PROPOSAL FOR A DIRECTIVE RELATING TO COCOA AND CHOCOLATE PRODUCTS

CONSEQUENCES FOR EXPORTING AND IMPORTING COUNTRIES

External Economic Relations Series

W - 14

1-1997
1. Introduction  p. 7

2. The original Directive 73/241/EEC  p. 8

3. The proposal for a new directive, COM(95) 722  p. 9
   3.1. The old directive  p. 9
   3.2. The legal basis  p. 9
   3.3. The reasons for and substance of the proposal for a directive  p. 9
   3.4. Various remarks  p. 11
      3.4.1. Designation  p. 11
      3.4.2. Level of replacement  p. 11
      3.4.3. Uncertainty about measuring the amount of vegetable fat in chocolate  p. 11
      3.4.4. Stage reached in the procedure  p. 12

4. Conformity from the legal point of view  p. 13
   4.1. International obligations  p. 13
      4.1.1. International Cocoa Agreement, 1993  p. 13
      4.1.2. The Lomé Convention  p. 14
   4.2. Obligations under the Treaty  p. 14

5. Cocoa and the developing countries  p. 16
   5.1. Cocoa cultivation  p. 16
   5.2. The economics of cocoa  p. 18
      5.2.1. Overview  p. 18
      5.2.2. Structure of the market  p. 23
      5.2.3. World trade  p. 29
   5.3. The phenomenon of substitution  p. 33
      5.3.1. The current situation  p. 34
      5.3.2. The case of shea nuts  p. 34
6. Consequences of the directive
   6.1. Consequences for the cocoa-producing countries
   6.2. Consequences for the European Union
   6.3. Consequences for consumers
   6.4. Consequences for the industries concerned

7. A coherent approach

8. Conclusions

9. Bibliography

10. Annexes
Cocoa and Chocolate Products

1. Introduction

In January 1984 the Commission of the European Communities put a proposal to the Council for a directive to harmonize the laws of the Member States relating to cocoa and chocolate products intended for human consumption\(^1\). In addition to consolidating the existing legislation, the proposed directive was to introduce a number of amendments. One of those amendments would have permitted all Community countries to make limited use of cocoa butter equivalents.

The Community came up against powerful lobbying by the producer countries, who feared that such legislation would have a disastrous effect on demand for cocoa and on prices. It also came up against opposition from the European Parliament, which was aware of these problems. The Commission finally withdrew the proposal in July 1986. It was likely that, with the arrival of the single European market in 1992, the question of harmonizing European rules on the composition of chocolate would arise once again.

The Commission has, in fact, recently presented a proposal to amend the directive (73/241/EEC) relating to chocolate\(^2\). The proposal, which was drawn up by the Commission's DG III in the context of harmonization of the internal market (free movement of goods), forms part of a package of seven 'technical' measures to be taken in the food sector\(^3\). The proposal, as a measure concerning the establishment of the internal market and consumer protection, is subject to the codecision procedure (Article 189b of the Treaty). The proposed change is to authorize the use of vegetable fats other than cocoa butter up to a limit of 5% of the total weight of the chocolate product.

The Commission's aim was to abolish the compartmentalization of the chocolate market in the Community which resulted from the exemptions regarding manufacture which had been secured by some countries. A 1973 directive authorized Denmark, Ireland and the United Kingdom (who had just joined the EEC) to retain their national rules regarding the composition of chocolate. These permitted the use of vegetable fats other than cocoa butter up to a limit of 5% of the total weight of the product\(^4\), whereas the other EEC countries did not permit such substitution. They barred access to their market to foreign chocolate manufactured according to the 5% rule. This exemption created an imbalance on the European internal market and set a dangerous precedent.

Since then, the directive has been repeatedly amended and made more complex to reflect technical developments relating to the manufacture of chocolate products\(^5\). Seven countries have authorized

\(^1\) COM(83) 787 final, OJ C 32, 7.2.1984, p. 3.
\(^3\) See EU bulletin 4-96 for details.
\(^4\) Comparable rules apply in Eastern European countries (Hungary, the Czech Republic, Slovakia, etc.), but also in Switzerland, for instance.
\(^5\) This directive has been amended at least nine times. For details see Directive of Community legislation in force and other acts of the Community institutions. vol. 1: analytical register 26th edition, reference date 1 December 1995, p. 944.
the use of vegetable fats other than cocoa butter in the manufacture of chocolate: Denmark, Ireland, the United Kingdom, Finland, Austria, Portugal and Sweden.

Now, even before the European Parliament's first reading, the Commission proposal (COM(95) 722), intended to replace Directive 73/241/EEC, has aroused strong passions. It is undoubtedly a worthwhile exercise to consider these two directives in detail.

2. The original Directive 73/241/EEC

This is a typical vertical directive governing a category of specific products (chocolate products) in a fairly detailed manner. The purpose of the directive was to approximate the laws of the Member States relating to cocoa and chocolate products intended for human consumption.

The directive laid down certain rules for the composition of chocolate products (defined in an annex). The Member States had to take all the measures necessary to ensure that the products defined in that annex were offered for sale only if they conformed to the definitions and rules laid down in the directive (Article 2). The directive prohibited, or rather, made no provision for, the presence in the composition of chocolate of fats other than those derived from cocoa, i.e. cocoa butter (Annex I (1.16)).

The directive did, however, provide for several exceptions, specifically in Article 14(2), which stipulated: 'This Directive shall not affect the provisions of national laws: (a) At present authorizing or prohibiting the addition of vegetable fats other than cocoa - butter to the chocolate products defined in Annex I. At the end of a period of three years from the notification of this Directive the Council shall decide, on a proposal from the Commission, on the possibilities and the forms of extending the use of these fats to the whole of the Community; ...' The directive thus explicitly envisaged the possibility of extending the use of such vegetable fats to the whole of the Community. The 7th recital also alluded to this possibility: 'Whereas the use of vegetable fats other than cocoa - butter in chocolate products is permitted in certain Member States, and extensive use is made of this facility; whereas, however, a decision relating to the possibilities and forms of any extension of the use of these fats in the Community as a whole cannot be taken at the present time, as the economic and technical data currently available are not sufficient to enable a final position to be adopted; whereas the situation would consequently have to be re – examined in the light of future developments'.

This fact seems significant enough to be worth highlighting. Although the directive laid down a general rule (albeit with some exceptions) it cannot be claimed that its long-term purpose was to prohibit vegetable fats or to make the 0% rule generally applicable. It envisaged the possibility of

(*) Finnish legislation even permits up to 10% of vegetable fats other than cocoa butter in the composition of chocolate
authorizing the use, throughout the Community, of 5% of vegetable fats in the composition of chocolate at least to the same extent as it envisaged the opposite.

3. The proposal for a new directive, COM(95) 722

3.1. The old directive

Article 7 of the proposal for a directive (COM(95) 722) stipulates that Directive 73/241/EEC is repealed with effect from 1 January 1998.

3.2. The legal basis

The directive is based on Article 100a of the Treaty: '... The Council shall, acting in accordance with the procedure referred to in Article 189b and after consulting the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market. ...'

The European Parliament and the Council of the European Union act in accordance with the co-decision procedure laid down in Article 189b of the Treaty. The Commission submits a proposal to the European Parliament and the Council. The Council, acting by a qualified majority after obtaining the opinion of the European Parliament, adopts a common position. The common position is communicated to the European Parliament. If the Council does not take account of the European Parliament’s views in its common position Parliament may block the adoption of the proposal. If Parliament decides to reject the proposal it may not be adopted by the Council. In the event of disagreement between Parliament and the Council, a conciliation committee is convened to seek a compromise before Parliament’s third reading. In the event of continuing disagreement Parliament may definitively reject the proposal.

3.3. The reasons for and substance of the proposal for a directive

In its explanatory memorandum the Commission justifies the changes to these directives (seven, including the directive on cocoa) by its desire to ensure the free movement of goods. It also wishes to simplify and streamline the legislation in the light of the subsidiarity principle.
The proposal simplifies the 28 cocoa and chocolate products defined in Directive 73/241/EEC. The definitions of raw materials and intermediate products have been dropped (Annex to the proposal for a directive).

In accordance with the subsidiarity principle, the Member States have the option of deciding whether or not to use vegetable fats other than cocoa butter in their national products. This discretion is subject to the requirement that such an addition of fat may not exceed 5% of the finished product and the content of cocoa butter and dry cocoa matter, laid down by the directive, may not be reduced (Article 2, first paragraph).

However, chocolate products falling within the scope of the directive must be able to circulate freely within the European Community under the sales names resulting from the provisions of the annex to the directive (Article 2, second paragraph).

This measure is to be accompanied by stringent labelling designed to provide consumer information. It lays down the requirement to indicate the list of ingredients used in the composition of the product, in accordance with Directive 79/112/EEC. With regard to products containing vegetable fats other than cocoa butter, the labelling is to be supplemented by a clear, neutral and objective statement that those substances are present. Finally, by virtue of Directive 79/112/EEC on labelling, producers and distributors of chocolate containing no fat other than cocoa butter may indicate this on the product label, provided that this does not mislead consumers (Article 3).

The proposal for a directive provides for the Commission to be assisted, in respect of future changes, by the Standing Committee for Foodstuffs, composed of representatives of the Member States and chaired by a representative of the Commission (Article 6).

The Commission has based its approach on the broad lines laid down in the Council resolution of 8 June 1993 recommending care in the quality of drafting of Community legislation to make it more accessible (OJ C 166, 17.6.1993, p. 1) and on the conclusions of the Edinburgh European Council of 11 and 12 December 1992, as confirmed by the Brussels European Council of 10 and 11 December 1993, to the effect that there was a need to simplify certain vertical directives in the foodstuffs sector to cover only the essential requirements to be met by such products to enable them to circulate freely in the internal market.

Eighth recital to the proposal for a directive (COM(95) 722): 'Whereas, in order to apply the principle of proportionality contained in the third paragraph of Article 3b of the Treaty, and in order to take account of the various national manufacturing traditions, Member States must have the option of deciding which of those vegetable fats to use in their national products, under the conditions laid down in this Directive'. Article 3b of the Maastricht Treaty stipulates: 'The Community shall act within the limits of the powers conferred upon it by this Treaty and of the objectives assigned to it therein'.

The current legislation provides that chocolate must contain a minimum total dry cocoa solids content of 35%, comprising at least 18% cocoa butter and at least 14% dry non-fat cocoa solids.

The Standing Committee for Foodstuffs was established by a Council decision of 13 November 1969. The committee is composed of representatives of the Member States and chaired by a representative of the Commission, who submits to the committee a draft of the measures to be taken. The committee delivers its opinion on the draft, if necessary by taking a vote. The opinion is recorded in the minutes; in addition, each Member State is entitled to ask for its position to be recorded in the minutes. The Commission takes the utmost account of the opinion delivered by the committee. It informs the committee of the manner in which its opinion has been taken into account.
The proposal for a directive maintains the exemption provided for in Directive 73/241/EEC whereby the United Kingdom and Ireland may authorize the use in their territory of the name 'milk chocolate' (not less than 25% total dry cocoa solids) to designate 'milk chocolate with high milk content' (not less than 20% total dry cocoa solids) (Annex, points 3 and 4).

As regards compliance with the composition criteria, the Commission stresses that it has launched a programme to develop methods of analysis allowing verification of compliance with those criteria and that it will ensure correct implementation of the Community directives on the official control of foodstuffs ('specific comments').

3.4. Various remarks

3.4.1. Designation

The manufacture of products containing vegetable fats other than cocoa butter is not prohibited in any of the countries of the European Union. Many cocoa-based products already exist, but they are not called chocolate because they do not have the requisite composition.

What is at issue here is the designation 'chocolate'. The draft directive currently tabled for debate before the European Parliament proposes to redefine which products will be able to bear the names 'chocolate' and 'milk chocolate'. Chocolate is a protected designation and conveys a certain image which has developed within a manufacturing tradition and taste perception of the product. This image is subjective and relative. What is known as 'chocolate' in the United Kingdom does not cover the same ground as the term 'chocolate' in Belgium, for instance. In order to illustrate the relativism involved, it is sufficient to envisage the fact that a whole range of products which are not currently called chocolate will be able to call themselves chocolate if the directive is adopted.

3.4.2. Level of replacement

The directive lays down a minimum cocoa content in chocolate. This minimum content will always be complied with, regardless of substitution. Manufacturers actually use a higher percentage of cocoa in chocolate than the minimum laid down by the directive. Where the directive lays down a maximum of 5% vegetable fats other than cocoa butter, this is 5% of the total weight of the product. Given that chocolate includes 20–30% cocoa butter, the directive actually authorizes a level of replacement of cocoa butter by another vegetable fat of 15–25%.

3.4.3. Uncertainty about measuring the amount of vegetable fat in chocolate

The current state of the art is such that it is certainly possible to detect whether vegetable fats are present in chocolate, but determining their proportion is a much more uncertain business. This issue of control, which was a problem even in 1973, has not been resolved.

---

For example, the legal minimum for the cocoa content of milk chocolate is 25%. At present, there is no milk chocolate (or very little) on the market with less than 30% cocoa.
Cocoa and Chocolate Products

'... as the economic and technical data currently available are not sufficient to enable a final position to be adopted; whereas the situation will consequently have to be re-examined in the light of future developments'\(^{14}\).

The Commission, moreover, has just issued an invitation to tender for the development of a satisfactory method of analysis. The chocolate industry has indicated that the detection of vegetable fat in the end product entails a 40% margin of uncertainty. This means that that the presence of 5% of such substances may imply a content ranging from 3 to 7%, which corresponds to an actual replacement level which may be as high as 35% of the cocoa butter in a chocolate product.

The question is therefore how to apply legislation where the verification method is unsound. It should be noted that chocolate manufacturers who support the directive refute this argument, since controls can be carried out at the source, when the product is manufactured.

'The lack of a precise quantitative analysis is not relevant: EU food legislation is based on inspections at the factory, not on product analysis ...'\(^{15}\).

