ECRONICON OPEN ACCESS

AGRICULTURE
Case Report

European Directive Related to Chocolate Composition is Unfair For the African Cocoa Planters

Ph. Lebailly[1]*, B Ahouissou[2] and M Namé[1]

[1]*Gembloux Agro Biotech, University of Liège, Belgium*

[2]*Catholic University of Central Africa, Cameroon*

***Corresponding Author:** Ph. Lebailly, Gembloux Agro Biotech, University of Liège, Belgium.

Received: October 27, 2015; **Published:** November 04, 2015

Abstract

Coming from the cocoa bean, chocolate is one of the most important sectors of the European food industry with sustained growth for many years and creating very high values in the food.

Whether the cocoa bean is largely produced in the African countries (Côte d'Ivoire, Ghana, and Cameroon), its derivatives are mainly consumed in industrialized countries.

For the founding countries of Europe (Germany, France, Italy and Benelux), cocoa butter present in cocoa is the only plant material allowed in chocolate composition. For others (Denmark, United Kingdom and Ireland), the 'chocolate' could contain other vegetable fats. Failing agreement, the 1973 Directive left remaining national standards on this issue.However, with the arrival of new States, the problematic has changed: seven out of 15 countries of EU use vegetable fats (in addition to the previous three Portugal, Austria, Sweden and Finland) and negotiations for a review of the 1973 Directive were relaunched in 1996.The main argument for harmonization of laws referred to the free movement of goods with the EU single Market, arguing that maintaining different standards created trade barriers, partitioning the chocolate market in the European Union.

After negotiation at EU level, since 23 June 2000, Directive 2000/36 has repealed Directive of 1973 and allows the use of other vegetable fats (CBEs) cheaper than cocoa butter to chocolate making in limit of 5% of the total weight of the finished product, at delight of some multinational companies. Are considered CBEs: *illipe*, palm oil, sal, shea butter and *gurgikogum* and mango kernels. But, in fact, it is palm oil, which is the substitute.

Fifteen years after having authorized the incorporation of palm oil in chocolate, we remark in European level, the evils of it on health and the environment! A sad commentary and especially since the adoption of the Directive has deprived the African planters (supply of cocoa beans is 70% of African origin) of a much-needed income to fight against poverty rural area. As firstly, markets have anticipated the decision, prices remained subdued and secondly it redirects a portion of the demand related to the vegetable fats to Asia which focuses supply of palm oil.

Once again, Africa appears to be the big loser in this saga led by the lobby of the oilseed industry in Brussels.

Keywords: *Cocoa beans; Côte d'Ivoire; ICCO; ADM*

Introduction

Africa has lost since the sixties substantial market shares for most agricultural commodities (coffee, palm oil, rubber ...). However, we can observe one exception to the rule: the cocoa beans, a soft commodity, which around 70% of the world production are produced in Africa.

Europe is also a major continent where we look at the cocoa economy and that at least for two reasons: technological developments related to the chocolate industry have been launched in Europe and the old continent is the largest consumer of cocoa beans (Europe currently represents the biggest market for cocoa beans since it provides more than 40% grindings).

Moreover, chocolate is one of the most important sectors of the European food industry with sustained growth for many years and creating very high values in the food. Europe also has close ties with major African cocoa producing countries such as Ivory Coast, Ghana and Cameroon. This did not, however, prevented the adoption of a Directive in 2000 which allows 5% vegetable fat other than those contained naturally in cocoa with a disastrous effect on world prices of the agricultural raw material. Once again, Africa appears to be the big loser in this saga led by the lobby of the oilseed industry in Brussels. More than a decade after the change in Europe Union (EU) regulation, the popular expression "the tray always backfires on the pig" seems to apply: palm oil is criticized both for its effects on the environment and health and chocolate multinationals are concerned about a shortage of cocoa beans.

The purpose of this article is to discuss the consequences of this change in legislation for both the African cocoa farmers and for European consumers. The research methodology is based mainly on the analysis of secondary data related to the fundamentals of the world cocoa market and the exploitation of the documents and reports prepared at the request of the European Commission on this issue.

The secondary data analysis could be enriched by interviews with key stakeholders in the cocoa sector, namely the producer organization; representatives of some international organizations like ICCO and the ACP group; multinationals active in grinding, the federation representing the European Vegetable Oil and Proteinmeal Industry in Europe (FEDIOL) , some consumer advocacy organizations.

