codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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REPORT OF THE SEVENTH SESSION OF
THE CODEX COORDINATING COMMITTEE FOR AFRICA

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INTRODUCTION

1. The Seventh Session of the Coordinating Committee for Africa was held in Nairobi by courtesy of the Government of Kenya.

2. The Session was attended by delegates and observers from 15 countries and 3 International Organizations. The list of participants, including the FAO/WHO Secretariat, is given in Appendix I to this Report.

3. Dr. J.K.A. Misoi, Chairman of the Coordinating Committee for Africa welcomed the participants attending the Session. He expressed his gratitude to the Assistant Minister for Agriculture and Livestock Development, the Hon. G. Mwicigi for finding time to open the Session. He then outlined some of the problems facing countries of the Region of Africa in the production, handling and control of food. He pointed to the progress made since the last Session and commended African Nations for their effort. He said that, although drought had caused lots of problems in the Region, the countries should introduce measures which will increase food production, food safety and consumer protection. He also called for greater participation in Codex work.

OPENING OF THE SESSION

4. The Session was officially opened by the Assistant Minister for Agriculture and Livestock Development, the Hon. G. Mwicigi, who conveyed the Minister's regret for not being able to be present personally because of other commitments. In his speech, the Assistant Minister stressed the importance of the work of the Codex Alimentarius Commission and its Committees, including the Coordinating Committee for Africa, in the protection of the consumer and in promoting international trade in foodstuffs. He indicated that Kenya, like other developing countries, looked to UN Agencies such as FAO and WHO for technical assistance.

5. In reply to the opening speech by the Deputy Minister, Mr. H.J. McNally, Joint Secretary of the Codex Alimentarius Commission, expressed thanks and appreciation, on behalf of the Directors-General of FAO and WHO, to the Government of Kenya for hosting, once again, a Session of the Coordinating Committee for Africa. He also expressed appreciation for Kenya's active role in the work of the Codex Alimentarius Commission and paid particular tribute to the able leadership provided by the Coordinator for Africa, Dr. J.K.A. Misoi of the Kenya Bureau of Standards.

6. Mr. E. Kimbrell, Chairman of the Codex Alimentarius Commission, indicated that he had attended Sessions of all the Regional Codex Coordinating Committees in order to get first hand information on the needs and problems facing developing countries and to assure the Codex Regions of the particular interest of the Codex Alimentarius Commission in dealing with the concerns of developing countries. He undertook to ensure that the conclusions and recommendations of the Coordinating Committee for Africa would receive the full attention of the Commission and of the Executive Committee. He wished the Committee success in its deliberations.

ADOPTION OF THE AGENDA

7. The Coordinating Committee adopted the Agenda without change except that it was agreed to rearrange certain items on the request of the Secretariat.

MATTERS OF INTEREST TO THE COMMITTEE

8. The Coordinating Committee had before it document CX/AFRO 85/2 containing matters of interest to the Committee. It was noted and agreed that most matters included in the paper would be better discussed under the relevant items of the agenda.

9. It was noted with interest that the Codex Alimentarius Commission would discuss a recommendation of a Joint FAO/WHO Consultation on Residues of Veterinary Drugs in Food held in Rome in November 1984, that a Codex Committee should be established to deal with the question of such residues. During the discussion, the Delegation of Kenya questioned

whether there was a real need to establish a new Codex Committee as existing Committees, i.e., the Codex Committees on Meat Hygiene and Meat and Poultry Products, might be able to deal with the problem. The remark was made that in Africa, the methods used in animal production might not require the use of chemicals to the extent used by other countries with intensive animal production practices, except perhaps in the field of poultry and pig production.

10. The Secretariat indicated that interest in work on residues of chemicals used in animal husbandry and veterinary medicine was very considerable. The work would involve a multiplicity of disciplines and offers to host such a Codex Committee had already been received from two Member Countries. The Coordinating Committee took note of this development.

11. As regards cooperation between ARSO and the Codex Coordinating Committee for Africa, it was noted that further discussions were needed at the Secretariat level in order to promote standardization activities in Africa and to avoid duplication of work. The Representative of ARSO and the Codex Secretariat undertook to arrange an inter-secretariat meeting and, if necessary, prepare a paper for the next Session of the Coordinating Committee.

FOOD CONTROL FACILITIES IN THE REGION OF AFRICA

12. The attention of the Committee was drawn to the fact that only few replies had been received from countries in reply to a request for information relative to the availability of food control facilities and infrastructures (CL 1984/18-AFRO, December 1984). The Delegations' attention was also drawn to document ALINORM 85/28 and in particular to the Resolution adopted at the Sixth Session of the Coordinating Committee for Africa, which, interalia, requested countries as well as FAO and WHO to report on progress made in the implementation of the provisions contained in the Resolution.

13. The Representative of FAO questioned the value of asking countries to provide such information, which required updating at regular intervals in order to be useful. This seemed also to be reflected in the low level of responses from Governments. The Representative of WHO expressed the view that such information could provide a basis for countries to assess periodically progress made in the area of food control. At the same time, such information could afford both Agencies with an overview of the status of food control in individual countries. This, in turn, could provide a basis for project formulation and implementation and for possible external funding. However, the value of continuing this activity in its present form would have to be decided in the light of comments of the delegates.

14. A number of delegations drew attention to the practical difficulties associated with the updating of the information for a variety of reasons, including frequent changes in administrative and legislative structures. The Committee was informed that similar information was neither requested by nor being provided to the other Regional Coordinating Committees.

15. The Representative of WHO drew the attention of the Committee to the ongoing joint FAO/WHO activity, namely, the preparation of guidelines to assist countries in monitoring and evaluating their food safety programmes. This document, which was expected to be available by the end of 1985 would contain detailed guidelines for Governments to oversee and evaluate the development of their programmes.

16. The Committee agreed to discontinue the present practice of requesting country information on food control. It held the view that the projected FAO/WHO documents mentioned above (see para 15), would provide a useful tool for countries to monitor the development of their programmes. Such assessments could form the basis for further programme development and for possible technical cooperation with FAO, WHO and other Agencies.

INFORMATION ON ACTIVITIES OF FAO AND WHO OF INTEREST TO THE REGION OF AFRICA

17. The Representative of the two Organizations elaborated on various activities of relevance to Africa that had been undertaken in collaboration with Member Governments at country, regional and global level (Document CX/AFRO 85/14).

18. In response to a proposal that FAO and WHO should consider establishing priorities for future food control activities, the Representative of WHO drew the attention of the Committee to the recently published report of a Joint FAO/WHO Expert Committee on Food Safety 1/. The report contained strategies for the prevention and control of food-borne diseases by improvement of food safety and also recommendations both to Member Countries as well as to FAO and WHO on the implementation of food safety activities.

19. It was pointed out that often food control work could be carried out with appropriate technology with limited resources in rural as well as urban areas, e.g., educational measures for improving food handling practices.

20. Following extensive deliberations on the topic, the Committee agreed that at future sessions a specific subject on food control should be chosen for in depth discussion and requested FAO and WHO to prepare the necessary papers. Subjects to be considered could include such issues as sampling and training of food control staff.

21. Several delegations expressed their concern over problems associated with the proper use, maintenance and repair of laboratory equipment. It was noted that advantages would be derived from the standardization of equipment at the national level. This could result in more economies through improved maintenance and repair facilities in the country. The role of equipment suppliers should be better geared to providing back-up services to include training not only in the use of equipment but also in simple repair and maintenance. It was further suggested that local procurement of equipment might stimulate local equipment dealers to provide more comprehensive after sales service.

22. Views were expressed on the desirability of establishing regional or sub-regional reference laboratories, which countries in the Region of Africa could use in the case of arbitration. At present, such samples had to be dispatched for analysis to independent laboratories outside the Region.

23. The Delegation of Kenya requested information on the efficacy of food irradiation and how FAO/WHO could help in the installation and management of such facilities. The Secretariat indicated that the Joint FAO/WHO/IAEA Expert Committee had recommended a limit for the irradiation of food which presented no health hazards. Reference was also made to the Codex Committee on Food Additives which had elaborated a recommended General Standard for irradiated foods as well as a Code of Practice for the operation of radiation facilities for the treatment of foods. As regards the economic feasibility of the process and its technological application for specific purposes, the Committee was informed that these aspects needed examination in individual countries. Food irradiation had to be seen as a part of the overall process of production, handling, distribution and sale of the product to be irradiated. IAEA should be approached for further information and technical assistance.

24. The Chairman stressed, and the Committee endorsed, the value of encouraging effective utilization of personnel who had been trained abroad at considerable cost. Such personnel should be used to conduct national training activities in specific fields. Local training of inspectors in simple analytical techniques that could be carried out on the spot could greatly enhance the effectiveness of the control system by providing quicker results and reducing the workload of the usually overburdened central laboratories.

25. Some Delegations asked how their countries could best proceed to formulate and present proposals for food control activities to funding Agencies. The Representatives of FAO and WHO in turn explained the practices and procedures of their respective Organizations. It was finally agreed that a Secretariat paper should be prepared for the next Session explaining various steps to be taken.

1/ The role of Food Safety in Health and Development, report of a Joint FAO/WHO Expert Committee on Food Safety, Technical Report Series 705; WHO, Geneva, 1984.

26. The attention of the Delegations was drawn to a list of WHO as well as Joint FAO/WHO Food Control/Food Safety documents, which had been prepared for the meeting by WHO. The list also contained information on how the documents could be obtained.