Carrying out factory checks might ensure a certain degree of accuracy. According to a report by the Economic Commission for Europe on food-processing machinery, the requirements of increasingly competitive and diversified production of products of the increasing quality demanded by consumers call for rapid advances in monitoring techniques\(^{16}\). Why is the Commission so keen to develop a satisfactory method of analysing the end product? There would undoubtedly be practical difficulties with setting up a control procedure (financing, establishment of a monitoring committee, the question of responsibility, etc.).

3.4.4. Stage reached in the procedure

We are at the first stage of the codecision procedure. The Commission proposal has thus been submitted to the Economic and Social Committee, the European Parliament and the Council. The European Parliament received the proposal on 30 May 1996. It was referred to the Committee on the Environment, Public Health and Consumer Protection as the committee responsible. The rapporteur was appointed on 25 June 1996, and it was Paul Lannoye (Green Group, Belgian MEP). Other committees concerned by the proposal for a directive have been asked for their opinions: the Committee on Development and Cooperation, the Committee on Agriculture and Rural Development, etc. The Development Committee delivered its opinion on the proposal for a directive on 20 November 1996. Two options were put forward: either to amend the proposal for a directive by reversing it, by applying the 0% rule for vegetable fats in chocolate, or to reject it. It decided unanimously to recommend rejection of the Commission's proposal to the Committee on the Environment, Public Health and Consumer Protection\(^{17}\).
4. Conformity from the legal point of view

The proposal for a new directive has been heavily criticized, particularly in legal terms. Several questions have been raised in two separate areas.

4.1. International obligations

4.1.1. International Cocoa Agreement, 1993

In its explanatory memorandum preceding the proposal for a directive, the Commission states that it 'weighed up all the interests involved and every aspect of the problem, from the angles of operation of the common market and of the Community's international obligations, particularly under the International Cocoa Agreement'. However, it seems that it is this final point which constitutes the most serious legal obstacle to the directive. The 1993 International Cocoa Agreement was signed in Geneva under the auspices of the United Nations Conference on Trade and Development on 16 July 1993. All the countries of the European Union and the European Union itself have signed and ratified this Treaty.

Many of the players who have become involved in the debate surrounding this directive have referred to an unofficial opinion (an internal document) delivered by the Commission's legal service in February 1995. According to these organizations, it takes the view that the proposal for a directive conflicts with Articles 32 and 33 of the International Cocoa Agreement.

Extract from the articles concerned:

Article 32: 'All Members shall endeavour to take all practicable measures which may be necessary to encourage the expansion of cocoa consumption in their own countries. ... , in particular, however, Members, especially importing Members, shall endeavour to remove or reduce substantially domestic obstacles to the expansion of cocoa consumption ...'

Article 33: 'Members recognize that the use of substitutes may prejudice the expansion of cocoa consumption. In this regard, they agree to establish regulations on cocoa products and chocolate or to adapt existing regulations, if necessary, so that the said regulations shall prohibit materials of non-cocoa origin from being used in place of cocoa to mislead the consumer. ...'

The key to the incompatibility resides in the fact that, irrespective of compliance with the requisite minimum cocoa content, the use of vegetable fats results in some substitution of the cocoa content used, above the minimum levels laid down by the directive.


(19) The Cocoa Campaign, the European Fair Trade Association, OXFAM and Mrs Bassong, Ambassador of Cameroon, have referred to this allegedly confidential document.
4.1.2. The Lomé Convention

Article 12 of the Lomé Convention provides for the ACP countries to be duly informed of measures that the Community might take and which might affect the interests of the ACP States as far as the Convention is concerned. However, even if the duty to provide information is undertaken, this does not rule out the possibility of the proposal for a directive being incompatible with the Lomé Convention.

In a resolution on the revision of the chocolate directive, which was adopted in Luxembourg on 26 September 1996, the ACP–EU Joint Assembly considered (paragraph 1) that the Commission proposal was "in full contradiction with the framework and contents of the Fourth Lomé Convention, notably as regards the promotion of exports from ACP countries." The proposal for a directive appears, in fact, to contradict the philosophy of the Lomé Convention. We can illustrate this in many different ways. Where trade cooperation is concerned, for instance, Article 167 of the Lomé Convention states that "... the object of this Convention is to promote trade between the ACP States and the Community, ...". Another example: where cooperation in the field of commodities is concerned, Chapter 1 of Title II is devoted entirely to the stabilization of export earnings from agricultural commodities through the establishment of the STABEX system. Given that the directive might affect the export earnings of the producer countries, the European Union should refrain from taking any steps which are likely to create instability, rather than taking remedial action after the event. All these considerations actually depend on the directive's possible consequences, which it is difficult to assess. From the formal point of view and to the best of our knowledge, no legal arguments have been advanced concerning non-compliance with the Lomé Convention.

4.2. Obligations under the Treaty

There are also doubts about the legality of the proposal for a directive with regard to the Maastricht Treaty. The working document drawn up by Mrs Maij-Weggen, draftsman for the Committee on Development and Cooperation, points out that the Community is required to comply with the provisions of Article 130u(1) and (3), according to which: 'I. Community policy in the sphere of

(21) Article 12 of the Lomé Convention: "Where the Community intends, in the exercise of its powers, to take a measure which might affect the interests of the ACP States as far as this Convention's objectives are concerned, it shall inform in good time the said States of its intentions. Towards this end, the Commission shall communicate regularly to the Secretariat of the ACP States any proposals for such measures." (22) Resolution of the ACP-EU Joint Assembly on revision of the directive on chocolate, 26 September 1996, Luxembourg, Doc. ACP-EU/1865/96/fin.
Cocoa and Chocolate Products

development cooperation, which shall be complementary to the policies pursued by the Member States, shall foster:

- the sustainable economic and social development of the developing countries, and more particularly the most disadvantaged among them;
- the smooth and gradual integration of the developing countries into the world economy;
- the campaign against poverty in the developing countries.

...

3. The Community and the Member States shall comply with the commitments and take account of the objectives they have approved in the context of the United Nations and other competent international organizations'.

NOTE: This article is inextricably linked with Article 130v, which states: 'The Community shall take account of the objectives referred to in Article 130u in the policies that it implements that are likely to affect developing countries'.

In this case, it does not seem that the interests of the developing countries were taken into account in the draft directive. In any event, there is no reference either in the explanatory memorandum or in the directive to the possible consequences of this measure for the developing countries. The initiative for the proposal for a directive came from DG III, but it has not secured the support of Commissioner Pinheiro, who is responsible for the Commission’s DG VIII. He has stated his opposition to any change in the definition of chocolate.

Many players have thus cited non-compliance with these articles of the Treaty (Article 130u(1)(3) and Article 130v) as grounds for rejecting the proposal for a directive.

We have been given to understand that the Commission’s legal service is also seriously examining the compatibility of the proposal for a directive with Article 30 of the Treaty on European Union: 'Quantitative restrictions on imports and all measures having equivalent effect shall, without prejudice to the following provisions, be prohibited between Member States'.

Others even go so far as to cite non-compliance with the third paragraph of Article 3b of the Treaty, which actually provides the legal basis for this directive. Article 3b enshrines the principle of proportionality, whereby: 'Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty'. The argument here is that, in order to achieve one of the objectives of the Treaty (freedom of movement in a single European market) it is simply necessary to apply the 0% rule for vegetable fats in chocolate (already in force), rather than to add a directive seeking to extend an exemption to the whole Community.

The aim is not to decide here whether the directive complies with legal requirements or not, but to point out the possible stumbling-blocks facing it. The Committee on Development and Cooperation has already sought the opinion of the European Parliament’s legal service.

(EU) EU/ACP: Commissioner Pinheiro opposed to any change in the definition and composition of chocolate; in Europe, No 6418, Saturday, 11 February 1995, p. 10.

- 15 -

PE 166.602
5. Cocoa and the developing countries

5.1. Cocoa cultivation

Cocoa is a crop which is cultivated, ideally, in a hot, humid climate without a lengthy dry season and for this reason it is concentrated in the tropical regions around the equator. Cocoa cultivation also requires very fertile soil, and it is therefore frequently located on the site of tropical forest which has been cleared.

1993 – 1994

Source: Statistics, ED & F.Man, 1994, Cocoa Market Reports
(The figures given are production by country in '000 tonnes)

Fig. 1.16: Map of main production centres in 1994

A comprehensively documented book on cocoa was published recently. This work, 'Booms et crises du cacao', compiled by François Ruf with support from the French Ministry of Development and Cooperation and CIRAD - SAR(26) brings together a wide range of observations. François Ruf explains in his book that 'the stories of cocoa cultivation have a common basis: pioneering frontiers, migrations conquering areas of tropical forest ... as the corollary, once the forest has been 'burnt'(27), the cocoa boom tails off and is replaced almost automatically, and sometimes abruptly, by a recession' (fall in production = rise in prices).

Cocoa cultivation carries the seeds of its own decline, because its needs make replanting difficult.

(26) International cooperation centre of agricultural research for development - scientific organization specializing in agriculture in tropical and subtropical regions.
(27) The wealth derived from the forest and its soil has been exhausted, the cocoa plantations have aged, and cultivation has not been renewed.
The sensitive cocoa tree passes fairly quickly from a very favourable ecological environment, since the forest milieu makes it possible to set up cocoa cultivation at little cost, without capital, to an unfavourable environment which makes replanting difficult.

As was stated earlier, cocoa requires a very rich soil, a hot climate, sunshine and fairly heavy and regular rain. The soil gradually becomes exhausted. Deforestation brings about increasingly irregular rain and increased exposure to wind, all of which make replanting problematical. This situation, combined with a fall in production and a consequent rise in prices, then leads to production moving elsewhere. The story is then repeated in a region where the virgin forest is still intact.

Cocoa trees produce a raw product, namely cocoa beans. This raw material provides the basis for a number of intermediate products, the most important of which are as follows:

- cocoa powder, obtained from beans which are dried, then roasted, shelled and ground,
- cocoa butter, extracted from beans by presses
- cocoa liquor
- cocoa mass, etc.

Most of these products are used for the food industry and, more specifically, for the chocolate manufacturing industry, which is the most important outlet for cocoa. More than 90% of cocoa production is used for the manufacture of chocolate.\(^{(28)}\)

\(^{(28)}\) Booms et crises du cacao, les vertiges de l’or brun. [Cocoa: boom and bust - the dizzying ups and downs of brown gold], François Ruf, Ministry of Development Cooperation, CIRAD-SAR, KARTHALA, 1995, p. 45.
5.2. The economics of cocoa

5.2.1. Overview

Cocoa production by the developing countries accounts for a large part, if not all, of world production.\(^{29}\)

<table>
<thead>
<tr>
<th>Production(^1)</th>
<th>1989–91 Average(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'000 tonnes, raw value</td>
</tr>
<tr>
<td>World total</td>
<td>2 399 2 376 2 429 2 545</td>
</tr>
<tr>
<td>Developing countries</td>
<td>2 460 2 376 2 429 2 545</td>
</tr>
<tr>
<td>Latin America</td>
<td>632 576 544 588</td>
</tr>
<tr>
<td>Brazil</td>
<td>347 309 270 306</td>
</tr>
<tr>
<td>Dominican Rep.</td>
<td>48 52 50 51</td>
</tr>
<tr>
<td>Ecuador</td>
<td>88 67 80 79</td>
</tr>
<tr>
<td>Africa</td>
<td>1 418 1 278 1 358 1 435</td>
</tr>
<tr>
<td>Cameroon</td>
<td>123 90 95 100</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>793 697 850 860</td>
</tr>
<tr>
<td>Ghana</td>
<td>297 312 245 315</td>
</tr>
<tr>
<td>Nigeria</td>
<td>152 145 135 130</td>
</tr>
<tr>
<td>Asia and Oceania</td>
<td>411 522 527 522</td>
</tr>
<tr>
<td>Indonesia</td>
<td>119 240 260 290</td>
</tr>
<tr>
<td>Malaysia</td>
<td>230 225 210 200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exports(^1)</th>
<th>1989–91 Average(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'000 tonnes, raw value</td>
</tr>
<tr>
<td>World total(^2)</td>
<td>1 825 1 717 1 889</td>
</tr>
<tr>
<td>Developing countries</td>
<td>1 825 1 717 1 889</td>
</tr>
<tr>
<td>Latin America</td>
<td>227 199 204</td>
</tr>
<tr>
<td>Brazil</td>
<td>103 84 95</td>
</tr>
<tr>
<td>Dominican Rep.</td>
<td>43 43 42</td>
</tr>
<tr>
<td>Ecuador</td>
<td>65 36 21</td>
</tr>
<tr>
<td>Africa</td>
<td>1 209 1 051 1 186</td>
</tr>
<tr>
<td>Cameroon</td>
<td>93 61 100</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>698 638 649</td>
</tr>
<tr>
<td>Ghana</td>
<td>248 224 266</td>
</tr>
<tr>
<td>Nigeria</td>
<td>127 95 135</td>
</tr>
<tr>
<td>Asia and Oceania</td>
<td>390 467 499</td>
</tr>
<tr>
<td>Indonesia</td>
<td>100 155 200</td>
</tr>
<tr>
<td>Malaysia</td>
<td>160 125 123</td>
</tr>
</tbody>
</table>

The European Union is their largest market. In 1993, the European Union absorbed 55% of cocoa exports.\(^{30}\) For some countries, moreover, cocoa production accounts for a significant proportion of their export earnings.


\(^{30}\) Ibid, p. 53.
Cocoa and Chocolate Products

Cocoa as a proportion of exports from the producer countries, and number of growers (1994)

<table>
<thead>
<tr>
<th>Country</th>
<th>Cocoa's share of exports in %</th>
<th>Number of growers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>43.7</td>
<td>600 000</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>38.7</td>
<td>700 000</td>
</tr>
<tr>
<td>Cameroon</td>
<td>18</td>
<td>220 000</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2.4</td>
<td>300 000</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.9</td>
<td>50 000</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.6</td>
<td>30 000</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.1</td>
<td>50 000</td>
</tr>
</tbody>
</table>

These figures do not include plantation workers.

