INTRODUCTION

1. The Third Session of the Codex Coordinating Committee for Africa was held in the Conference Hall, Kwame Nkrumah Conference Centre, from the 26-30 September 1977.

2. The Session was attended by government delegations from the following countries: Algeria, Egypt, Ghana, Ivory Coast, Kenya, Niger, Nigeria, Senegal, Togo and Zaire. Observers were present from OAU and ISO. The list of participants, including officers from FAO and WHO, is contained in Appendix I to this report.

3. His Excellency, Brig. N.A. Odartey-Wellington, Commissioner for Agriculture, formally opened the Session and welcomed delegates on behalf of the Government of Ghana. The Commissioner stressed the importance of harmonising as much as possible the Food Laws of the African region within the framework of the Model Food Law which the Committee had adopted at its second session. He also pointed out that regional or sub-regional food standardisation should aim at the inclusion of Codex criteria as an essential part of the elaboration of a Modern Food Law. The full text of the Commissioner's address is given in Appendix II.

4. The Secretariat, speaking on behalf of the Directors-General of FAO and WHO, thanked the Government of Ghana for their generosity in hosting once again the Codex Coordinating Committee for Africa. The enactment of Food Legislation was a primary step towards the application of food control and food standardisation in the region and in this session the Committee would be giving special consideration to certain food products for possible standardisation on a regional or sub-regional basis.

5. The representative of WHO, Dr. Matthey, underlined the importance that WHO attached to the protection of the consumer through food standardisation in the region.

6. The Coordinator for Africa, Dr. Robert Oteng, made a brief statement to the Committee in which he explained that under rule 11.4 of the Codex Alimentarius Commission his appointment as Coordinator would continue until the end of the Twelfth Session of the Commission and that he would normally act as Chairman of the present Committee. Nevertheless, because he was on leave of absence from his position as Director of the Ghana Standards Board, he proposed that the Acting Director, Dr. Twum-Danso, should act as Chairman of the Session in his stead. The Committee agreed to this proposal.

ELECTION OF VICE-CHAIRMAN AND RAPPORTEURS

7. The Committee unanimously elected Mr. Amela Komla (Togo) as Vice-Chairman and Mr. G.O. Baptist (Nigeria) and Dr. G.D. Kouthon (FAO) as rapporteurs.
be of little use in the absence of an appropriate structure for its implementation. Governments should therefore be invited to give some priority to establishing national food control projects, using, when necessary, scientific, technical and financial assistance as may be available from both UN and bilateral aid organisations. The means of obtaining assistance from agencies such as FAO, WHO, UNDP, UNEP and bilateral donors was outlined to the Committee. The Committee was also informed that FAO and WHO would organise a conference in December 1977 in order to define a strategy towards the harmonisation of food control activities.

16. In the discussion that followed, the delegation of Togo informed the Committee of a food control project which his government was planning to set up with the support of UNDP during the 1977-81 Programming Cycle. He expressed concern that qualified technical personnel, ready to work on the project together with the international staff, could not be trained until well after the installation of the laboratories. He reported that building facilities were already available. The Delegation of Nigeria informed the Committee that its government intended to train more people and build additional food control laboratories. The Secretariat informed the Committee that technical assistance to developing countries and assistance in food control could be obtained through either the FAO Technical Cooperation Programme (TCP), FAO/Government Cooperative Programme, or UNDP and UNEP. The Secretariat also indicated that some governments of developing countries may consider financing such projects under a Fund in Trust arrangement with FAO.

MODEL FOOD LAW

17. The Committee had before it for consideration CX/AFRO 77/3 and Conference Room Documents (CRD.1 and CRD.2) containing a summary of government replies to a questionnaire which had been issued (CX/AFRO 75/3) for the purpose of comparing national laws with this Model Food Law. It had also available a background document CX/AFRO 77/11 entitled "Deficiencies of National Food Law in various African Countries and suggested Methods for African Countries to bring their National Food Law into Conformity with the Codex Model Food Law".

18. The Committee noted that the Food Legislation in Kenya and the proposed Food Legislation in Ghana were in close agreement with the dispositions of the Model Food Law. The delegations of Egypt and Nigeria stated that although all items of this Model Food Law were covered in the Food Legislation of their countries, they were not arranged in the same fashion as in the Model Food Law. Other countries informed the Committee that they did not yet have national food legislation. The Secretariat pointed out that the African region was better placed to evolve uniform food legislation than the regions where the legal system had existed for some time and was so structured that the exercise of harmonisation was extremely difficult.

19. The delegation of Ghana pointed out that the Importations, Warranty and Defences section of the Model Food Law was not included in the Food Legislation of many countries. The Committee was informed that this section controls imports of food but provides a means for manufacturers and food traders to recondition or relabel any food that does not comply on entry if that is possible. The Secretariat undertook to discuss with the competent authorities in FAO whether the provision was necessary and further inform the Committee at a later date.

DEFINITION OF "SELL"

20. At its Second Session (ALINORM 76/28, para. 22) the Committee had requested that a new definition of "sell" be prepared to include gifts and barter, and a text including these provisions had been circulated for government comments (CL 1975/37, para. 3).

21. Some delegations thought that gifts would not legally be defined as a transaction in terms of "sell" since no exchange or reciprocation was involved. Other delegations
were of the opinion that gifts should be included in the definition so that, for example, cases where food was supplied as a gift by donor countries should also conform to the conditions for "sell".

22. After further discussion as to whether or not "gift" should be included in the text the Committee requested a small working group consisting of the delegations of Algeria, Ghana and Nigeria to consider the matter and to propose a suitable definition of "sell".

23. The Working Group presented the following alternative texts for the Committee's consideration:

   i. "Sell" includes offer, advertise, keep, expose, transmit, convey, deliver or prepare for sale, barter or exchange, dispose of as a gift from one nation to another or for any consideration whatsoever, or transmit, convey or deliver in pursuance of a sale, barter, gift, exchange or disposal as aforesaid.

   ii. "Sell" means (a) offer, advertise, keep, expose, transmit, convey, deliver or prepare for sale, barter or exchange, dispose of for any consideration whatsoever, or transmit, convey or deliver in pursuance of a sale, barter, exchange or disposal as aforesaid.

   either (b) For the purpose of this food law "to give aid" or "assist" shall be deemed to have the meaning of "sell",

   or (b) All gifts should be considered under the same conditions as any act of selling.

24. The Committee noted that the Working Group had been unable to arrive at a definitive text and requested the Secretariat to seek legal advice as to whether or not the term "gift" could be admitted to the definition of "sell".

INVENTORY OF FOOD CONTROL FACILITIES AND AVAILABLE STAFF IN THE AFRICAN REGION

25. The Committee had before it document CX/AFRO 77/5 which had been compiled by the Secretariat of the Coordinator in order that the Committee could identify countries in which regional or sub-regional facilities could be developed (see ALINORM 76/28, paras. 30-32). The document contained information in tabular form from the following countries: Ethiopia, Gambia, Ghana, Kenya, Morocco, Nigeria, Togo and Upper Volta. The Committee noted that Egypt had also supplied information which would be incorporated into the inventory at a later date.

