

EX/141/11
21 January 2010

Original: ENGLISH
Distr: RESTRICTED

EXECUTIVE COMMITTEE
One hundred and forty-first meeting
Yaoundé, Cameroon, 24-26 March 2010

DRAFT

**EVALUATION OF THE IMPLEMENTATION, EXPERIENCES, RESULTS AND LESSONS
TO BE LEARNED FROM THE “TOTAL QUALITY” PROJECT IN CÔTE D’IVOIRE**

Note by the Secretariat:

The attached document contains a comprehensive draft report on an evaluation of the implementation, experiences, results and lessons to be learned from the “Total Quality” project in Côte d’Ivoire. The report was drafted by Dr. Tom Harrison, Chairman of the ICCO Expert Working Group on Quality and of the Task Force for the “Total Quality” project. Dr. Harrison was supported in his drafting work by the ICCO Secretariat.

EVALUATION OF THE IMPLEMENTATION, EXPERIENCES, RESULTS AND LESSONS TO BE LEARNED FROM THE “TOTAL QUALITY” PROJECT IN CÔTE D’IVOIRE

INTRODUCTION

1. This report presents the results and findings of the ICCO “Total Quality” project carried out in Côte d’Ivoire, commencing in November 2001 and completed in April 2008. Over this period, numerous progress reports have been issued and circulated, giving great detail of the operation and changes made in operating practices as improved procedures were developed and introduced. Rather than attempt to incorporate all of the detail in this final report, it is presented in summary form. In the report, reference will be made to a number of key reference papers attached. The Secretariat further holds a file on all the working papers and reports issued over the project life.

2. As the work was initiated by CAOBISCO and took place purely in Côte d’Ivoire, a separate (short) report will be prepared for both parties which makes suggestions on how the results obtained may be further developed to facilitate the production of “total quality” cocoa in Côte d’Ivoire on a truly commercial scale.

BACKGROUND

3. The project was initiated by a paper from the Cocoa Committee of CAOBISCO in 1998, putting forward a physical quality specification for cocoa beans which are suitable for use in the manufacture of liquor, which represents the key flavour element in chocolate. It also expressed their concern that, at that time, a significant percentage of global bean exports did not meet these criteria. In 2002, CAOBISCO amended their initial paper to include non-physical quality characteristics which they believed would become increasingly important in the eyes of the consumer and/or may be required by future legislation. These additional non-physical quality requirements were set out in their paper and included issues of ethical production, environmental considerations and economic and social issues. In effect, the “total quality” concept was arrived at through combining the two papers, which is effectively a requirement for achieving a sustainable cocoa economy.

4. Whilst it is relatively easy to define and measure physical quality characteristics, it is far more difficult to define and measure the non-physical aspects, particularly as the conditions which are required in one area, e.g. for best environmental practices, may not be appropriate in another location. However, there are others e.g. ethical and economic requirements, which should be common to all cocoa supply chain operations.

5. As yet, there is no clear definition of what is required to be done in operational terms to achieve a sustainable cocoa economy. All that exists are general statements of intent with little advice on how this is to be achieved in practical, commercial and political terms. A key requirement is to achieve sustainable (growing) demand which, according to CAOBISCO, was very dependant on developing a ‘total quality’ supply chain. It was considered that the project would be approached by addressing Phase I (i.e. physical quality requirements, traceability and a more efficient supply chain) in a manner which could lead to the development of systems which would address the non-physical criteria to be included in Phase II.

WORK PROGRAMME

6. A Task Force with representatives from the Expert Working Group on Quality representing trade, industry and Côte d'Ivoire was established. Members representing the confectionary associations in the Task Force group included CAOBISCO, the International Confectionary Association (ICA, previously IOCCC), the Federation of Cocoa Commerce (previously the Cocoa Association of London, (CAL)) and the BCCCA. The chocolate manufacturers actively participating in the Task Force included Cadbury, Ferrero, Kraft, Mars and Nestlé. Members of the Task Force representing the trading sector included Ecom-Zamacom, Armajaro and Noble-Cocaf. The Government of Côte d'Ivoire was represented by the *Comité de Gestion de la Filière Café-Cacao* (previously the *Bourse du Café et du Cacao*, BCC). The successful implementation of the project attracted more participants to the pilot operations, who became actively involved in the work of the Task Force. Barry Callebaut joined the 2008/2009 pilot operations, in partnership with SACO, as the selected trader. Training of farmers was implemented by ANADER, with support of Cornelder, Côte d'Ivoire.