Cocoa cultivation is mostly carried out by small growers and requires a fairly substantial labour force. The number of those who depend directly or indirectly on cocoa production in West Africa is estimated at 11 million.

The ACP countries, cocoa and European Union

A substantial number of ACP countries (31 of a total of 70, mainly African) are involved in cocoa production. The main cocoa producers among the ACP countries are Ivory Coast, Ghana, Cameroon, Nigeria, Togo and Papua New Guinea. The practice of monoculture has helped to increase their dependence on the cocoa market. Some countries draw a substantial portion of their foreign-currency earnings from this crop. More than half the export earnings of countries such as Ivory Coast and Ghana come from cocoa exports.

EU imports from ACP countries: Extract from a selection of the ten most important products, broken down by major suppliers\(^2\)

January – December 1994

**CACAO EN FEVES**

<table>
<thead>
<tr>
<th>Country</th>
<th>1994:01</th>
<th>1994:12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Côte d'Ivoire</td>
<td>199.705</td>
<td>677.036</td>
</tr>
<tr>
<td>Ghana</td>
<td>115.246</td>
<td>82.293</td>
</tr>
<tr>
<td>Cameroon</td>
<td>11.073</td>
<td>11.073</td>
</tr>
<tr>
<td>N. Guinea</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

January – December 1995

**COCOA BEANS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivory Coast</td>
<td>371.5</td>
<td>440.6</td>
</tr>
<tr>
<td>Ghana</td>
<td>119.7</td>
<td>119.7</td>
</tr>
<tr>
<td>Cameroon</td>
<td>110.7</td>
<td>110.7</td>
</tr>
<tr>
<td>N. Guinea</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Importance of the European market for the ACP countries

In the first quarter of 1994, imports of cocoa beans accounted for 6.7% of total Community imports from the ACP countries, coffee for 4.3%, raw cane sugar for 3.7% and fresh bananas for 2.8%; after crude oil, these are the main exports from the ACP countries. Over the same period, more than 80% by volume and value of total EU imports of cocoa beans came from the ACP countries.32

They are keenly concerned by the price of cocoa and all the parameters that determine it, such as supply, demand, quality or the manufacturing standards for certain finished products such as chocolate.

The position of most of the ACP countries regarding the new directive is unequivocal: they reject the proposal and are fighting it, particularly in the various joint ACP–EU bodies33.

Cocoa cycles

In his book 'Booms et crises du cacao' the author demonstrates the existence of a cocoa cycle and attempts to develop a model from this. He notes that supply cycles are heavily interdependent with price cycles, all the more so because they are not determined by demand.

---

32 Ibid. p 6.
Surplus supply owing to the start-up of new production

Environmental factors in the producer countries
- forest-generated incomes
- labour-generated income
- age of trees increases
- errors in planting policies

Price \(\downarrow\)

Upturn in grindings

Decline in supply from old production areas

Supply/demand shortfall

World economic recession and stagnation of the level of household incomes in the consumer countries

Environmental factors in the producer countries
- Exploitation of forest-generated income
- New migrants and institutional factors
- Infrastructure and policies accelerating migration...

Price \(\uparrow\)

Downturn in grindings

It can be seen that, following the upturn phase, at a certain point the price cycle moves into recession, because a few years previously 'too many' migrants arrived to clear the tropical forest (overproduction = fall in prices). Excess supply is particularly uncontrollable in relation to demand. Operators content themselves with building up stocks. These price variations are subsequently reflected in a certain shortfall in production (falling prices = fall in production).

'It is as infrequent and irrational to cut down cocoa trees in response to falling prices as it is common and rational to plant in response to high prices, but when the opportunity cost of planting falls to the floor price of the land used by such planting, producers start to cut down and replant'\(^{35}\).

This specific feature of perennial crops ultimately results in an elasticity of supply which is greater when prices are falling than when prices are rising. And, even when prices are rising, the reaction time to the rise is around seven years, the time taken to plant and gather the first harvests.

\(^{(14)}\) Booms et crises du cacao, les vertiges de l'or brun. [Cocoa: boom and bust - the dizzying ups and downs of brown gold], François Ruf, Ministry of Development Cooperation, CIRAD-SAR, KARTHALA, 1995, p. 61.

\(^{(25)}\) Ibid, p. 85
Although the production and consumption of cocoa have undergone continuous, strong growth since the beginning of the century, the periods of imbalance between supply and demand give rise to fairly significant price fluctuations.

'A straightforward stagnation in supply from one of the countries dominating the sector at a given point in time equates to a kind of withdrawal from the market and may lead to shortfalls when set against demand, entailing a rise in prices'.

According to the author, this is partly what happened with Ivory Coast in 1994. After increasing its output from 300 000 to 850 000 tonnes between 1977 and 1988, the world's leading producer, Ivory Coast, which then accounted for 30% of world supplies, appeared to 'level off' between 1989 and 1994. It nonetheless had an exceptional year in 1995 (1 200 000 tonnes, compared with 850 000 – 950 000 tonnes this crop year). Malaysia and, above all, Brazil appear to be moving into rapid recession. Malaysian production, which was 240 000 tonnes in 1989 – 90, will probably fall below 200 000 tonnes in the long term. Annual production in Brazil, which came within a hair's breadth of 400 000 tonnes at the end of the 1980s, fell to close on 229 000 tonnes in 1994 – 95.

Cocoa production and yields in Brazil between 1986 and 1994

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (1000 t)</td>
<td>459</td>
<td>329</td>
<td>375</td>
<td>393</td>
<td>356</td>
<td>321</td>
<td>329</td>
<td>341</td>
<td>329</td>
</tr>
<tr>
<td>Yield (kg/ha)</td>
<td>700</td>
<td>507</td>
<td>560</td>
<td>595</td>
<td>536</td>
<td>481</td>
<td>449</td>
<td>464</td>
<td>471</td>
</tr>
</tbody>
</table>

Source: Brazilian Institute of Geography and Statistics

All this has been enough to help invert the structure of the market from a period of seven consecutive years of surplus (1984 – 85 to 1990 – 91) to four years of shortfall (1991 – 92 to 1994 – 95). This shortfall, combined with an upturn in consumption, is having and will have inevitable repercussions on prices (see Annex 1).

(37) Some authors have been mistaken in their estimates of the fall in Brazilian production, which has not been as steep as expected. The fact that Brazil has started to grind its own beans has clouded the picture to some extent.
The history of cocoa thus enables us to observe price cycles lasting around 30 years. It is interesting to note that this period corresponds to the economic life of cocoa trees (see the interpretation of price cycles and prospects in Annex 1).

5.2.2. Structure of the market

Demand

The structure of demand for cocoa has become increasingly concentrated and is clearly developing towards an oligopoly, with inevitable consequences for prices. Four or five major trading groups and international investment funds speculate on stocks and variations in supply, and magnify their effects. Six international companies account for 80% of the world market. In the United States, Mars and Hershey dominate 75% of the market. In Europe, Nestlé, Jacob Suchard, Mars, Cadbury and Ferrero account for 66% of the market. This market concentration makes it highly competitive.

Given that 90% of cocoa is used in the manufacture of chocolate, demand depends on forecasts of chocolate consumption. The demand for chocolate is regarded as being relatively well under the control of the major chocolate groups. The main determining factors are: (a) climate (particularly seasonal effects), (b) incomes and standard of living, (c) the number of consumers, (d) consumer prices ((e) some observers add taste). This more or less controlled demand appears to confirm the analysis whereby supply cycles determine price cycles more clearly than the ups and downs of demand.

This supply determinism parts company with the approach put forward in the United Nations study on cocoa, for which price is the preponderant factor: 'Cocoa prices are the single most important factor affecting both supply and demand. The supply of cocoa beans tends to be more responsive to price movements than is demand, where factors such as income levels and the small share of
Cocoa and Chocolate Products

cocoa expenditure in household budgets as well as the relatively low sensitivity of prices of chocolate products to changes in cocoa bean prices are important.\(^\text{38}\)

The two works agree on minimizing the importance of demand in the cocoa cycle and stress the very important link between supply and prices (or the reverse). As for the rest, we are dealing with the traditional chicken – and – egg question.

François Ruf nonetheless notes that the phenomena of upturns or downturns in consumption, associated with the general situation in the wealthy countries, have an impact on cocoa prices in that supply does not adjust 'instantaneously'. Thus, the resumption of 3% annual growth in demand seen since 1980, following the relative stagnation of the 1970s, should help to drive up prices\(^\text{39}\). He even thinks that prices should explode before the year 2000, which may mark the start of a new price cycle. In this context, the European directive, acting to curb cocoa consumption, will undoubtedly exert downward pressure on prices.

The prospects for demand for cocoa are fairly encouraging: there are many countries which are likely to constitute lucrative markets for chocolate. The countries of Eastern Europe, currently undergoing economic recovery, and the newly rich countries such as those of South – East Asia are of interest. China and the countries of the South, (once the problem of melting has been brought under control) are also giving rise to great hopes. As Marchés Tropicaux writes: 'Imports of beans are actually continuing to rise, as a result of increased consumption in Europe, above all in Eastern Europe, and in the Far East (particularly China). In 1996/97, world consumption will be 2.706 m tonnes compared with an estimated 2.68 m tonnes for 95/96.'\(^\text{40}\). (This corresponds to a 1% increase in consumption). It nonetheless remains the case that, at present, the most important markets for producers are the industrialized countries: Europe, the United States, etc.

'The average annual increase in chocolate consumption for the countries of the European Union between 1980 and 1992 was 2.45%\(^\text{41}\). According to the United Nations study on prospects for the world cocoa market until the year 2005, the increase in demand for cocoa should remain strong over the period 1994 – 2005, irrespective of the price paid, showing annual growth of 2 – 3%\(^\text{42}\). The report adds that these rates are far in excess of those indicated for other tropical products, although they are significantly lower than the growth in the supply of cocoa.


\(^\text{39}\) World consumption has increased by nearly 50% in the space of 10 years, as a result of the success of chocolate bars and other snacks containing cocoa.


\(^\text{41}\) The potential impact of the possible liberalization of EU legislation governing the use of non-cocoa vegetable fat in chocolate: an assessment by the secretariat of the International Cocoa Organization (ICCO), presented by Henri Jason, Senior Economist, at the international conference on this theme in Abidjan, 28-30 March 1995.

Cocoa and Chocolate Products

Production, price and stocks of cocoa, 1960/61 to 1993/94

Source: International Cocoa Organization (ICCO)

Supply

Cocoa production has increased continuously this century. Production and consumption curves have shown continuous strong growth since 1900. Between 1900 and 1994, the supply of cocoa increased 25-fold. This virtually linear trend nonetheless does not reflect the many convulsions of the cocoa market. Cocoa cultivation, which is subject to many random factors (the caprices of weather, disease, the ageing of trees, migration), has often fluctuated.

Many changes have taken place in cocoa production. Going hand-in-hand with rapid growth in output in a number of major traditional cocoa-producing States, the geographical basis of production has broadened, with the emergence of South-East Asia as a major new producing region. Bitter competition has emerged between producers for new market share. At the same time, the supply of cocoa has become less vulnerable to climatic factors as a result of the gradual introduction of new hybrid varieties and their use by South-East Asian producers. Starting at the end of the 1970s these major changes led to overproduction, bloated stocks and a collapse in prices. From 1977 onwards the price of cocoa beans thus underwent a spectacular fall, with some fluctuations.
World market prices of cocoa; 1975/76 to 1992/93

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US $/tonnes</td>
<td>6506</td>
<td>3075</td>
<td>2080</td>
<td>1051</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: European Fair Trade Association

Production trends

World cocoa production, 1900 – 1990

Cocoa bean production by region
(1900/1980)

Source: Booms et crises du cacao, François Ruf

Source: Prospects for the world cocoa market until the year 2005, UNCTAD

Despite these developments, observers are predicting a shortfall in cocoa production in relation to demand, which has resumed a steady and relatively high rate of growth. As was pointed out previously, Malaysia and Brazil are moving into recession. In the absence of new forest clearance it is possible that Ivory Coast will go the same way. The fall in prices between 1986 and 1991 corresponds to stocks of nearly 1 500 000 tonnes, i.e. 65% of consumption in 1990 – 91. In 1993 – 94, the third consecutive year in which supply failed to meet demand, stocks fell to 1 250 000 tonnes, i.e. 50% of grindings (grindings are used as a measure to estimate consumption).

As far as the 1996 – 97 crop year is concerned, there is confirmation of this trend. The International Cocoa Organization (ICCO) is forecasting that production will decline sharply and will not be sufficient to cover total consumption in the crop year from October 1996 to September 1997. The deficit is estimated at 225 000 tonnes of beans, which would equate to an 11% drop in supply, with positive consequences for world prices. The consumer countries will have to draw on their reserves, which will bring down world cocoa reserves, which were estimated in September 1996 as standing at 47.5% of annual worldwide demand. The aim of the countries which belong to the ICCO is to nibble away at these stocks, which are a drag on prices. In order to do this, they wish to cut worldwide production by a total of 45 000 tonnes in the next three crop years, which should bring the overall volume of stocks down to 34% of annual consumption in 1999. The ICCO members thus clearly have a strategy of controlled shortage in mind, the purpose of which is to
Cocoa and Chocolate Products

bring down stocks and push up prices\(^4\). This policy is easy to understand when it is realized that current prices are 50% below what they were ten years ago. It is curious to note that it is precisely at the point when the producers, gathered together within the ICCO, are starting to control their production that the proposal for a directive has resurfaced!