26. It was pointed out that many countries of the region had not yet sent in their replies and that more complete information was required before detailed consideration could be given to the planning of intra-regional cooperation in the development of regional or sub-regional infrastructure, including projects for training personnel and the creation of a regional training centre. It was noted that these were relatively long-term plans and that more immediate help could be provided through seminars and workshops.

27. Several delegations gave details of the current situation in food control in their countries. Where appropriate these were incorporated into the inventory (see Appendix III).

28. The Committee agreed that the Secretariat of the Coordinator should make a further request for information from the region.

CONSIDERATION OF FOOD PRODUCTS FOR POSSIBLE STANDARDISATION ON A REGIONAL OR SUB-REGIONAL BASIS

29. The Committee had for information and consideration documents CX/GEN 75/1/Rev. 1, CX/AFRO 77/7, CX/AFRO 77/8 and addenda 1, 2, 3, 4, and CX/AFRO 77/12.
30. The Committee was reminded that at its Second Session, one of the agenda items was the consideration of food products for eventual standardisation on a regional basis and that at that time the Committee had drawn up a list of products of significance in the trade of African countries which should be considered for possible standardisation (ALINORM 76/28, paras. 38-47).

At the Eleventh Session of the Commission (ALINORM 76/44, para. 425) it was noted that although importance was attached to cereals and cereal products, tubers and starches and their products, more data were required on the production, trade and local consumption of these products before a decision could be reached as to whether standardisation of these products was feasible. As a result it was decided that for the African Region a consultant should make a survey of production, consumption, trade and legislation of African countries with regard to tubers, other starchy roots and their products, indigenous cereals and their products and certain grain legumes and their products.

31. The main paper on the subject was introduced by the author, Mrs. G. Acquah (Ghana).

32. The Committee noted that as a result of the survey, recommendations were made in the document that elaboration of regional standards should be considered for the following commodities and products:

(1) Dry maize grains offered for direct human consumption;
(2) Industrially processed edible maize meal;
(3) Industrially processed edible maize flour;
(4) Dry sorghum grains offered for direct human consumption;
(5) Dry grains of legumes offered for human consumption;
(6) Peanut flour industrially processed in Africa;
(7) “Garri” (a West African fermented cassava meal product).

33. A further document, prepared by Mr. J.C. Obel (Kenya), entitled “Food Regulations for Africa, Products of Importance to the Region and Recommendations for Standards” (CX/AFRO 77/12) contained a list of regional products for suggested standardisation. These were cashew nuts, oranges, coffee, vegetable oil, drinks and beverages, shellfish, fish and animal products.

34. There was considerable discussion on the products proposed in both documents. It was pointed out that for many of the products in the second list International Standards or Codes of Practice were already elaborated and that fresh fruit did not come within the terms of reference for Codex standards. The Committee was of the opinion that one of the products on the list, cashew nuts, merited further study and noted that the government of Kenya was willing to host a meeting in order to decide whether there was a case for the standardisation of these products.

35. The Committee decided to give prior attention to the proposals in the first list and requested delegations to accept responsibility in coordinating the preparation of draft standards for these products. The delegation of Ghana agreed to propose draft standards for items 1-4 of the list, Kenya for item 5, Niger for item 6 (with the possible cooperation of Senegal) and Nigeria for item 7. In addition the delegations of Togo and Nigeria agreed to cooperate in the preparation of proposed draft standards for certain tubers. The representative of WHO underlined the importance that his organisation gave to the preparation of such standards.

36. The Committee emphasised that in its opinion the preparatory work could be done by correspondence and that before being presented to the Committee, the draft standards should be circulated to all countries of the region for information and comment. The Committee also underlined the importance of attaching technical personnel to delegations so that the proposed draft standards could be constructively discussed during its sessions.
37. The Committee expressed its appreciation of the valuable work of Mrs. Acquah and Mr. Obel in the preparation of the working documents.(1)

DRAFT CODE OF ETHICS FOR THE INTERNATIONAL TRADE IN FOOD

38. The Committee had before it for consideration the above Code contained in CX/GEN 77/1 and was informed that the necessity for a Code of Ethics had been discussed at various sessions of the Commission and the Executive Committee. The recommendation that such a code should be developed arose out of Recommendation 82 of the UN Conference on the Human Environment (Stockholm, June 1972) which gave increased support to the Codex Alimentarius Commission in its work on standardisation.

39. The Committee noted that the document had been issued only recently and that governments had not yet had time to comment.

40. The representative of WHO was of the opinion that the document represented an important step in the setting out of guidelines for ethical conduct in the food trade. The Committee endorsed this point of view and agreed unanimously that pending detailed study the general principles set out in the document should be adopted.

PROPOSED DRAFT CODE OF HYGIENIC PRACTICE FOR GROUNDNUTS

41. The Committee was informed that at its 14th Session held in Washington earlier this month the Codex Committee on Food Hygiene had further considered the above Code in great detail, and further changes had been made.

42. In discussing comments made on the Code, the Codex Committee on Food Hygiene had expressed regret that no observations from developing producing countries had been forthcoming. Consideration had been given to a suggestion to include in the Code maximum levels for contaminants, in particular for aflatoxins, but a decision had been deferred pending the outcome of the Joint FAO/WHO/UNEP Conference on Mycotoxins held 19-27 September 1977 in Nairobi, Kenya. It was hoped that as a result of this conference, the specific end product specification related to contaminants could be considered at the next session of the Codex Committee on Food Hygiene.

43. The Committee noted the changes that had been made by the Codex Committee on Food Hygiene and that, where applicable, the text of the Revised Code of Practice, General Principles of Food Hygiene would be incorporated into the present Code. It also noted that the Code had now been advanced to Step 5 of the Standard.

44. Some delegates were of the opinion that the Code as it stood was too complex to satisfy the needs of developing countries. In particular the regional methods of storage such as the "pyramid" method used in Nigeria, were not covered by the Code. Other delegates questioned the need to include refrigerated storage in the provision.

45. It was pointed out that the Code was intended to be a guideline to ensure that groundnuts were handled and processed in such a way as to protect the consumer and that in some cases special means of transport might be needed to avoid mould contaminations.

(1) Secretary's Note: Further copies of the working document prepared by Mrs. G. Acquah (Ghana) entitled "Tubers, Cereals, Grain Legumes and their Products - Production, Consumption, Trade and Legislation in African Countries" (ref: CX/AFRO 77/7) and of the working documents prepared by Mr. J.C. Obel (Kenya) entitled "Deficiencies of National Food Law in Various African Countries and Suggested Methods for African Countries to bring their National Food Law into Conformity with the Codex Model Food Law" (ref: CX/AFRO 77/11) and "Food Regulations for Africa - Products of Importance to the Region and Recommendations for Standards" (ref: CX/AFRO 77/12) to which the Committee attached particular value, can be obtained on request from the Codex Secretariat, Rome.
With regard to Mycotoxins, the Committee was informed that the Kenyan Conference on the subject had now ended. The delegation of Kenya, which now included a representative who had attended the Conference, informed the Committee that methods for the detection of aflatoxin at the farm level had been discussed and that the Conference was of the opinion that financial assistance should be directed towards research into the development of a "detection kit" for aflatoxin.

