities. 12. The NGO keys data, puts in place the list of children in child labor which is verified by the BC M&E team, purchases and hands items for remediation to families of children in child labor, identifies vocational training centers and ensures children are placed and followed up. <p>In Côte d'Ivoire, remediation involves:</p> <ol style="list-style-type: none"> 1. Data analysis and child labor cases identification by the Community Development/Monitoring & Evaluation team. 2. Draft of global remediation plan elaboration and submission to client (COH or Hershey) by the Community Development/Monitoring & Evaluation team or ICI depending on the project. 3. Validation of the plan. 4. Implementation of: <ul style="list-style-type: none"> - Terms of Reference of each activity; - recruitment of NGO if necessary; - Set up of the activities; and - follow up of the remediation. 5. Remediation plans are developed by ICI (Hersheys/Mars), SACO (COH), COOP management/Child Labour Surveillance Committee (Mars pilot) and CCPC (Hersheys). In case of Hersheys the remediation plan is presented to the customer after which they should approve and it can be implemented. 6. If a farmer household leaves the supply chain after case identification or if the identified child turns 18 and is no longer considered to be a child, the case is no longer considered. <p>In Indonesia, this KPI is not in scope for 2019/20 as CCPCs have just been established. In Brazil, there are no child labor monitoring program/systems yet in place.</p>
4.5	335 identified child labor cases are considered remediated on the grounds the child has not be found performing child labor over 2 consecutive monitoring visits	A child labor case is considered to be remediated if the child declared that he has not been involved in any hazardous activities over the last 12 months (or the last 2 consecutive biannual follow up visits from the coaches) since the remediation activity has taken place. Generally visits are made between 3-6 months or if the child, during this time period from case identification to 31 August 2020, turned 18 and is no longer considered a child.

		<p>A case has thus been remediated, if the child declared that he has not been involved in any hazardous activities over the last 12 months (or the last 2 consecutive biannual follow up visits from the coaches) since the remediation activity has taken place. Revisits should take place between 3-6 months after the remediation activity or last follow-up visit. These visits are strategically timed, when occurrence is highest, which is mainly during harvest times and school holidays.</p> <p>After the case(s) have been remediated a household that has had child labor cases are monitored yearly for at least three consecutive years or until the child has turned 18 or the household is no longer supplying to BC. If the case needs to be reopened or if in these three years a new case comes up in the same HH, then the coop management, BC, CCPC and other relevant child protection related authorities will convene and decide if the household is to remain in BC supply chain or not and who will take up the remediation. If the decision is to exclude the household from the supply chain, the remediation in principle is to be taken up by the local child protection authorities. If the decision is to keep the household in the supply chain, BC will continue to actively support the child's remediation.</p> <p>If a farming household leaves the supply chain after case identification or if the identified child turns 18 and is no longer considered to be a child, the case is no longer considered.</p> <p>More information about remediation activities can be found in KPI 4.4.</p> <p>This KPI is not in scope for Ghana and Cameroon. In Ghana it is not in scope as the remediation activities have not been fully completed, and in Cameroon because child labor identification activities began there this season. In both origins therefore all cases are under remediation but not yet remediated. They will be in scope next year. In Brazil and Indonesia, child labor monitoring has not yet begun.</p>
4.6	39,909 farming households that have participated in a child labor identification monitoring survey	<p>This indicator refers to the number of cocoa farmer households who participated in the following survey interviews, in the year ended 31 August 2020, as part of the child labor monitoring and remediation activities.</p> <p>In Côte d'Ivoire and Ghana, they participate in a child labor identification survey. In Cameroon, they participate in a community census survey.</p> <p>Indonesia and Brazil are not in scope as child labor activities have not fully started in these origins.</p>