Prices

As is stressed in a document from the Cocoa Campaign, a body which represents the interests of cocoa pressers and is campaigning against the directive\(^44\), the cocoa market is highly unstable and consequently speculative. Its equilibrium is very fragile and the slightest fluctuation may have a disproportionate impact. For example, the current shortfall of 100 000 tonnes of cocoa (4% of world production), despite being covered by existing stocks, has resulted in a 30% increase in cocoa prices.

\[\text{In the long term, demand shows variations which are fairly close to those in supply. In the short term, however, taking account of the level of stocks deemed to be necessary by each company (often 25% of annual grindings), the slightest mismatch between supply and demand engenders major price variations}^{45}.\]

The trend in world cocoa prices

(1988 Constant purchasing power)

![Graph showing the trend in world cocoa prices](image)

Source: Prospects for the world cocoa market until the year 2005, UNCTAD

Surpluses and deficits in production and grindings

Cocoa production and grindings, 1930 – 1993

![Graph showing surpluses and deficits in production and grindings](image)

Source: Booms et crises du cacao, François Ruf

The use of stocks, far from providing a stabilizing element, may help to promote speculation. It enables cocoa bean purchasers who hold such stocks to slow down a rise in prices or prolong a fall.


\(^{45}\) Booms et crises du cacao, les vertiges de l'or brun, [Cocoa: boom and bust - the dizzying ups and downs of brown gold], François Ruf, Ministry of Development Cooperation, CIRAD-SAR, KARTHALA, 1995, p. 45.

- 27 -  PE 166.602
Cocoa and Chocolate Products

'The American futures market was able to stockpile 'cheap' Sulawesi cocoa and help to depress international prices until August 1993'\(^{(46)}\). Producers have also been tempted to hold on to stocks unilaterally in order to push up prices. However, this policy has never worked properly owing to a lack of agreement between producers.

As the charts below show, prices are irregular, to say the least, and fluctuate in a way which is diametrically opposed to the level of stocks.

Source: Commodity review and outlook Ruf, 1994 – 1995

Source: Booms et crises du cacao, François World Bank

By repositioning ourselves in the context provided for by the proposal for a new directive, and after considering the various elements of the cocoa market, we can see that there are two contradictory phenomena.

1. Supply is clearly moving into a period of shortfall. Irrespective of whether this movement is natural or has been created artificially, it will inevitably entail an increase in prices, which will be boosted by the steady, strong growth in demand.

2. On the other hand, there is general agreement that the proposal for a directive authorizing the use of vegetable fats amounting to 5% of the total weight of the finished product will lead to a drop in the demand for cocoa. What impact will this have on prices?

\(^{(46)}\) Ibid, p. 55.
Cocoa and Chocolate Products

The question is to know how this fall in demand will influence prices. There are two possibilities: either it will damp down the rise in cocoa prices, or it will start a cycle of decline. We will consider the different projections later on.

A final factor, which has nothing to do with the new directive, might amplify or deflect its impact on prices. This factor is the changes that the recent agreement on world trade will bring about.

5.2.3. World trade

The most recent GATT negotiations, during what became known as the Uruguay Round, will also have an immediate, substantial and negative impact on the preferences which the industrialized countries used to grant to the poorest countries. A study recently published by the OECD, which was carried out by Fumiko Yamazaki, points to a very significant erosion of preferences granted for agricultural products.

In 1992, the potential value of such preferences granted by the European Union, the United States and Japan was estimated to be $1.9 billion. A third of these preferences were granted to Africa, 40% to Latin America and the Caribbean, and the rest mostly to the Middle East and Oceania. Following the Uruguay Round reductions in the rates granted to most favoured nations, the potential value of preferences is projected to shrink to $0.7 bn, of which African, Latin America and the Caribbean, and the Middle East will account for 26%, 39% and 28%, respectively. We can thus see a drastic fall (some 63%) in these preferences and a shift in their allocation which is clearly to the disadvantage of Africa.

When the distribution of the value of preferential margins granted by the European Union is considered region by region, it can be seen that Africa occupies a central position: it accounts for 50% of the value of preferential margins.

<table>
<thead>
<tr>
<th>Region</th>
<th>Trade in preferential commodities in 1992</th>
<th>Value of preferential margins in 1992</th>
<th>Value of the preferential margins after the Uruguay Round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>4182</td>
<td>673</td>
<td>508</td>
</tr>
<tr>
<td>Far East</td>
<td>1790</td>
<td>87</td>
<td>31</td>
</tr>
<tr>
<td>Near East</td>
<td>360</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Central America and Caribbean</td>
<td>979</td>
<td>228</td>
<td>192</td>
</tr>
<tr>
<td>South America</td>
<td>2111</td>
<td>254</td>
<td>150</td>
</tr>
<tr>
<td>Europe</td>
<td>59</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Oceania</td>
<td>301</td>
<td>90</td>
<td>94</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9781</td>
<td>1346</td>
<td>974</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>15599</td>
<td>1853</td>
<td>1221</td>
</tr>
</tbody>
</table>

Source: Potential erosion of trade preferences - F. Yamazaki

Where cocoa exports are concerned, the European Union is the most generous player.

<table>
<thead>
<tr>
<th>Country/Commodity</th>
<th>Trade in preference receiving commodities in 1992</th>
<th>Value of preferential margins in 1992</th>
<th>Value of preferential margins after the Uruguay Round</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA/Cacao</td>
<td>1570</td>
<td>59</td>
<td>14</td>
</tr>
<tr>
<td>Uruguay/Cacao</td>
<td>43</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Japan/Cacao</td>
<td>42</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1466</td>
<td>63</td>
<td>17</td>
</tr>
</tbody>
</table>

According to this study, the shortfall to be made good by the cocoa-exporting countries will be around $46 million ($45 m of which were accounted for by the European Union) and a 73% fall in the preferential margin on cocoa.

NOTE: this study adopts an essentially static approach and takes 1992 volumes and values as the basis for its calculations.

Obviously, to balance this study the forecasts of increasing exports of agricultural products which should result from a reduction in customs tariffs should be signalled. Such studies exist, but are pure speculation because they are based on hypotheses which do not incorporate the many different parameters which may affect a volatile market such as the cocoa market. Where cocoa is concerned, and calculating the figures shorn of context, economists estimate that the gains attributable to the latest negotiations on world trade will nonetheless outweigh the losses resulting from the reduction in preferential margins (see below).

In this connection, a very interesting study was recently published concerning the impact of the Uruguay Round on agricultural prices and incomes. This study confirms that the agricultural trade balance of the developing countries should improve by around $1.9 bn, from $15 bn to $16.9 bn by the year 2000 ($0.8 bn of this increase will be due to the impact of the Uruguay Round). This is the difference between estimated additional exports amounting to $8.3 bn and estimated additional imports amounting to $7.5 bn.

It is estimated that 4.1% of the additional $8.3 bn in exports attributable to the Uruguay Round will be accounted for by cocoa. This equates to a gain of around $340 m by the year 2000. Taking as the starting-point the final ratification of the legal texts on the results of the Uruguay Round as a whole, which took place in Marrakesh on 15 April 1994, the annual gains attributable to the Uruguay Round will be $60 m.

NOTE: the estimated loss on preferential margins (see above) attributable to the Uruguay Round ($46 m) has been arrived at on the basis of the 1992 figures. This loss fluctuates each


PE 166.602
Cocoa and Chocolate Products

year according to the volume and value of exports. The study adds that, taking into account the
effects of growth, losses might be greater, in the region of 10%.

Despite this relatively optimistic finding, which is generally favourable to the most recent GATT
negotiations, there are many regional disparities between the developing countries.

'Among the developing countries, the outlook for Africa raises some concern. The region is
projected to widen its trade deficit in agricultural products and the Uruguay Round does not alter
this outcome. The region relies on exports of a small number of traditional crops, particularly coffee
and cocoa, the markets for which are expected to grow at best steadily. At the same time, the region
will continue to be a heavy net importer of basic foodstuffs, the prices of which would rise'.

For Africa, the trade balance of agricultural commodities, which showed a $1 bn deficit between
1987 and 1989, is likely to see this deficit worsen to $1.4 bn by the year 2000 (see below).

| Trade balances of agricultural commodities, past and projected (US$ billion, f.o.b. basis) |
|---------------------------------|---------------------------------|---------------------------------|
| World | | |
| Imports | 275.5 | 334.6 | 362.0 |
| Exports | 280.4 | 340.4 | 366.2 |
| Developed countries | | |
| Imports | 208.7 | 236.4 | 256.3 |
| Exports | 198.5 | 223.1 | 240.0 |
| Developing countries | | |
| Imports | 66.8 | 98.2 | 105.7 |
| Exports | 81.8 | 114.3 | 122.6 |
| Africa | | |
| Imports | 8.4 | 13.9 | 14.9 |
| Exports | 9.4 | 12.4 | 13.5 |
| Latin America and the | | |
| Caribbean | | |
| Imports | 10.5 | 15.9 | 16.8 |
| Exports | 30.9 | 42.3 | 45.6 |
| Near East | | |
| Imports | 17.8 | 25.5 | 27.1 |
| Exports | 6.5 | 7.7 | 8.2 |
| Far East | | |
| Imports | 30.1 | 42.9 | 46.9 |
| Exports | 35.0 | 51.9 | 55.3 |

Source: FAO (1995a)
* Both exports and imports valued at world export unit prices (free on board basis).

(*) 'An overview of assessments of the impact of the Uruguay Round on agricultural prices and incomes', Ramesh

- 31 -
African food security

It is forecast that the volume of imports of agricultural products will increase substantially, reflecting the growth in total demand, which is mainly due to the population surge. The net effect of these changes will be an increase in the value of food imports from $6 bn in 1988 to $10.5 bn by the year 2000, $500 m of which will be attributable to the effects of the Uruguay Round.

The increase in food import bills will be proportionally greater for the LIFD countries (low-income food-deficit countries), which are net cereal-importing countries with per capita income less than the cut-off point defined by the World Bank for IDA eligibility (US$1345 in 1993). The value of food imports for the LIFD countries will increase from $3.5 bn to $6.3 bn.

<table>
<thead>
<tr>
<th>Food Import bills of developing and low-income food-deficit (LIFD) countries, past and projected (US$ billion)*</th>
<th>No. of countries</th>
<th>Actual (1987–89)</th>
<th>Projected (2000)</th>
<th>Size of Increase</th>
<th>Of which: Uruguay Round effect (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>137</td>
<td>40.0</td>
<td>64.7</td>
<td>24.7</td>
<td>3.6</td>
</tr>
<tr>
<td>All developing countries</td>
<td>72</td>
<td>17.8</td>
<td>27.6</td>
<td>9.8</td>
<td>1.4</td>
</tr>
<tr>
<td>LIFD countries</td>
<td>52</td>
<td>14.6</td>
<td>24.7</td>
<td>10.1</td>
<td>1.0</td>
</tr>
<tr>
<td>African</td>
<td>46</td>
<td>11.5</td>
<td>18.5</td>
<td>7.0</td>
<td>0.5</td>
</tr>
<tr>
<td>All developing countries</td>
<td>43</td>
<td>8.0</td>
<td>12.7</td>
<td>4.7</td>
<td>0.2</td>
</tr>
<tr>
<td>LIFD Countries</td>
<td>43</td>
<td>5.5</td>
<td>9.3</td>
<td>3.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>46</td>
<td>1.6</td>
<td>4.7</td>
<td>3.1</td>
<td>0.1</td>
</tr>
<tr>
<td>All developing countries</td>
<td>43</td>
<td>1.6</td>
<td>4.7</td>
<td>3.1</td>
<td>0.1</td>
</tr>
<tr>
<td>LIFD Countries</td>
<td>43</td>
<td>1.6</td>
<td>4.7</td>
<td>3.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Near East</td>
<td>19</td>
<td>4.5</td>
<td>12.7</td>
<td>8.2</td>
<td>0.8</td>
</tr>
<tr>
<td>All developing countries</td>
<td>6</td>
<td>3.7</td>
<td>4.7</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>LIFD countries</td>
<td>6</td>
<td>3.7</td>
<td>4.7</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Far East</td>
<td>20</td>
<td>13.5</td>
<td>24.7</td>
<td>11.2</td>
<td>2.0</td>
</tr>
<tr>
<td>All developing countries</td>
<td>13</td>
<td>9.0</td>
<td>14.2</td>
<td>5.2</td>
<td>1.0</td>
</tr>
<tr>
<td>LIFD countries</td>
<td>13</td>
<td>9.0</td>
<td>14.2</td>
<td>5.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>


* Food comprises cereals, oilseeds and products, meat, and dairy products.

* Net cereal importing countries with a per capita income less than the cut-off point defined by the World Bank for IDA eligibility (US$1345 in 1993).

In the context of our consideration of the new proposal for a directive presented by the Commission, one of the conclusions of this research seems particularly relevant: 'The ability of developing countries to pay these higher food import bills would depend critically on whether export earnings from agricultural and other sectors increase sufficiently'.

(50) An overview of assessments of the impact of the Uruguay Round on agricultural prices and incomes, Food security implications of the Uruguay Round, J. Greenfield et al. in Food Policy, Vol 21, No 4/5, p. 374, 1996, Great Britain.
5.3. The phenomenon of substitution

The use of alternatives to cocoa butter in chocolate or chocolate products is not recent, and is influenced by economic factors such as the wish to attenuate the effect of the periodic rises in cocoa bean prices on the price of the finished product. The use of substitute fats is also encouraged by technical factors such as the prevention of chocolate bloom or the need to increase the melting point of chocolate to enable it to be marketed in hot countries.

When talking about alternatives to cocoa butter, it is useful to draw a distinction between cocoa butter equivalents (CBEs), cocoa butter replacements (CBRs) and cocoa butter substitutes (CBSs).

Cocoa butter equivalents are substitutes which have traditionally been used to replace only part of the cocoa butter in chocolate products, generally up to 5% of the total weight of the product. Such fats are necessarily compatible with cocoa butter and should not engender any deterioration in the quality of the finished product. They generally have the same properties as cocoa butter from the point of view of crystallization, texture, appearance, 'mouth-feel', etc. Such fats are widely used in Denmark, Ireland and United Kingdom in all types of chocolate. Cocoa butter equivalents commonly comprise 50% groundnut oil, 30% palm oil and 20% illipe oil. Other compositions are possible, including kokum oil or sal oil, although these are not used in practice.