7. The objective of the Task Force was to examine the current supply chain from farmer to exportation and introduce changes (on a small scale basis) which would enable the production (at farm gate) of cocoa which met the CAOBISCO (physical) specifications and to alter current logistical systems to ensure the integrity of this cocoa from farm gate to industry user. It was recognized that the project would have to proceed by "trial and error" with modifications introduced to overcome any problems identified. The members of the Task Force accepted that they would actively participate in the work and obtain finance to meet any (reasonable) requirements for project activities. Initial financing was provided by CAOBISCO, IOCCC (ICA), CAL and BCCCA with Côte d'Ivoire committing to support resources required for field work. The Task Force considered that any final proposals had to be commercially sound, i.e. provide an economic benefit to all involved. It was further determined that the work would not be reliant upon new, untried technology nor would it require any new research projects.

8. As a first step (in 2001/2002), it was necessary to establish a base level of current practices by carrying out a survey in Côte d'Ivoire. Full details of this work are given in document EWG/Q/14/2¹. The key findings, based upon the results of the survey were:

- a) The majority of the farmers understood what needed to be done to achieve a good quality product, generally demonstrated great interest in training and often had good reasons for diverting from best practice e.g. if no banana leaves were available, they revert to the use of plastic sheeting;
- b) Basic faults were identified in the harvesting, fermenting and drying cycle, all of which might be improved through training. Farmers demonstrated interest in learning how to produce a good quality product; and
- c) The survey identified the need for further training, the need for the development and introduction of basic farming aids, which would help to standardize cocoa production and the significant impact the internal marketing system had upon farmer behaviour. The survey demonstrated that, without the knowledge of what was required of him, without access to improved techniques and aids in harvesting, fermenting and drying and without the ability to best market his produce, the farmer was unlikely to have quality as a major preoccupation.

¹ EWG/Q/14/2. Progress Report on the ICCO Quality Improvement Project

9. Following the survey, the Task Force developed the major elements of the first pilot operations during the main crop of 2002/2003. A farmers' training programme was devised with the necessary visual aids and a training manual (details contained also in document EWG/Q/14/2). During the deliberations in the Task Force, it became clear that this pilot project could only operate through establishing tripartite Groups of the key commercial entities i.e. a farmer's co-operative, a trade intermediary and an industry user. Details of this structure and its method of operation are given in the first section of document EWG/Q/17/2². The major elements of the system developed by the Task Force were: a simple system of traceability of the cocoa; introduction of a short and efficient supply chain; maintaining the integrity of the cocoa throughout the supply chain; and payment of a premium for cocoa which met the project's specification.

10. To achieve the basic elements of the systems proposed, the Task Force designed a simple system of traceability. Starting from the co-operative level, the co-operative would collect the cocoa from the farmers in villages designated as "project villages". When collecting the cocoa, the co-operative would keep the cocoa from each farmer separate from other cocoas. At the warehouse of the co-operative, the cocoa would be checked for physical quality against the standards of the project. If the quality criteria were met, the cocoa would be put into export bags, closed and labelled. The cocoa would then be transported to port, once again checked for quality and then shipped. This system would ensure both full traceability to the village level, but also full integrity of the cocoa between co-operative and shipment, through to the overseas manufacturer. To encourage farmers and cooperatives to engage in the proposed system and in recognition of the extra effort to produce project quality cocoa, chocolate manufacturers paid a Project Participation Incentive (P.P.I) to the traders to be distributed among farmers and cooperatives.

11. The essential requirements for the developed system to function efficiently can thus be summarized as follows:

- (a) identification of the three commercial partners who would work together i.e. co-operative, trade and industry;
- (b) agreement of target volumes and premium;
- (c) provision of necessary training for those farmers and co-operatives involved;
- (d) provision of quality testing and recording equipment, and checking that quality control is carried out correctly at the co-operative. Also that the co-operative keeps records of participating farmers and the volumes of project cocoa they produce;
- (e) ensuring that project cocoa is bagged, marked as such at the co-operative, and that its integrity is retained between the co-operative and port of export;
- (f) Re-checking the physical quality (independently) at the port, prior to export. (Note that the cocoa is bagged at the co-operative in export sacks in which they remain until delivered to the industry user).

² EWG/Q/17. Draft Project Profile. Supply Chain Management for Total Quality Cocoa

- (g) Payment of the agreed premium for project cocoa in an open and transparent manner; to the individuals or bodies agreed between the commercial parties;
- (h) Further quality checking in the importing countries for additional quality criteria e.g. organoleptic qualities, FFA etc. (These checks imposed no conditionality on the payments agreed); and
- (i) Supervision and co-ordination of activities, in particular as regards the operations at the level of exporters and co-operatives, including payment of premiums for project cocoa. This function was overviewed by the BCC.