The representative of WHO stated that simple methods for the detection of aflatoxin existed but that often the danger to human health lay in the transmission of mycotoxins to the consumer through animal products, such as milk derived from cattle which had been fed with contaminated oilcake.

The Committee agreed that governments should be prepared to comment on the Code at the next Session of the Commission and should pay particular attention to those provisions which related to the control of mould contamination.

PROPOSED DRAFT STANDARD FOR MAIZE (CORN)

The Committee examined the document CIX/AFRO 77/7A which was introduced by the delegation of Ghana, the author country. A discussion followed which referred to the following points:

Tolerances for Defects

50. Some delegations expressed the view that the list of defects as presently set out did not show clearly the relationship between the defects and the total permissible limits. The delegation of Ghana pointed out that in no circumstances could the combined defects listed under "Total Blemished Grains" (3.5.1.1 - 3.5.1.4) exceed 5%, and that, as in the case of the other defects listed (3.5.2 - 3.5.6), to exceed any individual limit was sufficient to disqualify the product.

51. In the light of this explanation the Committee agreed to make no changes to the text.

Presentation

52. Some delegations were of the opinion that an allowance of 5% for grains of other colours in yellow maize was too generous. It was pointed out that lower figures might be difficult to obtain because of natural variations in colour in white maize strains. The Committee agreed to maintain the figure at 5%. It also agreed to a rewording of the text relating to white maize to clarify the percentage of coloured grains permitted in white maize.

Analytical Characteristics

53. After some discussion on the figure for moisture content, the Committee decided to retain the present figure of 15% but to put the figure in brackets (15%) and to remove reference to fresh weight and to request governments to supply data on what moisture levels were available in practice.

Contaminants

54. The Committee was informed that the Codex Committee on Pesticide Residues in conjunction with the Joint Expert Committee on Pesticide Residues was responsible for the evaluation, establishment and acceptance of maximum residue levels in foods.
The Committee agreed that instead of specifying pesticide residues by name in the section, it would be preferable to make a general reference to the Codex publications on recommended residue limits.

It was pointed out that although the evaluation of pesticide residues was carried out internationally, the African region might have conditions which required the application of particular pesticides at levels different to those normally used in temperate zones and that it would be of great service in evaluating maximum residue levels if data from countries of the region were made available to the Codex Committee on Pesticide Residues. It was also important that experts who could represent the region's point of view should be able to attend sessions of the same committee.

Status of the Standard

The Committee agreed to send the proposed Draft Standard for Maize (Corn) to governments for comments at Step 3 of the Procedure for the Elaboration of Regional Codex Standards.

Nomination of Coordinator


The delegation of Togo pointed out that two consecutive terms of office had now been completed by Dr. Robert Oteng of Ghana who under rule 11.4(b) was therefore ineligible for re-appointment as Coordinator. It had been the practice for the country of the Coordinator to provide host facilities for sessions of the Coordinating Committee held in the region and as a result the two previous sessions of the Committee had been held in an English-speaking country of the region.

The delegation of Togo was of the opinion that it was now the moment for a French-speaking country of the region to provide the regional Coordinator and host facilities for the Fourth Session of the Committee. It noted that Dr. N'Doye (Senegal), at present Vice-Chairman of the Commission, had expressed his willingness to act as Coordinator but, due to unforeseen circumstances, was unable to be present.

Speaking on behalf of Dr. N'Doye, a representative of the Embassy of Senegal in Ghana confirmed that Dr. N'Doye would accept nomination and that the government of Senegal were ready to host the Fourth Session of the Committee in Dakar.

The Committee unanimously nominated Dr. N'Doye to be appointed as Coordinator for Africa at the next session of the Commission.

The Committee was also unanimous in expressing its appreciation to the outgoing Coordinator, Dr. Robert Oteng, for the valuable services he had rendered in the inaugural stages of the Committee and in acting as Chairman of its first two sessions.

In his reply, the Coordinator, Dr. Oteng, appealed to all concerned to give more support to the Committee by maintaining close communications with the regional secretariat and by providing data promptly when required. He also made reference to the value of continuity of representation in countries attending the Sessions of the Committee.

The delegation of Kenya strongly supported the views of the Coordinator and pointed out that both moral and material support was needed from governments of the region, particularly the host governments, to enable the Coordinator to carry out his functions.
66. After some discussion, the Committee agreed to include as an appendix to the report (Appendix V) a resolution to governments of the region covering these points.

OTHER MATTERS

67. The Committee was informed that at the Twelfth Session of the Codex Committee on Food Labelling (Ottawa, 16–20 May 1977) there had been some discussion of a working paper on Nutritional Labelling (CX/FL 77/5) prepared by the Canadian Secretariat.

68. The Committee noted that the Codex Committee on Food Labelling had agreed to the appointment of a group of experts to consider this particular subject and that the composition of the proposed expert group should include experts from developing areas of the world.

69. The Committee further noted that the delegation of Senegal had suggested that the subject should be added to the agenda of the session but was unable to be present to speak on the document. Because the subject was in the early stages of discussion at the Codex Committee on Food Labelling, the Committee decided to defer consideration of the document on Nutritional Labelling to the 4th Session.

RESOLUTION ON TRAINING NEEDS

70. The Committee accepted the principle of a resolution proposed by the delegation of Nigeria concerning the establishment of regional or sub-regional training institutes to provide adequate food control infrastructure. It requested the delegations of Ghana, Nigeria and Togo to formulate a resolution for inclusion as an Appendix to this report (Appendix VI).

DATE AND PLACE OF NEXT MEETING

71. The Committee noted that its Fourth Session would be held in Dakar (Senegal) in or before September 1979. The exact date would be fixed by agreement between the government of Senegal and the Codex Alimentarius Commission.
APPENDIX I

LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

CHAIRMAN – PRESIDENT – PRESIDENTE
Dr. L. Twum-Danso
Acting Director
Ghana Standards Board
P.O. Box M.245
Accra, Ghana

ALGERIA
LAGERIE
ARGELIA

Mustapha Abidellaoui
Deputy Director
Ministère de L'Agriculture de la
Révolution Agraire
12 Boulevard Colonel Amrouche
Alger, Algeria

EGYPT
EGYPTE
EGIPTO

R. Afify
Chairman
Biscoimir Co.
P.O. Box 1470
Cairo, Egypt

Mohamed Saad Kershah
Chairman
Alexandria Confectionery and Chocolate
373 Canal El-Mahmoudia St.
Alexandria – El Hadara, Egypt

GHANA

Mrs. J.M. Kordylas
Head of Ghana Delegation
Officer-in-Charge
Food Research Institute
P.O. Box M.20
Accra, Ghana

Dr. K.O. Gyening
Deputy Director
Department of Veterinary Services
P.O. Box M.161
Accra, Ghana

K.K. Eyeson
Senior Research Officer
Food Research Institute
P.O. Box M.20
Accra, Ghana

V.N. Dowuona
Deputy Director of Fisheries
Fisheries Department
P.O. Box 630
Accra, Ghana

GHANA (cont.)