Cocoa butter replacements may be mixed with cocoa butter, but only to a limited extent (only 20–25% of the cocoa butter content is recommended; the mixture becomes incompatible beyond that point). They are used in conjunction with low-fat cocoa powder. The use of cocoa butter replacements in a product such as confectionery coatings results in cocoa mass, which has a very high fat content, being eliminated. CBRs are produced by hydrogenation and fractionation; this is the case with soya bean oil, cotton seed oil and palm oil.

Cocoa butter substitutes are fats which replace the entire cocoa butter content in a chocolate product. They cannot be mixed with cocoa butter and should not be mixed to a level exceeding 1% of cocoa liquor or 15% of cocoa powder. Such fats may be mixed with walnut oil and used in filled products. Non-hydrogenated CBSs are frequently used in confectionery and 'health' products; since they have not undergone any chemical processing, they are deemed to be natural.

There are no published statistics on the production of cocoa butter substitutes. Despite this, in a study carried out in late 1977 and early 1978, the ICCO secretariat estimated the total use of the best substitutes (from the quality point of view) as ranging between 105 000 and 144 000 tonnes, of which cocoa butter equivalents accounted for 50 000–60 000 tonnes. More recently, in August 1987, the Secretariat of the Organization of American States estimated that production of cocoa butter equivalents stood at 70 000 tonnes (with a 15% margin of error either side). The breakdown by supplier was as indicated below (by '000 tonnes): Unilever: 24, Aarhus Oliefabrik: 15, Karlshamns Oljefabrikker: 6, Fuji Oil Company: 10, Asahi Denka Kogyo: 10, others: 12. For the most part, therefore, these are multinationals in the industrialized countries.

As the UNCTAD report stresses: 'Legislative factors, particularly in the European Union, combined with technical and economic factors, will undoubtedly affect the future use of cocoa butter substitutes throughout the world'.

5.3.1. The current situation

Seven countries of the European Union are permitted (eight are not) to include up to 5% vegetable fat in the total weight of product. However, 70% of chocolate manufacturing takes place in the countries where such substitution is not permitted. Freedom of movement does not allow products manufactured according to the 5% rule to be marketed under the designation 'chocolate' throughout the European Union.

5.3.2. The case of shea nuts

The shea tree produces nuts which, after processing, provide shea butter. Shea butter is one of the components of cocoa butter equivalents. One argument advanced in favour of vegetable fats is that the use of shea nuts from Burkina Faso and Mali to replace cocoa butter might increase. From a sociological point of view, shea nut cultivation provides a significant means of emancipating young women in those countries and gives them a not inconsiderable extra income. In this connection, the champions of the developing countries have concerns about the problems of shea nut cultivation, but few of them believe that the industry will increase its use of shea nuts if the directive is adopted, owing to the very nature of the crop. Shea nuts are not 'cultivated' as such but harvested from nature, which makes their production and quality unreliable. The nuts are fruits which do not appear on the trees until these are 20 or 30 years old. A typical cycle is three to five years. Every three to five years the trees produce a record crop, and their output gradually declines in the other years. One year of the cycle produces no nuts.

The production and prices of shea nuts are completely irregular, as the figures below for Burkina Faso, Benin and Togo show.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial production shea nuts from Burkina Faso</td>
<td>120.9</td>
<td>88.2</td>
<td>90.0</td>
<td>82.8</td>
<td>76.2</td>
<td>70.1</td>
</tr>
<tr>
<td>Prices of shea nuts</td>
<td>18</td>
<td>18</td>
<td>35</td>
<td>26</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Shea nut production in Benin</td>
<td>7,000</td>
<td>10,000</td>
<td>8,000</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Shea nut production in Togo</td>
<td>4,227</td>
<td>6,396</td>
<td>100,000</td>
<td>90,000</td>
<td>110,000</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: Central Bank of West African States economic and monetary Statistics; Secretariat of the Franc Zone Monetary Committee, Carter: Regional Action Centre for Rural Development

The industry will undoubtedly turn towards other, more reliable products which are cheaper. The directive's opponents even think that it might have a negative effect on shea nut exports in the long run.

Cocoa and Chocolate Products

term. The industry will channel investment into finding a cheaper substitute and will not only replace cocoa butter but might also replace shea butter, which is still three times more expensive than palm oil, for example.

The European Fair Trade Association has focused particularly closely on this issue of shea nuts, nuts in general and the benefit that the producer countries might derive from the measure proposed by the directive. Apart from the irregularity of production, it has noted the following:

• shea nut cultivation is not as significant and dominant as cocoa cultivation for the cocoa-producing countries: 'For example, in Burkina Faso shea only represents approximately 0.56% of GDP, or 1.56% of agricultural GDP';
• although 98% of shea nut exports are used in the manufacture of chocolate, the nuts have a potential market which is very large and undoubtedly more lucrative in the sphere of cosmetics, etc.;
• local use far outweighs exports: 'In Burkina Faso about 30% is used for own consumption, 21% is sold, 11% is used for soap and 14% for medicines';
• despite a sizeable potential for production, very heavy investment would be needed to respond to increased demand;
• a substantial period would be needed to respond to demand (15–20 years, the time needed to plant and gather the first harvests);
• the expected profits do not offset the losses for the region as a whole: 'Given the current prices of cocoa butter and the loss of cocoa bean demand, the minimum loss in revenue to cocoa producers would be (US$3350 x 30 713 t) = US$103 m, while the gain to shea producers would be (US$1050 x 15 357 t) = US$16 m. The net loss to the region would be US$87 m.'

6. Consequences of the Directive

6.1. Consequences for the cocoa-producing countries

Given the large number of parameters to be taken into consideration, it is all but impossible to evaluate the directive's consequences for the developing countries. The many uncertainties about the directive's possible repercussions should be emphasized here. The proposal for a directive gives Member States the option of authorizing the use of vegetable fats up to a level of 5% of the total weight of a 'chocolate' product.

Which countries will make use of this opportunity? If the directive is adopted some countries, such as Germany, might follow the trend. Other countries, such as Belgium, France, Italy or the Netherlands, would remain hostile and retain their current rules. However, in this case they would be subject to pressure from their own producers, faced with competition from abroad.

(*) 'A clone is being proposed: It would be False Chocolate. European Fair Trade Association, p. 23.
(**) Ibid, p. 25.
Which companies will use vegetable fats? Some companies which are in favour of the new directive have already stated that they would not use vegetable fats\(^5\). Moreover, not all chocolate manufacturers will be in a position to make the investment needed to acquire the technical facilities enabling them to use vegetable fats. Only big companies would be able to make use of this new possibility.

To what extent will the chocolate industry use vegetable fats? The maximum permitted, or less than the famous 5% ceiling? After making careful deductions, Professor Kees Burger, who has published a report on the impact of the European directive on chocolate\(^6\), has managed to ascertain that the British chocolate industry uses less than 4% vegetable fats in its chocolate. He therefore believes that the likely replacement rate will be less than 4%. However, who can tell what the chocolate industry will do? The opponents of the directive will take the highest figures and its supporters will claim, at a pinch, that there will be no substitution.

The consequences mentioned actually fall into two camps. The directive will affect the demand for cocoa, but will also have an impact on the price of cocoa.

**Probable impact on demand and prices**

A few studies have been carried out, but they do not all agree. Estimates of the loss that the producer countries will have to bear vary by a factor of three.

A study carried out by Henri Jason, Senior Economist at the ICCO, estimates that the loss in terms of volume of cocoa exports will be between 88 450 and 124 610 tonnes, i.e. a long-term reduction of 106 500 tonnes on average in respect of the European Union market\(^7\). These figures, however, do not take into account the possibility of the measure spreading to the United States. Some observers believe that it is highly likely, given the oligopolistic nature of competition in this sector, that American legislation will be brought into line with European standards. There would be immediate pressure from American companies to adopt the 5% rule, in the interests of restoring their competitiveness. If this new parameter is included, the reduction in demand from the United States would be between 67 000 and 84 000 tonnes\(^8\), giving a reduction in world demand ranging between 173 500 and 190 500 tonnes. The loss engendered by a reduction in American demand would not affect the same producers as those who sell their cocoa to the European Union.

In the short term, this drop in demand will result in over-production, which will depress prices. Cocoa producers would thus lose out both as a result of the drastic fall in demand and also as a result of lower prices for the remaining cocoa that they will continue to sell. It is a very delicate

---

\(^{55}\) A spokesperson for the Belgian-based Côte d'Or/Suchard pointed out that the proposal had a long way to go before it was approved, and stressed that his company has no intention of changing their “winning recipe”... in The Courrier, No 158.


\(^{57}\) The potential impact of the possible liberalization of EU legislation governing the use of non-cocoa vegetable fat in chocolate: an assessment by the secretariat of the International Cocoa Organization (ICCO), presented by Henri Jason, Senior Economist, at the international conference on this theme in Abidjan, 28-30 March 1995.

matter to estimate the losses attributable to this drop in demand. There are many different parameters to be taken into account and they are based on projections which are uncertain, to say the least. It is extremely difficult to ascertain how prices, consumption and production will evolve, all the more because all these factors interact with each other.

Many different figures have been put forward. For example, the report on the international conference on the use of vegetable fats other than cocoa butter in the manufacture of chocolate claims that 'the producer countries would lose $880 m annually, i.e. an aggregate loss of $4.4 bn over the next five years, $2.7 bn of which would be borne by ACP cocoa-producing countries'.59. According to Mrs Bassong, the Ambassador of Cameroon in Belgium, who spoke at a hearing of the parties concerned by the proposal for a directive, this 'loss of export earnings would amount to more than $500 m annually'.60 Finally, another less catastrophic but still substantial figure has been quoted by the Secretary-General of the Cocoa Producers' Alliance, Mr Silas Kamga, who believes that the producers will lose around $300 m annually.61 This figure, which is the one most frequently cited, was arrived at by the Ghana Marketing Board on the basis of an annual loss of 200 000 tonnes of cocoa.62

It has yet to be disclosed what hypotheses regarding price changes underpin these estimates. Have they been arrived at on the basis of constant prices or rising prices? Is this a discounted loss following a possible substantial rise in cocoa prices (in which case the loss constitutes gains foregone) or is it an actual net loss?

In this case the Cocoa Marketing Company of Ghana arrived at its figure simply by multiplying the fall in the demand for cocoa (200 000 tonnes) by the price per tonne (£1000), resulting in £200 m or $320 m. This figure does not take into account price changes or the effect of reduced demand on prices.

Any estimate of the loss involved is a difficult matter because we are faced with two contradictory phenomena. The first is the upward trend of prices resulting from the decline in production and increased consumption. The second phenomenon will be the outcome of a European policy which will lead to a reduction in the demand for cocoa and will exert downward pressure on prices. How will these two trends interact? What will be the outcome? These are the questions which need to be asked.

The ICCO forecasts regarding consumption are less optimistic than those put forward by the chocolate manufacturers. According to the ICCO, consumption is likely to increase by around 1%
per annum\(^{63}\) (the chocolate manufacturers claim 3%). Henri Jason considers that for each 10 000 tonnes that demand falls, the earnings of cocoa producers will shrink by 1%. Taking into account his loss forecasts, this would equate to a reduction in their earnings of 8.8 - 12.4%. Taking these figures as a starting point, the ICCO suggests that, even taking into account the increase in demand, the displacement of cocoa beans attributable to the substitution of cocoa butter by cocoa butter alternatives would be between 76 783 and 112 943 tonnes. The outcome would be a loss of earnings for the cocoa producers of 7.7 - 11.3%\(^{64}\). This estimate incorporates the 1% increase in demand and a modest increase in prices (average annual increase of around 1.5% between 1994 and 2000 - basic scenario for Henri Jason - see Annex 2).

Another study, carried out at the Free University of Amsterdam by Professor Kees Burger, is much more optimistic. The report, *'The European Chocolate Market and the Impact of the Proposed EU Directive'*, which was unveiled at a press conference in Brussels on 27 September 1996, reaches the conclusion that the consequences would be substantially more limited than those feared by the ACP-EU Joint Assembly. According to the Burger report, *'Given the use currently made of cocoa butter in countries such as the United Kingdom and Germany, it is likely that only limited substitution will take place'*. With substitution amounting to between 33 000 and 118 000 tonnes over a period of three to five years, the report indicates that cocoa prices are likely to fall between 3% and 11%. However, since cocoa prices will rise by at least 21% over the next 10 years, the drop in demand will merely dampen that increase, which will still remain substantial, between 7% and 17%. Despite this European measure, according to the Burger report, the producer countries could see their earnings rise by between 15% (in the event of the maximum estimated fall in demand of 118 000 tonnes) and 30% (in the event of the minimum substitution level of 33 000 tonnes).

It should be stressed here that this study was not taken into account by Mrs Maij-Weggen, rapporteur for the Committee on Development on the cocoa directive, as it was partly subsidized by CAOBISCO (the chocolate manufacturers' organization, which strongly supports the directive) and is thus suspected of bias. The second criticism made of her report is that it does not incorporate the position of the United States in its calculations.

### 6.2. Consequences for the European Union

The scope of this directive and its repercussions on the producer countries also entail consequences for the European Union. Some observers, including Professor Burger, for instance, believe that any intervention by the European Union through the STABEX fund is unlikely. This is based on their forecasts of price rises and the limited substitution which they believe will take place.

---

\(^{63}\) The ICCO estimates that the total increase in the demand for cocoa in western Europe, projected for the three-year period 1997/98 - 2000/01, will be 30 000 tonnes, i.e. 10 000 tonnes per annum (see Annex 2).

\(^{64}\) Example: for 1993/94 (price = $1370, world production = 2466 9), the loss would have been $260-378 m.