4.9	42.16% of farmer groups we directly source from that are covered by our child labor monitoring and/or remediation activities	<p>This indicator refers to the number of farmer groups we directly source from that are covered by our child labor monitoring and/or remediation activities as a proportion of all farmer groups we work with in our sustainability program (as per KPI 1.1). These activities may be child labor monitoring or remediation (as in KPIs 4.3, 4.4, 4.5, and 4.6).</p>

		<p>Indonesia and Brazil are not in scope as child labor activities have not fully started in these origins.</p>
4.10	<p>32% volume sourced from third party suppliers where Barry Callebaut considers that the risk of child labor is adequately addressed</p>	<p>A “third party supplier” is a supplier of an ingredient which is needed for making chocolate with whom Barry Callebaut does not work in the direct sourcing business. The ingredients assessed include cocoa, sugar (beet and cane), dairy, flavors, and fats.</p> <p>Assessment of risk for origins and suppliers</p> <p>The risk score is assessed by Maplecroft risk rating score, triangulated with the US DOL and Verité all of whom are globally credible organizations who maintain databases identifying risks or actual instances of goods being produced with child labor. These resources are used to create a cross referenced ingredient and origin risk determination. Maplecroft risk rating is used to determine the level of risk. Verité’s Atlas and US DOL’s List of Goods Produced with Forced and Child Labor are then checked to confirm if Maplecroft’s risk rating misses any of the countries and ingredients listed in these two respected documents.</p> <p>We also segment risk within countries where feasible based on local legislation enforcement as well as private sector initiatives to eliminate and prevent child labor. For example, child labor in the Brazilian sugarcane sector is a high risk in the northeast production area, while it is low to no risk in the Center South. This is due to state regulation and enforcement as well as the professionalization of the Center South industry as compared to the more traditional Northeast industry.</p> <p>BC has considered the adequacy of child labor risk being addressed if:</p> <ul style="list-style-type: none"> • Ingredients sourced from low risk countries or regions have a risk score >5; or • Ingredients sourced from high risk countries or regions having a risk score of 5 and below (e.g. cane sugar from Mexico, cocoa) are certified and have a child labor monitoring system. The child labor monitoring system can be part of the certification or be an add-on to the certification. <p>For this fiscal year, the risk identification of third party suppliers for non-cocoa ingredients is only based on geographic risk and does not assess whether a supplier has a child labor monitoring system in place, hence only volumes from third party suppliers with a low risk score have been included.</p> <p>Medium to high risk origins - additional considerations</p> <p>We recognize Bonsucro, Proterra, RTRS, UTZ, Rainforest Alliance, and RSPO as certifications that effectively audit for the absence of child labor. In addition to monitoring prevalence of child labor during the audit, the UTZ standard (and Rainforest Alliance as of June 2020)</p>

		<p>requires that suppliers have a child labor monitoring system in place. Therefore for cocoa, where the risk of child labor is high, a certified UTZ supplier is considered to have a child labor monitoring system in place when having successfully passed the UTZ audit. The other certifications mentioned here are only considered when accompanied by a supplier specific and verified child labor monitoring system.</p> <p>Low risk origins - additional considerations</p> <p>Should an incident of child labor occur in a supply region that is rated as low, BC will:</p> <ul style="list-style-type: none"> • Engage suppliers in the region to understand the situation and frequency of child labor. • Work with suppliers to develop and/or implement child labor prevention and remediation processes. • Remove suppliers from sourcing pool for those who refuse to collaborate to prevent child labor in low risk regions. • Adjust risk rating until there is high confidence that systems are in place to prevent child labor.
