







IMPRESSUM:

Publisher: Südwind, Laudongasse 40, 1080 Wien, Austria

Published: Innsbruck, March 2016 - 1st Edition

Responsible for the content: Caroline Sommeregger (Südwind), Martin Wildenberg (GLOBAL 2000)
Contributions: Mike Anane, League of Environmental Journalists (Ghana) and the Faculty of Agronomy and Agricultural

Sciences, University of Dschang (Cameroon)

Pictures/Copyright: © Martin Wildenberg/GLOBAL 2000 (Cover picture, p.10, No. 1/3/4/7/8, p.22,34,35,40), © Caroline Sommeregger/Südwind (p.10 No. 5/6; p.16,19,27,41,42,56), © Mike Anane, League of Environmental Journalists (p.30,31), © Samuel Boateng/laif/ picturedesk.com (p.10, No.2), © Daniel Rosenthal/laif/picturedesk.com (p.17)

Layout: Augustin medien&design, Zirl

Contact: caroline.sommeregger@suedwind.at, martin.wildenberg@global2000.at



This publication has been produced with the assistance of the European Union within the project "Supply Cha!nge – Make Supermarkets fair". The contents of this publication are the sole responsibility of Südwind and Global 2000 and can in no way be taken to reflect the views of the European Union.



Contents

1. Introduction	5
1.1 Methods and Sources	6
2. From Cocoa to Chocolate – Fast Facts	7
2.1 Growing Desire for Sweet Treats: Demand and Supply	
2.2 Main Cocoa Producing Countries	
2.3 Cultivating Cocoa: the Aztecan Tree of the Gods	
2.4 Cocoa and Agro-Forestry: Benefitting Humans and Nature	
2.5 Making Chocolate	
3. The Economy of the Cocoa Supply Chain: Benefitting the Few	
3.1 Tough Competition with many Losers	13
3.2 Low and Volatile Prices with High Social Costs	14
4. Social and Environmental Challenges in the Cocoa Sector	
4.1 Poverty	
4.2 Exploitation of Farm Workers and Child Labour	
4.3 Women in the Cocoa Sector	
4.4 Deforestation and Land Use Change	
4.5 Pesticides	
4.5.1 Pesticide Residues on Store Brand Chocolate in Austria	
4.6 Climate Change	27
4.6.1 The impact of chocolate on climate change – carbon footprint of chocolate	28
5. Ghana –Perspectives from Within	
5.1 (In)formal Gold Mining and Cocoa Farming: A difficult coexistence	
5.1.2 Gold-Mining: (Forced) Relocation of Cocoa Farmers and Environmental Damage	
5.1.3 The case of Anglo Gold Ashanti Iduapriem Mine in Tarkwa	30
5.1.3.1 Testimonies of Cocoa Farmers affected by AngloGold Ashanti Mining	
Operations	31
6. Cameroon –Perspectives from Within	33
6.1 Fast Facts	
6.2 Cocoa production in Cameroon	
6.3 Challenges in the cocoa sector	
6.4 Cocoa Institutions and companies in Cameroon	
6.5 Production levels and trends	36
6.6 Quality and Certification	
6.7 The Liberalization of the Cameroonian Cocoa Market under the Structural Adjustment	Ī
Programmes	38
6.7.1 Structural Adjustment Programmes: How Mainstream Economic Theory Failed	38
6.8 Farmers Organization in Cameroon	41

7. Role of Retailers and Store Brands	43
7.1 The Logic of Store Brands	43
7.2 Unfair Trade Practices (UTPs)	44
7.3 The responsibility of retailers	45
7.4 Retailer strategies towards cocoa in Austria and beyond	46
8. SOLUTIONS	49
8.1 Certified Cocoa and Label Check	49
8.1.1 Certification Bodies and World Fair Trade Organization	49
8.1.2 Certified Cocoa	51
8.1.3 Label Check	51
8.2 The role of governments	55
8.2.1 Government policies using the example of Ghana	55
8.3 Farmer empowerment through organizing	55
8.4 International Cooperation – World Cocoa Conference	57
8.5 Developments in producing countries	57
8.7 Civil society initiatives	58
8.8 Industry Initiatives and commitments of companies	58
9. Call for Change!	60
9.1 What You Can do as a Consumer and Citizen	
9.2 Demands for Supermarkets	61
9.3 Demands for the European Union and EU National Governments	61
10. Annex	62

Bittersweet Chocolate:

The Truth Behind the International Chocolate Industry

1. Introduction

Executive Summary: download the original report at www.supplychainge.org

The production and sale of food and drinks generates billions of Euros worldwide. Corporations that produce on a large scale, and lately retailers, control the market and receive the biggest share of the revenues. However, when it comes down to taking responsibility for the working and environmental conditions along the supply chain, these corporations stress that they are under no legal obligation to act. Retailers also often claim that they are merly fulfilling their customers' demands, denying their own influence on shaping the very same demands through massive marketing, using their market power to maximize profits in the first place.

Market mechanisms currently described as unfair trade practices cause human and workers' rights violations, as well as long-lasting environmental damage. Large and economically powerful multinational companies assert considerable influence on national legal frameworks, meaning that their own focus on profit maximization leads to laws protecting short term corporate profit while denying or externalizing environmental and health costs to society.

The SupplyCha!nge project brings together a group of civil society organizations from across Europe and the Global South. The main objective is to make supermarket store brands (sometimes known as 'own brands' or 'private labels') fairer and more sustainable.

We know that thus far supermarkets are not doing enough to counter these problems. Compared to their enormous influence, efforts of supermarket chains to prevent human rights violations and to reduce environmental damage along their product supply chains are often disappointing.

Why Cocoa?

Despite cocoa beans being a global commodity feeding the chocolate desires of industrialised nations, the production is still largely in the hands of millions of small holders. Cocoa provides the livelihood of over 5 million farmers worldwide. Further up the supply chain concentration processes have led to a mere handful of companies dominating the market.

This report takes a look behind the curtain of the international chocolate industry, uncovering the massive imbalances in the sector as well as the social and environmental challenges that cocoa producers are facing. Our geographical focus lies on West Africa - specifically Ghana, Ivory Coast and Cameroon - as most of the cocoa processed in Europe originates there. The report covers the most important stages in the chocolate supply chain, focusing both on one of its most powerful actors - the supermarkets - as well as on the most vulnerable group of participants: cocoa farmers, (migrant) farm-workers, children and especially women. It highlights the environmental problems of cocoa production, deforestation and pesticide use, their causes and consequences, and points to possible solutions. It presents an analysis of pesticide residues found on 41 Austrian chocolate bars and Easter Bunnies and an overview of the sustainability programmes of Austrian retailers towards cocoa. Besides the social problems, as poverty, child labour and exploitation of farm-workers, it highlights the environmental problems of cocoa production, deforestation and

pesticide use, their causes and consequences, and points to possible solutions. It presents an analysis of pesticide residues found on 41 Austrian chocolate bars and Easter Bunnies and an overview of the sustainability programmes of Austrian retailers towards cocoa. It also highlights two special issues concerning cocoa production in Ghana and Cameroon: the interaction between gold mining activities and cocoa in Ghana and the consequences of the World Bank"s Structural Adjustment Programs on the cocoa sector in Cameroon.

Furthermore, different solutions, from certified cocoa (including a label-check) to initiatives of the industries, are presented. The report closes with demands on different actors and policy-makers, recommendations for chocolate consumers, and includes a label-check.

The value chain of chocolate is very complex, opaque and characterized by a massive imbalance in the market at the expense of small-scale farmers. The impoverishment of cocoa farmers, exploitation of workers, child labour and environmental impacts are the main characteristics of today's chocolate industry.

1.1 Methods and Sources

This report builds on the Fact Sheet of the Make-Chocolate-Fair! Campaign, on the Cocoa Barometer 2012 and 2015, "The fairness gap report" by the International Labor Rights Forum (2014) and other published scientific literature.

Current data and new findings presented in the report are based on ongoing qualitative and quantitative research conducted in Ghana and Cameroon in 2015 and 2016 by the League of Environmental Journalists (Ghana) and the Faculty of Agronomy and Agricultural Sciences, University of Dschang (Cameroon), both project partners of the "Supply Cha!nge - Make Supermarkets Fair" project. Additionally, a field study was conducted by Südwind and Global 2000 during a research trip to Ghana and Cameroon in November 2015.

We would like to thank specifically all the men and women who contributed to this work, either by giving interviews or sharing their views and information. Special thanks to Afia Asamoa Owusu, Eric Cudjoe, Christopher Tankou, Patrick Sama-Lang, Mike Anane, Joseph Oben Ako and many more.

2. From Cocoa to Chocolate - Fast Facts

2.1 Growing Desire for Sweet Treats: Demand and Supply

Chocolate is one of the most popular and widely consumed confectionaries in the world, and has become a product of mass consumption: the average European and US-American consumes 5.2 kilograms of chocolate each year! Europe and the US account for more than 47% and 20% respectively of global sales. Austrians and Germans consume about 9 kilograms of chocolate per person per year, which makes them the European forerunners in terms of chocolate consumption.² More than three-quarters of consumer chocolate is supplied by supermarkets.3

How much Chocolate do I eat?

If you were to eat a regular sized chocolate bar with 43g every day, your consumption would be 15.7kg per year.

The processing of cocoa beans is predominantly undertaken in Europe and North America with the Netherlands and the USA being the top countries. There has, however, been a steady increase in other countries, and since 2003/04 the Ivory Coast has become the world's third largest cocoa processor. Beside North America and Europe, markets in Asia and South America are growing as well. By 2016, the global chocolate market is estimated to be worth \$98.3 billion. The market is dominated by large multinational confectionery companies, which promote their brands in all the major consumer countries.4

While chocolate is growing in popularity, little attention is paid to where the primary ingredient cocoa comes from and under which conditions it is produced.

2.2 Main Cocoa Producing Countries

70% of the world's cocoa beans come from four West-African countries – Ivory Coast, Ghana, Nigeria and Cameroon (see fig. 1). Ivory Coast is by far the largest cocoa producing country, providing more than one third of the traded cocoa in the world. Ghana, as the second largest cocoa producing country, produces 21% of the global supply. Indonesia, Nigeria, Cameroon, Brazil and Ecuador are the other main suppliers of cocoa.

While most of the cocoa beans produced in Asia and South America are exported into the US or into the growing Asian markets, most of the West African beans go to Europe. From 1961 to 2013 the worldwide production of cocoa beans has increased from about 1.2 million tons to 4.5 million tons – largely to production gains in West Africa and Asia (see fig. 2).

¹ International Cocoa Organization (2013): Quarterly Bulletin of Cocoa Statistics, Volume XXXIX No.2, Cocoa Year 2012/13, table 37

² International Cocoa Organization (2013): Quarterly Bulletin of Cocoa Statistics, Volume XXXIX No.2, Cocoa Year 2012/13, table 41

³ United Nations Conference on Trade and Development Cocoa Study (2008): Industry Structures and Competition Study prepared by the UNCTAD secretariat.(http://unctad.org/en/docs/ditccom20081_en.pdf, 12.3.2016)

⁴ United Nations Conference on Trade and Development Cocoa Study (2008): Industry Structures and Competition Study prepared by the UNCTAD secretariat.(http://unctad.org/en/docs/ditccom20081_en.pdf, 12.3.2016)

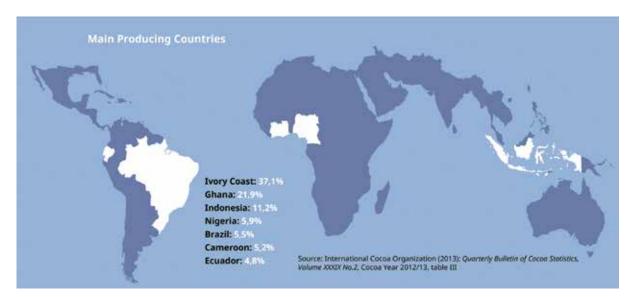


Figure 1: Main Cocoa Producing Countries

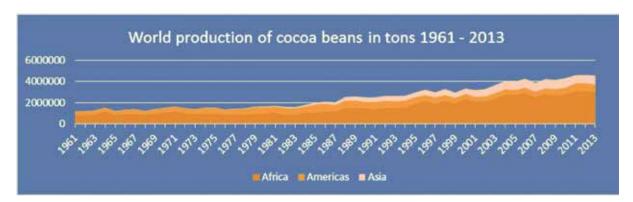


Figure 2: World production of cocoa from 1961 – 2013⁵

2.3 Cultivating Cocoa: the Aztecan Tree of the Gods

The origins of the cocoa tree are found in the rainforests of South- and Central America where it had already been cultivated long before the Europeans arrived. It had had an important role as a luxury food item, which, according to legends, was sent by the gods. This is still reflected in the species' name of the cocoa tree, Theobroma, which translates to "food of the gods". After the Europeans discovered their love for cocoa they



sought ways to increase production and capitalize on this new crop. In the 19th century, cocoa was brought to African countries by European colonizers. Here, the tree found favorable conditions for growth and, after only a few decades, West Africa became the leading region of production of cocoa. Already in the early times of the cocoa trade the supply chains were characterized by quasi monopolies linked to large trading companies.

The cocoa tree is adapted to tropical forest conditions. All the species of the genus are found wild in the rain forests of the western hemisphere from 18 to 15"S, that is from Mexico to the southern edge of the Amazon forests. It requires a minimum of 1000-2500 mm of rain distributed throughout the year as well as uniformity in temperature. Its sensitivity towards dry periods makes it very susceptible to changes in precipitation induced by climate change. Also, most varieties cannot deal well with direct sunlight and prefer to grow underneath shade trees.

FAOSTAT; accessed 11.03.2016

On an average farm or cocoa plantation trees will grow to a height of 4-10 m depending on spacing and the degrees of shade. In the wild, under the heavy shade of the primary forest, they may grow up to 20 m. Its characteristics make the cacao tree a well-suited crop for agroforestry systems which, if properly managed, can provide a diverse and well adapted farming system.

Stands of monocropped "cocoa orchards" represent the prevailing smallholder cocoa system in Ivory Coast, where the crop has had negative effects on biodiversity and the environment. In Central Africa, however, smallholders often cultivate cocoa in mixed agroforests, which can have as many as 60 different non-cocoa tree species. Aside from cocoa, such tree-crop systems produce timber and a diverse assortment of non-timber forest products, including medicines, fruits, nuts, oils, and important nutritional condiments.6

2.4 Cocoa and Agro-Forestry: Benefitting Humans and Nature

Agroforestry systems are agricultural systems that integrate trees in productive agricultural landscapes. The practice known as agroforestry today dates back centuries - if not millennia - and probably was one of the earliest forms of human agriculture. Modern agricultural systems such as Permaculture have also been inspired by the traditional practice of agroforestry.

Agroforestry practices involve a wide range of trees that are protected or planted and managed on farms and agricultural landscapes. These include trees that provide fruit, nuts, oils and leaves for food and nutrition, fodder trees that improve smallholder livestock production, fertilizer trees for land regeneration that improve soil health and thus contribute to food security; trees that are hosts to edible insects or used in honey production, trees that provide timber and wood energy, others that provide shelter; medicinal trees to combat disease; and trees that produce gums, resins or latex products. Many of these trees have multiple uses, providing a range of these benefits.⁷

Trees in agricultural landscapes provide many livelihood and environmental benefits, including:

- increased genetic and crop diversity on farms
- increased access to dietary diversity, as a means of reducing malnutrition
- ▶ a safety net and resilience in an increasingly erratic climate, providing foods all year round and also in case annual crops fail
- a higher asset base for poor households
- improved soil fertility and livestock productivity on farms
- ▶ links to markets for high-value fruits, oils, cash crops and medicines
- ▶ a balance between improved productivity and the sustainable management of natural resources
- stable or enhanced supply of environmental services in agricultural landscapes for water, soil health, carbon sequestration and biodiversity.

Cocoa agroforests that retain a floristically diverse and structurally complex shade canopy have the potential to harbour significant levels of biodiversity, claim the authors of a series of scientific papers devoted to the topic⁸.

Tree diversity within the cocoa production system is variable, depending on management, cultural differences, location and farm history, among other factors. Animal diversity is typically highest in those cocoa agroforests that have high plant diversity, structurally complex canopies, and abundant surrounding forest cover. In general, both plant and animal diversity within cocoa agroforests are greater than those of other agricultural land uses, but lower than in the original forest habitat.

Baxter, Joan (2014): Crop diversity can sweeten the deal for African cocoa farmers (http://blog.cifor.org/23652/crop-diversity-cansweeten-the-deal-for-african-cocoa-farmers#.U_LPxmNac6I, 13.3.2016)

⁷ World Agroforestry Center: (http://www.worldagroforestry.org/about/agroforestry-our-role, 13.3.2016)

Schroth, Götz and Harvey, Celia A. (2007): Biodiversity conservation in cocoa production landscapes: an overview. Biodiversity and Conservation volume 16/8 pp 2237-2244

Two studies undertaken in Cameroon found up to 50 different tree species planted or retained per cocoa farm⁹ ¹⁰. Trees were primarily used for food and timber but also for medicinal or other purposes. Two thirds of the food trees were native forest species and one third was introduced. Authors found that the agroforestry type of cocoa farms in this region generate more significant benefits for biodiversity conservation and local livelihoods than commercial plantations, but also place pressure on forest reserves and require chemical inputs.

Processing Cocoa Beans

After harvesting the pods (fig. 1) they are crushed with a knife called cutlass (fig. 2) and the pulp with the beans is fermented, which in Ghana takes place on banana or plantain leaves for 5-7 days (fig. 3). Cocoa receives its distinctive chocolate taste and flavour in the process of fermentation. Afterwards, the beans are dried: either in the sun (fig. 4), with so-called solar-ovens (fig. 5) or over regular ovens fired with wood (fig. 6). After drying, the beans are packed.

Another important step is the quality control of the beans (fig.7). Now the beans are ready to be sold to the traders. Transport to the harbors can be very challenging due to the remoteness of the farms and general bad road conditions (fig. 8).



⁹ Sonwa, Denis J., Nkongmeneck, Bernard A., Weise, Stephan F., Tchatat, Maturin Adesina, Akin A., Janssens, Marc J. J. (2007): Diversity of plants in cocoa agroforests in the humid forest zone of Southern Cameroon. Biodiversity and Conservation Vol 16/8, pp 2385 - 2400

¹⁰ Laird, Sarah A., Awung, Gabriel Leke and Lysinge, Rita J. (2007): Cocoa farms in the Mount Cameroon region: biological and cultural diversity in local livelihoods. Biodiversity and Conservation, volume 16/8, pp2401-2427

There are several emerging threats to biodiversity conservation within cocoa production landscapes, including the loss of remaining forest cover, the simplification of cocoa shade canopies and the conversion of cocoa agroforestry systems to other agricultural land uses with lower biodiversity value. To counter these threats and conserve biodiversity over the long-term, land management should focus on conserving native forest habitat within cocoa production landscapes, maintaining or restoring floristically diverse and structurally complex shade canopies within cocoa agroforests, and retaining other types of on-farm tree cover to enhance landscape connectivity and habitat availability. Cocoa cultivation is highly dependent on intensive manual labour. Not all cocoa pods ripen at the same time, making it necessary to continuously monitor, care for and harvest them. A single tree simultaneously carries flowers and pods at different stages of maturity. In addition, cocoa trees are very susceptible to disease, which can spread rapidly in dense rows of trees. Hence, maintenance costs in cocoa cultivation are very high. Once the cocoa pods are ripe and have been cut from the trees by hand, the beans undergo a process of fermentation, drying, cleaning and packing. These first crucial steps of processing are all done on the farms. They are critical in determining the quality of the beans and, ergo, the resulting chocolate.