For others (NGOs, producers, the ACP States\textsuperscript{66}), this directive might cause serious problems for the STABEX system. They estimate that for each thousand tonnes lost, the system would have to disburse ECU 1 million\textsuperscript{67}. According to the most pessimistic forecasts, the European Union could find itself facing demands in the region of ECU 200 m. If such a scenario were to happen, half the resources of the STABEX fund might be allocated to the cocoa-producing countries, which would put producers of other commodities in a difficult position. It is claimed that the Commission itself has estimated STABEX intervention as costing ECU 62 m.\textsuperscript{68}

\begin{tabular}{|l|c|c|c|c|c|}
\hline
\hline
Cameroon & 39.1 & 39.9 & 26.4 & 20.1 & 12.2 \\
Ivory Coast & 16.7 & 67.1 & 46.6 & 8.7 & -- \\
Ghana & 6.9 & 16.4 & 4.9 & 15.7 & -- \\
Grenada & 0.6 & 0.3 & 0.2 & 0.2 & 0.1 \\
Haiti & 1.4 & -- & 0.1 & 0.1 & -- \\
Papua New Guinea & 6.8 & 7.1 & 4.7 & 4.3 & 7.3 \\
Solomon Isles & 0.4 & 0.2 & -- & 0.6 & -- \\
Togo & 1.7 & 1.7 & 1.1 & 1.9 & 0.4 \\
Sao Tome & 1.0 & 1.1 & 0.8 & -- & -- \\
Western Samoa & 0.4 & 0.3 & -- & -- & -- \\
Sierra Leone & -- & 0.8 & 0.6 & 1.0 & 1.2 \\
Equatorial Guinea & 2.1 & 1.2 & 1.5 & 0.9 & 1.6 \\
\hline
\textbf{Totals} & 77.1 & 136.1 & 86.9 & 53.5 & 22.8 \\
\hline
\end{tabular}

Observers express doubts about the effectiveness of a system such as STABEX and its ability to offset the weaknesses of the market for the multiplicity of small producers in these countries. In the most vulnerable countries cocoa production is in the hands of several tens of thousands of very small producers. In Ghana and Ivory Coast 600 000 and 700 000 families, respectively, depend directly on cocoa production.

\subsection*{6.3. Consequences for consumers}

\textbf{Price}

Cocoa butter accounts for around 8\textendash 9\% of the total price of chocolate. Large manufacturers can reduce this price element to 1\textendash 2\% if cheaper vegetable fats are used. However, it is difficult to determine whether this cost reduction will be reflected in consumer prices. The manufacturers give

\textsuperscript{(*)} Resolution of the ACP-EU Joint Assembly, 22 March 1996 in Windhoek, OJ C 254, 2.9.1996, p. 58, recital M: 'taking into consideration that the STABEX fund would not be able to compensate for the resulting fall in export revenues from the ACP cocoa producing countries and this might also affect the intervention of the STABEX fund for other commodities, produced by particularly vulnerable countries'.

\textsuperscript{(*)} Address by Mrs Bassong, Ambassador of Cameroon; text of the presentations and speeches made by representatives of various interest groups at the exchange of views held on 29 October 1996 on the Commission proposal concerning a new directive on cocoa products, European Parliament, Committee on Development and Cooperation, PE 219.761/Ann., p 43

\textsuperscript{(*)} 'A clone is being proposed. It would be False Chocolate, European Fair Trade Association, p. 25.
assurances that prices will fall. Thus, Professor Burger estimates this reduction in the price of chocolate products as ranging between 0.2% and 2.5%. Other observers believe that such a reduction in prices is highly unlikely. They cite the example of the precipitous drop in cocoa prices over the past 20 years, which does not appear to have had any significant impact on the prices of finished products.

Health

Studies suggest that cocoa butter, despite being a saturated fat, does not have the same negative effects as other saturated fats, and possibly even the reverse. Most of the alternatives to cocoa butter, by contrast, are hardened or hydrogenated fats which have more harmful effects than saturated fats (see Annex). In any event, more research in this area is needed.

Quality

Tastes might change. This aspect remains highly subjective, however, and it would be unwise to put forward specific dogmatic arguments. As the old saw says, you can't argue with tastes and colours. The mass-market chocolate industry claims, however, that the wider use of vegetable fats would go hand-in-hand with new technological developments designed to satisfy a broader range of tastes. There is already a very wide diversity of cocoa products, albeit often under other names. There seem to be no limits to imagination in terms of recipes, tastes and names. What is at issue here is the scope of interpretation for the designation 'chocolate', which some wish to be as restrictive as possible (chocolate = 100% cocoa) and others want to be more relaxed. It should be noted that the directive already allows a degree of diversity by introducing slightly different and informative names such as 'milk chocolate' and 'gianduia chocolate'.

Clarity

BEUC (the European Bureau of Consumer Unions) considers that the provisions regarding labelling are inadequate and might mislead consumers, particularly in those countries with strong chocolate traditions. Given that chocolate is often purchased on impulse, it stresses the need for clarity regarding the designation, which should be changed or amended to give a clear indication that a given product is not the same as chocolate

6.4. Consequences for the industries concerned

The industry has been calling for harmonization of the market for a long time; there are no estimates of the losses which might be attributable to its compartmentalization. Moreover, the chocolate industry has seen production expand substantially and has carried out significant investment.

Cocoa and Chocolate Products

The mass-market industry’s interest is in the use of vegetable fats which are three times cheaper than cocoa butter. Above all, however, it would simultaneously benefit by the fall in the price of cocoa beans. The Ambassador of Cameroon, during her address to the members of the Committee on Development, gave a striking example. Taking a 15% fall in cocoa prices as a starting–point, Nestlé, which uses 350,000 tonnes of cocoa beans, would make savings of $75 m ($1400 x 15% x 350 000 = $75 000 000), while Ivory Coast, which produces nearly 1 million tonnes of cocoa, would lose $210 m. The Ambassador was only talking here of the savings which would be made on the price of cocoa. The financial interest is thus extremely important.

The cocoa-pressing industry, on the other hand, feels threatened by this measure and has reacted through the association known as the Cocoa Campaign. This organization, which embraces eight European cocoa-pressing companies with a workforce of 2658 and a turnover of $1.45 bn, highlights the possible job losses that the new directive might entail. Since the sector has no other outlets for cocoa butter, it would have limited opportunities for conversion and job losses would be inevitable.

The oil-processing industry, by contrast, strongly supports this European measure, which would expand its market. This industry has gone through a difficult period, particularly Karlshamns, which has suffered the full force of the collapse of the chocolate market in the former Soviet Union, the fall in cocoa prices at the end of the 1980s and the drop in consumption of coconut oil in the United States. The sector, which is at the end of its tether, is attempting to cut costs by closing factories and centralizing production. The new directive might throw these companies a lifeline, but it is not clear that this would lead to the creation of new jobs, because they are already in a situation of over–production.

7. A coherent approach

The European Parliament has often raised the issue of mutual consistency between the policies to be pursued by the European Union. In this connection, it has stressed the need for greater coordination between the various departments in the Commission, Parliament and the Council on policies which might have multiple repercussions (and sometimes unintended effects) in a number of different areas. The fact is that some policies conducted in a given area may have disastrous consequences in other areas which are likewise the subject of deliberate policy on the part of the Community. Cocoa appears to provide a fairly representative case of this question of a coherent approach. There seem to be two problems in this area.

1. The European Union has encouraged cocoa cultivation, directly through the structural policies that it has advocated, and indirectly through the IMF and the World Bank.

Taking Professor Burger’s most pessimistic hypothesis, in which the maximum reduction in demand for cocoa beans, 118,000 tonnes (47,000 tonnes of cocoa butter), would depress prices by some 11%, Nestlé would save $54 m ($1400 x 11% x 350,000 tonnes = $53,900,000). For the chocolate industry in general, the savings attributable to the use of vegetable fats which are three times cheaper than cocoa butter would be $23.5 m ($3350 x 15% x 47,000 tonnes = $23,617,500). The savings on the price of beans are thus more significant than the savings relating to substitution.
'Many producer governments have encouraged cocoa production in an endeavour to increase export earnings and international financial institutions have supported them in this regard' ... 'A large part of the finance came from international financial institutions such as the World Bank and the Asian Development Bank.'

This measure concerning the European internal market is likely to put at risk all the efforts which have been made in connection with such structural reforms. It could have major socio-economic repercussions in the producer countries, making debt-servicing impossible and threatening structural adjustment, with the familiar knock-on effect of cuts in social spending on health and education.

2. Cocoa is known to be one of the most important factors in deforestation. As François Ruf explains: 'Cultivation is as important a factor in deforestation as logging. Moreover, agriculture and logging have well-known links: the tracks opened up by loggers encourage migrants to move into the heart of the forests, which then very quickly give way to a variety of crops and fallow land. If an "environmentally friendly" or "sustainable cultivation" label were to be introduced, care would have to be taken to use it not only for wood and meat but also many other agricultural products, including those derived from "trees", such as palm oil, natural rubber, coffee and, above all, cocoa. The cocoa tree is undoubtedly one of the most active agents in the process of deforestation.'

It can thus be seen that, at the same time as encouraging the cultivation of cocoa, the European Union is also expending a great deal of money and energy on safeguarding tropical forests.

8. Conclusions

After examining the ins and outs of this proposal for a directive, we have been able to see that all the parties concerned agree in forecasting a reduction in demand (between 33 000 and 200 000 tonnes) if it is adopted.

There is also general agreement on the idea that it will at least have a dampening effect on the rise in cocoa prices. Although the various authors do not agree on the scale of the directive's consequences, it is obvious that it will reduce the potential earnings of the producer countries. The producer countries primarily concerned are some of the ACP states (31 out of 70), who are the main suppliers of the European Union. They depend fairly heavily on their cocoa exports. We have also seen that the agricultural trade deficit of the African countries would inevitably deteriorate and their food import bills would loom ever larger. Their capacity to meet such food import bills will crucially depend on adequate growth in their agricultural exports. In this context, which stands in contrast to the healthy situation of the chocolate industry, it is difficult to justify such a measure.

---


2) *Booms et crises du cacao, les vertiges de l'or brun*, [Cocoa: boom and bust - the dizzying ups and downs of brown gold], François Ruf, Ministry of Development Cooperation, CIRAD-SAR, KARTHALA, 1995, p. 45.
It is impossible not to emphasize here the scale of the responsibility borne by the Western world in general, and the European Union in particular, towards the countries of the south with regard to cocoa. Cocoa is a crop which does not furnish the immediate subsistence needs of the developing countries and the bulk of which is cultivated for consumption in the industrialized countries. The latter have encouraged the cultivation of cocoa in the tropics as being likely to generate the foreign-currency earnings needed for the structural reforms embarked upon in the countries concerned. At the same time, this encouragement has satisfied Western chocolate manufacturers and their consumers – us. Now that the trend of cocoa prices has reversed, this directive is likely to change the rules of the game. However, this increase in prices will have its day and will undoubtedly soon be brought down by increased production which will trigger a downward price cycle.

In the long term, the need is to consider the possibility, for the European Union and the producer countries, of making cocoa cultivation fit into an approach based on sustainable development, by using a variety of techniques to encourage yields and replanting in situ. From a global point of view, the excessive dependence of some ACP countries on cocoa makes them extremely vulnerable to any change which destabilizes the market. As already enshrined in the Lomé Convention, the European Union should increase its aid to encourage the diversification of crops and local processing thereof. Those countries which produce shea nuts, which are among the poorest in Africa, should not be forgotten. The European Union could encourage this crop and the use of shea products in other sectors and on other markets, such as cosmetics.

Finally, we have seen the scientific uncertainty surrounding the assessment of vegetable fat content in chocolate and on the effects of such vegetable fats on health. Research in these areas should undoubtedly be pursued so that (1) the application of the directive can be checked using reliable methods, and (2) decision-makers take their decisions in full possession of the facts where the effects on health are concerned.
9. Bibliography

'A clone is being proposed' It would be False Chocolate, European Fair Trade Association, p. 29.


Address by Mrs Bassong, Ambassador of Cameroon: text of the presentations and speeches made by representatives of various interest groups at the exchange of views held on 29 October 1996 on the Commission proposal concerning a new directive on cocoa products, European Parliament, Committee on Development and Cooperation, 7 November 1996, PE 219.761/Ann.


Booms et crises du cacao, les vertiges de l'or brun, [Cocoa: boom and bust – the dizzying ups and downs of brown gold], François Ruf, Ministry of Development Cooperation, CIRAD – SAR, KARTHALA, 1995, p. 45.

CAOBISCO replies to the questions raised by the members of the EP Development Committee at the hearing on the Chocolate Directive on 29 October 1996, PE 219.761/Add., p. 2.

COM(83) 787 final, OJ C 32, 7.2.1984, p. 32.


Cocoa and Chocolate Products


The potential impact of the possible liberalization of EU legislation governing the use of non – cocoa vegetable fat in chocolate: an assessment by the secretariat of the International Cocoa Organization (ICCO), presented by Henri Jason, Senior Economist, at the international conference on this theme in Abidjan, 28 – 30 March 1995, p. 6.


Periodicals

The Courrier, No 158.

Nouvel Afrique – Asie, No 81, p. 57.


'An overview of assessments of the impact of the Uruguay Round on agricultural prices and incomes, Food security implications of the Uruguay Round', J. Greenfield et al. in Food Policy, Vol. 21, No 4/5, p. 374, 1996, Great Britain.

'Commissioner Pinheiro opposed to any change to the definition and composition of chocolate', in Europe, No 6418, Saturday, 11 February 1995, p. 10.
10. Annexes

Annex 1: Interpretation of cocoa cycles, François Ruf

Annex 2: Statistics presented by Henri Jason, ICCO Senior Economist, at the Abidjan Conference (28 – 30 March 1995) on the use of vegetable fats other than cocoa butter in the manufacture of chocolate: impact, quality, prospects for the market and world consumption

Annex 3: Executive summary of the study carried out by Professor Kees Burger entitled 'The European Chocolate Market and the Impact of the Proposed EU Directive' + Preface

Annex 4: Position of the European Heart Network

Annex 5: Deforestation chart – cocoa – growing in Bahia, François Ruf.
Annex 1


Accélération exceptionnelle des migrations dans le Centre-Ouest et le Sud-Ouest ivoirien ; l'État et ses représentants sont totalement dépassés. Les 800 000 tonnes de la Côte-d'Ivoire en 1988/89 peuvent être considérées comme l'apogée du troisième grand cycle d'offre de l'Afrique de l'Ouest. Il contribue directement à la baisse des cours « secondés » par le nouveau boom malaisien.