5.1	34% of sourced raw materials are demonstrated not to be contributing to deforestation	<p>A raw material is demonstrated not to be contributing to deforestation if the place where it was grown is not located within a Protected Area (as defined by the host government and / or the Cocoa and Forest Initiative guidelines). Raw material refers to any ingredient used for chocolate production (e.g. cocoa, sugar, dairy, vanilla, hazelnuts). All volumes represent actual sourced volumes for chocolate or chocolate compound production in the year ended 31 August 2020.</p> <p>Barry Callebaut applies a risk-based approach to perform this calculation. All ingredients are assessed on the level of their origin, i.e. countries. For country/commodity risk assessment, Maplecroft risk assessment database is used. If an ingredient has a score of 5 or above, then sourced volume from a respective country is demonstrated as not contributing to deforestation. Non-cocoa ingredients are considered sourced at the delivery date between 1 September 2019 and 31 August 2020.</p> <p>For cocoa, Maplecroft high risk score is adjusted to include score 6 due to the high profile of cocoa. Where country-specific information is not available for an ingredient, Barry Callebaut applies risk ratings from a representative proxy country. For ingredient/origin combinations close to the cut-off an expert assessment may be conducted and can lead to manual adjustments based on Barry Callebaut’s experts and their specific knowledge of the commodities, whereby a score of between 5-6 (6-7 for cocoa) may still be classified as high risk. In the year ended 31 August 2020, all cocoa sourced volumes are at high risk of deforestation.</p> <p>Additionally, all high-risk ingredients counted as demonstrated not to be contributing to deforestation need to be certified. This year this</p>

		<p>applies for cocoa only as non-cocoa high-risk ingredients are not considered for this calculation.</p> <p>Cocoa is considered sourced at the posting date between 1 September 2019 and 31 August 2020. Sustainably sourced cocoa is considered that which comes from certified or verified sustainable sources. Cocoa certifications considered sustainable in this context are: Rainforest Alliance, UTZ, Fairtrade, Fair for Life, Mondelez, Cocoa Horizons, Organic and any combination of those.</p> <p>For high-risk ingredient/origin combinations, volumes count as not contributing to deforestation if they are traceable to a low-risk area (on subnational level) or if we have additional safeguards in place (on an individual level). Additional safeguards mean traceability and monitoring of forest loss/deforestation alerts. The level of traceability, as well as maps and tools used for sub-national risk assessments vary by ingredient. In the fiscal year 2019/20, only cocoa volumes directly sourced from our sustainability programs were assessed on a subnational and individual level. In other words, no high-risk non-cocoa ingredients could be demonstrated as not contributing to deforestation.</p> <p>For cocoa, we are using our own GPS mapping as an additional safeguard for high risk cocoa areas on a subnational or individual level. Barry Callebaut identifies the location of Protected Areas by using data from a variety of sources, including the WDPA (World Database of Protected Areas). Barry Callebaut is following the guidance by the respective national governments, forest ministries and the work in progress by the multi-stakeholder Cocoa and Forest Initiative (Côte d’Ivoire & Ghana):</p> <ul style="list-style-type: none"> • Côte d’Ivoire: Following WCF guidance, all National Parks, Reserves and Classified Forest 1 are considered as Protected Areas. As the Forest Ministry’s decree on the Classified Forests has yet to be finalized and enforced, the situation, guidance and categorization of the different Classified Forests remains highly unclear. Nevertheless, as a prudent measure, Classified Forest 1 which is described as under strict protection is considered a Protected Area as well, as some forests from this category could be classified as parks or reserved in the future. Barry Callebaut is continuing to engage with the Ivorian government to gain more clarity on the boundaries of Classified Forests and agree on actions to be taken in our supply chain, which may result in updates to our methodology in the future. • Ghana: National Parks, Resource Reserves and Wildlife Sanctuaries. • Cameroon: National Parks, Forest and Wildlife Reserves, and Sanctuaries of fauna and flora. • Indonesia: National Parks. • Brazil: National Parks.