H. Mends
Permanent Representative of Ghana
to FAO
c/o Ghana Embassy
via Ostriana, 4
00199 Rome, Italy

Joshua Glover-Tay
Quality Control Manager
Ghana Industrial Holding Corporation
Cannery Division
P.O. Box 115
Nawana, Ghana

F.G. MacBruce
Scientific Officer
Ghana Standards Board
P.O. Box M.245
Accra, Ghana

A.A. Laryea
Consultant
Ministry of Agriculture
P.O. Box M.37
Accra, Ghana

A.O. Ntifo
Senior Scientific Officer
Acting Head of Food and Organic
Products Department
Ghana Standards Board
P.O. Box M.245
Accra, Ghana

J.K.B.A. Ata
Research Officer
Food Research Institute
P.O. Box M.20
Accra, Ghana

Dr. G.Y. Ahlijah
Principal Scientific Officer
Head, Drugs, Cosmetics & Forensic
Science Department
Ghana Standards Board
P.O. Box M.245
Accra, Ghana
GHANA (Cont.)

Mrs. Abigail Andah
Research Officer
Food Research Institute
P.O. Box M.20
Accra, Ghana

GHANA (OBSERVERS)

Joseph P.K. Acquaye
General Manager
Meat Products Division (GIHOC)
P.O. Box 792
Tema, Ghana

Ebenezer Barnor
Chief Chemist
Tata Brewery Limited
Private Post Bag
Achimota
Accra, Ghana

Dr. Thomas A. Duodu
Senior Nutrition Officer
Nutrition Division
Ministry of Health
P.O. Box M.78
Accra, Ghana

E.O. Mireku
Scientific Officer
Ghana Standards Board
P.O. Box M.245
Accra, Ghana

A.E. Pentsil
Production Manager (Edibles)
Lever Brothers
Tema, Ghana

J. Ben Osei
Regional Animal Husbandry Officer
Department of Animal Husbandry
P.O. Box 5779
Accra - North, Ghana

M.F. Awuku-Kwatia
Scientific Officer
Ghana Standards Board
Accra, Ghana

GHANA (OBSERVERS) (Cont.)

R.S. Baddoo
Sales Manager
Ghana Bottling Company
P.O. Box 867
Accra, Ghana

J.W. Boateng
Principal Chemist
Ghana Water and Sewerage Corporation
P.O. Box M.194
Accra, Ghana

E.K. Marfo
Chief Chemist
Food Specialities (Ghana) Limited
P.O. Box 1739
Accra, Ghana

Robert Ofori
Plant Manager
Accra Brewery Limited
P.O. Box 351
Accra, Ghana

I. van der-Puije
Chief Chemist
Cocoa Products Factory
Private Post Bag
Tema, Ghana

IVORY COAST
COTE-D’IVOIRE
COSTA DE MARFIL

Oukenze Kouamé (Ingenieur)
Responsable des Projets
au Comité National Pour L'Alimentation
B.P. V,190
Abidjan, Ivory Coast

KENYA

J.C. Obel
Chief Public Health Officer
Ministry of Health
P.O. Box 30016
Nairobi, Kenya

Dr. Richards Kimanzi
Senior Veterinary Officer
Veterinary Research Laboratories
P.O. Kebete, Kenya
APPENDIX I

NIGER

Assoumane Baoua
Ministère Développement Rural
Direction Agriculture
P.B. 323
Niamey, Niger

NIGERIA

G.O. Baptist
Acting Assistant Director
Federal Ministry of Health
Food & Drugs Administration
P.M.B. 12525
Lagos, Nigeria

Olusegun Erinle
Acting Senior Standards Officer
Nigerian Standards Organization
Federal Ministry of Industries
Lagos, Nigeria

SENEGAL

Laurent Diatta
1er Conseiller à l'Ambassade du Sénégal
Ambassade du Sénégal
Rangoon Avenue
Accra, Ghana

TOGO

Amela Komla
Directeur
Direction de la Nutrition
B.P. 1242
Lome, Togo

Kokuvi Kwami
Directeur Général Adjoint
Opt, Lome B.P. 1334
Lome, Togo

ZAIRE

Kanda-Lonsa
Chef de Bureau Relations Internationales
Department de L'Agriculture
B.P. 8722
Kinshasa, Zaire

INTERNATIONAL ORGANISATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES
INTERNATIONAL ORGANIZATION FOR
STANDARDIZATION (ISO)

Dr. Robert Oteng
Director of Development Programme
1, Rue De Verembé
Geneva, Switzerland

JOINT FAO/WHO REGIONAL FOOD & NUTRITION
COMMISSION FOR AFRICA

Dr. Miroslav Bohdal
Scientific Secretary, WHO
Joint FAO and Nutrition Commission for
Africa
P.O. Box 1628
Accra, Ghana

E. Bruce
Acting FAO Regional Representative for
Africa
FAO Regional Office for Africa
P.O. Box 1628
Accra, Ghana

Dr. E.O. Idusogie
Regional Nutrition Officer
FAO Regional Office for Africa
P.O. Box 1628
Accra, Ghana

ORGANISATION OF AFRICAN TRADE UNION UNITY

Silete Adogli
Directeur
OATUU
P.O. Box M 386
Accra, Ghana

FAO PERSONNEL
PERSONNEL DE LA FAO
PERSONAL DE LA FAO

James McNamara Hutchinson
Food Standards Officer
Joint FAO/WHO Food Standards Programme
FAO, Via Terme di Caracalla
00100 Rome, Italy
FAO PERSONNEL (Cont.)

Dr. Gabriel Kouthon  
Nutrition Officer  
Food Policy and Nutrition Division  
Joint FAO/WHO Food Standards Programme  
FAO, Via Terme di Caracalla  
00100 Rome, Italy

WHO PERSONNEL
PERSONNEL DE L'OMS  
PERSONAL DE LA OMS

Prof. Emile Matthey  
Chief, Division of Control of Food Additives  
Federal Service of Public Hygiene  
Haslerstrasse  
16 Berne, Switzerland
APPENDIX II

INAUGURAL ADDRESS BY THE COMMISSIONER FOR AGRICULTURE
BRIG. N.A. ODARTEY-WELLINGTON ON THE OCCASION OF THE THIRD
SESSION OF THE CODEX COORDINATING COMMITTEE FOR AFRICA
ON 26TH SEPTEMBER 1977
AT THE KWAME NKRUMAH CONFERENCE CENTRE

Your Excellencies, Fellow Commissioners, Nananom, Nii Mei, Distinguished Delegates, Ladies and Gentlemen, on behalf of the Head of State and Chairman of the Supreme Military Council, General I.K. Acheampong and the Government and people of Ghana, I welcome you to Ghana on the occasion of the Third Session of the Codex Coordinating Committee for Africa. The Government of Ghana feels greatly honoured to have a second chance of hosting this very important conference of the Codex Alimentarius Coordinating Committee for Africa. Members may recall that Ghana hosted the previous Session of this Committee in September 1975.