Farmers sell the sacks of dried beans to intermediaries who resell them to exporters. Unprocessed cocoa is then transported to chocolate producing countries in the Global North for roasting, crushing and grinding.

2.5 Making Chocolate

The inventor of chocolate is unknown, but in 1847 Fry's sold a 'chocolat delicieux a manger' and Cadbury Brothers were selling a similar product two years later. The next major technical development was the mixing of milk solids and sugar into the cocoa mass to make milk chocolate in 1876. This was invented by Daniel Peter of Vevey in Switzerland by using a milk powder developed by Henri Nestlé. The texture and taste of chocolate was further improved when Rudolphe Lindt invented the conching machine. Also Milton S. Hershey, the founder of Hershey Co. started with the chocolate production at the end of the nineteenth century.¹¹

The growth of consumption of milk chocolate in a variety of forms has been the most striking feature of the cocoa and chocolate industry during the present century and today this product forms the backbone of the chocolate industry throughout the world.

Besides cocoa in the form of cocoa butter and cocoa liquor, chocolate also contains sugar, and (sometimes) vanilla, milk chocolate additionally contains milk powder, while white chocolate is made without cocoa liquor. Often an emulsifying agent, such as soy lecithin, is added, though a few manufacturers prefer to exclude this ingredient for purity reasons and to remain GMO-free. Some manufacturers are now using PGPR, an artificial emulsifier derived from castor oil that allows them to reduce the amount of cocoa butter while maintaining the same mouthfeel. The quality and texture of Chocolate is also highly influenced by the processing - especially by the conching. Longer and careful processing increases the quality of the final product and renders the need for emulgators useless. Although the composition of chocolate varies largely from producer to producer, as a rule of thumb the following can be assumed: the finest, plain dark chocolate couvertures contain at least 70% cocoa (both solids and butter), whereas milk chocolate usually contains up to 50%. High-quality white chocolate couvertures contain only about 35% of cocoa butter. Some mass-produced chocolate contains much less cocoa (as low as 7% in many cases), and fats other than cocoa butter. Vegetable oils and artificial vanilla flavor are often used in cheaper chocolate to mask poorly fermented and/or roasted beans.

¹¹ Klein, Christopher (2014): "The Sweet History of Chocolate" (http://www.history.com/news/hungry-history/the-sweet-history-ofchocolate, 13.3.2016)

Process of transforming chocolate

- **Step 1**. The cocoa beans are cleaned to remove all extraneous material.
- **Step 2**. To bring out the chocolate flavour and colour, the beans are roasted. The temperature, time and degree of moisture involved in roasting depend on the type of beans used and the sort of chocolate or product required from the process.
- A winnowing machine is used to remove the shells from the beans to leave just the cocoa Step 3.
- The cocoa nibs undergo alkalisation, usually with potassium carbonate, to develop the Step 4. flavour and colour.
- **Step 5**. The nibs are then milled to create cocoa liquor (cocoa particles suspended in cocoa butter). The temperature and degree of milling varies according to the type of nib used and the product required.
- **Step 6**. Manufacturers generally use more than one type of bean in their products and therefore the different beans have to be blended together to the required formula.
- Step 7. The cocoa liquor is pressed to extract the cocoa butter, leaving a solid mass called cocoa presscake. The amount of butter extracted from the liquor is controlled by the manufacturer to produce presscakes with different proportions of fat.
- Step 8. The processing now takes two different directions. The cocoa butter is used in the manufacture of chocolate. The cocoa presscake is broken into small pieces to form kibbled presscake, which is then pulverised to form cocoa powder.
- Cocoa liquor is used to produce chocolate through the addition of cocoa butter. Other ingredients such as sugar, milk, emulsifying agents and cocoa butter equivalents are also added and mixed. The proportions of the different ingredients depend on the type of chocolate being made.
- **Step 10**. The mixture then undergoes a refining process by travelling through a series of rollers until a smooth paste is formed. Refining improves the texture of the chocolate.
- **Step 11**. The next process, conching, further develops flavour and texture. Conching is a kneading or smoothing process. The speed, duration and temperature of the kneading affect the flavour. An alternative to conching is an emulsifying process using a machine that works like an egg beater.
- **Step 12**. The mixture is then tempered or passed through a heating, cooling and reheating process. This prevents discolouration and fat bloom in the product by preventing certain crystalline formations of cocoa butter developing.
- **Step 13**. The mixture is then put into moulds or used for enrobing fillings and cooled in a cooling chamber.
- **Step 14**. The chocolate is then packaged for distribution to retail outlets

(Source: http://www.icco.org/about-cocoa/processing-cocoa.html)

3. The Economy of the Cocoa Supply Chain: Benefitting the Few

Cocoa is the primary source of income of 5.5 million smallholder farmers and secures the livelihood of more than 14 million rural workers and their families. 12 In some West African countries, such as Ivory Coast, Ghana and Cameroon, up to 90% of the farmers rely on cocoa as their primary income. 13 But cultivating cocoa is not lucrative anymore: Most cocoa farmers live in destitute poverty on less than 1.25 US dollars per day, meaning they live below the absolute poverty line. The daily income of a cocoa-farmer in Ghana is 0.84 US dollars, in Ivory Coast it is an even lower 0.50 US dollars. 14 Even though the demand for cocoa is rapidly growing and will increase by nearly 20% in the upcoming years, together with a rising - though fluctuating - price, most of the farmers still cannot cover their basic living costs and live far below the poverty line. The cocoa sector is therefore increasingly unattractive to younger generations who prefer to work in white-collar jobs or in the cities. That is only one reason why the production of cocoa isn't growing fast enough and the industry fears shortages.

3.1 Tough Competition with many Losers

There are only a few big players in the highly competitive cocoa trading and chocolate confectionery market. While each of these companies is competing for an ever higher market share and higher profits, millions of cocoa farmers bear the brunt of the costs by receiving smaller and smaller portions of the revenues.

The grinding and trading of cocoa is dominated by five big companies who together make up more than half of the world market: Cargill (USA), Barry Callebaut (Switzerland), ADM (USA), Petra Foods (Singapore) and Blommer (USA). Based on their huge market power they assert a strong influence on the prices paid for cocoa. In chocolate production, the situation is similar, more than two thirds of the market share is held by only five companies: Mars, Mondelez, Nestlé, Hershey and Ferrero (see fig. 3). Up to 2012, the global chocolate confectionery market had generated net sales of approximately 80 billion dollars and is predicted to grow to 100 billion dollars in 2016. 15



Figure 3: Share in worldwide sales on the chocolate and confectionary market in 2015 in percent¹⁶

¹² Hütz-Adams, F/ Fountain, A.C. (2012): Cocoa Barometer 2012, p.3

¹³ World Cocoa Foundation (2012): Cocoa market update, p.1

¹⁴ VOICE Network (2015): Cocoa Barometer, p.42

¹⁵ Food Navigator (2011): Business Insights report. (www.foodnavigator.com, 24.04.2013)

¹⁶ Südwind et al. (2015): Factsheet Make Chocolate Fair #1, p.2; updated with numbers from: www.icco.org/about-cocoa/chocolate-industry in 02/2016

Massive imbalances in the value chain

As in other internationally traded commodities, companies of the Global North capture the largest share in the value chain. Millions of cocoa farmers in the Global South account for only a very small share – 6.6%– in the value chain of chocolate. This is compared to 16% in the late 1980s (see Fig. 4). Furthermore, a farmer's income cannot be seen as 'net profit', but has to be counted as income from labour, land, and return on investment. The small scale of farms and relatively low yields mean that the annual income remains very low. Even if the farmer could double his yield and receive a premium for producing certified cocoa, his net income often wouldn't be able to reach the extreme poverty line.¹⁷

By contrast, the share for processors and grinders, chocolate manufacturers and retailers has increased to 87%.

Due to recent developments in the European retail sector, where a growing production of store and private brands and an accumulating market concentration can be observed, an even bigger influence of the retail sector and an increasing dependency of producers on retailers can be forecast

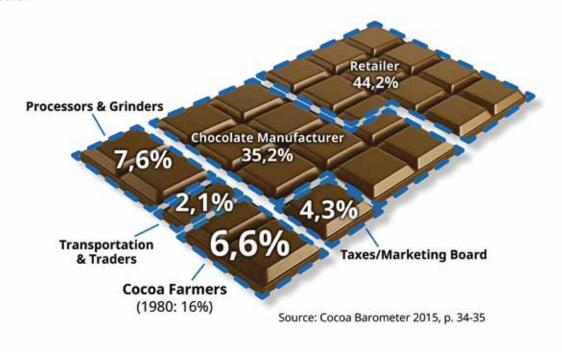


Figure 4: Share in the value chain of chocolate production

3.2 Low and Volatile Prices with High Social Costs

The highly competitive cocoa and chocolate market and the fundamental power inequalities between small-scale farmers and multinational corporations are one main reason for the serious price decline. While the profits of multinational chocolate companies have increased, the price of cocoa-beans was halved between 1950 and 2010. 18 see Fig. 5 below.

Cocoa farmers, on the other hand, are poorly organized and lack insight into the development of world market prices for cocoa. They therefore have to sell their harvest on conditions dictated by intermediaries. Millions of small-scale farmers stand opposite big traders and chocolate companies – an often unfair game. They lack the structure and organisation of big interest groups

¹⁷ VOICE Network (2015): Cocoa Barometer, p.30

¹⁸ Hütz-Adams (2012): Vor Kakaobaum bis zum Konsumenten. Die Wertschöpfungskette von Schokolade. Südwind e.V., p. 26

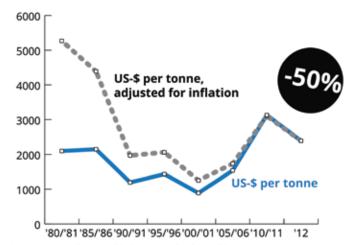
which would give them a bigger say in politics and international trade.

Furthermore, depending on local trading structures, taxes, quality of the beans or lack of storage capacity, cocoa farmers receive only a part of the current market price. For example, farmers in Ivory Coast and Ghana received 40-50% and 70% of the world market price respectively.19

In addition to a dramatic overall price decline since 1989, farmers also suffer from price volatility caused by changing supply volumes in the course of crop diseases, pest infestation, droughts and political instability and turmoil in the producing countries. Due to these unstable prices, it is very difficult for them to calculate their income and expenses in advance. (see fig. 6 below).

For speculators and hedge funds, on the other hand, volatile prices are lucrative for speculative trading on future markets, which again sparks volatility. While cocoa traders are able to compensate volatile prices by storing beans in the main harbours of Rotterdam, Amsterdam and Hamburg until the prices are favourable, farmers in the Global South are often forced to sell their beans immediately due to poor living conditions and lack of storage facilities.

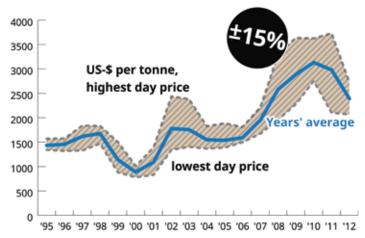
Cocoa prices 1980-2012



Source: Hütz-Adams, F (2012): Vom Kakaobaum bis zum Konsumenten. Die Wertschöpfungskette von Schokolade. Südwind e.V.; table 12, p.26 International Cocoa Organization (2013): Quarterly bulletin of Cocoa Statistics, Volume XXXIX No.2, Cocoa Year 2012/13, table 10

Figure 5: Cocoa prices between 1989-2012

Volatility of cocoa prices 1995-2011



Source: International Cocoa Organization (2013): Quarterly bulletin of Cocoa Statistics, Volume XXXIX No.2, Cocoa Year 2012/13, table 9

Figure 6: Volatility of cocoa prices between 1995-2011

¹⁹ LMC International (2011): Cocoa Sustainability, p.2. (http://www.worldcocoafoundation.org/learn-about-cocoa/documents/LMC-WCF CocoaSustainabilityReport_2010-11.pdf, 16.3.2016)

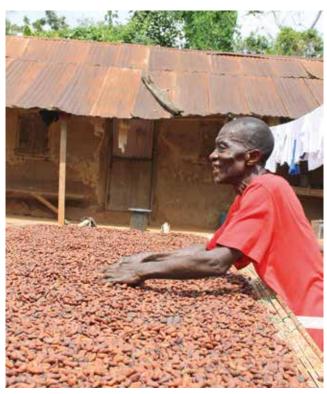
4. Social and Environmental Challenges in the Cocoa Sector

The low and insecure incomes cause serious social and environmental problems. Cocoa farmers' incomes are often based on the cultivation of cocoa alone. This sole dependency on cocoa as a cash crop magnifies the impact of volatile cocoa prices, and creates a situation which is disastrous for the livelihood of farmers, their communities and their surrounding environment.

Old trees - Old Farmers: The Future of Cocoa?

Due to the low prices paid at farm level and the uneven playing-field on the world-market, growing cocoa has increasingly become an old man's business. Along with the elderly farmers, the trees themselves have grown old and increasingly unproductive. A survey of the Cocoa and Coffee Inter-Professional Council (CCIC) in Cameroon showed that while an average tree is more than 25 years old, the average age of the farmers was even higher, ranging from 63-70 years, and that in a country with a median age of just 18. This is an indication that young people see little or no future at all in the cocoa business. Besides a lack of successors, the farmers do not have the necessary financial resources or the access to seedlings, so plantations are often not replanted any more. Furthermore, cocoa farmers frequently lack training and access to expert advice on sustainable agriculture to improve productivity and increase the quality of their cocoa beans.

This development has also alerted the industry, which is slowly starting to be concerned about how to secure future supplies of cheap cocoa, and it has also increasingly started to invest in supply chain management programmes, e.g. via the use of certification programmes. Another, more critical development is that companies gradually get interested in producing cocoa themselves. This could lead to the abandonment of rather extensive and diverse agroforestry systems, in favor of intensive monocrop plantation systems and have negative effects on the local economic systems.



Stephen Kwame from Brong Desuso (Ghana) drying his organic cocoa. All his children work and live in the cities and do not see a future in cocoa farming. Kwame is member of COFA - Cocoa Organic Farmers Association.



This cocoa-pod suffers from blackpod-disease. Without the right care, cocoa trees are very susceptible to various diseases.

4.1 Poverty

Most cocoa farmers live in destitute poverty. There are various reasons for this: low and fluctuating cocoa prices, lack of farmer organisation and market power, the small size of farms, uncertainty of land tenure, sharecropping, low productivity, lack of infrastructure and access to market and market information. This poverty is a driving cause for many related problems, including poor working conditions, child labour and child trafficking, illiteracy and malnutrition. It should therefore come as no surprise that younger generations are leaving cocoa farming all together. At present, cocoa simply does not provide the possibility of a living income for farmers and their families.20

4.2 Exploitation of Farm Workers and Child Labour

Insufficient financial resources are another driving cause for the exploitation of farm workers and children, violating internationally recognized principles as defined by the Universal Declaration of Human Rights and the International Labour Organization (ILO).

Since cocoa farmers make poverty incomes themselves it is difficult for them to pay their hired labour a fair wage and to provide adequate lodging and maintenance. In many cases workers are forced to work overtime and face unsafe conditions when working with chemicals and dangerous tools.

A field research conducted by the International Labor Rights Forum in Ivory Coast²¹ shows that most farmers employ at least one hired labourer to help maintain and harvest their small plots of land. It found that farm workers are typically sourced from neighbouring countries, such as Mali and Burkina Faso. These workers, who often migrate with their families, are considered the most marginalized actors in the cocoa supply chain. Besides the precarious and non-permanent work they do, they typically do not speak the local language, are the least educated and are even more impoverished than the producers that employ them.²²



In Ghana and Ivory Coast about 2 million children are involved in hazardous work on cocoa farms.

Hazardous Child Work and Child Trafficking

On the other hand, farmers complain about the lack of labour and/or the high costs of workers, one of the main reasons why children have to work on cocoa farms.

In the past years the total number of children involved in hazardous child labour in cocoa growing areas in Ghana and Ivory Coast has increased. The number of children involved in hazardous work in Ivory Coast increased by 39% between 2008/2009 and 2013/2014 (from 0.79 million to

²⁰ VOICE Network (2015): Cocoa Barometer 2015, p.6

²¹ International Labor Rights Forum (2015): The Fairness Gap. Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry

²² International Labor Rights Forum (2015): The Fairness Gap. Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry, p.3

1.15 million), whereas the situation in Ghana improved by 9% (from 0.93 million to 0.88 million), referring to a study from Tulane University in 2014 (see fig. 6 below). Currently, up to 2 million children are involved in hazardous work on cocoa farms in both countries.²³, Work, which "by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children" as defined by the ILO Convention 182. As stated in the report, "results in both countries were impacted by strong growth in cocoa production (production increases of more than 40% in Côte d'Ivoire and more than 30% in Ghana between the years of data collection)."²⁴

		All Children	Children Working in the Cocoa Sector in Hazardous Work			
		Number	Number	Percent	Percent change	
Total	2008/09	5.710.938	1.722.186	30.2 %	+ 12.9 %	
Total	2013/14	5.969.385	2.032.267	34 %	+ 12.9 %	
	2008/09	3.550.060	791.181	22.3 %	1 20 7 0/	
Ivory Coast	2013/14	3.733.261	1.153.672	30.9 %	+ 38.7 %	
Ghana	2008/09	2.160.878	931.005	43.1 %	- 8.8 %	
	2013/14	2.236.124	878.595	39.3 %	- 0.8 %	

Source: Tulane child survey 2008/09 and 2013/14

Table 1: Estimates of Cildren in Cocoa-Growing Areas, 5 – 17 Years, in Hazardous Work in the Cocoa Sector

Referring to the International Labor Rights Forum, children can be found working on many different tasks related to cocoa farming. They use machetes and other dangerous tools to remove cocoa pods from trees and to crack them open. They carry heavy loads of cocoa beans from the field to drying racks, they are exposed to dangerous chemicals such as pesticides and fertilizers and often endure long hours in the sun. Nearly all the activities associated with cocoa farming have been identified as the 'worst forms of child labour' by the government of Ghana and Ivory Coast, which means no children under the age of 18 should be engaged in this work, even on a family farm.²⁵

Furthermore, there is evidence of children being exposed to child trafficking and forced labour, especially in Ivory Coast. The trafficked children often come from Burkina Faso and Mali and, besides being abused by landowners, they are rarely paid. According to the First Lady of Burkina Faso the trafficking of children from Burkina Faso to cocoa farms in Ivory Coast has tripled from 588 to 1895 children in the years between 2010 and 2012.²⁶

Such practices are serious violations of international human rights standards and are strictly prohibited under international labour law (ILO regulations 182 and 138).