12. Procedures to establish and operate in a manner which meets these requirements were refined and implemented over the course of the project. Those co-operatives, traders and industry participants who have been active participants in this work are registered with ICCO as having the ability to operate the ICCO system for “total quality” (Phase I) cocoa. New participants can register after, in their first year of operation, showing they understand and have the ability to operate the system which ensures traceability and achieves agreed physical quality standards.

13. Over the lifespan of the project, the volumes of project cocoa which met the essential project cocoa requirements of physical quality standards and traceability are as follows:

Season	Volume
2003/2004	1,110 tonnes
2004/2005	670 tonnes
2005/2006	1,070 tonnes
2006/2007	1,226 tonnes
2007/2008	7,900 tonnes
2008/2009	4,550 tonnes

All of this cocoa met the required physical quality standards. The additional quality checks at the chocolate manufacturer, assessed flavour and FFA. It was found that the project cocoa was suitable for liquor production in both of these quality aspects.

14. It has proven difficult to achieve the required volumes (i.e. meet demand) for a variety of reasons, some logistical e.g. the political situation in Côte d’Ivoire, availability of appropriate sacks, implementation of timely training etc. A problem also identified was the difficulty in competing to buy this quality cocoa against the buyers of cocoa for internal processing who have a very significant tax advantage and recognize the value of the improved quality of project cocoa. Unfortunately, the cocoa loses its traceability value when used for this purpose.

ECONOMICS

15. As recognized by the ICCO Council, a fundamental requirement for sustainability was that any system had to be economically viable, i.e. it provides a mutual benefit to all involved from (in the case of cocoa) farmer through to consumer. It was therefore decided to initiate the new farming and logistical systems by providing an additional economic benefit to the farmers and co-operatives involved. This was based upon the volumes of cocoa beans produced which met the agreed physical quality requirements and retained their integrity (hence traceability) from the farm (co-operative) to

exportation. The payment (premium) was paid when the quality check at the port matched the quality results recorded at the co-operative.

16. It was dubbed the “PPI” i.e. the project participation incentive and was initially set at \$100 per tonne on a rather arbitrary basis. In the early years of the project, it was believed that this premium should be split to reward the individual participating farmers (on volumes produced), to compensate the co-operative for any additional work involved and to contribute to a fund which would help the local community in the areas of production (Social Fund).

17. Through experience, it was found that both the amount paid and the manner of distribution (i.e. the split) had to be adapted to the particular requirements of the geographical area of operation. The system evolved such that both the amount and its split between farmer/co-operative and Social Fund were not set by the Task Force, but through agreement between the commercial parties involved i.e. farmer/co-operative/trade/industry. It was clear that the best results were obtained when a close relationship, based upon trust, developed between the parties involved. The premium was and is important. However, just as important are the maintenance of a consistent approach and the building of a common understanding of the respective responsibilities of the parties involved.

18. Effectively, the premium has to be at a level which provides an economic incentive sufficient to motivate both farmer and co-operative to act in accordance with the procedural requirements of the project. This is not a constant and may vary from season to season and location to location. It was found that an important consideration was the timing of the payments e.g. a farmer may readily accept a lower payment for good cocoa (though often not completely dried) from a passing buyer for immediate cash. Hence (some) trade participants changed their practice of payment on testing at port to payment on testing at co-operative i.e. they believed the system used would work and were prepared to take the exposure of (effectively) paying the premium in advance.

19. As mentioned elsewhere in this report, a major buying competitor for these better quality beans is one who can utilize the tax advantage provided for beans used for internal processing. This differential advantage requires further study to determine the comparative benefits of these traceable beans being exported or used internally. An economic study could be carried out to evaluate the economic and strategic benefits accruing to producing countries and their cocoa farmers through adding value via internal processing compared with adding value through exporting high quality, traceable cocoa beans. It should be possible to achieve both.

20. In one season, a trial was made where the industry participants were prepared to outbid any competitors for project beans. Surprisingly, this did not result in a significant increase in volumes purchased. It was apparent that the climatic conditions of that season and insufficient farmer training had produced a situation where the beans which met the quality requirements were just not available.

21. In summary, price and premium are important. However, they are not everything. Education, training, more efficient co-operatives, greater trust and confidence between the participants and the need to address differential tax issues are key factors in promoting economic sustainability.

CURRENT POSITION

22. The project (Phase I), as such, is complete. It was established to see if a commercially viable system could be established in Côte d’Ivoire to produce cocoa which would meet the physical quality standards required by CAOBISCO and provide a base system necessary to address wider sustainability issues. Such a system has been developed and shown to be commercially viable. However, it has its

limitations. It would not be applicable to farmers operating outside of a co-operative system (the majority in Côte d'Ivoire) and, as it adds value to the cocoa produced, it attracts buyers (who have a significant economic advantage) for internal processing.