For the next five days or so, distinguished delegates, you will be guests of the Government and people of Ghana and I trust that you will enjoy your stay here in Accra.

Mr. Chairman, Your Excellencies, Ladies and Gentlemen, my duty is a simple one: to perform the formal opening of the Third Session of the Codex Coordinating Committee for Africa.

The Joint FAO/WHO Food Standards Programme, as you are aware, is a world-wide exercise aimed at guaranteeing the safety of consumers through the elaboration of Codex Standards in conformity with the Rules of Procedure of the Codex Alimentarius Commission.

In setting up the Coordinating Committee for Africa, Mr. Chairman, the Codex Alimentarius Commission has thrown a big challenge to us in Africa within the context of international trade as a whole and the food trade in particular. The Commission's laudable gesture, you will agree, points to the fact that standards represent the best available compromise between the exigencies of consumer quality and the limitations of production.

We, as representatives of African States, are present here today to face this challenge. And this calls for a mobilization of our human, intellectual and material resources in the field of food quality control services and food legislation in order to achieve that infrastructural framework to ensure fairness and to eliminate fraudulent trade practices in food.

I am aware, Mr. Chairman, of the deliberations of the Committee at its 2nd Session, especially of the unanimous adoption of the Codex Model Food Law.

The Model Food Law highlights all the basic principles necessary in a food law, and makes provision for differences in detail which are bound to occur from country to country due to differing local circumstances. I hope that Codex Contact Points in our various countries will liaise effectively with their relevant government departments to adapt this Model Food Law to suit our individual national needs and at the same time harmonize as much as possible the Food Laws of the African region. This is one of the surest ways to facilitate intra-African trade in food.

We are all aware of the current global economic crisis. Our watchword should therefore be vigilance in the face of present-day economic problems.

It is commendable that your Committee has as one of its agenda items the question of food standardisation on a regional or sub-regional basis. I hope this subject will merit serious attention by African countries. This, Mr. Chairman, involves the consideration of certain food products that could be made to conform to certain criteria first at the level of a given sub-region and subsequently at the continental level.

If Africa is to attain this goal, our aim should be to stop any attempts to use this continent as a dumping ground for subquality products, be they food items or other goods.

The regional or sub-regional food standardisation exercise should look at the inclusion of Codex criteria in national legislations. African countries should be capable of sifting standards that are tainted with particular economic interests from standards that would help to further the course of effective harmonisation and coordination.
The conference, Mr. Chairman, is therefore called upon to look very closely at those issues that relate to Codex criteria as an essential ingredient in the elaboration of a Modern Food Law and those that relate to the setting up of stronger sub-regional groupings to consolidate the work of the Coordinating Committee.

The Government of Ghana has always subscribed to, and will continue to endorse any genuine attempts at regionalisation in all matters including standardisation. Her contribution towards the creation of the Economic Community of West African States (ECOWAS) and the ratification of the ACP convention, spelling out the terms of relationship between the European Economic Community and the Afro-Caribbean and Pacific States, bear testimony to Ghana's desire to ensure the economic emancipation of Africa.

Let me remind participants that the birth of the Coordinating Committee is a good thing for Africa and it is our duty as member countries to nurse and nurture it. The process may call for the adoption of a mutually acceptable formula with a view to bringing up a functional and dynamic committee whose actions will not be characterised by lame recommendations and hollow resolutions.

I have every reason to believe that in the course of your deliberations you will consider carefully the form and structure of the Coordinating Committee. We want for ourselves a committee that is tailored to serve our needs. We should avoid a mere reproduction of other people's examples. What is good for the goose may not in this case necessarily be good for the gander.

It is true, Mr. Chairman, that standardisation has in the past greatly lagged behind in the case of agricultural products. The situation is, however, changing rapidly, but the question is whether we in Africa are keeping pace with this rapid change. You, as experts in the field of standardisation, are in a better position to answer this question. But you will permit me, Mr. Chairman, to observe that the outcome of this conference should reflect in the final analysis the realities of an ever-changing world of international politics.

Mr. Chairman, I hope that I have succeeded in focusing your attention on matters to which serious thought should be given. Let me say in conclusion that the whole world is watching and listening as you deliberate. You must therefore aim at maximising results.

Now, on behalf of the Government and people of Ghana, I have the honour to declare open this Third Session of the Coordinating Committee for Africa.

I wish you success in your deliberations and to those of you who have come from outside this country, a pleasant stay in Ghana.

Thank you.

APPENDIX III

INVENTORY OF FOOD CONTROL FACILITIES AND AVAILABLE STAFF IN THE AFRICAN REGION

INTRODUCTION

At the Second Session of the Coordinating Committee for Africa, the committee discussed thoroughly the need for an adequate food control infrastructure to enforce food standards and other regulations, whether national or international. Some delegations remarked on the difficulties faced by countries of the region in creating adequate laboratories, in finding and training of field inspection and analytical personnel and, in general, building up an adequate food control infrastructure.

The delegation of Ghana proposed that the Coordinator be given the task of making an inventory of facilities and staff available in the region to identify whether some regional or sub-regional facilities could be developed. The possibility of seconding staff from one country to another for short periods to assist in infrastructure development was also mentioned. (Please refer to ALINORM 76/28, paras. 30-32).

As a result of this, member countries were requested to furnish the Coordinator with available data. Replies were received from Ethiopia, Gambia, Ghana, Kenya, Morocco, Nigeria, Togo and Upper Volta. The information has been tabulated on the attached sheets and has been complemented by information supplied by delegates during the Third Session of the Committee.
# INVENTORY - FOOD FACILITIES AND AVAILABLE STAFF IN THE AFRICAN REGION