²³ Tulane University (2015): 2013/2014 Survey Research on Child Labor in West African Cocoa Growing Areas, p. 4,82,83 (http://www.childlaborcocoa.org/index.php/2013-14-final-report, 12.2.2016)

²⁴ Tulane University (2015): 2013/2014 Survey Research on Child Labor in West African Cocoa Growing Areas, p. 4,12 (http://www.childlaborcocoa.org/index.php/2013-14-final-report, 12.2.2016)

²⁵ International Labor Rights Forum (2014): The Fairness Gap, Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry p 5

²⁶ International Labor Rights Forum (2014): The Fairness Gap, Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry p 7

Trends in combatting child labour and trafficking

In the past years, cocoa producing countries have made steps forward in the fight to combat child labour and child trafficking, approaching the issue through a regional angle, collaborating with civil society and trade unions. The scope of the challenge, however, is still larger than the current efforts, but at the very least the issue seems to be more open for discussion at the level of policy makers, for instance in Ghana or Ivory Coast. Simultaneously, the ability to discuss the issue at community level seems to have become problematic. A major reason for this is a confusion between (the worst forms of) child labour - forbidden in both countries - and child work. The latter refers to children occasionally helping out on the farm as long as this work does not get in the way of the child's education and development. Additionally, the current focus on yield increase in many cocoa programs entails an increased need for labour. Without specific interventions, this could lead to more child labour and child trafficking.²⁷

Tulane University, too, highlights this issue in its study on child labour and demands a drastic change in production methods and/or child labor mitigation strategies to achieve major progress.²⁸

4.3 Women in the Cocoa Sector

Women in cocoa producing countriesplay a crucialrole in cocoa farming, e.g. in Ghana where women "play a key role in land preparation and clearing, planting, tending young cocoa plants when they are intercropped with food crops, weeding, and post-harvest activities."29 In Ivory Coast, women are involved in 12 of the 19 key stages in cocoa production. Furthermore ,they play a leading role when it comes to tending young cocoa trees and performing post-harvest activities.³⁰

Due to various reasons female cocoa farmers are experiencing substantial discrimination and inequality. In West Africa cocoa is produced largely in traditionally structured societies in which women experience great difficulties in obtaining legal land titles, even after their husbands have passed away and they seek to continue running the farm. Without land titles, they are often excluded from saving and credit systems, as well as from access to training and certification schemes³¹.

Referring to the African Cocoa Coalition, a coalition of non-governmental conservation organizations in Ghana, female cocoa farmers in Ghana face severe discrimination regarding access toland and legal land titles. Passbooksare



Cocoa farmer on her farm in Cameroon. Women play a central role in cocoa cultivation but face severe discrimination in terms of landownership or decisionmaking.

another main challenge which has to be tackeled at the same time as the land issue. The passbook can be described as the formal registration for cocoa farmers and it is only the owner of the

²⁷ VOICE Network (2015): Cocoa Barometer 2015, p.13

²⁸ Tulane University (2015): 2013/2014 Survey Research on Child Labor in West African Cocoa Growing Areas – Two Page Summary (http://www.childlaborcocoa.org/index.php/2013-14-final-report, 12.2.2016)

²⁹ Bogui, N. and Belleau, M. (1999): Réalisation du diagnostic Genre et Développement, SOCODEVI, quoted in "The role of certification and producer support in promoting gender equality in cocoa production", UTZ CERTIFIED , Solidaridad-Certification Support Network in cooperation with Oxfam Novib (2009)

³⁰ Source: Agyare-Kwabi, P. (2009): Gender mainstreaming into the CNFA, BMGF-funded cocoa project in Ghana, Gender assessment report, first draft.

³¹ VOICE Network (2015): Cocoa Barometer 2015, p. 16

passbook who is allowed to sell cocoa and further, to access benefits, for example agricultural inputs, credits or even scholarships for children.

As women are not, in most cases, legal owners of their land they often lack the access to benefits bound to the passbook and they are not legally allowed to sellcocoa beans.

In general, as is stated in the Cocoa Barometer 2015, women, as compared to men, are less involved in decision-making processes,less informed about market developments and effective ways of farm management and haveless opportunity to invest in their farms. Women who together with their husbands run a farm are often not regarded as cocoa farmers themselves but rather as the cocoa farmer's spouse. Consequently, most of these women are not participating in farmer group meetings. However, women are increasingly running cocoa farms whichis largely the result of age differences between husbands and wives, HIV/Aids, social conflicts and male rural-urban migration.32

When it comes to training of capacity building programmes for cocoa farmers, women are oftentimes not addressed. A recent study about the impact of UTZ certification in Ivory Coast confirmed this when stating that "due to the focus of the programme on farmers registered with a cooperative, women and youth workers on cocoa farms appear to have been only marginally included in the programme."33

4.4 Deforestation and Land Use Change

Cocoa is not only the driving force behind but is also affected by land use change. In both cases harmful effects on the environment can be observed - and in both cases the tenuous economic situation of farmers is the driver of change.

Throughout the twentieth century the expanding cocoa production was a major cause of deforestation, especially in many parts of West Africa and more recently in South-East Asia. At the beginning of the twentieth century, the humid and sub-humid belt of West Africa was a vast area of tropical rainforest belonging to the Guinean Forest Hotspot of Biodiversity. Most of these forests are now lost through a combination of unsustainable logging, tree crop farming (especially cocoa, and to a lesser extent coffee, rubber and oil palm, as well as slash-and-burn agriculture of food crops^{34 35 36}

Besides being driven by an increasing demand for cocoa beans in the industrialized nations, expansion into the forest frontier was also driven by the fact that old plantations have rarely been replanted at the same site. Instead, the farmers took advantage of the so-called forest rent which includes more fertile soil, lower weed and pest pressure, and a more favourable microclimate found on recently cleared forest land. The logging of forest and the establishment of new cocoa plantations on the "fresh" land required less investment in farming inputs and was also a prerequisite for making chocolate cheap and affordable for mass consumption. However, although the replacement of forest with cocoa paved the way for the enormous economic success of the chocolate business it generated externalities in terms of loss of biodiversity and damage to the environment. More importantly, it often backfired on producers themselves who have been exposed to boom-to-bust cycles and recessions as a result of migration and deforestation at a much too-rapid rate.

³² VOICE Network (2015): Cocoa Barometer, p. 16

³³ Verina Ingram et al. (2014): Impact of UTZ certification of cocoa in Ivory Coast. Assessment framework and baseline, p.59, (http:// www.cocoaconnect.org/sites/default/files/publication/UTZ%20Impact%20of%20UTZ%20certification%20of%20cocoa%20in%20 Ivory%20Coast%20FINAL%20REPORT%202014_0.pdf, 10.3.2016)

³⁴ Norris K, Asase A, Collen B, Gockowski J, Mason J, Phalan B, Wade ASI (2010): Biodiversity in a forest-agriculture mosaic—the changing face of West African rainforests. Biol Cons 143:2341-2350.

³⁵ Mittermeier RA, Robles Gil P, Hoffmann M, Pilgrim J, Brooks T, Mittermeier CG, Lamoreux J, Fonseca GAB (2004): Hotspots

³⁶ Ruf F., G. Schroth and K. Doffangui (2015): Climate change, cocoa migrations and deforestation in West Africa: What does the past tell us about the future? Sustainablity Science (2015) 10:101-111

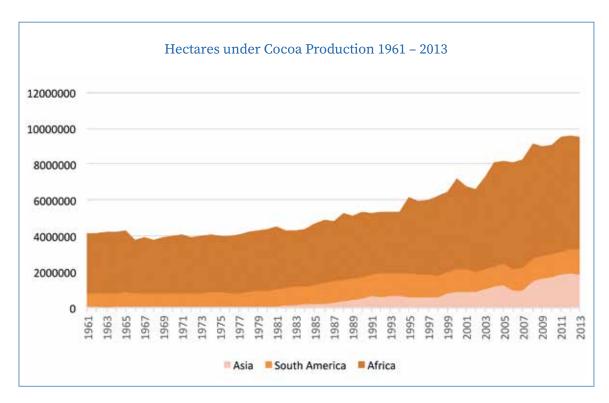


Figure 7: Since the sixties the cocoa-producing area has almost doubled worldwide – the area in Africa nearly doubled from 3,2 million to 6.3 million hectares. The production in Asia started in Malaysia in the Eighties, with Indonesia soon catching up to represent 95% of the almost two million hectares of cocoa plantations in Asia.37

In poorly managed cocoa plantations, soil degradation can lead to lower productivity. This, and the fact that the characteristic of tropical soils often makes it easier to establish a new plantation than to re-plant an old one, drives cocoa farmers to cut down forests to create new plantations.

Ruf et al. describe the process as follows: "When trees grow older and when forest has been massively cleared, cultivation becomes more difficult. Farmers have to face more weeds, more pests and diseases, lower soil moisture content and fertility, physical erosion, more wind, possibly disturbed rainfall patterns, at least less effective rainfall, less timber resources which may increase housing costs and less game resources, thus increasing the cost of living and the labour costs. There is also a higher investment cost in replanting. Tree growth is less rapid, also requiring more labour and inputs, hence a higher investment cost. This is the second difficulty of replanting and these factors form the `biological basis' of the replanting problem which partially explains regional shifts of cocoa supply. Producers seek lower production costs and first of all a lower investment cost."38

Another threat to forests may come from the use of fire wood for drying ovens. Whereas in some countries, e.g. Ghana, beans are dried by the sun, in areas with higher precipitation they are commonly dried in wood fired drying houses. So called solar ovens, which are simple devices similar to a greenhouse, would offer a cheap and sustainable solution in those areas.

In countries where primary forest is still accessible to farmers, cocoa production will remain a threat and potential cause of deforestation. Today the low farm gate prices for cocoa still hampers the transition of the sector to a more sustainable production on already existing plantations. Throughout most of the twentieth century the low income and virtually no access to affordable credits have hindered farmers to replant and manage their cocoa plantations in a sustainable manner. At present the cocoa plantations as well as the farmers in West Africa have grown old and their yields

³⁷ FAOSTAT: (http://faostat3.fao.org, 10.3.2016)

³⁸ Ruf F., G. Schroth and K. Doffangui (2015): Climate change, cocoa migrations and deforestation in West Africa: What does the past tell us about the future? Sustainablity Science (2015) 10:101-111

are declining. This can again increase the pressure on the remaining forests of the region – and via global markets dynamics also on pristine forests in other parts of the world e.g. Indonesia. Today farmers in some countries have virtually no choice as to replant existing cocoa stands or to convert other agricultural land or grasslands into cocoa plantations. Especially through combination of agroforestry, soil enhancing techniques and IPM (integrated pest management), farmers in different cocoa producing regions have proven that this can be a viable practice. In fact, there have always been production systems that successfully



Illegal small-scale gold mining activities pose a growing threat to the forests and environmental health in Ghana.

relied on diversified agroforestry systems and were well adapted to local conditions. Breaking the cycle of cocoa expansion into pristine forests requires education and extension activities on the farm level as well as fair prices that enable a sustainable management.

Cocoa has the potential to support a rather diverse and low impact form of agriculture when practiced in agroforestry systems. In West Africa, where most of the cocoa production takes place on small farms, cocoa plantations are often integrated at least to some extend with other crops such as plantains, coffee, oil palm or citrus. Diverse agricultural landscapes do not only contribute to nature conservation, they also provide a diversified economic basis, increased food security and are more resilient to climate change impacts. Therefore, losing cocoa plantations to more intensive forms of land use poses a threat to biodiversity and to a sound and resilient agro-environmental system. Cocoa plantations might be replaced by other cash crops like palm oil or, even worse, by mining activities. This is increasingly happening in Ghana in the context of small-scale gold mining activities and has also caused severe water pollution problems (see chapter 5.1 for details). Due to their economic situation, cocoa farmers are easily coerced into giving away their land to mining companies or large agro-businesses, which promise quick economic gain and hide the fact that the land will be rendered useless for farming once they have done their work.

4.5 Pesticides

Cocoa can be grown without the use of chemical pesticides, as is done with great success under organic production schemes. Techniques like pruning, cutting of chupons, or managing the density of the canopy can be used to strengthen the plants and enhance their resilience. Symbiotic organisms like ants or termites can be supported, which protect the trees against mirids and help reduce pest attacks. Many farmers who do not use pesticides do this just because they cannot afford them. If they can afford them they often use them without any knowledge about the associated risks. In this situation promoting knowledge about low input and low impact farming practices plays a critical role.

Most conventional farmers rely on the use of synthetic pesticides to protect their yield, which is often their only source of income. Fungicides and insecticides are the main classes of pesticides used in the cocoa production. In a study on pesticide use in Cameroon³⁹ the authors interviewed

³⁹ Mahob, R.J. et al. (2014): 2014 Pesticides use in cocoa sector in Cameroon: characterization of supply source, nature of actives ingredients, fashion and reasons for their utilization. Int. J. Biol. Chem. Sci. 8(5): 1976-1989

a sample of 251 farmers and 20 post-harvest traders on their pesticide use practice. The results showed that out of 26 pesticides reported to be used in cocoa production, 8 are banned in the EU as well as in Cameroon (see table 2). The most commonly used insecticide (23% of farmers) was Endosulfan – a substance banned in most countries of the world because of its extreme toxicity. 56% of the farmers surveyed did not apply insecticides at all - mainly because they could not afford them. In the warehouses aluminum phosphide is applied via fumigation at least once a year. Similar to a study which investigated pesticide use in Ghana^{40,} the authors found that most farmers neither adhered to the recommended doses of application nor did they know about or had access to equipment for safe use. In Ghana, the most commonly used pesticides belong to the neonicotinoids class of pesticides, which are extremely toxic for bees and were those approved by the COCOBOD for use in cocoa, 23% of the farmers were found to use unapproved chemicals.

Use	Active ingredient	Toxicity	Reported in
Fungicide	Benomyl	PAN Bad Actors, development & reproductive toxin, endocrine disrupter	Cameroon
Insecticide	Endosulfan	PAN Bad Actors, high acute toxicity, endocrine disrupter; world wide ban is aspired	Cameroon
Insecticide	Methyl parathion	PAN Bad Actors, cholinesterase inhibitor, high acute toxicity; classified as "Extremly Hazardous" by the WHO	Cameroon
Insecticide	Fenobucarb	PAN Bad Actors, cholinesterase inhibitor	Cameroon
Insecticide	Cartap	high aquatic toxicity	Cameroon
Insecticide	Diazinon	high acute and chronic aquatic toxicity	Cameroon & Ghana
Insecticide	Cypermethrin + Profenofos	high acute and chronic aquatic toxicity	Cameroon
Insecticide	Propoxur	PAN Bad Actors, highly toxic to bees and birds	Cameroon
Insecticide	Malathion	PAN Bad Actors, high aquatic toxicity, banned on cacoa	Cameroon
Insecticide	Chlorfenvinphos	PAN Bad Actors, high acute and aquatic toxicity; classified as Highly Hazardous" by the WHO	Ghana

Table 2: Pesticides banned in the EU, found to be used in the cocoa production in Ghana and Cameroon and their toxic classification. PAN Bad Actors are chemicals that are one or more of the following: highly acutely toxic, cholinesterase inhibitor, known/probable carcinogen, known groundwater pollutant or known reproductive or developmental toxicant. For the complete list of pesticides identified by the two studies see Annex 2

4.5.1 Pesticide Residues on Store Brand Chocolate in Austria

In February 2016 GLOBAL 2000 and Südwind commissioned an analysis of pestidcide residues on 35 storebrand chocolates and Easter Bunnies sold in Austria. The analyses was conducted by using Multimethode Pestizide Norm EN 15662 (SOP P301), this method covers a spectrum of about 500 substances. Despite chocolate being a highly processed product – with cocoa being only one of the ingredients - only 8 products were found free of chemical residues. In total, 6 different residues - 5 from pesticides and one synergist - were detected by the test (see table 3).

⁴⁰ Akua K. Antwi-Agyakwa et al. (2015): 2015 Insecticide Use Practices in Cocoa Production in Four Regions in Ghana. West African Journal of Applied Ecology, Vol. 23(1), p. 39-48

Description of chemicals and their health and environmental impacts

Acceptable daily intake or **ADI** is a measure of the amount of a specific substance in food or drinking water that can be ingested (orally) on a daily basis over a lifetime without an appreciable health risk. ADIs are expressed usually in milligrams (of the substance) per kilograms of body weight per day. Acute Reference Dose is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure for an acute duration (24 hours or less) to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. All numbers for ADI and AfRD have been taken from the EU Pesticide Database. 41

Chlorpyrifos

ADI: 0.01 mg/kg bw; ARfD: 0.05 mg/kg bw

Use: Insecticide

Chemical class: Organophosphorus

The United States Environmental Protection Agency lists organophosphates as very highly acutely toxic to bees, wildlife, and humans. Recent studies suggest a possible link to adverse effects in the neurobehavioral development of fetuses and children, even at very low levels of exposure. Organophosphates are widely used as solvents, plasticizers, and EP additives.

Health Risk: At high enough doses, chlorpyrifos can cause cholinesterase inhibition in humans; that is, it can impact the nervous system causing nausea, dizziness, confusion, and at very high exposures (e.g., accidents or major spills), respiratory paralysis and death.

It is classified as an Endocrine Disrupter. The EPA also determined that there are potential risks for people whose drinking water comes from small water systems in heavily farmed areas where chlorpyrifos may be widely used.42

WHO- Acute Hazard Rankings⁴³: II Moderately hazardous

Pan Bad Actor⁴⁴: Yes

Environmental Risk: highly toxic to fish and water organisms, extremely toxic to bees, accumulating in the environment.

Cypermethrin

ADI: 0.05 mg/kg bw; ARfD: 0.2 mg/kg bw

Use: Insecticide

Chemical class: a synthetic pyrethroid used as an insecticide. Most pyrethrins and some pyrethroid products are formulated with synergists, such as piperonyl butoxide and MGK-264, to enhance the pesticidal properties of the product.

Health Risk: Endocrine disrupter, possibly carcinogenic

Environmental Risk: Highly toxic for fish and aquatic animals, highly toxic for bees, bio-accumulation

Deltamethrin

ADI: 0.01 mg/kg bw; ARfD: 0.01 mg/kg bw

Use: Insecticide

Chemical class: a synthetic pyrethroid used as an insecticide. Most pyrethrins and some pyrethroid products are formulated with synergists, such as piperonyl butoxide and MGK-264, to enhance the pesticidal properties of the product.

⁴¹ http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN

⁴² EPA Revised Human Health Risk Assessment on Chlorpyrifos: (https://www.epa.gov/ingredients-used-pesticide-products/revisedhuman-health-risk-assessment-chlorpyrifos, 10.3.2016)

⁴³ The WHO Recommended Classification of Pesticides by Hazard: (http://www.who.int/ipcs/publications/pesticides_hazard/en/, 10.3.2016)

⁴⁴ PAN Bad Actors are chemicals that are one or more of the following: highly acutely toxic, cholinesterase inhibitor, known/ probable carcinogen, known groundwater pollutant or known reproductive or developmental toxicant. NOTE! Because there are no authoritative lists of Endocrine Disrupting (ED) chemicals, EDs are not yet considered PAN Bad Actor chemicals.