REVIEW OF ACCEPTANCES OF CODEX STANDARDS AND CODEX MAXIMUM LIMITS FOR PESTICIDE RESIDUES BY COUNTRIES IN THE REGION OF AFRICA

27. In introducing this topic, the Secretariat referred to the various Volumes of the Codex Alimentarius containing the Codex commodity standards and the Codex maximum limits for pesticide residues, which had been sent to Governments for acceptance. The Secretariat gave a detailed explanation of the obligations which Governments assumed when they accepted Codex standards and Codex maximum limits for pesticide residues (MRLs). The Secretariat also referred to the concept of free entry in cases where Governments were unable to give formal acceptance, explaining that this also helped to facilitate international trade. The Secretariat explained that countries which imported products for which there were Codex standards or Codex maximum limits for pesticide residues had an especially important role to play in furthering the general acceptability of Codex standards and promoting the freer flow of trade, since exporting countries were obliged to meet the standards of the importing countries.

28. Concerning progress on acceptances at the world-wide level, the Secretariat indicated that, whilst acceptances continued to be received, a greater response was needed from Member Governments. The Secretariat outlined current efforts being made to try and obtain more acceptances or declarations of free entry of products in conformity with Codex standards and Codex maximum residue limits. The Secretariat further indicated that the following countries in Africa had indicated acceptance of one or more of the Codex standards or some of the Codex maximum limits for pesticide residues: Algeria, Cameroon, Central African Republic, Egypt, Gambia, Ghana, Ivory Coast, Liberia, Libya, Madagascar, Mauritius, Morocco, Rwanda, Sao Tome and Principe, South Africa, Sudan, Swaziland, Tanzania, Tunisia and Zaire.

29. Concerning the question of accepting the Codex maximum limits for pesticide residues, several delegations expressed the view that it would be difficult for them to accept the limits, because of the lack of appropriate infrastructure, such as adequate laboratory facilities and trained personnel. The delegations stated that their problem would be their inability to check imports for compliance with the Codex MRLs. One delegation stated that the extent of acceptances of Codex MRLs by developed countries in general was not very great, and if those countries which had up-to-date laboratory facilities and trained personnel at their disposal were slow to accept the Codex MRLs, why should developing countries, with their infrastructural problems, be in a hurry to accept them. It was also stated that there was a limited capacity in developing countries to monitor pesticide residues, and that there were limitations as regards the scale of analysis. It would be some time, therefore, before developing countries could begin to examine the Codex MRLs contained in Volume XIII of the Codex Alimentarius.

30. The Chairman of the Coordinating Committee stated that, even if the view was that developing countries should not be in a hurry to accept the Codex MRLs and should defer consideration of them until infrastructural deficiencies were remedied, the developing countries could not continue with a situation where there were no effective restrictions on the amount of pesticide residues in foods being imported.

31. The Secretariat referred to the Resolution adopted by the Group of Developing Countries in Asia concerning Pesticide Residue Problems, at its First Session held in Petchburi, Thailand, in February 1984. That Resolution urged all Member Countries of the Codex Alimentarius Commission to review the lists of products contained in Volume XIII of the Codex Alimentarius, in order to determine which of the products were imported. The Resolution went on to request Member Governments to give favourable consideration to the possibility of accepting the Codex MRLs for the food products imported, or where formal acceptance was not possible, to the feasibility of permitting free entry of products in conformity with the Codex MRLs. The full text of the Resolution was attached as an Annex to document CX/AFRO 85/2. In adopting this Resolution, the Group of Developing Countries in Asia had recognized that Codex MRLs were established only where there was toxicological evidence of no appreciable risk to man resulting from the intake of small, unavoidable amounts of pesticides.

32. The Secretariat pointed out that even if developing countries did have infrastructure problems and did not, as yet, have proper facilities for checking for compliance with the Codex MRLs, developing countries should take advantage of the consumer protection offered by the Codex MRLs. If Codex MRLs become part of the law of the country, exporters to that country will have to respect the law. It would be reasonable to think that suppliers to a country would not wish to act in defiance of the law. Therefore, the inadequacy of the infrastructure was not a good reason for taking no regulatory action to protect consumers.

33. A number of delegations pointed to the need for the establishment of sound registration systems for pesticides. The need for computerization of information concerning pesticides and pesticide residues was also stressed. In this connection, the Secretariat explained that steps were being taken within the Codex to computerize information on Codex MRLs and responses of Governments. This computerized system could be expanded to include information relating to "good agricultural practices" and other relevant information on the use of pesticides.

34. The Committee agreed that efforts should be made to improve the infrastructural deficiencies which were common to most developing countries in Africa. The Committee noted that this topic would be discussed later under the item of the agenda relating to pesticide and their residues in foods. The Committee finally agreed with the recommendation contained in the Resolution adopted at Petchburi in 1984, in which governments were recommended to take certain steps regarding the Codex MRLs contained in Volume XIII of the Codex Alimentarius. The Committee also agreed that it was important for developing countries in Africa to establish an appropriate legal framework and regulations which would act as a deterrent against the possibility of dumping of products with excessive levels of residue. This would show that the countries of the Region intended to take some action to deal with the problem, in anticipation of the establishment of proper control facilities later. It was also mentioned that countries exporting to developing countries in Africa could be requested to supply certificates of compliance. Finally, it was brought to the attention of the Committee that the Codex Code of Ethics for International Trade in Food, sent to Governments for implementation, and the Code of Conduct on the Distribution and Use of Pesticides being developed by FAO called on exporters to meet the legislation of importing countries.

CONSIDERATION OF THE PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR PEARL MILLET

35. The Committee had before it document CX/AFRO 85/4 containing the standard for pearl millet revised on the basis of the decisions of the 6th Session of the Committee and of comments contained in document CX/AFRO 83/6-Add.1. The document was introduced by the delegation of Senegal. The following discussion took place:

Section 2.1.1 Definition of Product

36. The Committee discussed whether the standard should be restricted only to the 'souna' and 'sanio' varieties grown in Senegal. It was pointed out that other varieties existed which were suitable for human consumption, but which had not been studied by Senegal, author of the original draft. In the absence of information on whether the standard applied to other varieties of millet, the Committee agreed that no conclusions could be reached at the present Session.

37. It was agreed that reference to 'souna' and 'sanio' varieties should be placed in square brackets and that information should be sent to Senegal and the Secretariat on the various attributes and analytical characteristics for additional varieties of millet. FAO was invited to assist in the exercise of obtaining the necessary information. The Delegation of Kenya drew attention to the FAO food composition tables which contained some information on the composition of millet.

Section 2.1.2 Decorticated Grains

38. On the advice of Senegal, the Committee decided to remove the square brackets from around the figure of 20-22%. It was noted that the title of this section should be 'Decorticated grains' and that the definition of 'whole (non-decorticated) grains' (see

CX/AFRO 83/6) had been erroneously omitted. The Secretariat was requested to make the necessary corrections.

Section 3.2.2 Weight of one Thousand Grains

39. The Committee recalled that the question had been raised during the last Session whether a distinction should be made between whole and decorticated grains as regards this provision. The Delegation of Senegal indicated that, on the basis of experiments, the range of 5-5.7g should apply to whole grains. Following decortication 4g as the lower limit of the range would be more appropriate. The FAO representative indicated that improvement in breeding of millet varieties had an effect on the size of the millet grain.

40. It was agreed to apply a range of 5-7.5 to whole millet and a range (in square brackets) of 4-7.5 to decorticated millet. Governments were invited to send information to Senegal and the Secretariat on these ranges.

Section 3.2.4 Weight of 1 litre of Grain

41. The Delegation of Mozambique pointed out that different units were used in trade (viz: kg/hectolitre) and that it had no information to confirm the proposed range in square brackets. As regards the units, it was pointed out that conversion from one unit into another was a simple matter.

42. The Committee agreed to leave the range in square brackets and to ask for information from Governments.

Section 3.2.5 Content in Proteins

43. Noting that no new information had been received to confirm 7% and that the FAO Food Composition Tables gave different protein content for various varieties of millet, the Committee decided to leave the figure in square brackets awaiting comments from Governments.

Section 3.2.9 Impurities

44. The Delegation of Senegal indicated that further information was needed before this section could be finalized. It was noted that, at the last Session (para 72, ALINORM 83/28), the question had been raised whether the same limit can apply to the whole grain and decorticated grains and whether the limit of 2% was appropriate to all types of impurities. The Committee requested a small Working Group consisting of Kenya, Togo, Senegal, Mozambique and the Codex Secretariat to prepare a revised text of section 3.2.9 which would make it clear as to what information was needed.

45. The Committee was informed that the Working Group had discussed the question of impurities and had decided to differentiate between the various types of impurities and between decorticated and non-decorticated millet grains. The Working Group had recommended the following re-drafted text:

"3.2.9 Impurities

By "impurities" is meant: extraneous vegetable matter, shrivelled grains (grains having not reached normal maturity), altered grains, etc.

(a) the content of impurities in non-decorticated grain shall not exceed 2% m/m;

(b) the content of impurities in decorticated grain shall not exceed 0.5 m/m;

(c) non-decorticated and decorticated grains shall be practically free from dirt, animal debris, mineral particles and diseased grains."

46. The Committee adopted the revised text proposed by the Working Group.

47. The Delegation of Senegal informed the Committee that the Working Group had noted that in the revised version of the standard for millet the definition of whole (non-decorticated) grains had been omitted erroneously. The Committee agreed that the definition should be reinstated (see also para 38).

Section 6.2

48. There was a discussion on the need to retain the requirement concerning the use of lead-free marking inks. The Committee was informed that the Commission would discuss the question of residues arising from packaging materials. The use of marking ink could be referred to the Commission as a general problem. It was agreed to place the provision in square brackets and to bring the matter to the attention of the Commission.