<table>
<thead>
<tr>
<th>Name of Country</th>
<th>Food Laws and Regulations</th>
<th>Adequately Trained Field Inspection Staff</th>
<th>Competent Chemists and Microbiologists</th>
<th>Laboratory Facilities</th>
<th>Overall Administrative Personnel</th>
<th>Training Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ETHIOPIA</strong></td>
<td>a) Public Health Proclamation No 91 of 1947 &amp; No 111 of 1950</td>
<td>214 Sanitarians 47 Meat Inspectors Few other supervisory staff</td>
<td>Few including personnel of intermediate knowledge</td>
<td>1 Official Laboratories</td>
<td>There are administrative and supervisory staff</td>
<td>Public Health College for sanitarians and national veterinary Institute for Meat Inspectors</td>
</tr>
<tr>
<td></td>
<td>b) Meat Inspection Proclamation No 274 of 1970</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Ethiopian Standards on edible oils, pulses and oil seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GAMBIA</strong></td>
<td>a) Pest Act 1966</td>
<td>10 Produce Inspectors</td>
<td>1 Produce Chemist</td>
<td>Yes</td>
<td>1 Produce Chemist 1 Crop Protection Officer 1 Stored Products Officer</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>b) Groundnuts (Standard of Quality Act 1966)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GHANA</strong></td>
<td>Cocoa Products Factory (GCMB)</td>
<td>Modern Food Law in the Pipeline</td>
<td>Nil</td>
<td>Competent Chemists</td>
<td>2 Labs.</td>
<td>Efficient Admin Personnel</td>
</tr>
<tr>
<td>Food Research Institute</td>
<td>Trained Technical Staff</td>
<td>2 Food Scientists (chem. &amp; food analysis) 2 Nut Biochemists 4 Microbiologists 1 Food Scientist (oil &amp; oilseed processing)</td>
<td>Chemical Lab Micro. Lab Nut/Bioch. Lab.</td>
<td></td>
<td>Director Admin, Officer Snr. Admin. Assistant Admin. Asst. Clerks &amp; Typists</td>
<td>Short training programme for technicians engaged in food analysis and quality control work</td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws and Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------</td>
<td>-----------------------</td>
<td>---------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>GHANA Food Research Institute (Cont.)</td>
<td></td>
<td></td>
<td>1 Food Scientist/Technologist (fruits &amp; vegetable processing) 1 Food Scientist (cereal technology) 2 Food Scientists (fish technology) 1 Nutritionist (food consumption &amp; planning) 1 Food Engineer</td>
<td>9 Chemists 1 Microbiologist with Ph.D</td>
<td>Available at headquarters</td>
<td>Training facilities can be extended to other countries if requests are made</td>
</tr>
<tr>
<td>Ghana Standards Board</td>
<td>Ghana Standards Decree, NRCD 173 of 1973</td>
<td>Only a limited number of staff engaged on inspection of food manufacturing factories in accordance with G.S. Decree and the Certification Mark Scheme</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry of Health, Environmental Health Division</td>
<td></td>
<td></td>
<td>Nil</td>
<td>Nil</td>
<td>Health Inspectorate staff operate at the regional, district, city, municipal, urban &amp; rural levels</td>
<td>a) School of Hygiene, Accra: 3-year course leading to the Diploma of the Royal Society of Health for Public Health Inspectors.</td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws and Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------</td>
<td>-------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>GHANA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry of Health, Environmental Health Division (Cont.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Laboratory Services, Ministry of Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Specialist Microbiologist (M.D)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Biologist</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 Asst. Biologists</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Lab. Technologist</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Services, Division, Ministry of Agriculture</td>
<td></td>
<td>26 Meat Inspectors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 Veterinary Surgeons</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Lab. Technologist</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 Srn. Lab. Technicians</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dept. of Nutrition &amp; Food Science, University of Ghana</td>
<td></td>
<td>Senior members of staff of the department and the Chief Technician (10 at full</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 Chemists</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 Microbiologists</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws &amp; Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>GHANA</td>
<td></td>
<td>establishment) could operate as Inspection staff</td>
<td></td>
<td></td>
<td></td>
<td>in Food Science and Nutrition</td>
</tr>
<tr>
<td>Biochemistry Dept., University of Ghana</td>
<td></td>
<td>Nil</td>
<td>Competent Chemists</td>
<td>Laboratory Facilities</td>
<td></td>
<td>We have a Technician Training Scheme in the University. We could envisage training technicians in the use of the Atomic Absorption Spectrophotometer for determining trace heavy metals in foods such as Hg, Pb, Sn, etc.</td>
</tr>
<tr>
<td>Dept. of Chemistry, University of Cape Coast</td>
<td></td>
<td>Nil</td>
<td>12 Chemists 10 Technical Assistants</td>
<td></td>
<td></td>
<td>7 Laboratories well equipped but not properly equipped to analyse food</td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws &amp; Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>KENYA+</td>
<td>Standards Act 1973</td>
<td>4 Standards Officers</td>
<td>In the process of establishing an all round laboratory coupled with metrology centre</td>
<td></td>
<td></td>
<td>Reasonable for upper, middle and lower levels</td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>Food, Drugs &amp; Chemical Substances Act Cap. 254 Meat Control Act 1972</td>
<td>300 Public Health Officers, 15 Vet. Officers, 100 Meat Inspectors</td>
<td>There is a reasonable number</td>
<td>National Public Health Lab, Government Chemist, 5 Labs in Slaughterhouses, 1 central laboratory</td>
<td>Reasonable number at headquarters, Provincial and District levels</td>
<td>Region Meat Training Centre - Meat Inspectors</td>
</tr>
<tr>
<td>MOROCCO</td>
<td>A publication is available on all laws decrees, legislative instruments on the production, the manufacture &amp; sale of agricultural food items &amp; other industrial commodities</td>
<td>65 Technical staff (Engineers, inspectors, assistant technicians &amp; allied staff), 78 Field Officers, 54 Staff with various duties</td>
<td>40 Staff with 6 Engineers</td>
<td>Fully equipped with modern equipment</td>
<td>132</td>
<td>For upper, middle and lower levels</td>
</tr>
</tbody>
</table>