Supply of Cocoa Beans

The cocoa tree (*Theobromacacao* L.) is a tropical tree native to the Amazon basin whose agro-ecological requirements (annual rainfall between 1200 and 2500 mm; temperature between 21°C and 32°C and always above 10°C, dry season less than 3 months, deep and rich in organic matter soil) do that it is cultivated between 20° North and South of the Equator usually after deforestation. Of the three varieties encountered, the most common is known as the Forastero and represents about 90% of world production, the *Criollos* (originally the "fine cocoa" type of beans) and hybrid (or *Trinitario*) totalising no 10% of beans produced.

The constraints set out above does not, however, confined cocoa cultivation in a given geographical area. We can observe over time movements of the main producing areas: first Central America to South America (with the Bahianese plantations in Brazil) and then to Africa (Ghana became the first world producer in 1911 and subsequently dethroned by Côte d'Ivoire in 1977). From the eighties, but still alternatively, Asia with Malaysia and Indonesia try to develop cocoa production. The analysis of these movements or production cycles has been described remarkably by F. RUF (1991) [1]. Two major points to note this development: firstly, the African continent has become the main provider on the market for cocoa beans since the early twentieth century until today, producing more of two-thirds of world production; secondly cocoa farms are largely carried out by small farmers at the head of a family farm, the large plantations using the hired labour are underrepresented and mainly located in Brazil and Malaysia.

Demand

Chocolate comes from the cocoa bean that was imported from Central America to Europe by Christopher Columbus. It is, however, until the early nineteenth century that the first chocolate factories in Europe with future big names in what will become a chocolate industry. In 1815, Dutch chemist Conrad Van Houten installs a first chocolate factory and is developing a method to extract much of the fat contained in the cocoa bean and manufacture of cocoa powder.

Another revolution is still produced in the 19th century in the field of chocolate production. First, a quite innovative process was developed to condense milk (milk powder invented in 1860 by Swiss industrialist Henri Nestlé of German origin). This method was further improved by Daniel Peter in 1875 to allow the chocolate mixture and milk. It was the advent of milk chocolate, a popular commodity that would alter the course of the production of chocolate in the world including the American Milton Hershey who invents after intense research the chocolate bar that launches in 1894 who founded his first factory in 1903.

During the 20th century, business creation continued and the Chocolate consumption has greatly democratized: chocolate was considered a luxury item and become a mass consumer product mainly appreciated in the Northern Hemisphere. If cocoa is largely produced in the South, its derivatives are mainly consumed in industrialized countries. For beans, the purchasers of these countries are mainly the chocolate processing industry and manufacturing.

In a context where the global economy is in crisis, the chocolate industry is known to be a safe bet that in the long term has very sustained growth rate of its turnover and that displays a value among most important in the food industry.

A handful of large multinationals now control processing and chocolate making. Thus, the figures presented below for cocoa purchases in Côte d'Ivoire, the world's exporting countries show that 12 exporters realize alone three quarters of cocoa purchases for the 2011-2012 campaign:

Exporters	Headquater	Cocoapurchases (2010-2011, thousand tons)
Cargill West Africa	Cargill (USA)	184,0
ADM Cocoa SIFCA	ADM (USA)	141,6
Saco	Barry-Callebaut (Swiss)	108,4
Outspan Ivoire	OLAM (Singapore)	101,6
TNCI	Touton Négoce (France)	95,2
SAF Cacao	Ali Lakiss (Lebanon)	86,0
Cargill Cocoa	Cargill (USA)	75,3
CocafIvoire	Noble (GB/Singapore)	74,2
Zamacom	Estève (Brasil)	74,0
Barry Callebaut	Barry Callebaut (Swiss)	63,2
Armajaronégoce	Armajaro (GB)	58,8
Unicao	ADM (USA)	56,4
Sub-total		1 118,7
Total purchases		1 449,3

Table 1:

Source: Council of regulation, stabilization and development of the coffee-cococa industry, Republic of Côte d'Ivoire.