Section 7.5 Date Marking

49. The Committee discussed whether there was a need to indicate limit of durability. It was pointed out that decortication of millet led to a reduction of shelf-life. In the absence of information on the durability of millet, the Committee agreed to leave the requirement for the indication of the limit of durability in square brackets. Governments were requested to indicate whether there was a need for such a label declaration and, if so, whether a distinction should be made between decorticated and non-decorticated millet in this respect.

Section 8.6

50. While it was noted that the Soxhlet extraction method was a well known method, it was felt that it would be desirable to have more detail concerning the conditions of extraction (time, solvent, etc.) or a reference to a standard Soxhlet extraction method. The Delegation of Senegal was invited to provide the necessary details to the Secretariat.

Status of the Standard

51. The proposed Draft African Regional Standard for Pearl Millet, as amended, was advanced to Step 5 of the Codex Procedure (see Appendix II of this Report).

CONSIDERATION OF THE PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR PEARL MILLET FLOUR

52. The Committee had before it a revised Standard for Pearl Millet Flour prepared by Senegal and the Secretariat (CX/AFRO 85/5). It was noted that no Government comments, additional to those which had been received on the original text, had been received. The revised text incorporated the comments received on the previous text as well as the decisions of the 6th Session of the Committee. The following discussion took place:

Section 1 Scope

53. The Committee recalled that, at its last Session, the question had been raised whether the standard applied only to products sold directly to the consumer or also to products destined for further processing. Following detailed discussions, the Committee decided to delete the word "direct" in order to indicate that the standard applied to a product intended for human consumption whether or not used directly by the consumer or by the food industry. The reference to varieties, as in the standard for pearl millet, was placed in square brackets pending information being received from Governments on other varieties of millet to which the standard would apply.

Section 2 Description

54. The Committee decided to delete the word "direct" (see para 53 above). The Delegation of Kenya indicated that processing of millet into flour in their country did not involve the removal of the germ to any great extent. Milled millet products such as millet meal, would therefore not be in concormity with this section.

55. It was agreed not to change this section but to request information from Kenya and other Governments on the processing of millet into millet flour. The Delegation of Senegal pointed out that the removal of germ was necessary to reduce the fat content of the product and thereby increase durability.

Section 3.1.3 Particle size of the flour

56. The Committee noted that the Secretariat had tried to substitute the word couscous with a more general term and had proposed "milled products". Following a discussion, it was decided to request the Working Group (see para 44) to re-draft this sub-section. It was agreed that in the re-drafting no reference need be made to the technological use to which the various categories of millet flour would be put.

57. The Committee was informed that the Working Group had discussed this matter and proposed the following text:

"3.1.3 Particle size of the flour

Using a standard method of sifting, the whole of the product shall pass through a sieve the dimension of the mesh of which is: diameter of 0.5mm for "fine" flour and diameter of 1mm for "medium flour".

58. The Committee adopted the proposed text and agreed that it should also apply to sorghum flour.

Section 3.2.4 Fat Content

59. The Delegation of Mozambique was of the opinion that more information was required on the concentration of fat remaining following decortication. It was of the opinion that there was no need to set a limit for fat content for this product or for pearl millet grains. The Delegation of Senegal indicated that the purpose of setting a maximum limit for fat was intended to ensure the keeping quality of the product.

60. The Secretariat pointed out that the fat content of decorticated millet grains had a bearing on the remarks made by the Delegation of Kenya concerning the degree to which germ is removed during processing. This in turn related to the fat content of the flour. The Delegation of Kenya was invited to provide information on the fat content of decorticated pearl millet and millet flour.

Section 3.2.6 Colour

61. On the request of the Secretariat, the Delegation of Senegal agreed to examine this section in relation to section 9.7 in order to arrive at a wording which would not make reference to commercial equipment and which would clarify the units to which the figures 18 and 30 refer.

Section 8.5 Moisture Content

62. While it was recognized that a knowledge of the moisture content was essential in order to ensure appropriate storage of the product, it was agreed that a declaration of moisture content on the label would not be feasible in view of the fact that the moisture content changed during storage.

63. The Delegation of Senegal was in favour of an indication of moisture content so that the product could be stored accordingly. The Committee decided to delete section 8.5.

Status of the Standard

64. The proposed Draft African Regional Standard for Pearl Millet Flour, as amended, was advanced to Step 5 of the Codex Procedure (see Appendix III of this Report).

CONSIDERATION OF THE PROPOSED DRAFT AFRICAN REGIONAL STANDARDS FOR SORGHUM GRAINS

65. The Committee had before it proposed draft standard for Sorghum Grains, as contained in CX/AFRO 85/6 for consideration at Step 4. Before entering into an examination of the proposed draft standard, the Committee decided to consider the written comments of Argentina relating to the proposed draft standard for Sorghum Grains (CX/AFRO 85/6-Add.1) which was a Conference Room Document. The Committee was also informed by the Secretariat of the views which had been expressed at the most recent sessions of the Codex Coordinating Committee for Latin America and the Codex Committee on Cereals, Pulses and Legumes.

66. The written statement of Argentina contained statistics of world production and exportation of sorghum. During 1982/83 total world exports amounted to more than 12 million tonnes of which Argentina exported 5.5 million tonnes (47%). Concerning imports, which amounted to 11 million tonnes, the principal importing country was Mexico with 2.8 million tonnes (23%), followed by Japan with 2.7 million tonnes (22.7%) and the USSR (20%). The Argentine statement also indicated that, at the present time, almost all the sorghum exported by Argentina is exported in bulk, without any prior knowledge of the use to which the grain will be put by the importing country. The Argentine statement requested that due consideration be given by the Coordinating Committee to the Argentine position and concluded by proposing:

(i) that work on the Proposed Draft African Regional Standard for Sorghum Grains be suspended;

(ii) that the Codex Committee on Cereals, Pulses and Legumes be given the task of compiling all essential statistical information on human consumption of sorghum grain, without any form of subsequent processing.

(iii) that Governments should be informed of the results of this research; and

(iv) that Governments should be invited to submit their comments, in the light of which it should be decided whether or not to elaborate a world-wide Codex standard for sorghum grains.

67. The Committee was informed that at the Third Session of the Codex Coordinating Committee for Latin America, it had been noted that the Coordinating Committee for Africa was elaborating an African Regional Standard for Sorghum Grains. The Delegation of Mexico had stated that Mexico was interested in the development of a world-wide standard for this commodity. The position of Argentina was that if there was a need for a standard for sorghum grains for human consumption, it should be developed as a world-wide standard and not as a regional standard (ALINORM 85/36, paras 149-150).

68. At the Fourth Session of the Codex Committee on Cereals, Pulses and Legumes, the Committee had noted the views which had been expressed at the Third Session of the Coordinating Committee for Latin America. The Delegation of Brazil had stated that it agreed that a world-wide standard for sorghum grains should be established and was of the opinion that the Committee should also elaborate a world-wide standard for sorghum flour, which was increasingly produced on an industrial scale. The Codex Committee on Cereals, Pulses and Legumes had agreed that world-wide standards for sorghum grains and sorghum flour should be elaborated and decided to bring this matter to the attention of the Commission.

69. The Delegation of Senegal thought that it would be better to proceed with the development of the African Regional Standard for Sorghum Grains, at least until such time as it was known how much of the sorghum grain exported from Argentina was intended for human consumption. The Delegation of Senegal also wondered whether the sorghum grain in the Argentine was the same as that grown in Africa.

70. The Secretariat referred to the wish expressed by Mexico for a world-wide standard for sorghum grains and by Brazil for a world-wide standard for sorghum flour. The Secretariat also recalled that the Coordinating Committee for Africa had, some years ago, agreed that work on a draft African Regional Standard for Maize be continued at the world-wide level by a newly established Codex Committee on Cereals, Pulses and Legumes. Attention

was also drawn to the terms of reference of the Regional Coordinating Committee which provided for the elaboration of regional standards for products moving exclusively, or almost exclusively, in intra-regional trade.

71. The Coordinating Committee for Africa decided as follows: It was prepared to pass over the Draft African Regional Standards for Sorghum Grains and Sorghum Flour to the Codex Committee on Cereals, Pulses and Legumes for consideration at that Committee's next session in the light of Government comments, for further development as world-wide standards, if the Commission at its next Session agreed with the view of the Codex Committee on Cereals, Pulses and Legumes that world-wide standards for these products should be elaborated.

72. The Coordinating Committee for Africa attached the highest priority to the development of standards for sorghum grains and sorghum flour in the interest of consumer protection in Africa and the facilitation of trade. The Committee would not wish to see work on the development of the standard delayed in any way. It was on this understanding that the Committee would be agreeable to work on the draft African Regional Standards being continued at the world-wide level in the Codex Committee on Cereals, Pulses and Legumes at the next Session of that Committee. If, for any reason, the Draft African Regional Standards could not be considered by the Codex Committee on Cereals, Pulses and Legumes at its next Session, then it would be the intention of the Coordinating Committee for Africa to continue work on the two standards at the African Regional level, at its next Session.

73. The Committee decided to proceed with a detailed discussion of the Standard for Sorghum Grains. The revised standard (CX/AFRO 85/6) was introduced by the Delegation of Senegal. The Delegation indicated that the revised standard incorporated the comments received on the previous version as well as the decisions of the Sixth Session of the Coordinating Committee. A number of matters still required to be reconsidered in the light of further information.

74. The Committee agreed that the decisions reached in relation to the Draft Standard for Pearl Millet Grains would also apply to this standard, where appropriate. The Secretariat was requested to make the necessary consequential changes to the standard.

Section 2.1.1 Definition of the Product

75. The Delegation of Kenya offered to provide the Secretariat with the botanical name of the species and, if appropriate, varieties of sorghum.