+ Additional Information: National Environment Secretariat is at the moment dealing with methods of monitoring pesticide residues in foods and also dealing with certain food additives prohibited from use in food.
<table>
<thead>
<tr>
<th>Name of Country</th>
<th>Food Laws &amp; Regulations</th>
<th>Adequately Trained Field Inspection Staff</th>
<th>Competent Chemists and Microbiologists</th>
<th>Laboratory Facilities</th>
<th>Overall Administrative Personnel</th>
<th>Training Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIGERIA</td>
<td>Dept. of Food Science &amp; Technology University of Ife</td>
<td>13</td>
<td>6 Chemists</td>
<td>Nil</td>
<td>3</td>
<td>There are all essential facilities for food analysis</td>
</tr>
<tr>
<td></td>
<td>Dept. of Microbiology University of Nigeria, Nsukka</td>
<td>7 Microbiologists</td>
<td>Nil</td>
<td>43</td>
<td>There are training facilities for undergraduate programme for degree in food science and technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food Science &amp; Applied Nutrition Unit, University of Ibadan</td>
<td>A team of well-trained staff who carry out food consumption surveys of families, communities &amp; monitor market prices of food commodities. But no food inspectors</td>
<td>8</td>
<td>Nil</td>
<td>There are training facilities for BSc. MSc. &amp; Ph.D. courses in microbiology as well as training facilities for junior technical staff in microbiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>National Cereals Research Institute</td>
<td>12</td>
<td>7 Laboratories</td>
<td>Director</td>
<td>Training facilities for various nutrition courses leading to awards of (a) certificate in Food Science &amp; Applied Nutrition (b) Postgraduate diploma in nutrition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biochemistry Dept., University of Ibadan</td>
<td>17</td>
<td>Adequate laboratory facilities for food analysis</td>
<td>Deputy Director Number of supporting staff</td>
<td>Local and international training facilities for agricultural chemists, microbiologists and food analysts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Training facilities for students reading BSc. in biochemistry, veterinary and food</td>
<td></td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws &amp; Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------</td>
<td>----------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>NIGERIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biochemistry Department, University of Ibadan (Cont.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Biochemistry, Ahmadu Bello University</td>
<td></td>
<td>Nil</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Food Technology, University of Ibadan</td>
<td></td>
<td>4</td>
<td>4</td>
<td>Facilities for food analysis, food microbiology and food chemistry</td>
<td>4</td>
<td>Training facilities for students in food technology.</td>
</tr>
<tr>
<td>Food &amp; Drugs Administration Div.</td>
<td>Food &amp; Drugs Decree 1974</td>
<td>A team of food inspecting officers (48)</td>
<td>A team of competent chemists and microbiologists 12 chemists 8 microbiologists 32 public analysts</td>
<td>Facilities for food analysis, inspection and food regulations</td>
<td></td>
<td>Facilities for food analysis, food inspection and food regulations.</td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws &amp; Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------</td>
<td>----------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>NIGERIA(Cont.)</td>
<td></td>
<td>Nil</td>
<td>15</td>
<td>There are adequate laboratory facilities for food analysis and processing</td>
<td>There is a team of administrative personnel</td>
<td>Research and training facilities in the areas of microbiology, enzymology, cereal chemistry and technology, fermentation technology, food processing and toxicology</td>
</tr>
<tr>
<td>Federal Institute of Industrial Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria Institute of Oceanography &amp; Marine Research</td>
<td>3 Microbiologists carrying out inspection work on fish and shellfish in the industries</td>
<td>10 competent chemists and microbiologists</td>
<td>Nil</td>
<td>A team of administrative personnel</td>
<td>Training facilities for food analysis especially in the field of fish and fishery products. There is a fisheries school for fishermen</td>
<td></td>
</tr>
<tr>
<td>Nigeria Livestock &amp; Meat Authority</td>
<td>72 competent veterinarians</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.S.O. (Nigeria Standards Organization)</td>
<td>Decree 1971</td>
<td>A team of food standards officers and quality control inspectors</td>
<td>10</td>
<td>Facilities for food analysis</td>
<td>Training facilities for all newly recruited staff</td>
<td></td>
</tr>
<tr>
<td>Name of Country</td>
<td>Food Laws &amp; Regulations</td>
<td>Adequately Trained Field Inspection Staff</td>
<td>Competent Chemists and Microbiologists</td>
<td>Laboratory Facilities</td>
<td>Overall Administrative Personnel</td>
<td>Training Facilities</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------</td>
<td>---------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>TOGO</td>
<td>Draft Enforcement Regulations under consideration</td>
<td>1 Biologist (non-functioning as field inspection at the moment)</td>
<td>1 Chemist 1 Biochemist 1 Biologist 1 Physiologist 1 Vet. Doctor</td>
<td>Built without equipment</td>
<td>No problem. Everything in order</td>
<td>Nil</td>
</tr>
<tr>
<td>UPPER VOLTA</td>
<td>An Ordinance on Packaging &amp; Quality updated recently</td>
<td>Nil</td>
<td>Nil</td>
<td>Not fully equipped</td>
<td>5</td>
<td>Nil</td>
</tr>
</tbody>
</table>
APPENDIX IV

PROPOSED DRAFT STANDARD FOR MAIZE (CORN)
(at Step 3)

1. SCOPE

This standard specifies requirements for whole grain maize (Zea mays L) offered for human consumption. It does not apply to processed maize.

2. DESCRIPTION

2.1 Product Definition

Maize shall be the shelled, evenly dried, matured grains, characteristic of the species Zea mays L. (Varieties Zea indurata (Flint) and Zea indentata (Dent)).

2.2 Presentation

2.2.1 Maize may be presented yellow or white or a mixture of both colours that are natural to the species. It may also be presented as flint or dent separately.

2.2.2 Yellow maize includes all varieties of yellow and may not include more than 9\% by weight of grains of other colours of maize. White maize must not contain more than 2\% by weight of coloured maize grains. Mixed maize includes lots of maize not falling into classes of white or yellow.

2.2.3 The three basic classes are further qualified as Flint or Dent if 95\% or more of the grains by weight are of a particular variety.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 General Requirements

3.1.1 Lots of maize grains shall not contain grains with any abnormal or foreign odour or flavour.

3.1.2 Lots of maize grains shall be of a reasonably uniform colour according to type, be whole, clean, practically free from foreign matter and damage by insects or diseases.

3.2 Adulteration

Lots of maize grains shall be free from adulteration.

3.2.1 The term "adulteration" in this context covers alteration of the composition of maize by any means whatsoever so that the resulting mixture or combination is either not of the nature prescribed, or its quality or flavour is injuriously affected or its bulk or mass altered.

3.3 Analytical Characteristics

3.3.1 Moisture Content

The moisture content of lots of dried maize grains shall not exceed $15\% (m/m)$.

3.3.2 Fat Acidity

Fat acidity, expressed as the number of milligrams of normal potassium hydroxide required to neutralize the free fatty acids from 100g of grain and calculated on moisture-free basis, shall not exceed 20.

3.4 Definition of Defects

3.4.1 Blemished grains means grains which are insect damaged, stained, diseased or discoloured.

3.4.2 Broken or Chipped Grains

This may be defined as grains which have been cracked or chipped beyond the pericarp and horny endosperm or in the embryo area (but will not pass through a sieve having a base plate perforated with round holes of 6 mm in diameter).

3.4.3 Germinated Grains

This is grain which has sprouted or in which the process of germination is visible within the embryo.
APPENDIX IV

3.4.4 Shrivelled Grain
This is grain which is shrivelled over its entire surface and not just over the embryo area only.

3.4.5 Extraneous Vegetable Material (E.V.M.) means any leaf or cob material from the maize plant or other vegetable material such as grass weeds or other cereals.

3.4.6 Filth
This means any foreign matter, organic or inorganic which adversely affects the appearance and quality of the maize.

3.5 Tolerances for Defects
Based on a sample unit of 500g, the product shall have not more than the following:

3.5.1 Total blemished grains \(5\% \text{ m/m}\)
3.5.1.1 Stained grains \(\text{nil}\)
3.5.1.2 Insect damaged grains \(5\% \text{ m/m}\)
3.5.1.3 Diseased grains \(3\% \text{ m/m}\)
3.5.1.4 Discoloured grains \(2\% \text{ m/m}\)
3.5.2 Broken or chipped grains \(5\% \text{ m/m}\)
3.5.3 Germinated grains \(1\% \text{ m/m}\)
3.5.4 Shrivelled grains \(1\% \text{ m/m}\)
3.5.5 E.V.M. \(1\% \text{ m/m}\)
3.5.6 Filth \(0.5\% \text{ m/m}\)

4. CONTAMINANTS
If pesticides and other permitted chemicals are used to control insects, rodents and other animals, the greatest care must be taken in the choice and in the technique of their application to avoid incurring any risk of tainting or the addition of toxic residues to the maize grains. Minimum residue limits for pesticides shall be those recommended by the Codex Alimentarius Commission (CAC/RS 65 - 1974, CAC/RS 71 - 1976).