23. It would appear that CAOBISCO were correct in their belief that both legislation and consumer demand would require changes in the supply chain. As with other food ingredients, traceability is becoming more important as are non-physical quality requirements. This trend continues as evidenced by the actions of many large chocolate manufacturers who increasingly look for greater assurance of the total quality aspect of their cocoa supply chain.

24. Having successfully developed a system which satisfies the requirements set out by CAOBISCO, its further development has been passed into the hands of the commercial entities involved. Early indications are that this development is taking place using the project results as a base. A key and essential element in the system is traceability. This is at the heart of any supply chain which may be at risk of attack on many issues; health and safety, ethical, environmental, illegal practices. Hence the increasing demands for certification e.g. Rainforest Alliance who essentially use a traceability system coupled with an appeal to those who consider environmental issues to be of key importance to consumers.

25. This work did not fully address the non-physical quality issues or indeed some of the wider sustainability questions. It focused on the key commercial issues of improving efficiency in the supply chain, providing traceable cocoa of the physical quality required and provided economic benefits (through premia and through quality and efficiency improvements) to those involved. Hence it addresses the key element in any sustainable system i.e. the economic issues. The Phase II work on the non-physical quality standards may not be conducive to a common approach other than those issues of legality e.g. child labour and ethical standards. However, it should be noted that many of the participants in this project are committed to addressing these issues and are actively engaged in seeking solutions to wider sustainability issues through the development and introduction of improved farming practices and more efficient supply chains. The results of the project provide a base, operational system which, through traceability, can be used and adapted to meet the increasing demands made upon agricultural supply chains.

26. It should further be noted that many of the participants in the Total Quality project became, in the meantime, committed to addressing sustainability issues and are now actively engaged in seeking solutions for achieving sustainability in the cocoa supply chain. It is clear that a number of these activities are drawing on the lessons learned from the project. The objectives of the project have been achieved, if further efforts to achieve sustainability are making use of elements of the system developed under the project. We believe that this is the case, as the results of the project provide a base operational system which, through traceability, can be used and adapted to meet the increasing demands made upon agricultural supply chains.

27. ICCO has operated as a registration body for participants in the project. Although the project has finished, ICCO could continue to do this and assist current and new participants as they operate the system in the real commercial world.

28. As noted, a short report will be produced for Côte d'Ivoire and CAOBISCO making suggestions for consideration on what they could do to develop the project findings and proposals. ICCO could progress the work further by having more contact and interchange of information and strategy with WCF. In particular, to access the practical results from the extensive work WCF has done in the STCP. The results of the work done in this ICCO project focused on improving the

efficiency of the supply chain and economic issues; were it to be combined with WCF's results and experiences in training and sustainability issues, duplication would be avoided and could result in a workable approach towards a truly sustainable system, the achievement of which could be accelerated by the implementation of a Phase II Total Quality project. It is finally noted that the ICCO, both the Secretariat and the delegates, would benefit from having more direct contact with the chocolate industry at a senior level to better understand its needs and strategies.

ACKNOWLEDGEMENTS

29. Thanks are due to the various individuals, trade associations, companies, co-operatives and authorities in Côte d'Ivoire listed below. Special thanks are due to those who have been in it from the start and have stuck with it; continuity has been essential. It is noteworthy that, although the project is complete, many of those involved are actively using this base system to produce and source traceable, good quality beans and are further refining it to meet their own particular needs (both in Côte d'Ivoire and elsewhere). The real test of any project is the implementation of its findings by the participants in the real commercial world. This appears to be happening, but will require support and encouragement from all the key participants, both commercial and political. It will best progress through establishment of clear direction and procedure, the minimum of bureaucracy and the recognition that whilst aid is important, more lasting benefits are obtained through improving trading systems and relationships.

PROJECT PARTICIPANTS

Cooperatives

30. Cooprania, Ucada, Coopada, Czsbs, Cagrida, Cadi, Coagad, Capcc, Capg, Coopaes, Coopadias, Nzelibesse, Camene, Nocao, Coopamed, Coopas, Coopamy, C.Coty, Coopame, Ecaap, Cayesea, Cafd, Coopapaix, Upadi, Ecao, Coopasoa, Coprae-GB, Akayra, Coabia, Coopalba, Coab, Cat, Coopagro, Ecam, Cania, Codesva, Kovakiva, Ecoopam, Coopagli, Aconda, Scado, Enoyekoun and Apo.

Agencies

31. Cornelder, ANADER and the *Comité de Gestion de la Filière Café-Cacao* (previously the *Bourse du Café et du Cacao*, BCC).

Industry

32. Barry Callebaut, Cadbury, Ferrero, Kraft, Mars and Nestlé.

Trade

33. Armajaro, Cargill, Ecom-Zamacom, Noble-Cocaf and SACO.