Health Risk: Endocrine disrupter

WHO- Acute Hazard Rankings: II Moderately hazardous

Environmental Risk: Highly toxic for fish and aquatic animals, highly toxic for bees, bio-accumulation

Metalaxyl

ADI: 0.08 mg/kg bw; ARfD: 0.5 mg/kg bw

Use: Fungicide

Chemical class: Metalaxyl is a phenylamide fungicide with systemic function

Health Risk: is on the EU Candidates for Substitution (CfS) list for containing non-active isomere

with not known risks for human health and the environment.

WHO- Acute Hazard Rankings: III, Slightly Hazardous

Environmental Risk: only slightly toxic for aquatic animals and bees

Permethrin

ADI: 0.05 mg/kg bw Use: Insecticide

Chemical class: a synthetic pyrethroid used as an insecticide. Most pyrethrins and some pyrethroid products are formulated with synergists, such as piperonyl butoxide and MGK-264, to enhance the pesticidal properties of the product.

Health Risk: classified by the EPA as a likely human carcinogen, endocrine disruptor, neurotoxic and reprotoxic

WHO- Acute Hazard Rankings: Class II, moderately hazardous;

Pan Bad Actor⁴⁵: Yes

Ecotoxicity: high toxicity to fish and aquatic organisms; extremely toxic to bees

Piperonyl butoxid

ADI: 0.05 mg/kg bw

Use: Synergist for insecticides

Chemical class: Is an organic compound used as synergists to enhance the pesticidal properties of the products, especially pyrethrins and some pyrethroid. It is not registered as a pesticide and therefore also not regulated in organic farming. Here it is used as a synergist for pyrethroids derived from Hycinthea.

Health Risk: EPA classifies PBO as a Group C Carcinogen "possibly carcinogenic to humans." Listed as endocrine disruptor by EU. Piperonyl butoxide targets the liver, but does not disrupt the metabolism of other chemicals as it does in insects. It generally has a low toxicity in humans through any route of exposure.

Environmental Risk: moderately toxic to fish and highly toxic to other aquatic organisms⁴⁶

⁴⁵ PAN Bad Actors are chemicals that are one or more of the following: highly acutely toxic, cholinesterase inhibitor, known/ probable carcinogen, known groundwater pollutant or known reproductive or developmental toxicant. NOTE! Because there are no authoritative lists of Endocrine Disrupting (ED) chemicals, EDs are not yet considered PAN Bad Actor chemicals.

⁴⁶ National Pesticide Information Center (2000): (http://npic.orst.edu/factsheets/pbogen.pdf, 17.3.2016)

	Product Name	Dedected resudies (mg/kg)					
Brand		Chlorpyrifos	Cypermethrin	Deltamethrin	Metalaxyl	Permethrin	Piperonyl butoxid
Riquet	Vollmilch Schokolade	< 0,010	< 0,010		< 0,010	< 0,010	< 0,010
Choceur Noir	85% Cacao Dunkle Schokolade		< 0,010	< 0,010		< 0,010	0,025
Choceur	Alpenvollmilch Schokolade	0,011	< 0,010			< 0,010	< 0,010
Spar Premium	Noir 72% Extra dunkle Schokolade	< 0,010	< 0,010				< 0,010
Clever	Vollmilch Schokolade		< 0,010		< 0,010		< 0,010
Spar	Alpenmilch Schokolade	< 0,010	< 0,010		< 0,010		
Excelsior	Edelvollmilch Schokolade		< 0,010		< 0,010		< 0,010
Osterzauber	Vollmilch Schokoladenhase dekoriert	< 0,010	< 0,010		< 0,010		
Riegelein	Vollmilch Schokoladenhase dekoriert	< 0,010	< 0,010		< 0,010		
Fin Carré	Zartbitter Schokolade	< 0,010					0,010
Bellarom	Edel-Alpensahne Schokolade	< 0,010	< 0,010				
Excelsior	Alpenvollmilch Schokolade		< 0,010		< 0,010		
Maître Truffout	Milchschokolade	< 0,010	< 0,010				
Osterzauber	Vollmilch Schokoladenhase	0,010	0,014				
Lindt	Goldhase Alpenvollmilch- Schokolade	< 0,010					< 0,010
Ferrero Rocher	Milchschokoladenhase	< 0,010					< 0,010
Favorina	Edel-Vollmilch Schokoladenhase dekoriert	< 0,010	< 0,010				
Moser Roth	Edelvollmilch Schokolade		< 0,010				
Goldora	Vollmilch Schokoladenhase		< 0,010				
Douceur	Alpenvollmilch Schokoladenhase	< 0,010					
Fin Carré	Alpen-Vollmilch Schokolade						< 0,010
Fairglobe	Vollmilch Schokolade FT						< 0,010
J.D.Gross	Edelschokolade aus Orig. Trinitario Amazonas Edelcacao 60%						< 0,010
Penny	Alpenvollmilch Schokolade						< 0,010
Penny	Zartbitter Schokolade						< 0,010
Ja! Natürlich	Heumilchschokolade*						< 0,010
Spar Natur pur	Bio-Heumilchschokolade Haselnuss*						< 0,010
Merci	Vollmilch Schokoladenhase						< 0,010
St. Alpine	Vollmilch Schokolade						
S-Budget	Milchschokolade						
Ferrero	Kinder Schokoladenhase						
Milka	Alpenmilch Schokoladenhase						
Choceur	Edelvollmilch Schokoladenhase						
Alnatura	Bio Schoko Osterhase*						
EZA	Bio Milchschokoladenhase dekoriert*FT						

^{*} organic production; FT Fair Trade

Table 3: Results of the pesticide residue test of 41 chocolate products found in Austrian Supermarkets.

Although the amount of residues found does not imply direct health risks to the consumer, it is concerning that even a highly processed food like chocolade will add up to the overall burden of active chemicals consumed via our food. It is also an indication for a very high use of pesticides in the production - with detrimental effects on the health of both people and the environment.

These results together with the analysis of actual insecticide use in Cameroon and Ghana presented above show the urgent need to invest in education aiming at a massive reduction of pesticide use and adoption of sustainable and diverse agricultural systems.



Empty packages of fungicides on a cocoa farm in Cameroon. Fungicides and insecticides are the main classes of pesticides used in the cocoa production.

4.6 Climate Change

Climate change is a severe threat to cocoa production. Not only is the cocoa tree sensitive to changes in precipitation, it is also a crop that requires long term investment and cannot be easily changed on a short term basis.

What is Climate-Smart Agriculture?

Climate-smart agriculture (CSA) is an approach for transforming and reorienting agricultural systems to support food security under the new realities of climate change. Widespread changes in rainfall and temperature patterns threaten agricultural production and increase the vulnerability of people dependent on agriculture for their livelihoods, which includes most of the world's poor. Climate change disrupts food markets, posing population-wide risks to food supply. Threats can be reduced by increasing the adaptive capacity of farmers as well as increasing resilience and resource use efficiency in agricultural production systems. CSA promotes coordinated actions by farmers, researchers, private sector, civil society and policymakers towards climate-resilient pathways through four main action areas: (1) building evidence; (2) increasing local institutional effectiveness; (3) fostering coherence between climate and agricultural policies; and (4) linking climate and agricultural financing. CSA differs from 'business-as-usual' approaches by emphasizing the capacity to implement flexible, contextspecific solutions, supported by innovative policy and financing actions.

> From: Climate-smart agriculture for food security; Lipper et al. 2014. Nature Climate Change 4, 1068–1072 http://www.nature.com/nclimate/journal/v4/n12/full/nclimate2437.html

Although there are many attempts to develop so-called climate-smart agriculture, careful attention should be paid to the fact that adaptation is not only centered on technical solutions that do not consider the local social-economic situations. Systems that require high inputs, for instance, will not help farmers who cannot afford them on a regular basis. It should be ensured that these schemes really benefit the farmers and the environment in the long run and not the agro-techindustry or chocolate industry in the short term.

Often, basic low-tech solutions, knowledge exchange and consideration of current best practice can increase yields and build up resilience without requiring the introduction of new varieties, along with new chemicals and fertilizers. Diverse agroforestry systems have proven to be more resilient against climate change. They provide a better regulation of the micro-climate as well as a diversified resource base for farmers

4.6.1 The impact of chocolate on climate change - carbon footprint of chocolate

Life cycle assessment is a method to assess all environmental aspects associated with a product, service or corporation. In case of assessing a product, all the stages between the raw material extraction and the disposal (e.g. recycling, incineration, landfilling) are attributed with the associated environmental effects.

The life cycle assessment of chocolate starts with the cultivation of cocoa and ends either with the packaging of chocolate, the distribution and retailing of chocolate or the consumption phase of the chocolate.

In BÜSSER and JUNGBLUTH (2009)⁴⁷ four different chocolate compositions are investigated: dark, milk and white chocolate, as well as chocolate with sultanas. The results of this study show that the Global Warming Potential as well as for most other environmental impacts of chocolate is mainly influenced by the agricultural production phase of cocoa and milk. Milk as an animal based product has a significantly higher impact and therefore the amount of milk added determines the overall impact of the product. White chocolate has the highest Global Warming Potential of the four investigated compositions because it also has the highest share of milk (see figure below)

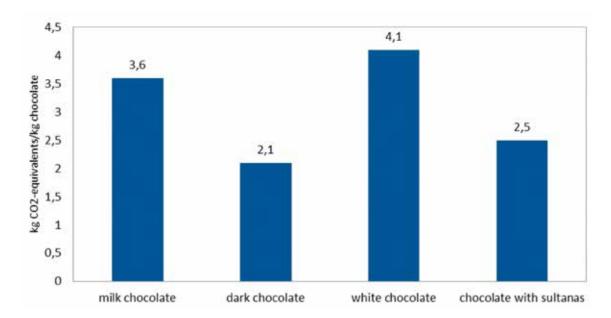


Figure 8: Global Warming Potential of four different chocolates. The higher the percentage of milk in the chocolate the bigger is the Carbon Footprint.

As a consequence the relevant measures to reduce the environmental burden of chocolate should focus on the agricultural production of cocoa beans and milk. In both cases an organic production will reduce the carbon footprint as well as other environmental impacts - especially those linked to pesticide use.

⁴⁷ BÜSSER, S., JUNGBLUTH, N. (2009). LCA of Chocolate Packed in Aluminium Foil Based Packaging. (http://courses.ecolechocolat. com/lobjects/pdf/lca_chocolate.pdf, 3.2016)

5. Ghana -Perspectives from Within*

Over the years Ghana has prided itself as being the world's second-largest producer of cocoa beans and the global benchmark in terms of quality on the world market. Producing 21% of the total global output, over 90% of Ghana's cocoa is grown on small farms between 5 and 15 hectares in the six main cocoa-growing areas: Ashanti, Brong-Ahafo, Eastern Region, Volta, and the Central and Western regions of Ghana.

However, in recent times this success story is proving to be a mirage with a myriad of factors, threatening the sustainable production of cocoa in Ghana with dire consequences for the country's sustainable development and poverty-reduction efforts. A significant decrease in poverty levels for cocoa farmers is usually observed during periods of higher yields and sustained higher prices and bonuses.

Available statistics indicate that in the production of cocoa Ghana experiences a reduction of about 100,000 tons every year. Increasing mining activities in cocoa farming communities and the attendant competition for land and water resources as well as labour could spell doom for the country as production capacity declines.

Records show that last year Ghana's cocoa production declined from one million tons to eight hundred thousand tons in just one year. If these trends continue, Ghana's Cocoa Board's (COCOBOD) projected production target of between 850,000 -900,000 metric tons could be a mere chasing the wind as the target cannot be attained.

The following chapter summarizes interviews conducted with cocoa farmers affected by gold mining activities in the Western Ashanti and Eastern Regions of Ghana by Mike Anane of the League of Environmental Journalists in Ghana.

5.1 (In)formal Gold Mining and Cocoa Farming: A difficult coexistence

For the past two decades gold mining and agriculture have contributed consistently to economic growth and development in Ghana. While farming is the traditional source of livelihood in most rural communities, gold mining - particularly artisanal and small-scale mining - are increasingly being embraced by many people in traditional cocoa growing communities as a profitable venture with immediate financial rewards.

Lending credence to this perception is the significant contribution of the mining sector to the country's economic growth and development over the years. With gold mining contributing some US\$3,673 million in exports in 2013, cocoa contributed an estimated US\$1,731 million in exports in 2013 (Government of Ghana 2013).

It is however no secret that uncontrolled gold mining is proving to be detrimental to land, water and labour resources. Mining renders land unusable for cocoa farming as ponds and degraded soils are left behind during and after mining and large tracts of land and water are polluted with mercury and cyanide used extensively in both informal and formal gold mining processes in the country.

Able bodied youth in most rural communities in the country who used to form the labour force on cocoa farms are now trooping to mining fields in search for work. Though some have argued that mining and cocoa farming could co-exist as it could supplement the income of farmers and improve productivity on their farms, Daniel Adu, a forty year old cocoa farmer in Mankessim near Tarkwa claims that the two cannot really co-exist because mining degrades soils and destroys farms and livelihoods of cocoa farmers.

⁴⁸ This chapter is mainly a contribution from Mike Anane, League of Environmental Journalists, Ghana

5.1.2 Gold-Mining: (Forced) Relocation of Cocoa Farmers and Environmental Damage

In the Western Ashanti and Eastern regions, cocoa farmers are up in arms against formal and informal gold mining companies over the destruction of their cocoa farms, their primary source of income, to make way for gold mining. In Tarkwa, cocoa farmers who used to have a source of sustained income now have to go begging for food and money as they've lost their cocoa farms to mining.

In communities visited in the Western Region Teberebie, Adisakrom Old Mankessim and Ajopa, the majority of cocoa farmers were not happy with the takeover of the cocoa farmlands for mining. There were also cases where cocoa farms have been destroyed without the free prior and informed consent of their owners.

Inadequate Compensation and Violence

In situations in which cocoa farmers are consulted to give their consent for mining before the takeover of their farms, the one-time payment impoverishes the affected farmers. The country's Minerals and Mining Act from 2006 (Act 703) mandates mining companies to pay affected farmers about 15-25 Ghana Cedis (US\$10-US\$15) for each cocoa tree. This one-time compensation is paid to a farmer and is based on the maturity of crops and what a farmer is expected to produce on his farm in a year. But farmers interviewed were quick to point out that this once in a lifetime compensation paid to affected cocoa farmers for loss of land and farms further fast tracks their slide into poverty.

Emmanuel, a farmer at Teberebie in the Western Region where most of these large formal mines are located, explained the far reaching problems of the one-time compensation for farmers:

"With cocoa trees having a life span of between 40-70 years, this one-time payment is just sheer wickedness. But who do you complain to? The country's laws say that wherever gold is found in the ground it should be exploited with the free prior informed consent of the landowner with the guidance and permission from the EPA and related government agencies - but this is just a formality as our rights are trampled upon, sometimes with the assistance of police and the military. Some of our colleague farmers who protested these forceful takeovers of the farm lands were shot or manhandled by state security operatives".

5.1.3 The case of Anglo Gold Ashanti Iduapriem Mine in Tarkwa

In Adisakrom Old Mankessim in the Western Region about 70 cocoa farmers were relocated by the AngloGold Ashanti Iduapriem mine, to a newly constructed relocation site 8 km from their old homes.

The following testimonies of cocoa farmers from Old Mankessim show the devastating impacts of gold mining activities on the life of cocoa farmers.



New homes built by the AngloGold Ashanti Mining Company for cocoa farmers in New Mankessim near Tarkwa in the Western Region.

5.1.3.1 Testimonies of Cocoa Farmers affected by AngloGold Ashanti Mining Operations

"Flying debris from the blast side are scary"

Mathew Kyeremeh: "We have been relocated from Old Mankessim where our farmlands were located to New Mankessim by AngloGold Ashanti Iduapriem Mine operating here in Tarkwa and its environs. Some new houses have been provided for us to make way for its Ajopa mining operations but about eleven of us still have our cocoa farms at old Mankessim near the Ajopa mines, some 8 miles away and AngloGold Ashanti is refusing to compensate us for our farmlands. Their explanation is that their operations will not affect our farms so we can still work on our farms even though the company has resettled us here at New Mankessim. But there is blasting of rocks by the company close to our cocoa farms, the deafening noise and flying debris from the blast sites are scary. Dust from the mining operations also settle on our vegetables in the farm" Mathew Kyeremeh laments. Mathew is 49 years old and married with six children. "Here we are in this relocation site. How can we travel 7 to 8 kilometers each morning to our old farms? What about our children? Even if we are old and we can walk the 8 kilometers how about our children aged 4-12 years who have to be with us when we are on our farms?" asked Mathew Kyeremeh.

"Our rivers and streams have been polluted"

Daniel Adu: "We have lost vast tracts of cocoa farms and other agricultural lands and our rivers and streams have been polluted, thanks to gold mining here in Tarkwa" Daniel explains. Daniel Adu is 40 years old and married with 5 children. He has a 20 acre cocoa farm and two labourers. "We didn't have much problems when we were at Old Mankessim and had our cocoa farms. I had a fishpond, sugarcane and pineapple farms, cassava, plantain. With two cocoa harvests per year alongside other food staples, I was able to take care of my family. When cocoa is not in season I had my corn, pepper, plantains, pineapples to give me some income" Daniel explains. "With increasing water pollution and diversion of streams and rivers for mining purposes by both formal and informal mines, availability of water to irrigate farms during the dry season can be a difficult one", he adds.

"We are hungry and angry"

Linda Owusu is married with three children and has a 12-year-old cocoa farm. Like Daniel Adu, she now lives with her family at the new relocation site.

"We can no longer go to our cocoa farms at Old Mankessim as often as we used to each day because of the distance. In the past our homes were at Old Mankessim just a stone



Mathew Kyeremeh and family



Daniel Adu



Linda Owusu

throw away from our cocoa farms and we could even go to our farms at midnight just to enjoy some quiet. This resettlement project at New Mankessim where we have our new homes is made up of 70 housing units, each with a toilet facility and potable water but we have no farms here and we are hungry and angry.

"Even when we have some food, how to find fuel wood to cook is a problem as we have been told not to use fuel wood here. We were given money by the company to buy gas stoves but we were not given money to fill our gas cylinders. I am a woman and my family's nutritional needs are important for me but here we are, uprooted from our cocoa farms at Old Mankessim which had vegetables and other staples as well. We had no hand in the selection of this relocation site. They just forced it on us", lamented Linda Owusu. "

These stories depict the plight of hundreds of cocoa farmers in the country and it spells doom for the cocoa and chocolate industry.