--	--	--

		<p>Cocoa volume sourced from farmers who are members of cooperatives where Barry Callebaut has its sourcing presence, is matched with cocoa farm mapped polygons (currently available only for COH cocoa volumes). If there is at least one farm polygon map which is within a Protected Area, then the whole volume delivered by a given farmer is rejected as not demonstrated to be not contributing to deforestation. If polygons of cocoa farms are located outside of a Protected Area, then sourced cocoa volume from these farmers is demonstrated not to be contributing to deforestation.</p> <p>The actual calculation is as follows:</p> <p>(Certified raw materials from low risk countries + Certified COH cocoa from high risk countries traced to cocoa farms located outside of a Protected Area) / (all Sustainable + Conventional sourced raw materials)</p>
5.2	72.33% of farms have a GPS map	<p>This indicator is calculated by dividing the total number of mapped cocoa farm polygons available for all active farmers by the total number of cocoa farms. The total number of cocoa farms is calculated for all active farmers in our sustainability program.</p> <p>With the exception of Brazil, the actual total number of cocoa farm plots in our supply chain remains unknown until we have completed all mapping. Thus, to calculate the total number of active cocoa farm plots in our supply chain, an average number of cocoa farm plots is taken across two to three main data sources depending on origin (as below) and multiplied by the total number of active farmers in our sustainability programs. The percentage is calculated by dividing the total number of cocoa farm polygons already mapped (1 per farm plot) by the calculated total number of cocoa farm plots in our supply chain.</p> <p>In Côte d’Ivoire and Ghana, the total number of cocoa farm plots is calculated by taking an average across three data points:</p> <ol style="list-style-type: none"> 1. Average number of cocoa plots declared per farmer from the census survey up to 31 August 2020. 2. Average number of cocoa plots already mapped per farmer up to 31 August 2020. 3. Average number of cocoa plots per farmer identified by the World Cocoa Foundation’s Cocoa Action program (to which Barry Callebaut is a contributing member) in 2018 and 2019 combined. <p>In Cameroon and Indonesia, the total number of cocoa farm plots is calculated by taking an average across the first two data points. Cocoa Action does not include these origins.</p> <p>In Brazil, farmers need to do a mandatory registration of all their cocoa plots in order to sell cocoa to BC. Therefore, the total number of cocoa plots in our Brazil supply chain is known.</p>

5.4	52,558 farms are at risk of sourcing from protected areas	<p>This indicator is calculated by summing all of the mapped farms in Côte d'Ivoire, Ghana and Cameroon which are within 25km of a Protected Area.</p> <p>Protected Areas are identified by using data from a variety of sources, including the WDPA (World Database of Protected Areas). Barry Callebaut is following the guidance by the respective national governments, forest ministries and the work in progress by the multi-stakeholder Cocoa and Forest Initiative (Côte d'Ivoire & Ghana):</p> <ul style="list-style-type: none"> • Côte d'Ivoire: Following WCF Guidance, all National Parks, Reserves and Classified Forest 1 are considered as Protected Areas. As the Forest Ministry's decree on the Classified Forests has yet to be finalized and enforced, the situation, guidance and categorization of the different Classified Forests remains highly unclear. Nevertheless, as a prudent measure, Classified Forest 1 which is described as under strict protection is considered a Protected Area as well, as some forests from this category could be classified as parks or reserved in the future. Barry Callebaut is continuing to engage with the Ivorian government to gain more clarity on the boundaries of Classified Forests and agree on actions to be taken in our supply chain, which may result in updates to our methodology in the future. • Ghana: National Parks, Resource Reserves and Wildlife Sanctuaries. • Cameroon: National Parks, Forest and Wildlife Reserves, and Sanctuaries of fauna and flora. <p>This assessment is done by calculating the nearest distance from a farm of a farmer to such a protected area, and checking whether it falls within a distance of 25 km.</p> <p>Indonesia and Brazil are excluded in this KPI as effort is focused on those areas currently, or likely to be, covered by the Cocoa Forest Initiative (CFI).</p>
5.6	243,683 active farms with a GPS map in FY 2018/19	<p>This indicator relates to the number of active farms which have been mapped up until the year ended 31 August 2019.</p> <p>Mapping is performed by Barry Callebaut staff, or by external consultants appointed by Barry Callebaut, using a GPS tracker and the data is uploaded to Barry Callebaut's cloud-based solution, Katchilè.</p>