Traditionally, the figures for world grindings are used to represent the measure of aggregate demand since millers tend to grind the cocoa beans to satisfy the demand for chocolate products. At the same time, imbalances between supply and global demand will result in an increase or decrease in global stocks, which represent the fundamental data to analyze developments in world cocoa prices. We obtain the following balance sheet for the last ten years:

The increase in demand is sustained and continuous over the period considered with the exception of the 2008/2009 where the effects of the financial crisis occurred seem to have had an immediate impact on grindings. The preponderance of Europe which generates more than 40% of grindings is evident with the Netherlands and Germany, where the activity is concentrated. It is followed by the Americas with 22% and grindings in order of importance the United States and Brazil.

In Asia, Malaysia is the main country cocoa beans processing. Finally, Africa is the major player in the production level realizes that 18% grindings mainly in Côte d'Ivoire and Ghana.

Campaign (Oct-Sept)	Gross output	Grindings	Surplus/deficit	Stocks	Ratio Stocks/Grindings
2005/06	3808	3522	+248	1892	53.7
2006/07	3430	3675	-279	1613	43.9
2007/08	3737	3775	-75	1538	40.7
2008/09	3592	3537	+19	1557	44.0
2009/10	3634	3737	-139	1418	37.9
2010/11	4309	3938	+328	1746	44.3
2011/12	4095	3972	+82	1828	46.0
2012/13	3945	4138	-232	1596	38.6
2013/14	4355	4281	+30	1626	38.0
2014/15	4232	4207	-17	1609	38.2

Source: ICCO Quarterly Bulletin of Cocoa Statistics.

Table 2:

Among these firms in that market, the two multinationals of American origin Cargill and Archer Daniels Midland (ADM) are the first suppliers worldwide for cocoa and chocolate products. These two groups serve pastry industries, pastries, dairy products and other food sectors by offering a complete range of quality cocoa powders, cocoa liquor, cocoa butter and chocolate confectionery and other compositions.

International Market and Prices

The international cocoa trade represents about 13 billion US $ per year and the chocolate sector, which depends on it, is valued at around 105 billion US $ per year [2]. Of the 50 cocoa producing countries in the world, four nations (Côte d'Ivoire, Ghana, Nigeria and Cameroon) are found in Africa and provide 70% of world production. For most of these African countries, cocoa contributes decisively to their socio-economic development.

The table below shows the change in price of cocoa from data compiled by the ICCO (indicator: ICCO Index, daily price of cocoa beans ($/ton)):

Quotation	1970	1980	1990	2000	2007	2008	2009	2010	2011	2012	2013
ICCO (US$/tonne)	670	2 098	1 193	990	2 516	2 599	3 246	3 109	2 979	2 391*	2 350*

Source: ICCO, Cyclope, FAO.

** = Source: ICCO cited by French Development Agency.*

Table 3:

From 1970 cocoa bean prices have risen sharply, which has encouraged the entry of new producers including countries in Asia (Malaysia and Indonesia). From 1980 to the mid-2000s, there has been a sharp decline in prices that remain globally to a floor level. During this period, global cocoa prices were maintained to the level of the 1970s. So, thanks to the African countries, we can produce a cheap cocoa in large quantities during this long period. African planters helped the democratization of chocolate consumption. In addition, the Ivorian crisis that began in 2002 has not caused a spike in cocoa prices. We can observe highest prices between 2008 and 2010. They returned to much lower levels in 2012 and 2013 mainly due to contracted demand following to the global crisis.

European Directive Relating To the Composition of Chocolate

Directive 73/241 of 24th July 1973 was adopted as part of the Community food law to establish common rules for the composition, manufacturing specifications, packaging and labelling of cocoa and chocolate products. When discussing the Directive, the possibility of an addition of vegetable fats (CBEs) other than those contained naturally in cocoa could not be the subject of an agreement between the nine states which then made up the Community European. For the founding countries of Europe (Germany, France, Italy and Benelux), cocoa butter present in cocoa is the only plant material allowed. For others (Denmark, United Kingdom and Ireland), the 'chocolate' could contain other vegetable fats. Failing agreement, the 1973 Directive left remaining national standards on this issue.

With the arrival of new States, the balance of power has changed: seven out of 15 countries of EU use vegetable fats (in addition to the previous three Portugal, Austria, Sweden and Finland) and negotiations for a review of the 1973 Directive were relaunched in 1996.

The main argument for harmonization of laws referred to the free movement of goods with the EU single Market, arguing that maintaining different standards created trade barriers, partitioning the chocolate market in the European Union. The question that remained was asked to authorize or not the CBEs. Advocacy for the respect for tradition and quality and interests of cocoa farmers have failed to convince. The new EU rules chocolate is the obvious delight of some multinational companies where its adoption was a victory.