Le "contre cycle indonésien", associé au "quatrième cycle ivoirien" retarda la remontée des cours de quelques années.

Sécheresse de 1983/84 en Afrique de l'Ouest

Fig. 1.18 : Interprétation de la courbe du prix international de 1970 à 1990 (prix spot, origine Ghana, sur le marché de New York, en cents 1985/kg) et essai d'anticipation du prix en 2000.

"Contre cycle" apparent de l'Indonésie, dont l'ascension cacaoyère coïncide avec la baisse du prix. Il s'agit en fait d'un « boom normal » avec un phénomène de retard puis d'amplification à la suite de l'impact du boom malaisien, et de diverses politiques en Indonésie (dont la politique rizicole et la politique monétaire, combinées, contribuent à faire monter le prix relatif du cacao au producteur ; cf. chap. 3).

<table>
<thead>
<tr>
<th>Country (with reference year in brackets)</th>
<th>Finished chocolate (b/)</th>
<th>Semi finished chocolate</th>
<th>Total chocolate equivalent (c/)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Solid</td>
<td>Filled</td>
<td>Chocolate couverture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unadjusted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Group A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark (1992)</td>
<td>7 400</td>
<td>13 800</td>
<td>3 050</td>
</tr>
<tr>
<td>Ireland (1992)</td>
<td>9 800</td>
<td>19 900</td>
<td>1 400</td>
</tr>
<tr>
<td>Portugal (1987)</td>
<td>1 600</td>
<td>1 500</td>
<td></td>
</tr>
<tr>
<td>United Kingdom (1992)</td>
<td>90 600</td>
<td>363 400</td>
<td>65 200</td>
</tr>
<tr>
<td><strong>Sub-total/average</strong></td>
<td>109 400</td>
<td>398 600</td>
<td>69 650</td>
</tr>
<tr>
<td><strong>Group B (New members)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria (1992)</td>
<td>26 200</td>
<td>21 200</td>
<td>2 850</td>
</tr>
<tr>
<td>Finland (1992)</td>
<td>6 800</td>
<td>22 100</td>
<td>3 000</td>
</tr>
<tr>
<td>Sweden (1992)</td>
<td>12 700</td>
<td>34 600</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total/average</strong></td>
<td>45 700</td>
<td>77 900</td>
<td>5 850</td>
</tr>
<tr>
<td><strong>Total Groups A + B</strong></td>
<td>155 100</td>
<td>476 500</td>
<td>75 500</td>
</tr>
<tr>
<td><strong>Group C</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium/Luxembourg (1992)</td>
<td>43 500</td>
<td>77 900</td>
<td>167 000</td>
</tr>
<tr>
<td>France (1992)</td>
<td>117 000</td>
<td>136 900</td>
<td>78 500</td>
</tr>
<tr>
<td>Germany (1992)</td>
<td>224 200</td>
<td>282 200</td>
<td>119 500</td>
</tr>
<tr>
<td>Greece (1992)</td>
<td>10 500</td>
<td>8 000</td>
<td></td>
</tr>
<tr>
<td>Italy (1992)</td>
<td>33 200</td>
<td>63 300</td>
<td>32 100</td>
</tr>
<tr>
<td>Netherlands (1992)</td>
<td>19 000</td>
<td>171 000</td>
<td>13 000</td>
</tr>
<tr>
<td>Spain (1992)</td>
<td>33 200</td>
<td>8 400</td>
<td>25 000</td>
</tr>
<tr>
<td><strong>Sub-total/average</strong></td>
<td>480 600</td>
<td>767 700</td>
<td>434 600</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>635 700</td>
<td>1 244 200</td>
<td>510 100</td>
</tr>
</tbody>
</table>

Notes:
- \(a/\) Based on the most recent level of recorded annual production of finished chocolate for each country as published by IOCCC.
- \(b/\) Excludes cocoa powder-based products.
- \(c/\) Calculated using the following conversion factors: solid chocolate 0.9, filled chocolate 0.45, couverture 1.0.
- \(d/\) IOCCC Secretariat working estimates. Figure in brackets indicate the assumed proportion of couverture not counted in finished chocolate.

Source: IOCCC Statistical Bulletin; CAOBISCO, Statistical Monograph; various national chocolate associations in the EU.
Growth in the production and consumption of finished chocolate products in selected EU countries for various periods between 1980 and 1992

<table>
<thead>
<tr>
<th>Country</th>
<th>Chocolate production</th>
<th></th>
<th></th>
<th></th>
<th>Chocolate consumption</th>
<th></th>
<th></th>
<th></th>
<th>Average annual rate 1980-1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>-1.12%</td>
<td>11.93%</td>
<td>-4.07%</td>
<td>19.10%</td>
<td>1.35%</td>
<td>7.72%</td>
<td>8.68%</td>
<td>4.37%</td>
<td>45.53%</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.98%</td>
<td>20.56%</td>
<td>8.00%</td>
<td>26.92%</td>
<td>1.85%</td>
<td>21.78%</td>
<td>-8.54%</td>
<td>0.43%</td>
<td>16.83%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>15.84%</td>
<td>13.52%</td>
<td>1.02%</td>
<td>33.18%</td>
<td>2.23%</td>
<td>23.75%</td>
<td>12.31%</td>
<td>-0.09%</td>
<td>39.11%</td>
</tr>
<tr>
<td>Total</td>
<td>14.45%</td>
<td>13.86%</td>
<td>1.18%</td>
<td>32.14%</td>
<td>2.17%</td>
<td>22.52%</td>
<td>19.90%</td>
<td>0.25%</td>
<td>38.29%</td>
</tr>
<tr>
<td>Group B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>12.50%</td>
<td>23.43%</td>
<td>-7.17%</td>
<td>28.80%</td>
<td>1.97%</td>
<td>15.40%</td>
<td>9.51%</td>
<td>-3.84%</td>
<td>21.52%</td>
</tr>
<tr>
<td>Finland</td>
<td>12.50%</td>
<td>21.72%</td>
<td>17.96%</td>
<td>64.20%</td>
<td>3.89%</td>
<td>30.97%</td>
<td>18.92%</td>
<td>5.75%</td>
<td>62.83%</td>
</tr>
<tr>
<td>Sweden</td>
<td>19.81%</td>
<td>-0.19%</td>
<td>-7.44%</td>
<td>10.26%</td>
<td>0.75%</td>
<td>7.27%</td>
<td>-0.42%</td>
<td>-2.63%</td>
<td>1.14%</td>
</tr>
<tr>
<td>Total</td>
<td>15.77%</td>
<td>12.34%</td>
<td>-0.48%</td>
<td>27.03%</td>
<td>1.86%</td>
<td>13.63%</td>
<td>6.68%</td>
<td>-2.03%</td>
<td>17.33%</td>
</tr>
<tr>
<td>Total Groups A + B</td>
<td>14.71%</td>
<td>13.55%</td>
<td>0.85%</td>
<td>31.10%</td>
<td>2.10%</td>
<td>20.52%</td>
<td>10.01%</td>
<td>-0.21%</td>
<td>33.57%</td>
</tr>
<tr>
<td>Group C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>23.70%</td>
<td>29.09%</td>
<td>7.72%</td>
<td>75.43%</td>
<td>4.42%</td>
<td>13.45%</td>
<td>9.00%</td>
<td>19.45%</td>
<td>31.44%</td>
</tr>
<tr>
<td>France</td>
<td>17.15%</td>
<td>4.11%</td>
<td>2.63%</td>
<td>37.39%</td>
<td>2.47%</td>
<td>5.69%</td>
<td>13.92%</td>
<td>1.23%</td>
<td>35.76%</td>
</tr>
<tr>
<td>Germany</td>
<td>3.50%</td>
<td>37.06%</td>
<td>-5.31%</td>
<td>45.18%</td>
<td>2.91%</td>
<td>-4.36%</td>
<td>34.46%</td>
<td>-6.80%</td>
<td>31.10%</td>
</tr>
<tr>
<td>Italy</td>
<td>34.67%</td>
<td>50.35%</td>
<td>8.07%</td>
<td>121.90%</td>
<td>6.32%</td>
<td>46.10%</td>
<td>36.77%</td>
<td>1.40%</td>
<td>107.62%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>15.99%</td>
<td>13.74%</td>
<td>3.26%</td>
<td>39.09%</td>
<td>2.57%</td>
<td>7.16%</td>
<td>10.81%</td>
<td>18.79%</td>
<td>-10.09%</td>
</tr>
<tr>
<td>Total</td>
<td>12.60%</td>
<td>25.22%</td>
<td>0.13%</td>
<td>50.04%</td>
<td>3.17%</td>
<td>3.95%</td>
<td>25.11%</td>
<td>-1.71%</td>
<td>38.95%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>13.40%</td>
<td>20.77%</td>
<td>0.38%</td>
<td>42.90%</td>
<td>2.78%</td>
<td>10.05%</td>
<td>19.03%</td>
<td>-1.18%</td>
<td>36.97%</td>
</tr>
</tbody>
</table>

Source: Derived from data published in IOCCC Statistical Bulletin (February 1994).
Simulation of the effects of alternative levels of cocoa displacement in chocolate manufacturing

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>2443</td>
<td>2462</td>
<td>2544</td>
<td>2615</td>
<td>2659</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>2443</td>
<td>2462</td>
<td>2542</td>
<td>2804</td>
<td>2808</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2443</td>
<td>2402</td>
<td>2541</td>
<td>2594</td>
<td>2808</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2443</td>
<td>2402</td>
<td>2540</td>
<td>2594</td>
<td>2579</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2443</td>
<td>2462</td>
<td>2538</td>
<td>2576</td>
<td>2512</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>2443</td>
<td>2462</td>
<td>2537</td>
<td>2566</td>
<td>2538</td>
<td></td>
</tr>
</tbody>
</table>

World production (000 tonnes gross)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>2539</td>
<td>2542</td>
<td>2546</td>
<td>2571</td>
<td>2559</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>2539</td>
<td>2521</td>
<td>2514</td>
<td>2555</td>
<td>2566</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2539</td>
<td>2500</td>
<td>2482</td>
<td>2538</td>
<td>2596</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2539</td>
<td>2479</td>
<td>2449</td>
<td>2521</td>
<td>2585</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2539</td>
<td>2458</td>
<td>2417</td>
<td>2504</td>
<td>2575</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>2539</td>
<td>2437</td>
<td>2384</td>
<td>2487</td>
<td>2565</td>
<td></td>
</tr>
</tbody>
</table>

World consumption (000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1095</td>
<td>1194</td>
<td>1213</td>
<td>1179</td>
<td>1150</td>
<td>1183</td>
</tr>
<tr>
<td>A</td>
<td>1095</td>
<td>1181</td>
<td>1137</td>
<td>1098</td>
<td>1097</td>
<td>1152</td>
</tr>
<tr>
<td>B</td>
<td>1092</td>
<td>1128</td>
<td>1068</td>
<td>1024</td>
<td>1037</td>
<td>1108</td>
</tr>
<tr>
<td>C</td>
<td>1090</td>
<td>1099</td>
<td>1005</td>
<td>057</td>
<td>081</td>
<td>1066</td>
</tr>
<tr>
<td>D</td>
<td>1089</td>
<td>1070</td>
<td>094</td>
<td>085</td>
<td>028</td>
<td>1023</td>
</tr>
<tr>
<td>E</td>
<td>1087</td>
<td>1042</td>
<td>082</td>
<td>038</td>
<td>077</td>
<td>097</td>
</tr>
</tbody>
</table>

Crop year prices (LSD per tonne)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>2041</td>
<td>3000</td>
<td>3137</td>
<td>3067</td>
<td>3086</td>
<td>3089</td>
</tr>
<tr>
<td>A</td>
<td>2088</td>
<td>2948</td>
<td>2808</td>
<td>2684</td>
<td>2614</td>
<td>1443</td>
</tr>
<tr>
<td>B</td>
<td>2777</td>
<td>2815</td>
<td>2866</td>
<td>2817</td>
<td>2754</td>
<td>1383</td>
</tr>
<tr>
<td>C</td>
<td>2748</td>
<td>2661</td>
<td>2505</td>
<td>2247</td>
<td>2583</td>
<td>1303</td>
</tr>
<tr>
<td>D</td>
<td>2717</td>
<td>2574</td>
<td>2332</td>
<td>2308</td>
<td>2431</td>
<td>1263</td>
</tr>
<tr>
<td>E</td>
<td>2689</td>
<td>2466</td>
<td>2174</td>
<td>2154</td>
<td>2208</td>
<td>1170</td>
</tr>
</tbody>
</table>

Producer revenue (million constant 1993 SDRs)


1/ The scenarios represent the following assumptions:

Base - No future changes to the current situation with respect to the use of non-cocoa vegetable fats in the worldwide manufacture of chocolate.

A..E: Scenarios corresponding to the additional use of non-cocoa vegetable fats causing the displacement of varying amounts of cocoa, expressed in beans-equivalent terms, from the worldwide manufacture of chocolate. Each scenario illustrates a different total amount of displacement, but in each case assumes a two-year period to reach the total, with half of the eventual total displacement occurring in the 1995/96 crop year. The amount of displacement for each scenario is:

A: 25 000 tonnes in 1995/96, 50 000 tonnes per year from 1996/97 onwards.
B: 50 000 in 1995/96, 100 000 in 1996/97, 0 in 1997/98, 0 in 1998/99, 0 in 1999/00.
C: 75 000 in 1995/96, 150 000 in 1996/97, 0 in 1997/98, 0 in 1998/99, 0 in 1999/00.
D: 100 000 in 1995/96, 200 000 in 1996/97, 0 in 1997/98, 0 in 1998/99, 0 in 1999/00.
E: 125 000 in 1995/96, 250 000 in 1996/97, 0 in 1997/98, 0 in 1998/99, 0 in 1999/00.