Section 2.1.3 Decorticated Grains

76. The Delegation of Kenya considered that the range [20-22%] was not appropriate in view of the various applications to which decorticated sorghum grains were intended, e.g., products with a degree of decortication of 5% were available. The Committee decided not to make any changes but to request information to be supplied on this matter.

Section 3.2.7 Impurities

77. The same text was adopted on the recommendation of the Working Group, as per Pearl Millet Grains (see para 45 of this Report).

Section 7 Labelling

78. The Delegation of Tanzania pointed out that reference to the General Standard for the Labelling of Prepackaged Foods was missing. The Committee requested the Secretariat to make the necessary amendment following the Standard for Pearl Millet Grains.

Section 8.6 Determination of Fat

79. The Delegation of Tanzania referred to the existence of an ISO method for cereals and cereal products included in the standard for Gari and suggested that this method would be appropriate for sorghum grains. The Committee requested the Delegation of Senegal to review the methods included in this Standard and also in the other Standards (millet grains, millet flour), and to make this information available to the Secretariat.

Status of the Standard

80. It was noted that the name of the Standard should be Sorghum Grains rather than just Sorghum. The proposed Draft African Regional Standard for Sorghum Grains, as amended, was advanced to Step 5 of the Codex Procedure (see Appendix IV to this Report).

CONSIDERATION OF THE PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR SORGHUM FLOUR

81. The Committee had before it document CX/AFRO 85/7 containing the Standard for Sorghum Flour prepared by Senegal. The document was introduced by the Delegation of Senegal which indicated that they had based the standard on the Standard for Millet Flour substituting appropriate analytical and other characteristics as determined experimentally. The Committee agreed that the Sorghum Flour Standard should be brought in line with the Standard for Millet Flour, where appropriate.

Section 3.1.3 Particle Size of the Flour

82. The Delegation of Kenya was of the opinion that a diameter of 0.3mm would be more appropriate for the "fine" flour. The Committee took no action and invited Governments to comment on this matter.

Section 5 Contaminants

83. The Committee noted that this Section dealt in detail with maximum limits and other provisions relating to Pesticide Residues. It was agreed to bring Section 5 in conformity with the corresponding Standard for Millet Flour.

Section 6 Hygiene

84. The Committee agreed that this Section should also be brought in line with the Standard for Millet Flour.

Section 9 Methods of Analysis and Sampling

85. The Delegation of Senegal was invited to revise this section in the light of the Committee's decision in relation to the Standards for Millet Flour and Gari.

Status of the Standard

86. The proposed Draft African Regional Standard for Sorghum Flour, as amended, was advanced to Step 3 of the Codex Procedure (see Appendix V to this Report (see also paras 68 and 71 of this Report).

CONSIDERATION OF THE NEED FOR THE ELABORATION OF AN AFRICAN REGIONAL STANDARD FOR CASSAVA FLOUR

87. The Committee had before it document CX/AFRO 85/8 prepared jointly by Tanzania and Mozambique. The paper was introduced by the Delegation of Tanzania which indicated that the standard was based on actual laboratory findings.

88. The Committee discussed whether a standard should be elaborated for this product. It agreed that it would be useful to proceed with the elaboration of a regional African standard and decided to consider the standard briefly, noting that Governments had not yet been invited to comment on the standard.

NAME OF THE STANDARD

89. The question was raised whether reference to edible cassava was necessary in the Title. It was pointed out that this was desirable as flour was also produced from cassava which required detoxification during processing. The Committee noted these remarks.

Section 2.1 Definition of the Product

90. The question was raised whether the flour should not be made from the peeled material. It was agreed to note this remark for discussion at the next Session, in relation to Section 3.1.1 dealing with raw materials.

Section 3.2 Organoleptic properties
Section 3.3. Analytical characteristics
Section 3.3.1 (HCN content)

91. It was noted that these sections had been erroneously omitted from document CX/AFRO 85/8 and should be reinstated.

Status of the Standard

92. The Committee agreed that the Proposed Draft African Regional Standard for Cassava Flour should be distributed for comments at Step 3 of the Codex Procedure (see Appendix VI to this Report).

CONSIDERATION OF THE NEED FOR THE ELABORATION OF AN AFRICAN REGIONAL STANDARD FOR GRATED COCONUT

93. The Committee had before it document CX/AFRO 85/9 proposed by Mozambique. The paper was introduced by the Delegation of Mozambique.

94. The Committee discussed whether a standard should be elaborated for this product. It agreed that it would be useful to proceed with the elaboration of a Regional African Standard and decided to consider the standard briefly, noting that Governments had not yet been invited to comment on the standard.

Title of the Standard

95. The Delegation of Senegal suggested that the term 'coconut flour' would be more appropriate in view of the method of processing included in Section 2.1 and since 'desiccated coconut' did not adequately describe the product. The Delegation of Togo indicated that the word 'grated' could be added in addition to 'desiccated'. A discussion followed concerning the scope of the standard in relation to products prepared by traditional methods such as grating and industrial methods such as milling. In addition, products such as copra were mentioned in relation to the standard.

96. The Committee agreed to add 'flour' to the title of the standard, where appropriate in the standard, in square brackets. Governments were invited to comment on this matter.

Section 3.1 Raw Materials

97. The question was raised whether the term 'meat' should be used or some more appropriate term. It was agreed to leave the section unchanged.

Section 3.3.5 Extraneous Vegetable Matter

98. The Delegation of Kenya queried whether this provision was measurable in view of the particle size of the product. The Delegation of Mozambique and the Representative of FAO indicated that visual inspection and counting of EVM was quite practical.

Section 9.3 Determination of Total Acidity

99. It was agreed that in the method under 'Reagents' the text in (2) should read as follows: "Ethyl aether and ethyl alcohol 95% mixture (1.2), neutralized with sodium hydroxide 0.1N using phenolphthalein as indicator.

Status of the Standard

100. The Committee agreed that the Proposed Draft African Regional Standard for Grated Cocount [flour] should be submitted to Governments for comments at Step 3 of the Procedure (see Appendix VII of this Report).

CONSIDERATION OF THE NEED FOR THE ELABORATION OF AN AFRICAN REGIONAL STANDARD FOR OIL-SEED CAKE PRODUCTS FOR USE IN WEANING FOODS

101. The Delegation of Kenya explained that it had not been possible to prepare document CX/AFRO 89/10 since research on raw materials, especially in relation to levels of mycotoxins, were still in progress. Materials such as ground nuts, milk powder and maize were under study. Following investigation of suitable raw materials it will be necessary to work out the formulation of weaning foods.

102. The Secretariat informed the Committee that there was considerable information in this field not only within Codex but also from the work of the PAG, FAO, WHO and other International Organizations. Furthermore, the work of the Kenyan scientists related to the work of the Codex Committee on Foods for Special Dietary Uses, especially in relation to the various standards for foods for infants and children.

103. The Delegation of Senegal indicated that Senegal was doing research on suitable materials for the feeding of infants and children and that it would make information available to Kenya. The Delegation of Nigeria indicated that a weaning food had already been developed in that country. The product, which is called "Soy-ogi" was a blend of soybean and corn flours fortified with added vitamins and mineral nutrients. Detailed specification of the product would be made available to Kenya. The Committee welcomed this cooperation.

104. The Representative of FAO outlined work by the Regional Office of FAO and FAO in Rome on the development of raw materials suitable for incorporation in foods for infants and children.

105. The Committee decided to await further developments and results of research before taking any further action.

RECONSIDERATION OF CERTAIN SECTIONS OF THE DRAFT AFRICAN REGIONAL STANDARD FOR GARI

106. The Committee had before it a revised standard for Gari prepared by Togo taking into consideration information supplied by Nigeria (CX/AFRO 85/3). The Committee noted that the standard had already been advanced to Step 8 of the Procedure, but that certain aspects still needed clarification.

Section 2.1 Definition of the Product

107. There was discussion of the new definition of the product proposed by the Secretariat and Togo. The Delegations of Senegal and Egypt questioned the exact meaning of "toasting" or "heating to develop appropriate organoleptic properties" (an alternative proposed by Togo). It was agreed that the revised section 2.1 still required clarification and requested a Working Group consisting of Kenya, Senegal, Togo, Mozambique and the Secretariat to propose a new text.

108. The Working Group, having considered the question in detail, proposed the following text for Section 2.1:

"2.1 Definition of the Product

Gari is the finished product obtained by artisanal or industrial processing of cassava tubers (*Manihot esculenta crantz)*. The processing consists of peeling, washing

and grating of the tubers, followed by fermentation, pressing, fragmentation, granulation, drying if necessary, sifting and suitable heat treatment.1/ Gari is presented as flour of variable granule size."

Section 2.2 Classification

109. The Committee noted the remarks of Togo that, in the size classification of the product the upper limit of the range had greater significance than the lower limit, since the greater size grains should be limited. The Committee agreed that the text of the various size classes should be redrafted more clearly. The Delegation of Togo indicated that, on the basis of results of investigations, the limit for the smaller grain sizes for each category should be increased. The Committee requested the Working Group to consider the matter.

110. The Working Group, having considered the matter, proposed the following text for Sections 2.2.1 to 2.2.4.

"2.2.1 Extra-fine Grain Gari

This is Gari of which not less than 100% by weight shall pass easily through a sieve of 0.5mm aperture size, but of which not more than 40% by weight shall pass easily through a sieve of 0.25mm aperture size."

(2.2.3 - 2.2.4 to be drafted in a similar manner using the appropriate sieve sizes, i.e., 1 and 0.5mm; 1.25 and 1mm and 2 and 1.25mm).