5. HYGIENE
5.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice entitled "Recommended International Code of Practice, General Principles of Food Hygiene" recommended by the Codex Alimentarius Commission (Ref. CAC/RCP 1-1969).

5.2 To the extent possible in good production practice, the product shall be free from objectionable matter.

6. PACKAGING AND LABELLING
6.1 Bags shall be clean, sound, sufficiently strong and properly sewn. Bags and liners, if used, shall be of materials which do not present a hazard to human health. Markings shall be of edible ink or lead-free paint.

6.2 Each bag of maize grains shall be officially sealed. The bag or seal shall show at least the following information:
   (a) The country of origin
   (b) The name of the product
   (c) Any other identification marks necessary in accordance with Codex regulations in force.

7. METHODS OF ANALYSIS AND SAMPLING
The methods of analysis and sampling referred to hereunder are proposed to be used as international referee methods.

7.1 Moisture - Air Oven Method (AACC Method 44-15A).
This method determines moisture content as loss in weight of a sample when heated under specific conditions.

**Apparatus**

(a) A laboratory mill of the Wiley type.
(b) Oven (either gravity convection or mechanical convection), capable of being maintained at 130°C (± 10°C) and provided with good ventilation.
(c) Moisture dishes having diameter of ca. 55 mm and height of ca. 15 mm. They should be provided with tightly fitting slip-on covers which are designed to fit snugly under dishes when they are placed in oven.
(d) Airtight desiccator.
(e) Balance accurate to at least 1 mg.

**Procedure**

Grind a 30 - 40g sample in mill, mix rapidly with spatula and transfer immediately a 2 - 3g portion to each of two dried weighed moisture dishes. Cover and weigh at once. Uncover dishes and place them, with covers beneath, on shelf of oven. Heat exactly for 60 minutes at 130°C. Remove dishes. Cover immediately and transfer as quickly as possible to desiccators. Weigh dishes after they reach room temperature (45-60 minutes usually). Determine loss in weight as moisture. Replicate determinations must check within 0.2% moisture; otherwise repeat determination.

Calculation:  
\[
\text{% Moisture} = \frac{A}{B} \times 100
\]

in which  
\[A = \text{moisture loss in g.}\]
\[B = \text{original weight of sample.}\]

7.2 **Fat Acidity** (AACC Method 02-01)

Fat acidity is defined as the number of milligrams of potassium hydroxide required to neutralise the free fatty acids from 100 grams of grains and calculated on a moisture-free basis. It is an estimate of the degree of soundness of the grains.

**Reagents**

(a) Alcohol - Benzene - Phenolphthalein solution. To 1 litre benzene add 1 litre 95% ethanol and 0.4g phenolphthalein to form 0.02% solution.
(b) Alcohol - phenolphthalein solution. To 1 litre 95% ethanol add 0.4g phenolphthalein (0.02% solution).
(c) Potassium hydroxide standard solution - 0.0178N, CO₂ - free standard solution (1ml = 1mg KOH).
(d) Petroleum ether, B. pt. range 40°C - 60°C.

**Apparatus**

(a) Grain mill - suitable for grinding small samples.
(b) Fat extraction device - Soxhlet (Double paper thimbles or Alundum RA - 360 thimbles).

**Procedure**

Obtain a representative sample of about 200g. Grind sample so that not less than 90% will pass No.40 U.S. Standard sieve (Mesh size 40μ). If sample is too moist to grind readily, dry at temperature of about 100°C just long enough to remove excess moisture.

Extract about 10g ground sample with pet. ether for about 16 hours in extractor. Start extraction as soon as possible after grinding and never let ground sample remain overnight. Completely evaporate solvent from extraction on steam bath. Dissolve residue in extraction flask with 50ml alcohol-benzene-phenolphthalein solution. Titrate dissolved extract with standard Potassium Hydroxide (KOH) solution to distinct pink; in case of yellow solution to orange-pink. If emulsion forms during titration dispel by adding second 50ml portion of benzene-alcohol-phenolphthalein solution. End point should match colour of solution made by adding 2.5 ml 0.01% potassium permanganate (KMnO₄) solution to 50ml potassium dichromate (K₂Cr₂O₇) solution of proper strength to match colour of original solution being titrated. (Add 0.5% K₂Cr₂O₇ solution dropwise to 50ml H₂O until colour matches. Then add 2.5ml 0.01% KMnO₄ solution.)
Make blank titration on 50ml benzene-alcohol-phenolphthalein solution and subtract this value from titration value of sample. If additional 50ml portion benzene-alcohol-phenolphthalein solution was added, double blank titration.

Calculation

Report fat acidity as mg KOH required to neutralise free fatty acids from 100g maize on dry-matter basis by formula:

\[
\text{Fat acidity value} = 100 \times (\text{titration} - \text{blank}).
\]

7.3 Method of Sampling

It is recommended that sampling shall be in accordance with the International Organization for Standardization's (ISO) Standard for Sampling of Cereals (as grains), 1969 (Ref. ISO/R 950-1969).
RESOLUTION TO GOVERNMENTS

The Codex Coordinating Committee for Africa

Realising the importance of standardisation to consumer protection and to fair trade in commodities of importance to the economies of their countries.

Aware of the efforts made by other regions to assure consumer protection and to achieve equity in trade through active participation in meetings where world-wide specifications are elaborated for commodities of interest to their economies.

Conscious of the increasing importance of commodities produced on the African continent in international trade.

Mindful of the fact that many nations of the world make use of standards in determining whether or not to admit commodities into their countries.

Further mindful of the fact that standards or specifications drawn up for trade in commodities should be mutually agreed upon and judged satisfactory to all parties concerned.

Recognising that their views in relation to their special circumstances can only be effectively expressed and taken into account by active participation when specifications for commodities of interest to their economies are elaborated.

Wishes to draw the attention of its member Governments to the dangers involved in their non-attendance at, and non-participation in, meetings where standards for the regional products of interest to their economies, are elaborated.

Recommend them to give serious consideration to invitations to attend such meetings and to study carefully the agenda documents and, particularly, to recommend to the Governments of the developing nations that they ensure that their representatives do attend as many such meetings as is possible and in appointing such representatives, to ensure as far as possible that there is continuity of attendance.

RESOLUTION PRESENTED BY THE NIGERIAN DELEGATION

Whereas this conference recognises the need for trained manpower as paramount in a food control infrastructure, be it resolved that:

1. Institutes be established on a regional or sub-regional basis for training:
   
   (a) in standardisation
   (b) in food quality control
   (c) in research at all levels
   (d) of laboratory personnel, and
   (e) the provision of requisite facilities.

2. (a) That FAO, WHO, UNDP and UNEP be requested to assist in a substantial way any member government where such institutes are to be located,

   (b) Where any such projects exist as listed in CX/AFRO 77/6, these U.N. agencies be requested to improve and reinforce their efforts.