Crop-year prices are forecasts and projections of the average daily ICCO price for the period 1 October to 30 September.

b/ Obtained by dividing the forecast or projected price of each scenario by the forecast or projection for the corresponding period in the base scenario.

c/ Indicative total producer revenue is obtained by multiplying the projected world production by the projected average ICCO daily price six months in advance of the crop year, on the assumption that production is sold at an average of six months forward. The revenue figures are indicative only since no account is taken of either forward premiums, discounts and premiums of physical cocoa, or whether sales are for domestic use or export.

d/ Calculated as in note c/ above using indicative producer revenues.
INTERNATIONAL CONFERENCE ON THE THEME:
"THE USE OF VEGETABLE fats OTHER THAN COCOA BUTTER IN THE
MANUFACTURE OF CHOCOLATE: IMPACT, QUALITY, PROSPECTS
FOR THE MARKET AND WORLD CONSUMPTION"
ABIDJAN, 28 - 30 MARCH 1995

THE POTENTIAL IMPACT OF THE POSSIBLE LIBERALIZATION OF EU LEGISLATION
GOVERNING THE USE OF NON-COCOA VEGETABLE FATS IN CHOCOLATE:
AN ASSESSMENT BY THE SECRETARIAT OF THE
INTERNATIONAL COCOA ORGANIZATION (ICCO)

Presented by:

Henri Jason
Senior Economist

International Cocoa Organization (ICCO)
22 Berners Street, London W1P 3DB, United Kingdom
1. Executive summary

In the recently proposed European Parliament and Council Directive related to cocoa and chocolate product intended for human consumption, the opportunity is offered for EU member countries to decide whether to permit the use of other vegetable fats than cocoa butter in the recipe of chocolate. The amount is limited to 5% of the chocolate weight excluding the other edible materials, and the recipe should meet with minimum and maximum requirements for other ingredients that are similar to the original requirements.

In this report we investigate the likely consequences that adoption of this Directive might have for the chocolate market. We investigate the potential amount of cocoa butter that might replaced by the alternative fats, we look at the price effects that such a change in recipe has, and we investigate the likely consequences that the reduced demand for cocoa butter may have on the world market prices of cocoa beans, and thereby on the export earnings of the producing countries.

At present the EU is divided over the use of other fats in chocolate. The UK, Ireland, Denmark, Austria, Sweden, Finland, and Portugal legally permit the use of non-cocoa butter fat in chocolate, whereas the other countries do not. Trade in the products within the EU is, however, a fundamental freedom, and the products of each member country can be sold in the other countries.

[section 2] We point out that the manufacturing of the products by itself is not illegal in any country. What the present and the proposed regulation stipulates is whether such products are permitted to carry the name 'chocolate' or 'milk chocolate'. It is the name that is protected, and the proposed Directive would change the definition of what 'chocolate' is.

In view of the many different perceptions that consumers are likely to have of 'chocolate', it is not expected that a change in the definition would diminish the value that consumers attach to the image of 'chocolate'.

[section 3] Based on IOCCC statistics, and statistics provided by the ERC we establish the amounts of chocolate products that are produced and consumed in each country. Total production and consumption of chocolate confectionery products in the EU in recent years were around 1900 kilotons (kt) and 1700 kt, respectively.

To produce these products, the EU-12 imported in 1994 just over 1100 kt of cocoa beans, and an additional 24 kt of paste (the product of beans after grinding) and 15 kt of butter. The other product that is obtained by pressing the paste is powder. The EU-12 exported over 110 kt of powder. In addition the EU exported 7 kt of bulk chocolate. The remaining cocoa products are used in chocolate confectionery production; of the latter 462 kt was exported.

[section 4] The chocolate recipe contains sugar, cocoa butter, and cocoa paste, with minor additions of flavour and some other ingredients. For milk chocolate, milk powder is added, and possible other ingredients in minor quantities. Total recipe costs are in the order of size of ECU 1500 per ton. Cocoa butter content is typically some 16% in the milk chocolate recipe, but takes about 33% of total recipe costs.

The alternative fat to be used in stead of cocoa butter is cocoa butter equivalent (CBE), typically made of fats from shea nuts, ilipe nuts and fractionated palm oil, but other so called
cocoa butter replacers, or other fats, can be used as well. The costs of such fats vary. CBE in general is about 15% cheaper than cocoa butter, cocoa butter replacers can be considerably cheaper.

Assuming that the alternative fat costs two third of the price of cocoa butter, the recipe costs of chocolate go down by 0.7% for every percentage of cocoa butter replaced. This is quite robust as to the composition of the recipe.

Recipe costs in Germany form about 18% to 36% of total ex-factory chocolate product costs. The lower percentage applies to pralines, the higher to solid block chocolate.

Acceptable values for the chocolate content of the chocolate products were found to be 90% for solid bars, 60% for straightlines (these are small bite size products), 50% for countlines (candy bars), and 80% for other products. With these estimates, and accounting for the country detail, the amounts of chocolate equivalent for each country were calculated. For the EU12 the amount is 1530 kt, which is about 81% of the volume of chocolate products.

The (added) cocoa butter content of the chocolate in each country was assessed by adjusting the content parameters so as to find a fit with the amounts of cocoa products used. The average butter content in the EU-12 comes at 20% of total chocolate weight.

The percentage found for the UK was 17%, whereas for Germany percentages of 18% for solid products, and 20% for filled products applied. As alternative fats are permitted in the UK, it indicates that producers may not reduce the cocoa butter use by the full 5%.

A reasonable maximum replacement of cocoa butter, therefore, seems to be 4% of the chocolate weight. This would amount to 20% of the cocoa butter, and would come at 47 kt for the EU countries where the alternative fats are presently not permitted.

A more likely scenario is that adopting countries would be using cocoa butter to the extent that the UK does now. For Germany this implies a small reduction in cocoa butter content of the solid products and a larger reduction in the filled products. An additional argument for less than full replacement is the minimum requirement for quality milk chocolate, that says that at least 30% cocoa mass should be contained. If all countries would adopt the UK recipe, total cocoa butter use in the EU12 would go down by 24 kt.

In the likely event that France and Italy do not adopt the proposed Directive, this adjustment in cocoa butter use would be 13 kt only.

[from section 6] The impact that such a reduction will have on the world market for cocoa beans is given by the following elasticity values: Each percentage downward shift in world demand leads approximately to a 2% fall in prices, and an eventual decrease in trade of 0.65%. Thus 1/3 of the original reduction in demand is recovered, but at lower prices.

A reduction in cocoa butter demand by 13 kt can be converted into a reduced demand for beans of 33 kt, equal to about 3% of EU imports, and to 1.3% of world demand. The eventual price effect is a reduction by 2.6%, while exports decrease by 0.9%.

The estimated maximum reduction by 47 kt of butter (or 118 kt of beans), would lead to prices that are lower by 11%, and exports that are reduced by 3%.

These values must be considered against the background of the likely rise in prices that is projected for the next one and a half decade. Two scenarios are considered. One in which prices go up from the present level of USS 1400/ton to around USS 2000 (the lower price scenario),
and one in which prices go up to over USS 2800/ton by the year 2010. The proposed legislation may lead to decreases in the expected growth of these prices and of the production volumes.

In the lower price scenario, the revenues of cocoa producers are projected to increase by 35% in the next ten years. The reduction in EU demand by 33 kt would leave a growth of 30% over the same period. A reduction in EU demand for beans by 118 kt, would still leave a growth of 15%.

In the same scenario, prices are projected to increase by 21% between 1995 and 2005, by 17% in case of small reduction in cocoa demand, and by 7% in case of maximum reduction.

The scenarios reveal that it is unlikely that the STABEX transfer mechanism will be triggered by the change in demand due to the additional use of CBEs.

[section 5] To assess these effects on prices and earnings that such a decrease in demand has, we needed to know how chocolate product prices would respond to changes in recipe costs, how the demand would respond to the chocolate prices, and how the cocoa market would change in response to lower demand for beans. For the UK and Germany we have estimated the price transmission elasticities. These show that changes in the cocoa prices (and therefore in recipe costs) are indeed transmitted to the prices of the chocolate products. The extent to which such price effects occur shows the importance of cocoa for the final product. In Germany the price transmission elasticity was highest for solid bars (0.26) and lowest for pralines (0.14). In the UK transmission elasticities were slightly lower.

Demand elasticities are in the order of size of -1 for Germany, and around -0.5 for the UK. It was also found that the cocoa contents of chocolate products increases when prices of cocoa are low compared with the ruling chocolate prices. Relevant elasticity is between 0.08 and 0.20.

The price effects are estimated together with income effects. These latter show that demand for filled bars shows the strongest rise when incomes go up (elasticity of 0.9 for Germany, 1.7 for the UK). Other products also go up, but by less (0.7 and 0.4, respectively).

[from section 6] The calculated reduction in beans demand from the EU is not likely to materialize until after 1998, in view of the time needed for parliamentary discussions, and investments into equipment and market research. Differences in speed of ratification and adoption of new recipes give rise to a gradual shift of the demand for cocoa. Full adjustment is likely to require some 3 to 5 years.

Within the EU, the calculated reduction in demand for cocoa butter by between 13 and 47 kt will be partly compensated by additional demand on account of the lower prices of cocoa. In beans equivalents, the initial drop amounts to between 33 kt and 118 kt. Compensatory demand amounts to between 5 and 16 kt. This is due to extra demand for chocolate (up to 3% more), and increased use of cocoa per ton of chocolate. Changes in the response elasticities due to the wider availability of alternative fats may change the compensation to about 20 kt. in the case of the drastic fall, while extra sales in hot countries could add another 2 kt. The maximum compensatory demand, therefore, should not amount to more than 20% of the initial fall in the EU.
The main conclusions again:

- In view of the present use of cocoa butter in countries like Germany and the UK, it is likely that only limited substitution will take place. The scale of substitution would be equivalent to 33,000 tons assuming France and Italy would not adopt the proposed Directive. If they would, the reduction in beans demand would be 60,000 tons. Maximum substitution would amount to 118,000 tons.

- The substitution will cause cocoa prices to be lower by between 3% and 11%. Strong effects in the first years after adoption will be attenuated by gradual introduction of the new legislation and recipes, while start of the adjustment is not likely until after 1998. Prices of chocolate products will also be lower (by between 0.2% and 2.5%), while sales values will hardly change.

- Current outlook for the cocoa prices is to go up in the next ten years by 21% at least. The minor shift in EU demand would diminish this growth to 17%, the major shift in demand would leave a growth of 7%. Corresponding growth rates of revenues to cocoa producers are 35% in the basic scenario, 30% and 15% in the scenarios with substitution.

- The STABEX mechanism is not likely to be activated.
Position on the European Commission’s proposal for a Directive relating to cocoa and chocolate products intended for human consumption

On April 17 1996, the European Commission tabled its proposal to amend the 1973 Cocoa and Chocolate Directive (73/241). Article 2 of the Commission’s new proposal for a Directive on cocoa and chocolate (96/0112(COD)) authorizes the Member States to add vegetable fats other than cocoa butter to chocolate. Replacement of cocoa butter by other vegetable fats may not exceed 5%.

The European Heart Network (EHN) wrote to Mr Egon Gaerner, Directorate General III, in December 1995 to advise against the introduction of any provisions which would allow replacement of cocoa butter by other vegetable fats.

EHN believes that a replacement of cocoa butter by other vegetable fats may easily lead to a choice of a replacement fat which is a cheaper, saturated, vegetable fat.

The effect of different fatty acids on blood cholesterol was highlighted a report published in 1995 by the Netherlands Food Council. Noticeably, the report concludes that a high intake of saturated fat can lead to an increased level of cholesterol in the blood and a high level of cholesterol in the blood is one of the main risk factors for coronary heart disease. Replacement of cocoa butter by cheaper saturated fats may alter the neutral effects, which the cocoa butter (mainly containing stearic acid) is deemed to have on the cholesterol level, into a negative effect (i.e. increasing the level of cholesterol in the blood).

Considered as an isolated issue, the replacement of cocoa butter by other vegetable fats may seem to be of little importance for the incidence of cardiovascular disease (CVD). However, one should bear in mind that if several foodstuffs are subject to similar alterations, the total amount of saturated fat in the daily diet will increase. Then the issue becomes much more important because a change of the level of cholesterol in the blood has a significant impact on the risk of CVD.

It is therefore EHN’s opinion, that the Council of Ministers and the European Parliament should not adopt the Commission’s proposal allowing a cocoa butter replacement of up to 5% by other vegetable fats. In this context as well as in others, it is important that the principal of article 129 of the Maastricht Treaty, that health protection requirements shall form a constituent part of the Community’s other policies, is not forgotten.
Évolution à Bahia des surfaces relatives de cacaoyères, de forêt et de pâturages de 1970 à 1985
The following publications have appeared in the External Economic Relations Series:

No 1  (10/1989): L'Association européenne de libre-échange et le marché unique communautaire. FR

No 2  (10/1990): Third World Debt – Analyses. All official languages.


No W 4 (9/1993): Agreement on the European Economic Area – Background and Contents. EN

No W 5 (10/1993): International dual-use technology transfer – COCOM and the EC. EN/FR

No W 6 (12/1993): The European Community and the Association of South-East Asian Nations (ASEAN). EN

No W 7 (1/1994): Economic Interdependence – New Policy Challenges. EN

No W 8 (6/1994): Demography and Development, Public Hearing held by the Committee on Development and Cooperation. EN/FR

No W 9 (11/1995): The Gulf Cooperation Council (GCC) and its relations with the European Union. EN


No W 12 (3/1996): The Dynamics of Economic Change in Asia. EN

No W 13 (6/1996): Regional Economic Cooperation and Integration in Africa. DE/EN/FR

No W 15 (2/1997): Public Hearing on Climate Change and Small Island States. EN