111. The Working Group also recommended the inclusion of ICC method of sampling No.101-1960, which is the same as ISO method 2170-1972, and the deletion of the methods for the determination of protein and fat, as the standard did not contain any provision for these two analytical criteria.

112. The Committee adopted the recommendations of the Working Group.

Section 3.4 Extraneous Vegetable Matter

113. The Committee also adopted a proposal of Togo that the limit for extraneous vegetable matter should only be limited by good manufacturing practice.

Status of the Standard

114. The Committee agreed that the revised Draft African Regional Standard for Gari should be submitted to the Commission at Step 8 of the Codex Procedure, replacing the standard now at Step 8 (see Appendix VIII of this Report).

NUTRITIONAL ASPECTS OF FOOD STANDARDS

115. The Committee received a verbal report from the Secretariat and a Conference Room Document (No.2) containing a matter referred to the Committee by the Codex Committee on Foods for Special Dietary Uses.

116. The Committee was informed that the Codex Committee on Food Labelling was developing Guidelines on Nutriton Labelling (ALINORM 85/22) which will be useful for Governments and for Codex Committees developing standards. The Codex Committee on Foods for Special Dietary Uses also had under elaboration Guidelines for Codex Committees on the Inclusion of Provisions on Nutritonal Quality in Codex Standards and other Codex Texts (ALINORM 85/26). These guidelines, once developed, could be used by the Coordinating Committee for Africa to review the standards elaborated by it with a view of possibly including nutrition related provisions.

1/ Suitable heat treatment means toasting, grilling or any other method of cooking capable of producing the characteristic organoleptic properties of the product. During the heat treatment, there is a partial gelatinization of the starch and the dehydration of gari grains.

117. The Committee also noted that the Codex Committee on Foods for Special Dietary Uses was elaborating General Principles on Food Fortification and Guidelines on Supplementary Foods for older Infants and young children (ALINORM 85/26). These texts were directed to Governments themselves for action as appropriate. As regards the Guidelines on Supplementary Foods, the Special Dietary Foods Committee had requested the Codex Regional Committee to express their opinion on the raw materials suitable in such foods (Room Doc. No.2, ALINORM 85/26).

118. The Representative of FAO described work of the FAO Regional Office in the field of human nutrition and the survey of suitable raw materials for use in human nutrition.

119. The Delegation of Senegal pointed out that the UN Agencies had, over the last 35 years, experienced difficulty in developing suitable food formulations. The difficulties arose from the fact that food formulations did not take into account sufficiently socio-economic and cultural factors. The Representative of FAO pointed out that, indeed, the development of suitable food products was a national matter. The Delegation of Kenya also drew attention to problems of shelf-life and packaging.

120. The Committee noted with interest work within FAO/WHO and the Codex in relation to human nutritional matters.

MEMBERSHIP OF THE CODEX REGION OF AFRICA AND IMPORTANCE OF PARTICIPATION IN THE WORK OF THE COORDINATING COMMITTEE FOR AFRICA

121. The Committee noted that since its last Session, four more African countries had become Members of the Codex Alimentarius Commission, namely, Lesotho, Mozambique, Seychelles and Zimbabwe, bringing to 40 the number of African Members of the Commission. The Committee expressed the hope that the following countries, which had not yet become Members of the Commission, would do so: Angola, Comoros, Equatorial Guinea, Mauritania, Mali, Nambia, Niger, Rwanda, Sao Tomé and Principe and Somalia.

122. Concerning the importance of participation in the work of the Coordinating Committee for Africa, the Committee had before it a paper on this topic, CX/AFRO 85/11. The paper covered the health protection and economic aspects of the work of the Commission. The paper also listed the benefits to be derived from the work of the Commission. There was also a section in the paper containing suggestions for more effective participation in the work of the Commission.

123. The Secretariat informed the Committee that, at the 31st Session of the Executive Committee, one of the Vice-Chairmen of the Commission, Dr. E.R. Méndez (Mexico) had stressed the need to find funds to help increase the attendance of representatives of developing countries at Codex Sessions. He had referred to the financial assistance which had been made available by the Pan American Health Organization (PAHO) to countries in Latin America and the Caribbean to attend a workshop in Havana immediately before the Third Session of the Codex Coordinating Committee for Latin America and the Caribbean. This had had the effect of helping to increase attendance at the Coordinating Committee Session. He had also stated that he thought that financial help should be sought to improve the attendance of developing countries in general at Codex Sessions. Dr. Méndez had been strongly supported by the Coordinator for Latin America and the Caribbean and the Representative of that Region on the Executive Committee.

124. In connection with the above suggestion, the Secretariat had informed the Executive Committee that there were no funds available in the Codex budget to help Member States send representatives to Codex Sessions. In fact, under Rule XI.4 of the Rules of Procedure of the Commission, the cost of attendance at Codex Sessions had to be borne by Member Governments.

125. In view of the need to improve attendance by developing countries at Codex Committee Sessions, the Executive Committee, on the suggestion of the representative of the Region of North America, had requested the Secretariat to explore the feasibility of funding for the above purpose by other bodies. In this connection, the Executive Committee had noted with satisfaction and appreciation the fact that PAHO had been able to provide funds for a workshop, which, in turn, had increased attendance at a Codex Committee Session.

126. The Secretariat informed the Coordinating Committee for Africa that it had formulated a project idea in FAO in the hope of obtaining financial assistance to improve attendance by representatives of developing countries at Sessions of the Codex Coordinating Committees in their respective regions (Africa, Asia, Latin America and the Caribbean). The Secretariat hoped to be able to advise the Commission, at its next Session, concerning the outcome of this project idea.

127. The question was asked whether it would be possible for FAO and WHO to arrange for a workshop on food standards and food control matters to be held for two days immediately before the next Session of the Committee, as had been done at the last Session of the Coordinating Committee for Latin America and the Caribbean.

128. The Secretariat and the FAO Regional Food Policy and Nutrition Officer, Dr. E. Isusogie, indicated that they would look into the possibility of finding funds for such a workshop. The WHO Regional Representative, Mr. Veli Aalto, stated that the budget for 1986/87 was already fixed, and that there would be no funds available from that source for such a workshop. However, he too would look into the possibility of securing extra budgetary funds.

129. It was stated that some delegations had succeeded in obtaining financial assistance to attend the present Session either from the food industry or other sources in their countries. The FAO Regional Food Policy and Nutrition Officer stated that the food industry had often shown willingness to sponsor delegates to food and nutrition meetings.

130. The Committee urged the Secretariat to look into all possibilities of funding to help delegates from African countries attend Sessions of the Coordinating Committee for Africa and hoped that it would be possible for FAO/WHO to arrange a two-day workshop immediately before the next Session of the Coordinating Committee.

CONSIDERATION OF THE PROPOSED AMENDMENT OF THE CODE OF ETHICS FOR INTERNATIONAL TRADE IN FOOD

131. The Committee had before it a paper (CX/AFRO 85/13) being an extract from the Report of the Thirty-First Session of the Executive Committee of the Codex Alimentarius Commission (ALINORM 85/3). The Secretariat summarized the developments regarding proposed amendments of the Code of Ethics for International Trade in Food, vis-à-viz the International Code of Marketing of Breastmilk Substitutes. This included the proposal made by the Executive Committee at its 30th Session to the 15th Session of the Codex Alimentarius Commission, and the subsequent decisions of all four Regional Coordinating Committees.

132. The Committee agreed with the proposal of the Executive Committee, which, it noted, had also been supported by the Coordinating Committee for Asia and by the majority of delegations in the Coordinating Committee for Latin America and the Caribbean. The Committee agreed, therefore, that the amendment of the Code of Ethics should read as follows:

(i) Preamble:

"(g) The International Code of Marketing of Breastmilk Substitutes sets forth principles for the protection and promotion of breastmilk feeding, which is an important aspect of primary health care".

(ii) "5.9 Foods for infants, children and other vulnerable groups should be in accordance with standards elaborated by the CAC".

(iii) Paragraph 5.10(b):

"(b) Information concerning the nutritional value of food should not mislead the public".

ACTIVITIES REGARDING PESTICIDES AND THEIR RESIDUES IN FOOD

133. The Committee had before it document CX/AFRO 85/15 prepared by the Secretariat. A number of documents of interest (i.e. the Guide to Codex Recommendations concerning Pesticide Residues, ALINORM 85/31, ALINORM 85/24A) were also available. The Secretariat pointed out that the present document was mostly for the information of delegates. However, Appendix II to CX/AFRO 85/15 contained new recommendations of the Working Group on Pesticide Residue Problems in Developing Countries (Working Group 3) (ALINORM 85/24A), which the Coordinating Committee may wish to consider and endorse.

134. The Committee was also informed that following the retirement of Mr. G. Baptist of Nigeria, Dr. Salwa H. Dogheim of Egypt, had been appointed by the Working Group 3 as its Vice-chairman. This office meant that Dr. Dogheim would be expected to act as a coordinator on pesticide residue matters in the Region of Africa.

135. The UNEP consultant questioned whether water was also regarded by the Codex as food. The Secretariat confirmed that this was so, but indicated that a standard for drinking water had been elaborated by WHO. Furthermore, the problem of the contamination of rain, ground water, rivers and lakes was reflected in work of the Codex on pesticide residue limits in foods.

136. The Committee endorsed the recommendations of Working Group 3 and thanked the Secretariat for having prepared the working paper.

NOMINATION OF COORDINATOR FOR AFRICA

137. The Committee had before it document CX/AFRO 85/16. The current Coordinator for Africa, Dr. J. Misoi (Kenya) was serving his second consecutive term of office which would end at the conclusion of the Sixteenth Session of the Commission in July 1985. Having served two consecutive terms of office, Dr. Misoi was not eligible for re-appointment as Coordinator for Africa for the next succeeding term.