Since 23 June 2000, Directive 2000/36 repeals Directive of 1973 and allows the use of other vegetable fats (CBEs) cheaper than cocoa butter to chocolate making in limit of 5% of the total weight of the finished product. Are considered CBEs: *illipe*, palm oil, sal, shea butter and *gurgikogum* and mango kernels.

To adopt this Directive, the lobbies of food companies conducted by Fediol. (1996) [3] to the Commission highlighted the interest of the authorization of 5% for some Sahelian countries such as Burkina Faso and Mali to the development of the shea butter industry, the main substitute for cocoa butter. But to most experts, this possibility was unlikely [4] and in fact, it is palm oil, which is the substitute.

On a geopolitical level, it has witnessed a double cleavage during the discussion for the adoption of this Directive: between "Old Europe" and the new Member States at the Commission and between forest African countries (Côte d'Ivoire, Ghana and Cameroon) and Sahel (Burkina Faso and Mali) at the African Caribbean Pacific (ACP) group.

More of ten years after having authorized the incorporation of palm oil in chocolate, the European consumer discovers the evils of it on health and the environment! A sad commentary and especially since the adoption of the Directive has deprived the African planters (supply of cocoa beans is 70% of African origin) of a much-needed income to fight against poverty rural area.

Chocolate defenders of the "100% cocoa" got a little compensation with the rules relating to consumer information and labelling which provides that the sales names "chocolate", "milk chocolate" and "couverture chocolate" may be supplemented, in some cases, descriptions relating to the criteria of product quality (higher levels of cocoa and milk). Furthermore, the presence of vegetable fats other must be mentioned so as to attract attention and to be clearly legible.

Finally, the Directive provided for a study after five years to measure the impact of 5% on the countries producing cocoa and vegetable fats. In view of the findings of this study, the possibility of revising the list of original products for CBEs remained open.

This assessment has been entrusted by the European Commission to LMC International. (2006) [5]. Overall, the study conducted finds that after a detailed analysis of price data and international trade that the Directive has had a very low impact on the world cocoa economy. The presentation of results stubbornly present palm oil as a minor substitute and the impact on prices seems minimized since the reference situation is not that of a rejection of an incorporation of CBEs in chocolate but that of a status quo in terms of European legislation. According to the forecasting model used by LMC, the price decrease is less than USD 5 per ton. It is surprising this shortcut: two studies conducted respectively by ICCO [6] and the University of Amsterdam [7] respectively felt the decrease in demand for beans cocoa to 135 000 tons and 118 000 tons or, at that time, corresponds to the Cameroon production (the fifth main exporter).

Directive 2000/36 and Geopolitics

The evidence presented above relating to the world cocoa economy helped somehow set the scene. A question remains: is the cocoa bean geopolitical object? It seems obvious that the players of games involving the states and especially the European Commission and certain multinational companies have been instrumental in the directions taken during recent years. African farmers' organizations and NGOs of civil society in Europe have been unable to influence a particularly unfair decision for cocoa farmers in West Africa and for the European consumer.

As widely noted by different authors, the economies of most African countries are heavily dependent on export of some agricultural commodities revenues. Thus in the case that concerns us and 2002 (implementation of Directive 2000/36 has been effective in the 15 EU countries in 2003), cocoa accounted for 44% of the value of total exports for Côte d'Ivoire, 34% for Ghana and 10% for Cameroon. Reduce the demand for more than 100000 tonnes had a doubly disastrous for the economies of these countries: firstly, as markets anticipated the decision, prices remained subdued and secondly it redirects a portion of the demand related to the vegetable fats to the Sahelian countries with shea butter but more likely to Asia which focuses supply of palm oil.

This logic seems particularly cynical when you consider that in the chocolate value chain and according to ICCO, the share returns to producers is only 6%. Under these conditions, a higher price for chocolate industries would have a limited impact on the increase in production costs with minimal reduction on margins of chocolate manufacturers. It would probably be a price to pay to assure a stabilized supply of chocolate cocoa beans from sustainable production systems that enable West African planters to be properly compensated.