The field interviews and observations reveal that tension is mounting at Ajopa-old Mankessim and the New Mankessim relocation site in the Tarkwa-Nsuem constituency in the Western Region as the residents in the community, mainly cocoa farmers - some of whom have been relocated - have expressed their discontent with the ill-treatment meted out to them by officials of AngloGold Ashanti Iduapriem mine. Some of the farmers in the area expressed deep concern about the unfolding events and warned that it could have a devastating impact on the country's cocoa production levels since an increasing number of cocoa farmers are being deprived of their livelihoods.

COCOBOD has reacted strongly to the ongoing mining of gold on cocoa farms and they are asking the government to cancel permits granted to registered mining companies to destroy cocoa farms and mine gold in these farmlands. It is alarming that the state, as it is involved in the minerals commission of Ghana, is granting permits to mining companies to mine gold in cocoa farms.⁴⁹

What efforts can be made?

To arrest the downward trend of the cocoa farming sector, efforts must urgently be made to deal with the ravages of gold mining operations and their negative impacts. Measures need to be taken to motivate cocoa farmers, improve their conditions and their yields through modern farming practices, proper soil and water management systems and markets to harvest and also add value to the product as well as fertilizer subsidy and payment of bonuses.

This has become even more necessary in the wake of the erratic rainfall patterns due to climate change and the rapid depletion of forests.

⁴⁹ Ghana Web: Cancel prospecting of gold in cocoa growing areas - COCOBOD official (http://www.ghanaweb.com/GhanaHomePage/ NewsArchive/Cancel-prospecting-of-gold-in-cocoa-growing-areas-COCOBOD-official-423111,15.3.16)

6. Cameroon -Perspectives from Within

6.1 Fast Facts⁵⁰

Area: 475,440 sq km

Climate: varies with terrain, from tropical along the coast to semiarid and

hot in the North

Land use & cover: 20.6% arable land 13.1%; permanent crops 3.3%;

permanent pasture 4.2% forest: 41.7%

Main Agricultural products: coffee, cocoa, cotton, rubber, bananas, oilseed, grains, cassava (manioc, tapioca); livestock; timber; 70% of labor force works in agriculture

Other industries: petroleum production and refining, aluminum production, food processing, light consumer goods, textiles, lumber, ship repair, other: 37.7% (2011 est.)

Language: 24 major African language groups, English (official), French

(official), home of over 200 different languages.

Religion: indigenous beliefs 40%, Christian 40%, Muslim 20%

Population: 23,739,218; growth rate: 2.59% (2015 est.)

Life expectancy: 58 years

Literacy rate: 75%

Chief of state: President Paul BIYA (since 6 November 1982)

Corruption Index⁵¹: 27 points, Rank 130 from 165 Human Development Index⁵²: 0,512 Rank 153 from 187

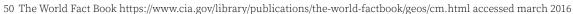
Talking to the people

When travelling through Cameroon in the Autumn of 2015, people told us that corruption was and still is one of the major problems in Cameroon. In addition, a growing discontent with the long-term authoritarian president Paul Biya was raised, along with criticism about the often violent suppression of opposition and freedom of speech and opinion. The role of the former colonial power France was regarded very critically who are said to strongly support Biya as well as their own and French companies' interests. Just like in many other African countries, the bad state of the infrastructure - especially roads - was seen as a big obstacle to development and well being. The general feeling prevailed that there was no interest at the government level to do anything about this problem.

6.2 Cocoa production in Cameroon

Cameroon is one of the world's largest producers of cocoa. Its main cocoa season runs from August to July with peak harvest from October to January/February with a smaller harvest from April/ May to June/July. Cocoa is commonly intercropped with coffee, maize, plantain/banana, oil palm, cassava, pineapple, aroids and citrus fruits.

Cocoa farming was introduced to the South Western region of Cameroon in 1886 by the former colonial power Germany. The production of cocoa beans was a raw material for their local



⁵¹ Transparency International https://www.transparency.org/country/#CMR accessed march 2016





⁵² UNDP Human Development Indicators http://hdr.undp.org/en/countries/profiles/CMR accessed march 2016

factories. They owned and managed huge cocoa plantations. After the introduction of the crop to other parts of the national territory, and the takeover of management by the French and British after the Second World War, cocoa farms were increasingly owned and managed by the peasants but were still maintained for export purposes. Since the independence of Cameroon in 1960 and up until recent years, cocoa production in Cameroon has been managed by smallholders on farms the size of between 1 and 3 hectares.

In Cameroon, cocoa remains the main cash crop for more than 75% of the population and production is mainly by smallholder (peasant) farmers53. Cocoa is principally grown in seven out of the 10 administrative regions of Cameroon. Cocoa farms and farmers are found in the regions of the Centre, East, Littoral, North West, South, South West and West. The South Western region is the highest producer in the country with about 33% of the total national cocoa production.







Three generations of cocoa farmers in Cameroon. Low income possibilities on farm level make the cocoa sector uninteresting for the young despite its importance for the economy.

A typical cocoa farm in Cameroon

(based on interviews with 15 cocoa farmers in Western Cameroon):

Average size of the farm: 2,3 ha

Average distance to cocoa farm: 2,7 km

Average age of owner: 49. Youngest = 29; oldest = 70

All use chemical inputs (pesticides) of which only half use equipment for protection

7 farms have other sources of revenue

1 farmer has a health insurance

2 farmers are in a retirement schema and will receive retirement benefits

Cocoa is cultivated in more than 400,000 stands distributed through different agro-ecological zones of the country. About 80% of these cocoa farms produce 300kg/Ha. Generally, farms are quite old; not properly maintained with the average age of a farm being about 25 years. They are low density and in need of rehabilitation or renovation, needing better management in terms of pruning, grafting and maintenance. The farming population is aged and there is no extension of farms

⁵³ Tcharbuahbokengo, N. 2005. Cocoa production in Cameroon AFTA Conference

with strong implications for the need of a younger and more vibrant workforce. For several years the productivity level of cocoa has been relatively low and has varied considerably from one agroecological zone to another. Cultivation is a delicate process, as trees are susceptible to changing weather patterns, disease, and pests.

Although Losch et al (1991)⁵⁴ reported that cocoa is grown under heavy shade composed of forest and fruit trees with a low level of farm management and limited use of pesticides, Efombagn et al., (201455) noted that the level of management of cocoa farms improves yield more than the genetic origin of the planting material. The yield of dried cocoa per hectare varies between 100 and 500kg/ ha (Varlet and Berry, 1997)56 but average yields of 400kg/ha/year have been reported (Information sheet, 2001)57

6.3 Challenges in the Cocoa Sector

Age of Farmers

Farmers as well as trees in Cameroon are over-aged (see also chapter 4). "Young people today always think that they can achieve success in life in an office in town," said a 49-year-old farmer in the Centre Region, who quit university in 1987 to grow cocoa.

The CCIC launched its "New Generation" scheme in 2012 to attract young people to cocoa farming and create new plantations by funding agricultural schools and giving logistical and financial help to the new farmers. While 500 hectares of new plantations have been created under the program and some 325 young farmers have participated, such efforts are like a drop in the ocean. There is also a shortage of nurseries, seedlings and seedpods.

Access to credits

In Cameroon (as well as in most other parts of Africa) farmers are generally unable to obtain even small credits to invest in production. Since the disappearance of FONADER (Government agricultural bank), the farmers have no reasonable credit scheme.

Access to seedlings

Cameroon has specialized cocoa research institutes that handle everything concerning cocoa research. However, there is shortage of cocoa nurseries. Seedpods and seedlings production as well as distribution is done in a very limited capacity. Many farmers complain that they have no access to seedlings – and cannot replant their aging plantations.

Use of pesticides / Access to Extension Services

There is a high dependency on chemical control although there are farmer "field schools" who train farmers on integrated pest management, which is run by the sus-



Cocoa nursery. Although there is research and production of seedlings in state run institutes the amount of seedlings produced does not satisfy the demand. Farmers told us that they have been waiting for seedlings for years.

⁵⁴ Losch B., Fusillier J.L., et P. Dupraz (1991) : Stratégies des producteurs en zone caféière et cacaoyère au Cameroun. Quelle adaptation á la crise? Montpellier, France CIRAD-Dsa Collection document systèmes agraires no. 12, p. 252

⁵⁵ Efombagn M.L.B., Vefonge K.D., Nkobe M, Sounigo O., Nyassé and A.B. Eskes (2014): Assessment of cocoa farmers' knowledge and preferences towards planting material in Cameroon. International Journal of Current Research and Academic Review Volume 2 Number 8 (August), Ppp2015-216.

⁵⁶ Varlet F., et D. Berry (1997) : Réhabilitation de la protection phytosanitaire des cacaoyers et caféiers au Cameroun Tome I rapport principal; tome II annexes Douala, Cameroun, Conseil interprofessionnel du cacao et du café, p. 204/202

⁵⁷ Information sheet (2001): Cocoa Commodity chains (accessed from www.worldcocoa.org, 17.11.2015)

tainable tree crop program and other institutions. See chapter 5.2 for a list of pesticides used in Cameroon. Many of the pesticides used are banned not only in the EU but also in Cameroon. Although the so called "field schools" are increasingly reaching out to farmers, a lack of education and knowledge about the use and avoidance of pesticides is prevailing. Additionally, the traditional forms of plantations, e.g. agroforestry with mixed intercropping, are perceived as backward in contrast to the more intensive full-sun systems.

Obstacles: Drying

In the Center-South and Eastern regions of Cameroon, climatic conditions favor the sun drying of cocoa. There isn't much rainfall in this area unlike in the South-Western Region, where rain fall is very high and heavy and sun drying during the rainy season is therefore not feasible. Hence, the drying of cocoa during the rainy season needs to be done with artificial dryers. Originally, these artificial dryers were not properly designed and maintained. Hence, smoke is bound to appear on the cocoa beans. The European Union has recently raised the problem of Polycyclic Arometic hydrocarbon contamination.

6.4 Cocoa Institutions and Companies in Cameroon

The Cocoa Coffee inter-professional Board of Cameroon states as its mission to guarantee a healthy and fair competition between operations within the sector, to facilitate transactions in internal markets and for exportation "to defend the origin of our cocoa". Although the mission of CCIC is supposed to be an assistance of farmers and especially cooperatives, none of the farmers (most of them organized in cooperatives) we spoke to had ever heard of the CCIC before.

The National Cocoa and Coffee Board of Cameroon is responsible for checking the quality of cocoa, to collect statistics, facilitate exports, and represent the Cameroonian cocoa industry abroad.

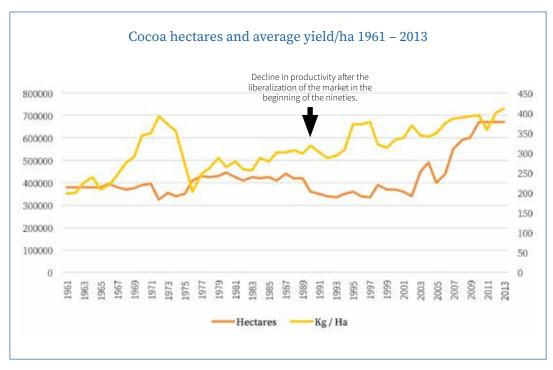
Telcar Cocoa Ltd topped the list of exports with 58,486 tons, followed by Olam-Cam with about half of this: 30,294 tons. Cameroon Marketing Commodities (CAMACO) exports 25,757 tons and Ets. Ndongo Essomba 17,722 tons.

6.5 Production Levels and Trends

The ICCO (2014) reported that the highest level of production - 225,000 metric tons - was recorded during the 2012/2013 harvest.

Cocoa production in Cameroon has reached a new high, hitting a 10% increase from 209,905 tons recorded in 2013/2014 to 232,530 tons in the season of 2014/2015. Although the present level of production is promising, it is still far from Cameroon's objective of producing 600,000 tons of cocoa by 2020.

The Netherlands, Belgium and Germany are the biggest importers of cocoa from Cameroon. In the season of 2014/2015, Cameroon exported 188,129 tons to eleven countries, the Netherlands receiving over 73% of Cameroon's beans, followed by Belgium and Germany. The official balance sheet showed that 85% of Cameroon's cocoa was shipped to Europe.



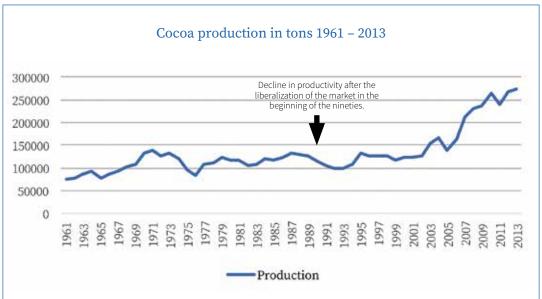


Figure 9 and 10: Development of production, area and productivity (tones) of cocoa from 1961 -2013. After the liberalization the productivity as well as the total production show a decline.⁵⁸

6.6 Quality and Certification

Cameroon recorded 10.000 tons of certified cocoa in 2014/15, up from 5446 tons in the season of 2013/2014 and 2000 tons registered in the season of 2012/2013. However, 97% of the cocoa is still sold as Grade II and Fair Fermented.

Since Telcar Cocoa Limited, a representative of Cargill, launched its certification programme last August, the quantity of certified cocoa has more than doubled. It shows that certification is manned by three actors: Telcar Cocoa Ltd, AMS and SICCACAOS.

6.7 The Liberalization of the Cameroonian Cocoa Market under the Structural **Adjustment Programmes**

Structural Adjustment Programmes (SAPs) and their associated stabilization policies are among the most important policy frameworks of the last centuries that have greatly influenced both strategies and programmes for agriculture, food and nutrition security in Africa and therefore overall economic development. The SAPs were introduced across Africa in the 1980s and continued to operate throughout the 1990s.

6.7.1 Structural Adjustment Programmes: How Mainstream Economic Theory Failed

Despite all evidence and harsh criticism from most sciences, mainstream economics still relies on overly-simplified models and theories. This would be of no concern if those theories would stay in the realm of science – but unfortunately they have been and still are used by economic and political leaders to underpin their decisions in support of our current economic system with all its flaws and terrible consequences for our planet and the vast majority of people living on it. The World Bank-led structural adjustment programmes (SAP) are examples of how the oversimplification of mainstream economical models can backfire on the wellbeing of people. A key objective of the World Bank-led SAPs implemented in most sub Saharan African countries since the mid 1980s was the elimination of barriers to trade. Despite social and political pressures, most countries in the region extended their SAPs to agricultural markets in the hopes of improving integration along agricultural supply chains.

The SAPs were based on the neoliberal understanding of economic development held by donors and international institutions at the time and which found expression in the World Banks Berg Report (1981)⁵⁹ "Towards Accelerated Development in Sub-Saharan Africa". The central recommendation of the report was for governments to refrain from intervening in their economies and to liberate market forces by freeing foreign trade and currency exchange from controls. Steps of this kind were made on precondition for structural and sectoral adjustment loans and had far reaching effects on developments in Africa.60

The SAPs implemented in African countries were expected to ultimately reduce poverty by fostering economic growth and by shifting relative prices in favour of agriculture and rural areas, where most of the poor live. A typical SAP called for devaluation and trade liberalization to improve the country's balance of payments and control its foreign indebtedness. Debt rescheduling and stricter debt management were regularly part of the prescribed policy set.⁶¹

To the extent that SAPs failed to promote growth, no improvement in poverty can be expected from growth effects. The impact on poverty and food security arising from the shifting of relative agricultural prices has been mixed. The winners have been net surplus producers of agricultural products among rural households, particularly those with export crops, while the losers have been net consuming poor households and the urban poor⁶² (CHRISTIAENSEN et al., 2001).

multi_page.pdf

⁶⁰ Franz Heidhues and Gideon Obare (2011): Lessons from Structural Adjustment Programmes and their Effects in Africa. Quarterly Journal of International Agriculture 50 (2011), No. 1, p. 55-64

⁶¹ HEIDHUES, F., A. ATSAIN, H. NYANGITO, M. PADILLA, G. GHERSI and J.C. LE V ALLÉE (2004): Development Strategies and Food and Nutrition Security in Africa: An Assessment. 2020 Discussion Paper No. 38. IFPRI, Washington, D.C.

⁶² CHRISTIAENSEN, L.J., L. DEMERY and S. P ATERNOSTRO (2001): Growth, Distribution and Poverty in Africa. Messages from the 1990s. The World Bank, Washington, D.C.

Lessons learned from the failures of SAPs

- ▶ Where inadequate competition exists, governments will have to intervene in the market. Where food insecurity exists, they will have to do more than simply "get prices right" to get farmers to increase output.
- ▶ Adjustment should not mean reducing the role of the state in the naive hope that markets will develop to take its place, but to restructure its activities so that it becomes a facilitator of, rather than an obstacle to, development.
- ▶ Increasing recognition of the role governments should play in providing the necessary support for education, health care, research and extension, most notably in agriculture, rural credit and institutional development.
- ▶ Scarce public funds need to be focused more on the needs of the poor so as to increase their access to these vital services.
- More attention should be paid to the social dimension of development and the role of the state in this process.
- ▶ It is better to use a more flexible and gradual approach to budget cuts with greater tolerance to short-term deficits.

These lessons learned have been integrated to some extend in the programmes of the World Bank and the International Monetary Fund. Still, SAPs remain heavily influenced by neo-classical economic thinking and a naïve view on economic growth as a solution to the grand challenges of today.

The implementation of SAPs and its consequences on the cocoa sector in Cameroon

The cocoa market in Cameroon was liberalized in the 80s. The marketing chain is composed of producers, retailers (mainly door to door retailers or licensed buying agents) wholesalers and exporters. The producer price is determined at the farm gate (and correlated with the free-on board price) depending on the bargaining power of the seller relative to the buyer, and a subjective examination of the cocoa quality which is very often based on the discretion of the buyer. There is therefore uneven information on cocoa quality and market price, causing farmers to be price takers and receiving low prices⁶³. International marketing is handled by a combination of exporters, the single significant country processor (SIC cacaos, a subsidiary of Barry-Callebaut), agents of these companies, independent traders and producer organizations⁶⁴.

Smallholders' access to the market is a permanent concern for actors in developing countries. Indeed, various studies show that the smallholder remains poorly connected to the agricultural market. One of the solutions to improve their access to the market involves promoting collective marketing through farmers organizations (FOs). However, it is noted that very few studies have so far been carried out to point out the importance of FOs in the collective marketing of members' products in developing countries.

After the liberalization of Cameroon, (the National cocoa and coffee marketing board is no longer the lone buyer) some farmers' organizations (FOs) appeared but only in a few regions. In the Central region, former State-owned cooperatives have completely disappeared. In the Southwestern region former cooperatives (such as the Southwest Farmer Cooperative Union based in Kumba) have passed over to cocoa buyers (who are often producers). In the current situation there is no fair relationship between the buyers and cooperatives. Individual buyers are dealing with individual farmers. There is a lack of a centralized quality control unit. Each buyer grades the cocoa (determining the price) the way that suits them.