6.1	7.8 million tons of CO ₂ e – the carbon footprint of our supply chain from farm to customer	<p>An organisational carbon footprint is defined as the total emissions caused by all activities of Barry Callebaut. The company uses a tailored tool developed together with experts from Denkstatt GmbH, which includes calculation for Scope 1 - 3 emissions in line with the GHG Protocol. All 7 gases as defined by the Kyoto Protocol are included in this calculation.</p> <p>Barry Callebaut is looking at the carbon footprint created by its own operations, called scope 1; the carbon footprint generated by the energy used, scope 2; as well as the carbon footprint of its entire supply chain, scope 3, which also includes the production and</p>

		<p>processing of all the raw materials sourced and their related land use changes (LUC). Barry Callebaut measures its CO₂e footprint along the entire supply chain. The areas include:</p> <ul style="list-style-type: none"> • Cocoa farming and production • Non-cocoa ingredients production • Transport of ingredients, products, and employee flights • Operation of cocoa factories, chocolate factories, and specialty factories • Packaging and offices <p>1. Cocoa farming and production Carbon footprint from cocoa farming and production includes the following areas: Direct land use change (LUC), indirect LUC and cocoa farming. These areas cover the following steps in calculation and Barry Callebaut relies on the following data sources:</p> <p><u>Direct LUC</u> The calculation of direct LUC consists of the quantification of total net carbon loss on cocoa land, the allocation of net carbon loss to cocoa and other crops, and the depreciation of cocoa specific carbon loss over year 5 to 50 (there are no cocoa crops in year 1-4). Where source data is unavailable, academic literature and the Global Forest Watch data is used.</p> <p>The LUC emission factors for direct and indirect cocoa sourcing in Côte d'Ivoire, Ghana, Cameroon, and Indonesia have been obtained from Quantis, a third party consultant, while the ones for Brazil and Ecuador have been obtained from Denkstatt.</p> <p>For other origins an assumed carbon emissions factor of 2.38 kg CO₂e / kg cocoa is applied for cocoa farming LUC and deemed reasonable based on sensitivity analyses performed.</p> <p><u>Indirect LUC</u> Carbon emissions from indirect LUC refer to cocoa farms established on other cropland if the substituted crops are not contracting globally (i.e. stable or increasing production volumes).</p> <p>Cocoa farming: The activities related to cocoa farming, production and the usage of fertilizers constitute the relevant carbon footprint.</p> <p>The highest uncertainty is related to the share of farms in a given country which have:</p> <ol style="list-style-type: none"> 1. trees younger than 21 years (and have up to 17 productive years); and
--	--	--

		<p>2. have been established on natural (forest) land. Barry Callebaut assumes 16 productive cocoa years within the 20-year lifetime of a cocoa tree.</p> <p>The final numbers for the sourcing categories in the different origins are given below and can be used as an emission factor in carbon accounting.</p> <p>2. Non-cocoa ingredients production Barry Callebaut considers the following ingredient groups in its carbon footprint model: dairy, sugar (beet and cane), oils and fats, sweeteners, nuts, additives, specialties, emulsifiers, flavors and others. Carbon footprint impacts of ingredients are always calculated by multiplying volumes of specific materials with suitable GHG emission factors.</p> <p>For relevant dairy, sugar, oils and fats, and emulsifiers ingredients, the model differentiates between countries of origin, or between specific suppliers, or between conventional, organic, and volumes which are sustainably certified. LUC impacts are considered for dairy, sugar, oil and emulsifier ingredients where relevant.</p> <p>Where specific conversion factors are available, they are used, but in their absence the emission factors are extrapolated from factors for other ingredients in the same subgroup.</p> <p>Sources for emissions factors are the World Food LCA Database (WFLDB) for dairy, sugar, and oils and fats, and Ecoinvent version 3.4 for the rest of the ingredients.</p> <p>3. Transport For transporting cocoa and chocolate, Barry Callebaut has developed a refined tool for calculating the carbon footprint of cocoa and chocolate transportation. It combines specific data on distances, transported volumes, transport modes (ship, truck type, liquid / solid, standard / solid cooled), and payload utilization of trucks, with GHG emission factors which are calculated for each specific transport situation.</p> <p>Furthermore, Barry Callebaut uses a “transport coefficient model”, which allows the calculation of GHG emission factors for each specific truck transport situation, linked to truck size, actual payload utilization, and share of empty trips. Emission factors are calculated for standard, heated and cooled trucks. The transport coefficient model also lists GHG emission factors for train transports and ship transports. Emission factors from Ecoinvent version 3.4 are used for the calculation.</p> <p>For transportation of cocoa beans and non-cocoa ingredients, Barry Callebaut uses annual sourced volumes, and for cocoa beans also</p>