138. The Delegation of Kenya proposed that Dr. Ati Randolph (Togo) be nominated for appointment as Coordinator for Africa to serve from the end of the Sixteenth to the end of the Seventeenth Session of the Commission. This proposal received the unanimous support of the Committee.

CONSIDERATION OF THE NEED FOR AND FEASIBILITY OF DEVELOPING CODEX STANDARDS FOR TROPICAL FRESH FRUITS AND VEGETABLES

139. The Committee had before it document CX/AFRO 85/17, which contained in Appendix I a reprint of document ALINORM 83/7, which was the basic working document on this topic. Document ALINORM 83/7 had been prepared by a consultant for consideration by the Fifteenth Session of the Codex Alimentarius Commission in July 1983. Document CX/AFRO 85/17 also contained the relevant extract from the most recent Sessions of the Codex Coordinating Committees for Asia, Europe, Latin America and the Caribbean.

140. The Committee noted that the Coordinating Committee for Asia had concluded that there was no need for worldwide standards for Tropical Fresh Fruits and Vegetables. The Coordinating Committee for Latin America and the Caribbean had expressed itself as being in favour of worldwide standards. The Coordinating Committee for Europe had stated that it did not see a need at this time for the establishment of international standards for tropical fresh fruits. That Committee had noted that both the Organization for Economic Cooperation and Development (OECD) and the United Nations Economic Commission for Europe (UN/ECE) had already initiated action in the preparation of European standards for certain fresh exotic fruits. The Coordinating Committee for Europe had recommended, therefore, that no further action be taken until work by the OECD and UNECE had been completed, at which time, the Commission should review the results.

141. The Chairman recalled that the Committee, at its Sixth Session had agreed that the standardization of products of particular interest to the African Region should be handled through, or in consultation with the Region. This was an important matter of principle which the Committee had decided should be brought to the attention of the Commis-

sion, since such standardization activities might have an economic impact on the export interests of Africa.

142. The Delegation of Madagascar stated that Madagascar was not a major exporter of these products, but attached importance to standardization of quality at the international level. The Delegation stated that Madagascar had had some difficulties with importers, because of the absence of international standards. The Delegation considered that internationally negotiated standards would benefit exports.

143. The Delegation of Senegal stated that it was a large exporter and, like Madagascar, had also had some difficulties with importers. The Delegation also considered that international standards would be beneficial.

144. The Delegation of Egypt stated that international standards, properly developed and negotiated between exporting and improting countries, represented a very useful measurement of what was acceptable quality. Egypt was very much in favour of the development of international standards which would reflect the interests of both the exporters and the importers.

145. The Delegation of Kenya stated that exports of fresh fruits and vegetables ranked third in importance after coffee and tea. Kenya recognized the importance of standards and, in fact, there were Kenyan standards for fresh fruits and vegetables. The absence of proper standards sometimes resulted in exports being downgraded. The Delegation of Kenya favoured the idea of developing international Codex Standards for tropical fresh fruits and vegetables.

146. The Committee, therefore, was in favour of the development of international Codex standards for tropical fruits and vegetables.

CONSIDERATION OF THE NEED FOR CODEX STANDARDS FOR PROCESSED FRUITS AND VEGETABLES

147. The Committee had before it a document which had been prepared by a FAO consultant for the Sixth Session (CX/AFRO 85/18). The document listed fruits and vegetables actually being processed in Africa and those with a potential for processing and trade. The Secretariat, in introducing the paper suggested that the Committee might wish to consider the subject covered by the paper as follows:

(a) What processed fruits and vegetables require Codex worldwide standards to be elaborated by the Codex Committee on Processed Fruits and Vegetables?

(b) What processed fruits and vegetables move exclusively, or almost exclusively, in intra-African trade requiring African regional standards?

148. As regards (a) above, the Committee noted that the Codex Committee on Processed Fruits and Vegetables would, in all likelihood, adjourn after its next Session. As for (b) above, the Committee had quite a lot of work before it for the next Session.

149. The Committee agreed that document CX/AFRO 85/18 should be kept as a useful reference document in guiding the Committee in planning its future work, once the present work was completed.

OTHER BUSINESS

150. The UNEP consultant gave a detailed outline on the state of contamination of foods and the environment (including air) by aflatoxins B_1, B_2 and M. From extensive surveys it had become evident that aflatoxins were present in very high amounts in human biopsy tissue and in various foods and animal feed, leading to acute toxic symptoms and even death both of humans and animals. There was irrefutable evidence of a link between aflatoxins present in food, beverages, water and air and human disease; including intoxication by this mycotoxin.

151. The UNEP consultant indicated that the situation in Africa had reached such proportions as to warrant immediate remedial action. There was a need, therefore, for a second conference to be held on aflatoxins, the elaboration of guidelines on how the formation of this thermostable toxin could be prevented and an aggressive approach to dealing with the problem.

152. The Delegation of Mozambique indicated that research conducted in that country had revealed a large number of cases of contamination of food. Work was underway to establish a link between aflatoxin levels and cancer in cooperation with IARC and ways of detoxifying food.

153. The Delegation of Senegal indicated that this problem was also well appreciated in that country and that research was underway to establish a link between hepatitis B, liver cancer and aflatoxin.

154. The Delegation of Togo confirmed that aflatoxin levels in food represented a serious health and socio-economic problem and supported the views expressed by the UNEP consultant.

155. The Chairman pointed out that the acute and long-term effects of aflatoxins in food in rural areas were difficult to estimate; the situation may well be more serious than revealed by the existing surveys.

156. The Committee adopted the following Resolution:

RESOLUTION

The Participants of the Seventh Session of the Codex Coordinating Committee for Africa held in Nairobi 12-18 February 1985;

Recognizing the nature and extent of the mycotoxin problem and its relevance to the health and trade of the countries of Africa;

Urge FAO, WHO and UNEP to convene a Second Joint FAO/WHO/UNEP Conference on Mycotoxins in the near future, in order to reassess preventive and control strategies in the light of further developments since the First Joint FAO/WHO/UNEP Conference, held in 1977.

DATE AND PLACE OF NEXT SESSION

157. Dr. Ati Randolph(Togo) stated that he would consult with his authorities to obtain confirmation of his nomination by the Committee as the next Codex Coordinator for Africa and also as regards the question of holding the next Session of the Committee in Togo.

158. The Secretariat suggested January 1987 as a suitable time to hold the Session, taking into account the tentative schedule of Codex Sessions for 1986/87. Dr. Randolph stated that he would communicate with the Secretariat on this matter as soon as possible.

CLOSURE OF THE SESSION

159. The Session was closed by the Minister for Commerce and Industry, the Hon. Peter Okondo, who stressed the need for the harmonization of food standards and regulations in Africa in order to facilitate and promote trade in food. Expansion of food trade both within a country, within the Region and with other countries depended, among other factors, on the confidence of the buyers in the quality and safety of food products. Such a confidence depended, in turn, on compliance with appropriate standards and regulations, including limits for pesticide residues and nutritional standards.

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LISTE DES PARTICIPANTS
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ALINORM 85/28A
APPENDIX II

PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR PEARL MILLET
(Advanced to Step 5 of the Codex Procedure)

1. SCOPE

This standard applies to whole and decorticated pearl millet *(Pennisetum americanum)* intended for human consumption, i.e., which is suitable for use as food for humans and is sold, either pre-packaged or in bulk, directly to the consumer. It does not apply to derived products.

2. DESCRIPTION

2.1 Definition of the Product

2.1.1 Millet grains shall be whole or decorticated and suitably dried if necessary. They shall have the characteristics of the species *Pennisetum americanum* [(varieties "souna" and "sanio" of Senegal)].

2.1.2 Whole (non-decorticated) Grains

These are grains of pearl millet obtained as such after a complete threshing without any special treatment.

2.1.3 Decorticated Grains

These are grains of pearl millet from which outer parts, amounting to 20-22% of the weight of the whole grains have been removed in an appropriate manner using mechanical treatment (for example, simple abrasion).

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 General Provisions

3.1.1 Millet grains shall not have abnormal odour or taste.

3.1.2 Millet grains shall have uniform colour appropriate to the species. They shall be unbroken, clean and practically free from impurities (insect debris, stones, etc.).

3.2 Analytical Characteristics

3.2.1 Moisture Content

The moisture content of decorticated or whole (non-decorticated) millet grains shall not exceed 13 percent m/m on the dry matter.

3.2.2 Weight of One Thousand Grains

(a) For whole (non-decorticated) millet grains the value shall be between 5.0 and 7.5 g.

(b) For decorticated millet grains the value shall be between [4.0 and 7.5]g.

3.2.3 Ash

The ash content of decorticated millet grains shall be between 0.8 and 1.2 percent m/m on the dry matter.

3.2.4 Weight of 1 litre of Grains

The weight of 1 litre of millet grains shall be betwween [750 and 820]g.

3.2.5 Content in proteins

The protein content of millet grains shall not be less than [7] percent m/m on the dry matter.

3.2.6 Degree of decortication

The degree of decortication shall not exceed 22 percent.

3.2.7 Cellulose content

(a) For whole (non-decorticated) millet grains the cellulose content shall not exceed 4.5 percent m/m on the dry matter.

(b) For decorticated millet grains the cellulose content shall not exceed 2.0 percent m/m on the dry matter.

3.2.8 Fat Content

(a) For whole (non-decorticated) millet grains the fat content shall not exceed 7.0 percent m/m on the dry matter.

(b) For decorticated millet grains the fat content shall not exceed 5.0 percent m/m on the dry matter.