⁶³ Kamdem B., Galtier F., Gockowski J., David-Bent H., Egg. J., and Kamgnia B (2010): What determines the price received by farmers? The case of cocoa in Cameroon African Journal of Agriculture and Resources Economics Vol 6 No 1

⁶⁴ Coulter J. (2010): Study of the value chain finance for coffee and cocoa in Cameroon. Report to UNCTAD November 3

Further up the supply chain concentration processes have been observed by the United Nations Conference on Trade and Development (UNCTAD) secretariat's "Cocoa Study: Industry Structures and Competition" report . The study states that "In cocoa sourcing, the exporters' reach extends all the way from export to the farm level. At origin, producers do not have much bargaining power vis-à-vis these major traders who, directly or through agency relationships, purchase at or close to the farmgate."

The report outlines the results of the liberalization as follows:

- ▶ More than 60% of exports declared from August 2006 to July 2007 were handled by the four largest (in terms of shipment weight) exporters.
- ▶ The single largest exporter alone accounted for roughly 29% of all shipments over the period.
- As in other cocoa-producing countries, the largest local processing and exporting companies in Cameroon are now subsidiaries of, or closely associated with, multinational companies involved in the world cocoa trade.
- ▶ The country's main processor, Société Industrielle Camerounaise des Cacaos SA, or SIC Cacaos, is owned (99.95% ownership as per 31 August 2006) by Swiss-based Barry Callebaut, a major cocoa processor and chocolate manufacturer.
- ▶ US-based Archer Daniels Midland (ADM) has acquired jointly with Singapore-listed Olam Usicam, one of the largest plants for cocoa drying, cleaning, warehousing and other related activities in Cameroon.
- ▶ A number of local exporters who are formally unrelated still depend on foreign companies as a source of funding. In practice, these exporters act as shippers who resell their product free on board (FOB) to the international buyers, from whom they receive financing.

The report concludes that "the internationalization of activities at different segments of the cocoa value chain within the multinational companies renders tacit or formal collusive behaviour a priori possible."

Outlook

Producers are fully exposed to the vagaries of international markets for cocoa, with periods of low prices in which production is sometimes unprofitable. Past experiences have shown that it is difficult for Cameroon to shield itself from these price swings.

Despite the increasing demand for cocoa



Workers and empty cocoa bags in front of the SIC processing site in Douala.

beans and subsequent varied products by consumers there might not be a corresponding increase in production if policy changes are not made to improve the conditions of the resources of poor farmers who are at the beginning of the supply chain. Among the many solutions would be putting into action the finance supply chain to encourage or provide incentives to the producers. This would result in a trickle down effect that can remove other constraints encountered in production.

⁶⁵ http://unctad.org/en/docs/ditccom20081_en.pdf, accessed march 2016

6.8 Farmers Organization in Cameroon

Despite the missing support for cooperatives and the overall difficult conditions in the cocoa market, best practice examples have evolved in Cameroon.

One interesting cooperative is KONAFCOOP - the Konye Area Farmers' Cooperative Society Limited, Südwind and Global 2000 visited during our field research in November 2015 together with representatives of the University of Dschang, SOWEDA (South West Development Authority) and IRAD (Institute of Agricultural Research for Development).

6.8.1 Best Practice - KONAFCOOP

With its 419 members the Konye Area Farmers' Cooperative Society Limited is involved in the collecting, reprocessing, packaging and commercialization of different products, with cocoa as its main crop. The cooperative is FAIRTRADE, UTZ and Rainforest Alliance certified. 80 of its farmers started to produce organic cocoa recently. KONAFCOOP was founded in 1981 and is owned by small scale cocoa and coffee producers of various ethnic origins in the principal area of coverage, Konye Sub Division in South-West Cameroon. At this time, the commercialization and export of cocoa was, as stated earlier in this chapter, in the hands of the state-owned marketing board which was closed down in 1990 due to the liberalization of the cocoa- and coffee market. From 1997 to 2001 KONAFCOOP sold all its cocoa -about 1300 tons per year- to SIC Cacao, the daughter of one of the main cocoa processing companies Barry Callebaut. Due to lack of finance, the commercialized cocoa was reduced to 200 tons and hard times began for the cooperative. To reduce the insecure dependency to commercial buyers the cooperative started to search for alternative ways of commercialization of their products. In 2006 contact to fair trade actors was established.

KONAFCOOP produced about 630 tons of cocoa in the year 2013, 555 tons were sold to SIC Cacaos and other local sales, 76 tons went to GEPA Germany. In 2013 a cooperative credit association was funded, to administer the savings of the members and give loans.

Mission and Main Activities of KONAFCOOP

The mission of KONAFCOOP is to assist producers of cocoa, coffee, non-forest timber products, plantain, cassava etc. in Konye Sub Division and environs, to successively continue to raise their income level by strengthening their bargaining power through the collection and marketing of their products, joint acquisition of input (pesticides and fertilizers) and other farm tools at affordable prices and acceptable quality. Production and supply of improved variety of planting materials, mobilization of funds for mutual support in times of need, through thrift and loans.

The collection, reprocessing, packaging and commercialization of their members' products,

especially cocoa, is one of KONA-FCOOP's main activities.

The cooperative is FAIRTRADE, UTZ and Rainforest Alliance certified.

Going Organic! Currently about 80 cocoa farmers of KONAFCOOP are adapting to organic farming methods in order to soon be able to produce solely organic cocoa, supported by the Fair Trade Company GEPA and the NGO "Brot für die Welt".



Solar Drying of Cocoa Beans





Members of the cooperative use the modern solar drying house to dry their cocoa. 1400 kg of cocoa can be dried inside within 5 days.



KONAFCOOP-manager Asek Zachee Ojong presenting a new fermentation box in which cocoa can be fermented in three stages within 6-7 days.



Under construction: A new cocoa nursery is being built. A major activity of KONAFCOOP is the production and distribution of improved varieties of planting materials like cocoa seedlings.





Besides the construction of two new warehouses/stalls KONAFCOOP is processing its own cocoa to chocolate or oil for local consumption. In the right picture, Isaac Mkale, worker at the processing plant, is presenting the cooperative owned oil press. Machines produced in Cameroon were purchased to enhance regional economic growth.

KONAFCOOP can be seen as a best practice model for the future of cocoa farming. In cooperation with different (non-)governmental actors, the cooperative managed to sustainably enhance its production and to achieve better prices for their products.

7. Role of Retailers and Store Brands

In 2010, five large retail chains controlled more than 70 percent of the retailing market in 11 European countries.66 In 2015, the three largest European retailers, according to their total food sales on European markets, were the Schwarz Group (Lidl), Carrefour and Tesco.

The role of retailers is constantly increasing as average consumption from 2008 to 2018 is expected to rise by two percent for hypermarkets, 2.6 percent for supermarkets and 4.6 percent for discounters. There are country-to-country variations, as for example consumers in Germany are more attracted to the discounting model, whereas those in France prefer the hypermarket format.⁶⁷

In Austria, the concentration process in the Retail sector is even more pronounced. In fact it is one of the most concentrated markets in Europe. The companies REWE, Spar and Hofer control about 80% of the market.

Nr	Retailer	Total food banner sales on European markes (mil. euros) in 2014	Number of outlets 2014	Sales area 2014
1	Schwarz-Gruppe	72.9	11.270	14.065.531
2	Carrefour	54.4	9.687	10.767.783
3	Tesco	52.2	4.760	6.499.844
4	Aldi	48.2	8.166	6.439.754
	Aldi Süd	27.4	3.305	2.695.259
	Aldi Nord	20.8	4.861	3.744.495
5	Edeka	45.9	13.299	10.684.858
6	Rewe Group	40.1	10.183	8.738.711
7	Auchan	34.5	3.430	7.524.717
8	Leclerc	30.2	758	3.437.538
9	ITM	28.8	2.716	4.201.719
10	Metro Group	26.0	1.105	7.654.829

Table 4: Source: Planet Retail, September 15th 2015 available on lebensmittelzeitung.net, For the Global Ranking of retailers: see Annex 168

7.1 The Logic of Store Brands

A key retail strategy is the development of store brands - a chain's own private label. Store brand products can be sold at a lower price than most branded competitors because their marketing costs are minimal and they profit from large purchase volumes: they are on average by about 30 percent cheaper as compared tobrand-name products. 69

⁶⁶ Wrigley Neil, OECD (2010): The Globalization of Trade in Retail Services, OECD, 2010 p.4 (http://www.oecd.org/tad/servicestrade/46329746.pdf, 10.3.2016)

⁶⁷ Tackett Kelly, Planet Retail (2014): European Grocery Retailing Change is the only constant (http://www.planetretail.net/ presentations/ApexBrasilPresentation.pdf, 13.3.2016)

⁶⁸ Annex 1: Retailers global ranking. TETRA PACK 2010-2013. Worldwide Center of Research and Development and Business. Intelligence. Modena, Italy. Internal database

⁶⁹ Symphony IRI Group (2012): Private Label in Europe 2012, Is there a limit to growth?, p.2 (http://www.iriworldwide.eu/Portals/0/ articlepdfs/PrivateLabel/PrivateLabel_2012_FullReport_Final.pdf, 13.3.2016)

Globally, Europe has the highest store brand penetration of national markets. The share of supermarket store brand products is estimated to reach 40 percent of EU food retail sales. ⁷⁰ The reasons for this development include a widespread conviction that these products offer good value for good money, as well as the opportunity for higher margins for retailers, and a profitable way for manufacturers to make use of spare capacity.

Store brands always have a ready distribution channel which means that they are guaranteed to have a prominent spot on the shelves. Whereas previously, store brand products were mostly inexpensive everyday items, today most supermarkets offer store brands at all price levels, for example orange juice.⁷¹ Store brand products are especially strong contenders in product groups where there is only a small difference between products with regard to specific features or packaging. On the supermarket store-brands' market, suppliers have to comply with high-quality standards for low production cost.⁷².

7.2 Unfair Trade Practices (UTPs)

UTPs can broadly be defined as practices that grossly deviate from good commercial conduct, are contrary to good faith and fair dealing and are unilaterally imposed by one trading partner on another.

Fairtrade Advocacy state in their report on UTPs in the food supply chain that the best documented cases of UTPs relate to leading supermarkets. They include practices like squeezing on prices, threats of de-listing, retrospective deduction or changing of prices, demanding loyalty payments from suppliers, keeping pricing opaque, using short term or no contracts, demanding regional/global supplier agreements, paying late, demanding global promotions at short notice and demanding standards' compliance at suppliers' expense.

Leading supermarkets may also transfer excessive and/or unjustified risks to suppliers and may undermine the competitiveness of the independent grocery brands.

In addition, there are many reported cases of distorted in-store competition linked with supermarkets-owned brands: better positioning of those supermarket private labels, copycat packaging of targeted competitors, lower in-store services provided to independent brands, etc. Legal complaints against these practices are mostly non-existent as the suppliers are afraid of upsetting and losing their largest – and often sole – customer. Being listed or de-listed as a supermarket supplier may decide over the financial viability of a producer.⁷³

Especially in situations where unequal market powers prevail there is an increasing risk of UTPs. UTPs do not only effect producers in the Global South. They are an equally big problem for farmers in Europe who are often confronted with an economic dependency, which is larger the more concentrated the retail sector is. Establishing legal framework conditions that help fight and prevent UTPs will therefore not only benefit millions of farmers in the Global South but also in Europe.

The categories of UTPs identified in the European Commission Green Paper and confirmed by a number of stakeholders can be described as follows⁷⁴:

⁷⁰ Tim EALES, IRI (2014): "Private Label in Western Economies, Closing the price gap, losing share", IRI, December 2014, p.4 (http://www.iriworldwide.eu/Portals/0/articlepdfs/PrivateLabel2014/Private-Label_report_Dec2014_nolinks.pdf, 13.3.2016)

⁷¹ Ibid. p.10

^{72 (}Only French) Autorité de la concurrence (2015) : Avis n° 15-A-06 du 31 mars 2015 relatif au rapprochement des centrales d'achat et de référencement dans le secteur de la grande distribution (http://www.autoritedelaconcurrence.fr/pdf/avis/15a06.pdf, 13.3.2016)

⁷³ Fair Trade Advocacy Office, PFCE, Traidcraft, Fairtrade Deutschland (2014): Who`s got the power? Tackling Imbalances in Agricultural Supply Chains (http://www.fairtrade-advocacy.org/images/Whos_got_the_power-full_report.pdf, 12.3.2016)

⁷⁴ European Commission (2014): Tackling unfair trading practices in the business-to-business food supply chain (http://ec.europa.eu/internal_market/retail/docs/140715-communication_en.pdf, 12.3.2016)

Ambiguous Contract Terms that make it possible to impose additional obligations on weaker contracting parties.

Lack of Written Contracts. UTPs are more easily imposed where contracts are not set out in written form as the parties have no lasting proof of the terms agreed upon.

Retroactive Contract Changes. Retroactive changes, such as deductions from the invoiced amount to cover promotion fees, unilateral discounts based on quantities sold, listing fees, etc. could at first sight seem legitimate but they could be unfair if they have not previously been agreed upon in a sufficiently precise manner.

Unfair Transfer of Commercial Risk, e.g.

- placing the responsibility for stolen goods entirely on the supplier (shrinkage fees), whereas the retailer is typically best placed to control theft or disappearance of goods at its premises (this could cause moral hazard on the side of the retailer);
- financing proprietary business activities of the other party (such as demanding investment in new outlets);
- obligations to compensate for losses incurred by the trading partner, or long payment delays.
- 'Reverse margin' practices, which the Green Paper acknowledges to be fair in most circumstances, but excessive and unfair in others.

Unfair Use of Information:

- Large cases in which one of the parties requests information to the other, and then uses them to develop a competing product: the European Commission has published a study on the economic and legal aspects linked to the use, misappropriation and litigation on confidential business information and trade secrets²⁴.
- refusals to sign a confidentiality agreement or failure to respect confidentiality.

Unfair Termination of a Commercial Relationship.

Sudden and unjustified termination of a commercial relationship or termination without a reasonable period of notice may also be a major type of UTP. While ending a relationship is part of business life, it should not be used as a means to bully a contracting party by refusing to justify this decision or by not complying with a reasonable notice period.

Territorial Supply Constraints.

Imposed by some multinational suppliers may impede retailers from sourcing identical goods cross-border in a central location and distributing them to other Member States.

7.3 The responsibility of retailers

Most retailers today have so called Corporate Social Responsibility (CSR) strategies and publish CSR-reports. Although forerunners in the sector are engaged in reducing their environmental and social impacts in their operations as well as in their supply chains, and publish transparent and holistic reports, others seem to see CSR mainly as a further marketing instrument.

Many retailers already have in place a Code of Conduct, outlining their position on, and approach towards, corporate social responsibility. However, it is very difficult to assess the responsibility of the buying practices of supermarkets from these typically very general sets of rules. Retailers should implement a credible monitoring procedure through direct engagement with trade unions, labour rights groups and environmental NGOs. These organizations need to be equally represented at all decision-making levels up to the most senior. A functional complaints system and a system for independent verification need to be put in place. A transparent and credible Multi-Stakeholder Initiative (MSI) is one way towards trustworthy monitoring.

Retailers should also measure and disclose the environmental impact of products following transparent and international accepted methods, e.g. ISO 14040 series or the upcoming EU Product and Organisational Environmental Footprinting standards. They should develop and implement a long-term strategy to reduce the overall environmental footprint of the organization based on quantitative assessments of impacts, and stakeholder inputs including CSOs and NGOs. They should set clear and measurable goals within their strategy and document and communicate achievements towards or deviations from these goals.

There are a number of certification schemes that can improve social and environmental conditions along the supply chains. As a first step, supermarkets need to adopt these schemes for their private label products immediately. However, none of these certification schemes are free of shortcomings. Therefore supermarkets need to work together with other stakeholders to ensure that the certification criteria are, as a bare minimum, brought in line with international human rights standards, and to improve the quality of audits.

Supermarkets should improve consumer accessibility to information on the social and environmental performance of individual products by publishing transparent information on the overall cost breakdown. For social criteria this includes, for example, the average farm-gate price and a public confirmation that living wages have been calculated and paid in the countries of production. For ecological criteria the EU voluntary Guidelines for Environmental Labelling need to serve as a base standard. Environmental claims should be transparent (including information on the assessment procedure used, source, criteria), relevant, reliable, complete, comparable and clear.

Finally, retailers should refrain from selling products below the sustainable cost of production and eliminate manipulative pricing practices (negative margins, price manipulation, etc). Also, companies need to refrain from advertising that creates consumer expectations of unsustainably low prices. There must be an end to the 'distorted shopping basket'.

7.4 Retailer strategies towards Cocoa in Austria and beyond

Chocolate is found in many products - from bars to cornflakes - so it is no surprise that most retailers in Austria have something to say about their approach to this sweet treat.

Regarding measurable commitments, REWE⁷⁵ and Hofer⁷⁶ have committed themselves to only selling third party certified chocolate by 2020. Hofer has announced that by the end of 2016 all products with a percentage of more than 10% of cocoa will use certified cocoa only. Lidl also states that they use UTZ and Rainforest Alliance certificates, although we did not find any Rainforest certified own-brand chocolate in their Austrian stores. The way in which they present themselves on their website does not make it clear if they are already selling 100% certified own-brand chocolate or if they are on the way to reach this goal. A quick visit to their stores shows that they are still selling conventional non-certified chocolate. Lidl also clearly overstates the value of the UTZ label by claiming that it means 100% sustainability in the production⁷⁷. This clearly shows a very market oriented approach to CSR - with more emphasis on marketing and image creation than transparency and information.

Spar has not yet announced if they have any such strategy in place. They highlight one of their premium chocolates as Fairtrade and organic⁷⁸ - but it is only one chocolate in one of its special

⁷⁵ https://www.rewe-group.at/download/PDF/Nachhaltigkeit/KakaoLeitlinie_D.pdf

⁷⁶ https://www.projekt2020.at/fuenf-schwerpunkte/ressourcen/kakao.html

⁷⁷ http://www.lidl.at/de/nachhaltige-schokolade.htm

⁷⁸ https://www.spar.at/de_AT/index/mahlzeit-magazin/Artikel/Zotter.html

editions. However they do have - as the only Austrian retailer - a fairtrade AND organic certified storebrand chocolate (Spar Natur Pur) in their shelves. All Retailers mention the problem of child labour related to cocoa on their websites, but none of them - with the exception of REWE and Hofer - presents the other sustainability hotspots, which are apparent in the cocoa production. REWE has published its strategy towards cocoa in its own-brand products (https://www.rewegroup.at/download/PDF/Nachhaltigkeit/KakaoLeitlinie_D.pdf) including a timeline describing the steps in the process.