This solution can be described as "idealistic" however was never really imagined. It prefers ad hoc responses organized around certification "fair" as F RUF. (2012) [8] which emphasizes masks the reality rather than confront it. At the same time, there is awareness campaigns industrial sector as the one initiated by the end of 2013 the global leader in cocoa products and chocolate manufacturer, Barry Callebaut: "Chocolate consumption is increasing, especially in emerging countries. If growth continues at this rate, there will be a shortage of cocoa in a few years".

Another important element revealed by the adoption of the Directive is linked to the growing influence of the agribusiness multinationals as they are concerned with primary processing (grinding of beans) or secondary (chocolate production). Thus, Cargill and ADM did not make the weight to the interests of Unilever, Nestlé and Barry Callebaut.

For consumers, the adoption of the Directive falls by us in the loss of identity of a product. By allowing the incorporation of vegetable fats other than cocoa butter in chocolate, we open the door to manipulation that might create doubt in the consumer. The recent example of the discovery of the ingredients of the chocolate spread "Nutella"of Italian group Ferrero is exemplary in this regard. The idea of a tax by France of palm oil has raised awareness to millions of consumers about the composition of what we dared call "chocolate spread". The reaction of the industry does not have to wait: he pledged to stop buying that RSPO certified palm oil (Roundtable for a sustainable Palm Oil).

Conclusions

Agriculture and geopolitics are linked. This is not new but with globalization and the increased internationalization of trade, the phenomenon involves more subtle interest that still fall within the current financial visions of multinational corporations that bring in competition to the peasantry able to have an agricultural raw material at low prices in large quantities. The logic is not wrong in itself. However, she calls when relies on states that do not hesitate to change the rules without regard for the induced effects of changes adopted on the incomes of farmers they are supposed to be protected.

Chocolate is no exception to this principle when he represents the food sector where growth prospects were and are supported with a strong wealth creation downstream production and comfortable margins for manufacturers. Today, the situation seems to have changed and the repeated campaigns against palm oil reveal an awareness of European citizens on manipulations by some major groups of food at the expense of the environment and health. Now, is it not appropriate to propose a new evaluation by the European Parliament on the impact of Directive 2000/36? The recommended solution is it does not remove palm oil from six CBEs products? [9], [10], [11], [12], [13], [14].

Bibliography

1. RUF F. "Les crises cacaoyères. La malédiction des âges d'or?" *In : Cahiers d'études africaines* l. 31 (1991) : 83-134.
2. Chalmin Ph. "Rapport Cyclope, les marchés mondiaux 2013". Economica, mai 2013 (2013): 357-361.
3. FEDIOL. "Vegetable fats in chocolate". *The facts* (1996):2.
4. Lebailly Ph and ZAGBAI SH. "Beurre de karité : situation et perspective". Conférence international sur l'avenir des cultures pérennes, Yamoussoukro, 5 au 9 Novembre, (2001): 12.
5. Lmc International. "The Impact of Directive 2000/36/EC on the Economies of those Countries Producing Cocoa and Vegetable Fats other than CocoaButter". *Main Report*, (2006): 106.
6. Brewer A. "Assessments of the Effects on the World Cocoa Market of Possible Changes in the Use of Non-Cocoa Vegetable Fats in the Manufacture ofChocolate Within the European Union", International Symposium about Coffee andCocoa organized by ISCID, Le Touquet, France, 24-25 (1995): 14.
7. Burger K. "The European Chocolate Market and the Impact of the Proposed EU Directive". Economisch en Sociaal Instituut, Amsterdam, (1996): 48.
8. RUF F., *et al*. "Certification du cacao stratégie à hauts risqué". Inter-Réseaux, Développement rural, (2012): 7.
9. CCC. "Conseil du Café-Cacao. République de Côte d'Ivoire". (2013).
10. CNUCED (2010), Accessed on 2d November 2015.
11. ICCO. "The World Cocoa Economy : Past and Present". London (2010): 44.
12. Lebailly Ph. "Key features of the cocoa channel in Cameroon, 711-719". In : Economics in tropical regions, Price formation and agricultural trade, Proceedingsof the Xth Seminar of Economics and Sociology, Centre for International Cooperationin Agronomic Research for Development. Paris.
13. Lebailly Ph. "Evolution of the world cocoa economy". International Symposium on, Globalization and agri-food systems - AIEA 2, Caracas, (1998): 18.
14. RUF F. "Booms et crises du cacao". *Karthala* (1995): 459.

Volume 2 Issue 4 November 2015