3.2.9 Impurities

By "impurities" is meant: extraneous vegetable matter. shrivelled grains (grains have not reached normal maturity) altered grains, etc.

(a) the content of impurities in non-decorticated grain shall not exceed 2% m/m;

(b) the content of impurities in decorticated grain shall not exceed 0.5 m/m;

(c) non-decorticated and decorticated grains shall be practically free from dirt, animal debris, mineral particles and diseased grains.

4. CONTAMINANTS

Pearl millet shall be prepared with special care under good manufacturing practices so that residues of those pesticides which may be required in the production, storage or processing of the product, or in the disinfestation of the premises and equipment used for processing do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

5. HYGIENE

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

5.2 When tested by appropriate methods of sampling and examination, the product:

(a) shall be substantially free from pathogenic microorganisms;

(b) shall be substantially free from substances originating from microorganisms in amounts which may represent a hazard to health; and

(c) shall not contain any other poisonous or deleterious substances in amounts which may represent a hazard to health.

6. PACKAGING, TRANSPORT AND STORAGE

6.1 Pearl millet shall be packaged, transported or stored in containers which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

6.2 If the product is packaged in bags, these shall be clean, strong and carefully sewn. The bags and their internal lining shall be prepared from material which does not represent any danger to human health. [Marks shall be printed using an ink of food quality or paint not containing lead. Under no condition shall these marks come into contact with the product].

7. LABELLING

In addition to Sections 1,2,4 and 6 of the Codex General Standard for the Labelling of Prepackaged Foods (Ref. No. CODEX STAN. 1-1981) the following specific provisions apply: Each package of pear millet shall carry an official mark. The following information shall appear on the package or on the accompanying document when it is packed in bulk.

7.1 The Name of the Product

The name of the product shall be "millet grains" for non-decorticated millet; or "decorticated millet grains".

7.2 Net Contents

The net contents shall be declared by weight in the metric (Système International) units.

7.3 Name and Address

The name and address of both the manufacturer and packer, where the latter is different from the former, shall be declared.

7.4 Country of Origin

7.4.1 The country of origin shall be declared.

7.4.2 Where the product undergoes processing in a second country, the country in which such processing is carried out shall be considered as the country of origin for the purpose of labelling.

7.5 Date Marking

The date of packaging and the [limit of durability] shall be declared.

8. METHODS OF ANALYSIS AND SAMPLING

8.1 Sampling

According to ICC Standard method no. 101.

8.2 Determination of Moisture

According to ICC Standard method no. 109.

8.3 Determination of Ash

According to AFNOR method VO3 - 720 October 1971: cereals and milling products.

8.4 Determination of cellulose

According to ICC Standard method no. 113.

8.5 Determination of Proteins

AOAC method 14.026: Official Methods of Analysis, 12th Edition.

8.6 Determination of Fat

Soxhlet method (details of method to be included).

ALINORM 85/28A
APPENDIX III

PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR PEARL MILLET FLOUR

(Advanced to Step 5 of the Codex Procedure)

1. SCOPE

1.1 This standard applies to flour destined for human consumption which is obtained from pearl millet *Pennisetum americanum* [variety "souna" and "sanio"].

1.2 This standard does not apply to grits or coarse grain obtained from millet, *Pennisetum typhoidium*.

2. DESCRIPTION

The flour is the product destined for human consumption which is obtained from millet grains *(Pennisetum americanum)* through a process of industrial milling during which the germ is removed to a large extent and the endosperm is reduced to a sufficiently fine powder.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 General Provisions

3.1.1 The millet from which the flour is obtained shall be suitably decorticated, of sound and commercial quality, free from abnormal odour and taste.

3.1.2 The degree of extraction of the flour shall be between 78 and 81 percent.

3.1.3 Particle size of the flour

Using a standard method of sifting, the whole of the product shall pass through a sieve the dimension of the mesh of which is: diameter of 0.5 mm for "fine" flour and diameter of 1 mm for "medium" flour.

3.2 Analytical characteristics

3.2.1 Moisture content

The moisture content shall not exceed 13 percent m/m on the dry matter.

3.2.2 Ash

The ash content shall be between 0.8 and 1.2 percent m/m on the dry matter.

3.2.3 Protein content

Content in proteins shall not be less than 8.5 percent m/m on the dry matter.

3.2.4 Fat content

Fat content shall not exceed 5.0 percent m/m on the dry matter.

3.2.5 Cellulose content

Cellulose content shall not exceed 1.5 m/m on the dry matter.

3.2.6 Colour

The colour shall be between 18 and 30 (see Section 9.7).

4. FOOD ADDITIVES

The product shall not contain any food additives.

5. CONTAMINANTS

The product shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the product, or in the disinfectation of the premises and equipment used for the processing do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

6. HYGIENE

6.1 It is recommended that the product covered by the provisions of this standard should be prepared in accordance with the International Code of Hygienic Practice entitled "Recommended International Code of Practice, General Principles of Food Hygiene" (CAC/RCP 1-1969, Rev.1).

6.2 When tested by appropriate methods of sampling and examination, the product:

(a) shall be substantially free from pathogenic microorganisms;

(b) shall be substantially free from substances originating from microorganisms in amounts which may represent a hazard to health; and

(c) shall not contain any other poisonous or deleterious substances in amounts which may represent a hazard to health.

7. PACKAGING, TRANSPORT AND STORAGE

7.1 The product shall be packaged, transported or sotred in containers which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

7.2 The packaging shall be clean, strong, dry and impervious. The packaging material shall not transfer to the flour any toxic substance or undesirable odour or taste. [Marks shall be printed using an ink of food quality or paint not containing lead. Under no condition shall these marks be in contact with the product].

8. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Codex General Standard for the Labelling of Prepackaged Foods (Ref. No. CODEX STAN 1-1981) the following specific provisions apply: Each package of millet flour shall carry an official mark. The following information shall appear on the package or on the accompanying document when it is packed in bulk.

8.1 The name of the product

The name of the product shall be "millet flour".

8.2 Net Contents

The net contents shall be declared by weight in metric ("Système International") units

8.3 Name and Address

The name and address of both the manufacturer and packer, where the latter is different from the former, shall be declared.

8.4 Date marking

The date of packaging [and the limit of durability] shall be declared.

8.5 Country of Origin

8.5.1 The country of origin shall be declared.

8.5.2 Where the product undergoes processing in a second country, the country in which such processing is carried out shall be considered as country of origin for the purposes of labelling.

9. METHODS OF ANALYSIS AND SAMPLING

9.1 Sampling

According to ICC standard method no. 101.

9.2 Moisture determination

According to ICC standard method no. 109.

9.3 Determination of Ash

According to AFNOR method V03 - 720 October 1971: cereals and milling products.

9.4 Determination of Cellulose

According to ICC method no.113.

9.5 Determination of Proteins

AOAC method 14.026: Official methods of analysis, 12th Edition.

9.6 Determination of Fat

Soxhlet method (details of the method to be included).

9.7 Determination of colour

Colorimetric method of Kent-Jones using Martin colorgrader.

ALINORM 85/28A
APPENDIX IV

PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR SORGHUM GRAINS
(Advanced to Step 5 of the Codex Procedure)

1. SCOPE

This standard applies to whole and decorticated sorghum intended for human consumption, i.e., which is suitable for use as food for humans and is sold, either prepackaged or in bulk, directly to the consumer. It does not apply to derived products.

2. DESCRIPTION

2.1 Definition of the Product

2.1.1 Sorghum grains shall be whole or decorticated and suitably dried if necessary. They shall have the characteristics of the *genus sorghum*. 1/

2.1.2 Whole (non-decorticated) grains

These are grains of sorghum obtained as such after a complete threshing without any special treatment.

2.1.3 Decorticated grains

These are grains of sorghum from which the outer parts amounting to [20-22%] of the weight of the whole grains have been removed in an appropriate manner using mechanical treatment (for example simple abrasion).

3. ESSENTIAL COMPOSITION OR QUALITY FACTORS

3.1 General Provisions

3.1.1 Sorghum grains shall not have abormal odour or taste.

3.1.2 Sorghum grains shall have uniform colour appropriate to the species. They shall be unbroken, clean and practically free from impurities (insect debris, stones, etc.).

3.2 Analytical characteristics

3.2.1 Moisture Content

The moisture content of decorticated or whole (non-decorticated) grains shall not exceed 13 percent m/m on the dry matter.

1/ To be clarified and botanical name provided.

3.2.2 Ash

The ash content of decorticated sorghum grains shall be between 1.0 and 1.6 percent m/m on the dry matter.

[3.2.3 Degree of decortication

The degree of decortication shall be between 20 and 22 percent on the dry matter.]

3.2.4 Protein content

Content in proteins shall not be less than 7 percent m/m on the dry matter.

3.2.5 Cellulose content

(a) For non-decorticated sorghum grains the cellulose content shall not exceed 3.5 percent m/m on the dry matter.

(b) For decorticated sorghum grains this content shall not exceed 2.2 percent m/m on the dry matter.

3.2.6 Fat content

(a) For non-decorticated sorghum grains fat content shall not exceed 5.2 percent m/m on the dry matter.

(b) For decorticated sorghum grains this content shall not exceed 4.7 percent m/m on the dry matter.

"3.2.7 Impurities

By "impurities" is meant: extraneous vegetable matter, shrivelled grains (grains have not reached normal maturity), altered grains, etc.

(a) the content of impurities in non-decorticated grain shall not exceed 2% m/m;

(b) the content of impurities in decorticated grain shall not exceed 0.5 m/m;

(c) non-decorticated and decorticated grains shall be practically free from dirt, animal debris, mineral particles and diseased grains."