On an international scale we screened the cocoa policies of Tesco and Carrefoure, two of the world's leading retailers. A search on their websites and on the internet did not reveal any documents addressing or highlighting their engagement or strategies for more sustainable cocoa. However, Tesco announced its membership in the world cocoa foundation, a stakeholder platform promoting sustainable cocoa. Although Tesco defines and communicates goals in terms of percentage of certified tea or coffee no such goals are defined or communicated for cocoa products, and neither does Carrefour. Nevertheless it has to be said that we did not screen the availability of certified ownbrand chocolate in the stores of Tesco and Carrefour yet. A European wide assessment of certified own-brand chocolate is being conducted in spring 2016 and will be published later this year. In the retailer's language, the sourcing of certified cocoa is equal to the sourcing of sustainable cocoa. Although this is true in the case of combined Fairtrade and organic certifications it is a clear overstatement for most other certification systems. Using those systems is clearly a step towards more transparency and better conditions in the supply chains – but they often secure those social, environmental and economical criteria which should be a bottom line standard anyway. It is therefore encouraging to see that certification systems that set higher standards, like Fairtrade or organic production, are increasingly becoming present on the shelfs of retailers. Some of them already offer own brand chocolate that is certified by at least one of those systems. But out of the 21 own-brand chocolates screened for this report in March 2016 in Austria only one had a Fairtrade and organic label, one had an organic and two had a Fairtrade label showing that there is much room left for improvement. At least nine had an UTZ label, whereas eight had no certification at all.

	SPAR	HOFER	REWE	LIDL	NORMA	UNIMARKT	TOTALS IN %
NO. OF OWNBRAND CHOCOLATES	4	4	4	5	3	1	21 (100%)
NO CERTIFICATION	3			2	2	1	38%
WITH CERTIFICATION	1	4	4	3	1		62%
ORGANIC & FAIRTRADE	1						5%
ORGANIC			1				5%
FAIRTRADE				2			10%
UTZ		4	3	1	1		43%

Table 5: Result of a shopping test in March 2016 in Austrian supermarkets focusing on store brand chocolate bars

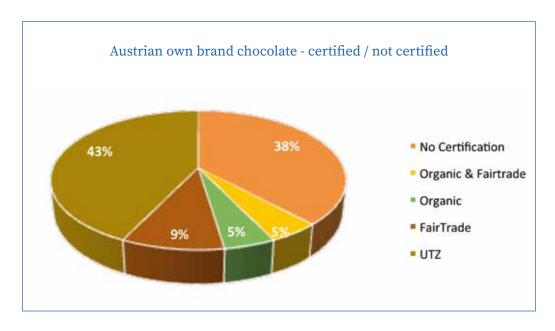




Figure 11 and 12: result of a shopping test in March 2016 in Austrian supermarkets focusing on own-brand chocolate bars and Easter bunnies.

8. SOLUTIONS

To improve the situation of millions of cocoa farmers and other actors along the cocoa supply chain, a broad, holistic approach of many different actors and decision makers is needed. In the following chapter, different approaches are highlighted.

8.1 Certified Cocoa and Label Check

One out of many necessary approaches can be the certification of cocoa. Currently there are three main certification marks for cocoa: FAIRTRADE, Rainforest-Alliance and UTZ.

Independently of the future perspectives, it is important to recall that certification is a tool that establishes requirements to facilitate the sustainable production of commodities. It is an intervention that should complement other interventions taken by the private sector, governments and NGOs and shall not be seen as an end in itself. Study on the costs, advantages and disadvantages of cocoa certification

8.1.1 Certification Bodies and World Fair Trade Organization

Rigid norms and regulations are needed for every market player in order to correct the imbalance of international trade and secure the survival of over 40-50 million people working within the value chain of cocoa production. Even though there are negotiated minimum standards based on the UN Declaration of Human Rights and the International Labour Organization, there is no guarantee that they are adhered to in the countries of production. Certifications, however, contribute to an adherence to these standards by means of external and independent control mechanisms as well as local guidance:

- ▶ Worker's rights, health and safety regulations (ILO Core Labour Standards, Conventions No. 29, 97, 98, 100, 105 and 111)
- ▶ Inalienable human rights (for example the freedom of association and organization)
- ▶ Ban on exploitative child labour (ILO Conventions No. 138, 182)
- ▶ Environmental protection (for example banned substances and pesticides: POP and PIC Convention; FAO International Code of Conduct on Pesticide Management; ILO Convention No. 170; WHO 1a/1b; PAN list of lists)

Independent certification bodies control the adherence to these standards. To safeguard independent control, these bodies themselves are accredited according to the international standard ISO 65. Additionally, the proclaimed purpose of the campaigns for fair trade and sustainable cocoa production is to support agricultural operations in their continuous development towards a sustainable cocoa production. Other aims of overriding importance are social equity, economic viability as well as environmentally compatible and sustainable production processes.

Although the three most renowned certification bodies in the field of fair trade and sustainable products – FAIRTRADE, UTZ and Rainforest Alliance – have different priorities, they agree in terms of minimum standards for humans and nature in cocoa production and collaborate in working out strategies for an improvement of agricultural practice (for example joint training material). The certification programmes of all three certification bodies are based on the guidelines of the International Social and Environmental Accreditation and Labelling Alliance (ISEAL), an internationally accepted standardization body. In the end of 2015, Fairtrade, UTZ, Rainforest Alliance and other organizations founded the Global Living Wage Coalition. This coalition advocates sustainably achieved improvements of the smallholder's living conditions and incomes through economic success on the free market.

In the figure 13 below the different roles and processes related to the certification of sustainable cocoa are highlighted:

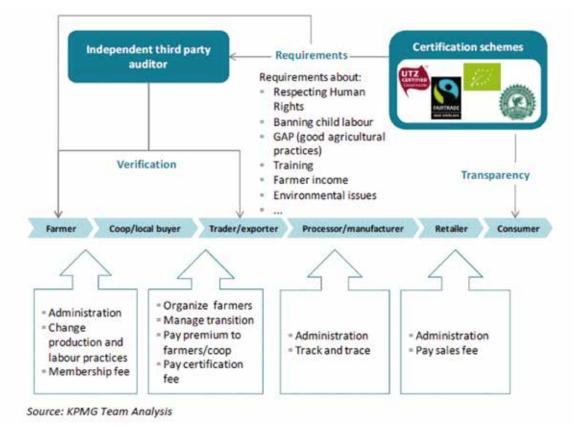


Figure 13: Roles and processes related to certification of sustainable cocoa

Additionally to the three certification marks that were introduced here, there are also the standards of the World Fair Trade Organization (WFTO) that some producers adhere to. Among them are EZA, GEPA, and EL PUENTE, whose fairly traded products can be purchased in so-called World Shops. The WFTO was founded in 1989 and serves as umbrella organization for fair trade and sustainability programmes in approximately 70 countries. This is the only global network comprised of players from every level of the value chain, from production as well as sales. A three-stage monitoring procedure for registered members ensures transparency and credibility at all levels of the value chain by the means of internal and external audits, verifications and continued development. WFTO take the 10 principles of fair trade as examples for their own work. According to WFTO a fair price is one that has been mutually agreed by all through dialogue and participation, which provides fair pay to the producers and can also be sustained by the market. Where Fair Trade pricing structures exist, these are used as a minimum.



Not one of the certification marks meets the ecological requirements for an organiccertification mark. This is why it is important to pay particular attention if additionally a **European organic certification** mark is present.

8.1.2 Certified Cocoa

More and more certified cocoa is traded on the world market, but there is a problem with double certification. FAIRTRADE International, UTZ Certified and Rainforest Alliance/SAN certified nearly 1.4 million tons of cocoa in 2013, roughly 30% of the world market. It is unknown, how much of the cocoa that originates from farmer groups they control, is double or even triple certified. This means the same ton could be counted as certified by more than one standard body. Some stakeholders in the industry and standards bodies estimate between 33 and 50% of the certified cocoa is not available in reality because it arrives from double or triple certified farmer groups. This would mean that there are 720.000 – 950.000 tons of certified cocoa available. Approximately 631.000 tons of cocoa were sold as certified in 2013. Half of this is not sold to the major chocolate manufacturers, but to smaller 'niche' chocolate companies and home brands.⁷⁹

8.1.3 Label Check

The subsequent analysis is based on information provided FAIRTRADE, UTZ and Rainforest Alliance and summarized in 2014 by Dr. Elisabeth Nindl from the Vienna University of Economics and Business. The evaluation of the information was done in collaboration by multiple NGOs from the areas international development, environmental protection and consumer's protection. The analysis was updated by Südwind in February 2016.



FAIRTRADE www.fairtrade.at

FAIRTRADE Austria was founded in 1993 by independent citizens and is a member of the umbrella organization Fairtrade International. FAIRTRADE International defines itself as an association of producer organizations from southern countries and campaigners

for fair trade in consumer countries. In the umbrella organization FAIRTRADE International, standards, FAIRTRADE premiums and Fairtrade minimum prices are being determined collectively. The FAIRTRADE-Standard for cocoa applies to small holders, there is no FAIRTRADE-certification for plantations. In order to obtain the FAIRTRADE certification mark, blended products must contain ingredients that are produced according to FAIRTRADE criteria and are sourced from FAIRTRADE sources. The end product must contain at least 20% of FAIRTRADE certified ingredients and all ingredients that are available on FAIRTRADE terms have to be bought on this terms. The exact amount of FAIRTRADE certified ingredients is indicated on the product package.

In 2014, FAIRTRADE introduced its own cocoa certification programme for FAIRTRADE companies, focusing only on the core ingredient. The FAIRTRADE cocoa **programme** only demands that the cocoa that is used shall be obtained from FAIRTRADE sources, whereas the FAIRTRADE certification mark requires all raw materials be sourced from FAIRTRADE certified producers. When it comes to chocolate, it means that in accordance with the programme, 100% of the cocoa must be sourced from FAIRTRADE cooperatives, but the sugar can be beet sugar from Europe or sourced from non-fairtrade production. The aim of this programme is to increase the amount of certified cocoa, so that more smallholder families can become members of the FAIRTRADE network. In order to support and empower smallholder families and cooperatives, FAIRTRADE developed the programme Unlocking The Power Of The Many. It supports subsistence farmers in developing strategies in the fields of cultivation, organization and working conditions.

Aim:

FAIRTRADE applies a developmental approach to fight poverty and exploitation. It supports producers in developing and emerging markets so that they can live independently and decently.

⁷⁹ VOICE Network (2015): Cocoa Barometer 2015, p.27f

Not only crop cultivation, but also the trade system and the organization of producers will benefit from the requirements, with the overall goal of promoting sustainable development. FAIRTRADE supports social, ecological and economic programmes.

Credibility of audits:

In order to obtain the certification, a registration on the UTZ website and a contract with an authorized certification institute is enough. Traders and farmers have to adhere to the regulations of the chain of custody and producers have to adhere to the code of conduct. Independent certification authorities verify that the farms adhere to the standards.

Strengths

- contractually guaranteed minimum prices (do not necessarily lead to a living income)
- pre-finance opportunities and a guaranteed investment grant
- premiums for local social and ecological projects, for example building schools and medical stations, supply of drinking water. In 2014, € 106.2 million of premiums were paid.
- promotion of democratic participation of smallholders (for example through support of cooperatives)
- equal participation of producer organizations (50% of votes in general assembly of FAIRTRADE International)
- promotion of quality management and environmentally compatible cultivation in the course of trainings and additional payment of a surcharge for organic products (e.g. around 69% of all FAIRTRADE products in Austria are organic products)
- ban on genetically engineered seeds
- 100% of the cocoa in use must be bought in compliance with FAIRTRADE regulations
- raising awareness of and providing information for consumers

Weaknesses

- higher costs and expense for smallholder audits
- the contractually guaranteed minimum prices and fairtrade premiums do not necessarily lead to a living income
- insufficient turnover of certified cocoa. Only a little bit less than 40% of the certified cocoa beans are also being sold as certified because of insufficient demand.

UTZ www.utz.org

UTZ Certified is a sustainability programme for coffee, which was founded in 1997 and is based in Amsterdam. In 2007, the programme was expanded, comprehending now also cocoa as well as tea. Since the beginning of 2016, it is called UTZ. UTZ is comprised of members of the chocolate industry, auditors and experts on sustainability. Chocolate products with the UTZ certification must contain at least 90% of certified cocoa. Other ingredients, like sugar or vanilla, do not have to be cultivated according to sustainable standards.

Aim:

UTZ is primarily a sustainability programme that was developed to assist producers by means of trainings to increase their turnover and efficiency as well as make sure that sufficient cocoa beans are produced for the processing sector.

Credibility of audits:

In order to obtain the certification, a registration on the UTZ website and a contract with an authorised certification institute is enough. Traders and farmers have to adhere to the regulations of the chain of custody and producers have to adhere to the code of conduct. Independent certification authorities verify that the farms adhere to the standards.

Strengths	Weaknesses
 Simple and non-bureaucratic participation in the sustainability programme support for increase of smallholder's production by means of comprehensive training 	 no guaranteed minimum price premiums are not fixed but have to be negotiated by the smallholders themselves with the traders no possibility of pre-finance or credits insufficient participation of producer organizations no ban on genetically engineered seeds proportion of certified ingredients can be lower than 100% (certification is already possible if the proportion of certified cocoa is 90%) insufficient information about developmental topics available in consumer countries



Rainforest Alliance www.rainforest-alliance.org/de

Rainforest Alliance is an independent environmental organization based in New York. Since 1987, it fights against the deforestation of the rainforest to make way for larger plantation areas. It is a member of the Sustainable Agriculture Network (SAN)

that comprises environmental organizations as well as producers and determines international standards for sustainable agriculture. As a sustainability programme, it not only covers ecological aspects, but also determines explicit social criteria that are accountable for a certification. Rainforest Alliance's certification mark may be used for products as soon as they have a minimum proportion at least 30% of certified cocoa. This is to facilitate access to the system for producers. However, recipients of the license commit to increasing this proportion to at least 90% in the course of five years in the so-called Smart Source Plan. According to Rainforest Alliance, 70% of all licensees use 100% of certified cocoa.

Aim:

Rainforest Alliance promotes a sustainable and environmentally compatible agriculture for the preservation of our earth. Comprehensive training will help to improve cultivation methods and provide a sustainable income for producers.

Credibility of audits:

To obtain the Rainforest Alliance certification mark, businesses have to agree to an annual audit carried out by auditors who are accredited by their branch IOAS (International Federation of Organic Agriculture Movements).

Strengths

- determines international standards to promote protection of the environment
- farmers receive training about sustainable cocoa cultivation
- calls on certified companies to cooperate with regional administration and to participate in regional projects (for example, building of schools and supply of drinking water)
- ban on genetically engineered seeds

Weaknesses

- no guaranteed minimum price
- premiums are not fixed but have to be negotiated by the smallholders themselves with the traders
- no pre-finance or credits possible (but support is available in the form of Sustainable Financing Program in order to obtain credits from banks)
- insufficient participation of producer organizations
- proportion of certified ingredients can be lower than 100% (certification is already possible with a 30% proportion of cocoa)
- insufficient information about developmental topics in consumer countries.

Final Evaluation

FAIRTRADE, UTZ and Rainforest Alliance pursue similar targets using different approaches. They all stand for the protection of international human rights and worker's rights, for the ban on exploitative child labour, for improvements of agricultural practice and for the protection of the environment. UTZ primarily wants to make cocoa cultivation more productive using less resources. Also, they want producers to achieve higher incomes and sufficient supply of cocoa beans for the demands of the industry. Rainforest Alliance distinguishes itself by determining standards in the protection of the environment that are significantly higher than mandatory minimum standards. FAIRTRADE and UTZ take these standards as examples for their own work. Rainforest Alliance, however, cannot be compared to the standards of a certification mark and cannot be taken as a substitute for one. FAIRTRADE takes a developmental approach and engages directly in pricing as well as financing, because they believe that due to structural disadvantages, no income that provides a living can be achieved on the free market. Also, equal participation of producer organizations in the development of standards sends a clear signal and emphasizes the commitment to a democratization of value chains. Minimum prices, premiums and organization shall provide possibilities for development and help fight poverty. FAIRTRADE, Rainforest Alliance/ SAN and UTZ work together to reduce the costs and complexity and to provide more efficiency and clarity for producers. This way, the core standards (labour standards and environmental protection) will be more and more harmonized and the audits will become more efficient.



Shared responsibility

It is important to note that certification is not the same as sustainability; it is merely a subset of a broader approach. It can be an important tool to support a sustainable cocoa business, but only solves a part of the obvious problems, and only works well when all of the aforementioned components and actors take responsibility. The impact of standards and certification is limited if it is not combined with a more holistic approach. Furthermore, the broader concept of sustainability is a shared responsibility among all stakeholders, including industry and governments where cocoa is produced, not just the standard bodies.80

8.2 The role of governments

The debate about the role of governments in sustainable cocoa production is intensifying. Governments of producing countries need to play a pivotal role to improve the situation of farmers. They should be transparent in taxes received on cocoa and invest a significant part of this income in rural technical and social infrastructure (including roads, electricity, education, water, sanitation and health care) or other indispensable public goods cocoa farmers rely on. They should regulate the activities of companies in their country and facilitate development aid and civil society actors. The UN Guiding Principles on Business and Human Rights (UNGP) clearly set forth that it is the state's duty to protect its population against human rights abuses. As such, it is the role of producing countries' governments to ensure the social, environmental and economic wellbeing of farmers, their families and the larger cocoa growing communities. With their anti-trust policies, governments in consuming countries should stand firm on power concentration in processing facilities under their jurisdiction. Additionally, they should support governments in producing countries or facilitating organisations with expertise.81

8.2.1 Government policies using the example of Ghana

As stated in "The fairness gap" report by ILRF, informal interviews with farmers show that there are many issues with the way the government regulates the cocoa sector due to a lack of farmer representation at the government level. The most criticized issues arecocoa price determination, distribution of subsidized inputs and government programs.

Corruption, another big concern offarmers, often occurs in the cocoa sector. As an example, the government of Ghana implemented a scholarship program for the education of children from cocoa producing families. But the scholarship did not reach the farmers. Instead, the subsidies went to government employees at the top of the cocoa supply chain. Influential cocoa traders confirmed this issue as well. The Ghanaian government also distributes pesticides and seedlings to support cocoa farmers. However, the distribution is heavily politicized. It frequently occurs that free pesticides end up in communities favouring the government and/or make their way to the black market, sometimeseven making their way to Ivory Coast.82

8.3 Farmer empowerment through organizing

Farmer organizations play a central role in fostering political, economic and social empowerment and enhancing the livelihood of farmers. Besides access to better and more timely information on domestic and international markets, the negotiating and bargaining power of farmers could

⁸⁰ VOICE Network (2015): Cocoa Barometer 2015, p. 20

⁸¹ Fountain, A.C. and Hütz-Adams, F. (2015): Cocoa Barometer 2015, p.11

⁸² ILRF (2014): The fairness gap, Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry p.20

be enhanced. Organizing in cooperatives helps farmers in scaling up the production of cocoa and negotiating higher prices and better contracts. In addition, organization enables the pooling of resources to purchase agricultural inputs such as seedlings, fertilizers and pesticides and can potentially limit quality-related risks for individual farmers.83



The Ekona Farmers Cooperative in South-West Cameroon has 400 registered members and produces 100 tons of Cocoa per year. Following the liberalization of the cocoa sector, many cooperatives have been unable to compete against new traders/exporters that have access to cheaper internationally raised finances. Membership in the cooperatives has reduced tremendously.