--	--	---

		<p>refers to the mix of origin countries.</p> <p>4. Operation of cocoa factories, chocolate factories and specialty factories</p> <p>Carbon footprint represents the energy consumption of factories for cocoa processing, chocolate production and specialty production). Supplier-specific electricity mixes are considered where available; otherwise country mix is applied for all factories. Energy elements considered for the carbon footprint calculation are collected on a factory level and include electricity (non-renewable and renewable sources), fuel, gas, steam, heat and water.</p> <p>Barry Callebaut uses a list of standard CO₂e factors for energy use in all factories. The reference databases are Ecoinvent version 3.4 and IEA 2017 (International Energy Agency).</p> <p>The BC carbon footprint model is (besides other inputs) based on data provided by BC factories (via different reporting tools) regarding</p> <ul style="list-style-type: none"> - volumes processed (cocoa beans; cocoa and non-cocoa ingredients); - energy consumed; and - products delivered. <p>A mass balance check on the volumes of cocoa from cocoa factories and chocolate factories ensures that inputs and outputs are sufficiently consistent.</p> <p>If a factory is closed or sold to new owners, then the respective data are no longer part of the various reporting systems. If a new factory is acquired or starts to produce, data is considered as soon as it is reported/available. Generally, the first data which is being monitored is the reporting of volumes and sales, with the data on energy following after. We performed a sensitivity analysis of the carbon impact by energy of our biggest chocolate (Wieze) and cocoa (Pasir Gudang) factories and found that the impact in relation to the entire corporate carbon footprint is not material. i.e. <0.65% (cf. fiscal year 18/19). Therefore, no energy data estimations and or extrapolations are made for the carbon footprint in 19/20.</p> <p>5. Packaging and offices</p> <p>Packaging and offices make up the residual balance of Barry Callebaut's CO₂e footprint.</p> <p><u>Packaging</u></p> <p>The volume of packaging is obtained from sourced data and multiplied by the Global Warming Potential (GWP) obtained from Ecoinvent version 3.2.</p> <p><u>Offices</u></p> <p>The office CO₂e footprint consists of domestic and international</p>
--	--	---

		<p>flights, and office electricity and gas use based on office areas in Zurich, Chicago and Singapore. The relevant GWP is obtained from Ecoinvent version 3.2.</p> <p>Re-baselining Barry Callebaut re-baseline figures if there is a material change in the methodology applied within the model, or if updates to the emissions factors have a material impact on the results.</p>
6.2	3.73 CO2 equivalent intensity per ton of product	<p>This indicator is calculated as follows:</p> <p>The total carbon footprint reported in KPI 6.1 is divided by the total volumes of cocoa and chocolate products sold to third parties in the year ended 31 August 2020. The total volume sold to third parties is the volume as reported by the Barry Callebaut Group, audited by KPMG annually, and reported in the Barry Callebaut Annual Report.</p> <p>Note that this intensity result is before factoring in the scope 3 emission removals and reductions outside boundary which have been Gold Standard certified by SustainCERT, a third party certification body. The Certification documentation can be found on the Gold Standard Impact Registry.</p>
6.3	23 factories using only renewable electricity sources	<p>A factory is considered to be using renewable electricity sources if more than 99% of electricity used at the factory comes from renewable sources (e.g. hydroelectric) as at the year ended 31 August 2020. Barry Callebaut acknowledges a residual risk of electricity consumption coming from conventional sources from the energy suppliers.</p>
6.5	3,258 cookstoves distributed to farmers	<p>This indicator measures the number of cookstoves distributed to farmers between 1 September 2019 and 31 August 2020 in our sustainability program (as per KPI 1.1).</p> <p>In Côte d'Ivoire, a cookstove is considered distributed if a farmer has signed for it. This is in the form of a receipt.</p> <p>In Ghana, the cookstoves are distributed from the supplier to the Purchasing Clerk and then further to the farmer. A cookstove is considered distributed when the farmer has signed the distribution sheet.</p> <p>There was no cookstove distribution this year in Cameroon, Indonesia, or Brazil. As the program scales, Barry Callebaut will look to expand the activity in other origins.</p>
6.5a	5,275 cookstoves distributed to farmer groups	<p>This indicator measures the total number of cookstoves distributed by Barry Callebaut to farmer groups between 1 September 2019 and 31 August 2020. Once received by the farmer groups, the farmer groups then go on to distribute the cookstoves to farmers as per KPI 6.5.</p>
6.6	1,296,788 shade tree seedlings distributed to farmers	<p>This indicator measures the total number of shade tree seedlings distributed by Barry Callebaut between 1 September 2019 and 31 August 2020. The seedlings come from either suppliers or community nurseries.</p>

		<p>A shade tree is a tree whose primary purpose is to provide shade for other crops, especially cocoa. They are usually fast growing and planted at intervals on a cocoa plot to help protect cocoa trees from the sun and retain moisture. Usually the shade tree seedlings distributed are a mix of varieties, and some can have the secondary purpose of providing fruits e.g. plantain. These are distributed as young seedlings.</p> <p>In Côte d’Ivoire, a seedling is considered to be distributed when it reaches the farmer. Upon receipt, the farmer signs or finger prints a distribution list.</p> <p>In Ghana, a seedling is considered to be distributed when it reaches the farmer. The seedling is distributed from supplier to Purchasing Clerk and from Purchasing Clerk to the farmers. Upon receipt, the farmer signs or finger prints a distribution list.</p> <p>In Indonesia, a seedling is considered to be distributed when it is sold from the supplier's nursery. This could be either directly to a farmer, to a government body or other organization, who then gives them to farmers.</p> <p>In Cameroon, a seedling is considered to be distributed when a farmer has received and signed the discharge form/receipt.</p> <p>There is no shade tree seedling distribution in Brazil, hence this KPI is out of scope for Brazil.</p>
6.6a	1,683,306 shade tree seedlings distributed to farmer groups	<p>This indicator measures the total number of shade tree seedlings distributed by Barry Callebaut to farmer groups between 1 September 2019 and 31 August 2020. Once received by the farmer groups, the farmer groups then go on to distribute the seedlings to farmers as per KPI 6.6.</p>
7.1	222,477 farmers trained	<p>A farmer is considered to have received training if they have attended at least one training session for the following modules within the year from 1 September 2019 to 31 August 2020. A farmer is only counted once regardless of the number of trainings they have attended.</p> <p>In Côte d’Ivoire, the following trainings are spread over a 2-year program:</p> <ul style="list-style-type: none"> • Analyzing the situation • Planting • Integrated pest management (weeds, pruning, cleaning) • Mineral fertilization • Traceability and quality • Integrated pest management (diseases and pests of cocoa) • Swollen shoot, brown rot and control of mirids • Fighting child labor • Nurseries and replanting • Cultural calendar • Compost • Health and hygiene, health and security

		<ul style="list-style-type: none"> • Fighting erosion, protecting the environment, association of trees and cocoa, waste management • AIDS and Malaria • Nutrition • Farm services and farm development plans • Gender and social aspects <p>In Ghana, training modules include:</p> <ul style="list-style-type: none"> • Good Agronomic Practices • Integrated Pest Management • Quality and traceability • Health and safety • Child labor • Social issues • Environmental protection <p>In Cameroon, training modules include:</p> <ul style="list-style-type: none"> • Child and labor • Social and help • Good agricultural practices • Environment <p>In Indonesia, the following trainings are spread over a 4-year program:</p> <ul style="list-style-type: none"> • A1- Code of conduct and traceability • B1- Pruning, sanitation and fertilizer • B2- Pest and disease and IPM • B3- Yield estimation and post harvest • B4- Farm rehabilitation • B5- Farm development plant/ coaching farm • C1- Child labor and general farm working condition • D1- Environment and biodiversity • D2- Safe use of pesticide and hazardous material • E1- Good finance practices • E2- Good nutrition practices <p>In Brazil, training modules include:</p> <ul style="list-style-type: none"> • Rights and duties of the producer and rural worker (including child labor) • Occupational health and safety • Environmental protection
7.1a	94,946 farmers trained on child labor	This indicator represents the number of farmers in Côte d'Ivoire, Ghana, Cameroon, Indonesia, and Brazil who have attended at least one training session which includes the topic of child labor in cocoa farming communities.