According to field research conducted by the International Labor Rights Forum, not all farmers associations and cooperatives are beneficial for cocoa farmers, as it was the case in Ivory Coast. Farmers expressed concern over the rampant corruption by 'fictitious cooperatives' that exist to take money from farmers. Therefore an important part of the empowerment process is gaining knowledge about corrupt practices and leading the sector toward initiatives that benefit all workers. To ensure the proper functioning of a cooperative, adequate transparency and farmer participation in the management of the cooperative has to be considered and "farmers that are educated about their rights and responsibilities as members of cooperatives will be less likely to be caught in a fictitious cooperative deal."84

In Ghana, the General Agriculture Workers Union (GAWU) and the IUF (International Union of Food) worked together with the International Labour Organization (ILO) to create a better representation of cocoa farmers' interests on a national level. Furthermore, the Concerned Private Cocoa Farmers Association (CoPCoFa) tries to improve farming methods, reduce exploitation and corruption in the cocoa sector, enhance farmers' representation in the national price setting mechanism and trains members on their legal rights.85

⁸³ ILRF (2014): The fairness gap, Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry p.21 84 ILRF (2014): The fairness gap, Farmer Incomes and Root Cause Solutions to Ending Child Labor in the Cocoa Industry, p.21 85 Ibid.

8.4 International Cooperation – World Cocoa Conference

In 2012, the first World Cocoa Conference (WCC) was held in Abidjan, Ivory Coast. After long negotiations leading up to and during the conference, the Global Cocoa Agenda (GCA) was put forward. Signatories of the Agenda now include most of the major cocoa consuming and producing nations, as well as many relevant industry and civil society actors. The GCA outlines roles, responsibilities and actions for all major stakeholder groups involved in a sustainable cocoa sector, producing governments, consuming governments, industry actors, civil society and farmers. It is far from perfect, but the Global Cocoa Agenda and its annexes are the most comprehensive attempt up until now at defining what a 'shared responsibility' for sustainable cocoa production could look like.

The second WCC held in Amsterdam, NL, in 2014 was going to be the first instance that significant reporting on the progress of the GCA would take place. However, at this time a decent monitoring framework was not yet in place, resulting in a wide variety of reporting formats. As such, it is not possible to paint a clear picture of progress achieved to date. As a result of the first World Cocoa Conference and the Global Cocoa Agenda, most producer governments are setting up National Cocoa Development Plans (NCDP).

In order to properly monitor the GCA, the Consultative Board of the International Cocoa Organisation (ICCO) was expanded to include civil society organisations and other relevant actors. The WCC is held every two years and the next conference will take place in the Dominican Republic in May 2016.86

8.5 Developments in producing countries

Over the last decade, consumer awareness of issues surrounding sustainable cocoa production has increased. Fuelled by numerous campaigns, particularly focused on child labour and trafficking, media and public awareness are now a major driving force behind the move to (higher) standards and certification in the chocolate industry. At the same time, such campaigns can run the risk of overly simplifying some of the underlying reasons driving child labour and trafficking, such as poverty and lack of infrastructure. Solutions to these issues will require multi-facetted approaches. Voluntary corporate social responsibility initiatives by companies alone cannot prevent human rights violations and environmental degradation. Some of the core challenges in the sustainable cocoa production will require legislation both at national and regional levels (such as the EU). The goal of such legislation should be to ensure that corporations headquartered in those countries are compelled to respect human rights and the environment worldwide, not only within the company, but also for the whole supply chain. This would entail the construction of a human rights due diligence process to identify, prevent, mitigate and account for how impacts on human rights are addressed. Due diligence in this context includes risk assessment, measures to prevent and eliminate possible human rights violations and environmental damage, as well as comprehensive reporting on the policies in place and actions taken. Another key element to consider is policy coherence in consuming nations' foreign development and trade policy. It is illogical to invest via cooperation for development, while trade, as a lever for development, is made difficult through trade barriers.87

Europe

European countries are following various paths towards sustainable cocoa. The multi-stakeholder forum in the Netherlands, which started in 2010, is still working towards 100% sustainable cocoa consumption in the country by 2025. In 2014 about a quarter of all chocolate was sold as sustainably

⁸⁶ VOICE Network (2015): Cocoa Barometer 2015, p.10,11

⁸⁷ VOICE Network (2015): Cocoa Barometer 2015, p.13f.

certified to the consumer. A first monitoring of this commitment has recently been released and it seems that most actors are on track to achieve this goal.

The German Initiative on Sustainable Cocoa (GISCO) is comprised of stakeholders ranging from civil society, industry and unions to government ministries. Through this initiative, Germany has committed to at least 50% of certified cocoa consumption by 2020. Additionally, GISCO is stimulating the debate about best practices through expert meetings, dialogue with the Ivorian government, a project to train farmers in Ivory Coast and supporting the Certification Curriculum Enhancement (CCE) process.

In other countries, such as Belgium and Switzerland, the debate about the creation of similar multi-stakeholder initiatives is less developed. There is still no significant public debate on steps forward in many other countries in Europe including the United Kingdom, France, and Italy. National platforms have proved to be a valuable instrument to stimulate the dialogue between different stakeholders along the value chain. However, the chocolate industry is comprised of many players of global and regional scope. Therefore a stronger focus on multi-stakeholder dialogues at a European level could be a major step forward. Organised in a transparent and efficient way such a European initiative could facilitate the exchange of experiences with national platforms.⁸⁸

USA

Turn-of-the-century legislative processes in the United States catalyzed the global dialogue on sustainable cocoa, specifically on child labour-related issues. At present, the only real action by the American government seems to be an initiative of the Department of Labour called the Child Labour Cocoa Coordination Group (CLCCG), which is working together with the Ivorian and Ghanaian governments. The CLCCG is taking steps forward but transparency and reporting on its activities are largely absent, so progress monitoring is lacking.89

8.7 Civil society initiatives

Collaboration is not only confined to industry actors. Over the last years, civil society has increasingly started to come together, especially in Europe. Various individual NGO's and networks have run campaigns, such as Solidaridad's 'For the Love of Chocolate', Oxfam's 'Behind the Brands', Make Chocolate Fair's campaign for certified cocoa, Berne Declaration's campaigns on human rights in cocoa, and Stop The Traffik's campaigns on child labour and trafficking, and last but not least, the Supply Cha!nge Campaign to make supermarkets and their private chocolate store brands fair. The VOICE Network has collectively engaged in advocacy, as well as informationsharing with farmers and civil society from the Global South. At the same time many individual NGO's implement programmes in producing nations or engage in advocacy work. Cocoa farmers are in the first stages of regional and international cooperation, with the launching of various networks of cocoa farmer organizations.90

8.8 Industry Initiatives and commitments of companies

Due to a lack of independent third-party evaluations, it is still impossible to properly assess the impact of individual company initiatives. Most companies report progress in their annual reports but these are usually 'success stories. True lessons learned and/or challenges the companies face are still mostly lacking. As is demonstrated in other parts of this report, poverty, child labour,

⁸⁸ VOICE Network (2015): Cocoa Barometer 2015, p.14

⁸⁹ VOICE Network (2015): Cocoa Barometer 2015, p.14f

⁹⁰ VOICE Network (2015): Cocoa Barometer 2015, p.18

trafficking, dismal working conditions and other challenges in the cocoa sector are still rife. It seems that collective industry initiatives still do not have the major impact in producing countries that would be necessary for a true transformation of the cocoa sector.91

Most of the major chocolate manufacturers, with the exception of Mondelez and Nestlé, have committed themselves to use 100% sustainable and/or certified cocoa by 2020. The most prominent of these are Mars, Hershey's, Lindt & Sprüngli and Ferrero, who all follow different strategies in defining sustainability. Some use certification by standard bodies, some are working through their own projects, and others are combining both approaches. However, more and more cocoa is coming from 'own projects' and sold as 'sustainable', though not certified by one of the major standard bodies.

It is essential for purchasers of certified cocoa to take shared responsibility, including implementing corrective action plans, access to training and demonstrations, access to credits, and long-term supplier relationships.92

However, Mondelez, who is - with its products Milka, Toblerone, Suchard - and a share of 36% of the Austrian market, the leading company that hasn't committed to change to 100% sustainable and/or certified cocoa. Instead, they invented their own sustainability program called "Cocoa Life". With this action Mondelez wants to invest 320 million Euros until 2022 to empower cocoa farmers, profitable productivity and stop child labour. Critics emphasize here the missing independent evaluation of the project, which has led Mondelez to declare in March 2015 to authorize the project by the independent certification company FLOCERT.

Lindt & Sprüngli, the second largest producer on the Austrian chocolate market, has set itself the target to use exclusively sustainable and/or certified cocoa by 2020. Instead of cooperating with one (or more) of the three certification bodies, Lindt & Sprüngli also invented their own sustainability program called "Lindt & Sprüngli Farming Program". The programme started in 2012 and includes, according to statements of the company, 45.000 cocoa farmers in Ghana and Ecuador. An independent external evaluation of the program will take place, according to the company.

Ritter Sport concentrates its direct engagement on their main deliverer of cocoa in Nicaragua. With targeted promotion the company supports the cooperation "Cacaonica" since 1990 Within this cooperative. Ritter Sport guarantees long term purchase with guaranteed prices. Additionally, in 2012 Ritter Sport started to operate its own cacao plantations the size of about 2500 hectares. The target is to produce one third of their own cocoa supplies with modern farming methods and to pay their employees a 30% higher wage than is usually paid in this region. According to statements by the company the standards are as high as an UTZ or Rainforest alliance certification but without any independent evaluation and control.93

But there are also good news in Austria

A lot of national manufacturers reacted to consciousness raising by consumers and use sustainable and/or certified cocoa in their production. For example Josef Manner & Comp. AG plans to use 100% sustainable and/or certified cocoa by 2020. In 2012 the manufacturer converted the "Mannerschnitte" to UTZ and in April 2015 the "Casali-Schokobananen" to FAIRTRADE. Hofer KG also produces mainly in UTZ standards and has launched the "Gourmet" chocolate with FAIRTRADE certification. Walter Heindl GmbH & Pischinger and Heidi Chocolat AG with its products "Niemetz Schwedenbomben" and "Manja und Swedy" produce under FAIRTRADE standards since 2015.94

⁹¹ VOICE Network (2015): Cocoa Barometer 2015, p.16

⁹² VOICE Network (2015): Cocoa Barometer 2015, p.25

⁹³ Südwind et al. (2015): Make chocolate Fair Factsheet #2, p. 5-6

⁹⁴ Südwind et al. (2015): Make chocolate Fair Factsheet #2, p. 5-6

9. Call for Change!

The situation described above with respect to the production of cocoa in West Africa demonstrates that companies do not take sufficient account of their responsibilities. That is what the Supply Cha!nge project wants to change.

We are a group of civil society organizations from across Europe and the Global South. Our main objective is to make supermarket store brands fairer and more sustainable. We know that so far, supermarkets don't put a lot of effort into countering these problems. Compared to their enormous influence, the endeavours of supermarket chains to prevent human rights violations and to reduce the environmental damage along their product supply chains are often disappointing.

This is why we demand tangible action from supermarkets, national governments and the European Union to improve labour conditions in countries of the Global South, and to reduce environmental damage along the supply chain. Supermarkets need to take responsibility for the circumstances under which their private labels are produced. Governments, both in producing and consuming countries, need to adopt legislation that obliges supermarkets to respect human and workers' rights in their supply chains, and act in a responsible manner where environmental issues are concerned.

9.1 What You Can do as a Consumer and Citizen

As a consumer you can act through your buying decision. As a citizen you can confront companies and help pressure them for fair and sustainable political framework conditions.



Be conscious of your choices when buying!

In the case of chocolate or processed products containing chocolate, opt for FAIRTRADE labeled and organic products or buy products by companies producing under the standards of the World Fair Trade Organization (WFTO) so that a better price for farmers and workers is provided and/or the highest environmental standards are met!

When consuming chocolate, be aware that you are enjoying a product whose main ingredient has been produced on small family farms somewhere in the tropical-forests of the Global South. It is an amazing plant which, in theory, can support farmers that practice extensive and diverse agroforestry. Knowing that farmers have the most impact on the quality and taste of your chocolate, as well as on the state of the environment on their land, should make it easy for you to choose organic, FAIRTRADE labeled chocolate.



Write to your retailer!

If you are not satisfied with the selection of certified chocolate in your supermarket, send them a message or post your opinion on their social media accounts. Ask them where their chocolate comes from, whether they care how it is produced and if they can guarantee the absence of child labour on the cocoa farms.



Inform yourself and support our campaign!

On our website www.supplychainge.org you can find information on different supermarket store brands and the ways they are produced. Visit our events, take action and support our petitions to make store brands fairer and more sustainable.

9.2 Demands for Supermarkets



Use 100% independent third-party certified cocoa for store brands to ensure the social minimum standards listed below and strive to use more organic cocoa.



Ensure fair payment of a living income to cocoa farmers and their workers in your supply chains.



Adhere to human and labour rights along the entire cocoa supply chain, and oppose hazardous child labour.

Stop manipulative and unfair trading practices.

Approve a code of conduct, including all ILO core-conventions and the right to a living wage, valid for suppliers in the supply chain.



Establish credible multi-stakeholder initiatives for the implementation, independent monitoring and verification of the approved code of conduct.

Ensure transparency throughout the entire cocoa-supply-chains.



Enhance cocoa farmers' capacities to perform sustainable and diversified farming

Implement measures to decrease negative environmental impacts on the entire cocoa supply chain.

Support farmers in adopting sustainable agriculture practices and use alternatives to chemical pesticides and fertilizers which will gradually lead to organic agriculture.

Ban the use of the worst pesticides in the cocoa supply chain.

9.3 Demands for the European Union and EU National Governments

Demands for the European Union

▶ Renew the European competition policy framework!

The EU should address structural issues such as the accumulation of excessive buyer power and increased market concentration in the retail sector through a revised approach to merger control. Also, the EU should address behavioural issues such as anticompetitive agreements and abusive unilateral behaviour in the retail sector, which have an adverse impact on small suppliers.

▶ Pass the necessary legislative measures to end Unfair Trading Practices! (see box below) With accumulating market concentration, the dependency of producers on retailers is equally growing. As a result, retailers can impose trading practices upon suppliers that threaten their existence. Common practices include unilateral price cutting by retailers, abruptly ending trade relationships and on unfair grounds, modification of orders on short notice etc. These practices need to be identified and sanctioned on a legislative level.

Demands for national governments in the European Union

▶ Put in place legal frameworks, including provisions for monitoring and sanctions, that hold retailers accountable for workers' rights violations and environmental destruction throughout the supply chains, and give workers the legal right of redress and assured access to effective remedy. These legal mechanisms should exist both in countries where the respective products are sold and in the country where the retailer is headquartered. Governments also need to demand that the WTO promotes fair and sustainable trade policies.

10. Annex

Annex 1: Top ten retailers worldwide. From: Deloitte Global Powers of Retailing 2015^{95}

	Top 10 retailers worldwide, 2013					
Rank	Name of company	Country of origin	# countries of operation	2013 Retail revenue (US \$mil)		
1	Wal-Mart Stores, Inc.	U.S.	28	476,294		
2	Costco Wholesale Corporation	U.S.	9	105,156		
3	Carrefour S.A.	France	33	98,688		
4	Schwarz Unternehmens Treuhand KG	Germany	26	98,662		
5	Tesco PLC	U.K.	13	98,631		
6	The Kroger Co.	U.S.	1	98,375		
7	Metro Ag*	Germany	32	86,393		
8	Aldi Einkauf GmbH & Co. oHG	Germany	17	81,09		
9	The Home Depot, Inc.	U.S.	4	78,812		
10	Target Corporation	U.S.	2	72,596		
	Sum: 1294,697					

 $[\]overline{95\ \text{http://www2.del}} o itte.com/content/dam/Deloitte/global/Documents/Consumer-Business/gx-cb-global-powers-of-retailing.pdf$

Annex 2:96

Use	Active ingredient	WHO Hazard class	Toxicity	Banned in EU	Reported in
Fungicide	Copper oxide + Metalaxyl (Metalaxyl-M)	III, Slightly Hazardous			Cameroon
Fungicide	Cuprous/Hydroxide oxide	not listed			Cameroon
Fungicide	Metalaxyl + Mancozeb	U, Unlikely to be Hazardous	PAN Bad Actors, carcinogen, development & reproductive toxin		Cameroon
Fungicide	Maneb	not listed			Cameroon
Fungicide	Mancozeb	U, Unlikely to be Hazardous	PAN Bad Actors, carcinogen, development & reproductive toxin		Cameroon
Fungicide	Benalaxyl + Copper oxide	U, Unlikely to be Hazardous			Cameroon
Fungicide	Benomyl	U, Unlikely to be Hazardous	PAN Bad Actors, development & reproductive toxin, endocrine disrupter	EU	Cameroon
Insecticide	Endosulfan	II	PAN Bad Actors, high acute toxicity, endocrine disrupter	EU	Cameroon
Insecticide	Cypermethrin	not listed	toxic for aquatic animals		Cameroon
Insecticide	Methyl parathion	Ia, Extremely Hazardous	PAN Bad Actors, cholinesterase inhibitor, high acute toxicity	EU	Cameroon
Insecticide	Imidacloprid	II, Moderately Hazardous			Cameroon & Ghana
Insecticide	Fenobucarb	II, Moderately Hazardous	PAN Bad Actors, cholinesterase inhibitor	EU	Cameroon
Insecticide	Cartap	II, Moderately Hazardous	high aquatic toxicity	EU	Cameroon
Insecticide	Chlorpyriphos (Chlorpyriphosethyl)	II, Moderately Hazardous	PAN Bad Actors, cholinesterase inhibitor, endocrine disrupter		Cameroon & Ghana
Insecticide	Diazinon	II, Moderately Hazardous		EU	Cameroon & Ghana
Insecticide	Lambdacyhalothrin + Profenofos	II, Moderately Hazardous		EU	Cameroon & Ghana
Insecticide	Cypermethrin + Profenofos			EU	Cameroon
Insecticide	Thiamethoxam	II, Moderately Hazardous			Cameroon & Ghana
Insecticide	Cypermethrin + Chlorpyriphos (Chlorpyriphosethyl)				Cameroon
Insecticide	Cypermethrin + Dimethoate				Cameroon
Insecticide	Cypermethrin + Imidacloprid				Cameroon
Insecticide	Propoxur	II, Moderately Hazardous	PAN Bad Actors	EU	Cameroon
Insecticide	Dimethoate				Cameroon
Insecticide	Deltamethrin				Cameroon
Insecticide	Malathion	III	PAN Bad Actors	EU	Cameroon
Post harvest treatment	Aluminium phosphide	Fumigant, not classified, b	PAN Bad Actors		Cameroon
Insecticide	Pyrethrum	II, Moderately Hazardous			Ghana
Insecticide	Chlorfenvinphos	Ib / Highly Hazardous	PAN Bad Actors	EU	Ghana
Insecticide	Bifenthrin	II, Moderately Hazardous			Ghana
Insecticide	Alpha-Cypermethrin	II, Moderately Hazardous			Ghana
Insecticide	Fenvalerate	II, Moderately Hazardous			Ghana
Insecticide	Permethrin	II, Moderately Hazardous			Ghana