4. CONTAMINANTS

The product shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the product, or in the disinfectation of the premises and equipment used for the processing do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

5. HYGIENE

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

5.2 When tested by appropriate methods of sampling and examination, the product:

(a) shall be substantially free from pathogenic microorganisms;

(b) shall be substantially free from substances originating from microorganisms in amounts which may represent a hazard to health; and

(c) shall not contain any other poisonous or deleterious substances in amounts which may represent a hazard to health.

6. PACKAGING, TRANSPORT AND STORAGE

6.1 Sorghum grains shall be packaged, transported or stored in containers which will safeguard the hygenic, nutritional and technological qualities of the product.

6.2 If the product is packaged in bags these shall be clean, strong and carefully sewn. The bags and their internal lining shall be prepared from material which does not represent any danger to human health.

7. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Codex General Standard for the Labelling of Prepackaged Foods (Ref. No. CODEX STAN 1-1981) the following specific provisions apply: Each package of sorghum shall carry an official mark. The following information shall appear on the package or on the accompanying document when it is packed in bulk:

7.1 The name of the product

The name of the product to be declared shall be "sorghum grains" for non-decorticated sorghum or "decorticated sorghum grains".

7.2 Net Contents

The net contents shall be declared by weight in the metric ("Système International") units.

7.3 Name and address

The name and address of the manufacturer and packer, where the latter is different from the former, shall be declared.

7.4 Country of origin

7.4.1 The country of origin shall be declared.

7.4.2 Where the product undergoes processing in a second country, the country in which such processing is carried out shall be considered as the country of origin for the purposes of labelling.

7.5 Date Marking

The date of packaging and the [limit of durability] shall be declared.

8. METHODS OF ANALYSIS AND SAMPLING

8.1 Sampling

According to ICC Standard method No. 101.

8.2 Moisture determination

According to ICC Standard method No. 109.

8.3 Determination of Ash

According to AFNOR method V03-720 October 1971: cereals and milling products.

8.4 Determination of cellulose

According to ICC Standard method No.113.

8.5 Determination of proteins

AOAC method 14.026: official methods of analysis, 12th Edition.

8.6 Determination of Fat

Soxhlet method (details of the method to be included).

PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR SORGHUM FLOUR
(At Step 3 of the Codex Procedure)

1. SCOPE

1.1 This standard applies to flour destined for human consumption which is obtained from sorghum 1/.

1.2 This standard does not apply to grits or coarse grain obtained from sorghum.

2. DESCRIPTION

The flour is the product destined for direct human consumption which is obtained from sorghum grains through a process of industrial milling during which the germ is removed to a large extent and the endosperm is reduced to a sufficiently fine powder.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 General Provisions

3.1.1 The sorghum grains from which the flour is obtained shall be suitably decorticated, of sound and commercial quality, free from abnormal odour and taste.

3.1.2 The degree of extraction of the flour shall be between 78 and 81 percent.

3.1.3 Particle size of the flour

Using a standard method of sifting, the whole of the product shall pass through a sieve the dimension of the mesh of which is: diameter of 0.5 mm for 'fine' flour and diameter of 1 mm for 'medium' flour.

3.2 Analytical characteristics

3.2.1 Moisture content

The moisture content shall not exceed 13 percent m/m on the dry matter.

3.2.2 Ash

The ash content shall be between 0,9 and 1,5 percent m/m on the dry matter.

1/ To be clarified and botanical name provided.

3.2.3 Protein content

Content in protein shall not be less than 8.5 percent m/m on the dry matter.

3.2.4 Fat content

Fat content shall be not less than 2,2 percent m/m and not exceed 4,7 percent on the dry matter.

3.2.5 Cellulose content

Cellulose content shall be not less than 1.0 percent and not exceed 1.8 percent on the dry matter.

3.2.6 Colour

The colour shall be between 18 and 30 (see Section 9.7).

4. FOOD ADDITIVES

The product shall not contain any food additives.

5. CONTAMINANTS

The product shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the product, or in the disinfectation of the premises and equipment used for the processing do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

6. HYGIENE

6.1 It is recommended that the product covered by the provisions of this standard should be prepared in accordance with the International Code of Hygienic Practice entitled "Recommended International Code of Practice, General Principles of Food Hygiene" (CAC/RCP 1-1969, Rev.1).

6.2 When tested by appropriate methods of sampling and examination, the product:

(a) shall be substantially free from pathogenic microorganisms;

(b) shall be substantially free from substances originating from microorganisms in amounts which may represent a hazard to health; and

(c) shall not contain any other poisonous or deleterious substances in amounts which may represent a hazard to health.

7. PACKAGING, TRANSPORT AND STORAGE

7.1 The product shall be packaged, transported or stored in containers which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

7.2 The packaging shall be clean, strong, dry and impervious. The packaging material shall not transfer to the flour any toxic substance or undesirable odour or taste. [Marks shall be printed using an ink of food quality or paint not containing lead. Under no condition shall these marks be in contact with the product].

8. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Codex General Standard for the Labelling of Prepackaged Foods (Ref.No. CODEX STAN 1-1981) the following specific provi-

sions apply: Each package of millet flour shall carry an official mark. The following information shall appear on the package or on the accompanying document when it is packed in bulk.

8.1 The name of the product

The name of the product shall be "sorghum flour".

8.2 Net Contents

The net contents shall be declared by weight in metric ("Système International") units.

8.3 Name and Address

The name and address of both the manufacturer and packer, where the latter is different from the former, shall be declared.

8.4 Date Marking

The date of production, of packaging and the [limit of durability] shall be declared.

8.5 Country of Origin

8.5.1 The country of origin shall be declared.

8.5.2 Where the product undergoes processing in a second country, the country in which such processing is carried out shall be considered as country of origin for the purpose of labelling.

9. METHODS OF ANALYSIS AND SAMPLING

9.1 Sampling

According to ICC standard method No. 101.

9.2 Moisture determination

According to ICC standard method No. 109.

9.3 Determination of Ash

According to AFNOR method V03 - 720 October 1971: cereals and milling products.

9.4 Determination of Cellulose

According to ICC method No. 113.

9.5 Determination of Proteins

AOAC method 14.026: official methods of analysis, 12th Edition.

9.6 Determination of Fat

Soxhlet method (details of the method to be included).

9.7 Determination of Colour

Colorimetric method of Kent-Jones using Martin colorgrader.

PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR CASSAVA FLOUR
(At Step 3 of the Codex Procedure)

1. SCOPE

1.2 This standard applies to cassava flour intended for human consumption.

2. DESCRIPTION

2.1 Definition of the product

2.1.1 Edible cassava flour is the product prepared from dried cassava *(Manihot esculanta Grantz)* chips or paste, by pounding, grinding or milling process followed by sifting to separate the fibre from the flour. In case of edible cassava flour prepared from bitter cassava, detoxification should be carried out by soaking the tubers in water for a few days before it undergoes drying in form of whole, pounded tuber (paste) or in small pieces.

2.2 Classification

Edible cassava flour is classified in two categories.

2.2.1 Fine cassava flour

This is a cassava flour of which not less than 90% of the weight shall pass easily through a sieve of 0.6 mm aperture size.

2.2.2 Coarse cassava flour

This is a cassava flour of which not less than 90% of the weight shall pass easily through a sieve of 1.20 mm aperture size.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw materials

The cassava *(Manihot esculanta Grantz)*, tuber from which the edible cassava flour is milled shall be peeled, clean and in good physiological condition.

3.2 Organoleptic properties

The colour, taste and odour of edible cassava flour shall be characteristic of the product.

3.3 Analytical characteristics

3.3.1 Hydrocyanic Acid Content

The hydrocyanic acid content of edible cassava flour shall not exceed 10 mg/kg determined as free HCN.

3.3.2 Moisture content

The moisture content of edible cassava flour shall not exceed 13 percent m/m.

3.3.3 Crude fibre content

The crude fibre content of edible cassava flour shall not exceed 2 percent m/m.

3.3.4 Ash content

The ash content of edible cassava flour shall not exceed 3.0 percent m/m.

4. FOOD ADDITIVES

No food additive shall be added to edible cassava flour.

5. CONTAMINANTS

Edible cassava flour shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage, or processing of the cassava, cassava chips, cassava flour, or the premises and equipment used for processing do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

6. HYGIENE

6.1 It is recommended that the product covered by the provisions of this standard should be prepared in accordance with the International Code of Hygienic Practice entitled "Recommended International Code of Practice, General Principles of Food Hygiene" (CAC/RCP 1-1969 Rev.1).

6.2 When tested by appropriate methods of sampling and examination the product:

(a) shall be substantially free from pathogenic microorganisms;

(b) shall be substantially free from substances originating from micro-organisms in amounts which may represent a hazard to health; and

(c) shall not contain any other poisonous or deleterious substances in amounts which may represent a hazard to health.

7. PACKAGING, TRANSPORT AND STORAGE

7.1 Edible cassava flour shall be packaged, transported or stored in containers which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

7.2 The packaging material shall be such as to protect the product against bacteriological and other contamination, it shall protect the product as far as possible against any infiltration of moisture, rehydration and against leakage. The packaging material should not impart any odour, taste, or colour or any other extraneous property to the product and should not result in contamination of the product with substances of which the packaging material is made.

8. LABELLING 1/

In addition to Sections 1, 2, 4 and 6 of the Codex General Standard for Labelling of Prepackaged Food Products (CODEX STAN 1-1981) the following particular provisions shall apply.

1/ There may be a need to provide for lot identification and non-retail containers.

8.1 Name of the Product

8.1.1 The name of the product shall be edible cassava flour preceded or followed by the common or ordinary name legally accepted in the country where the product is sold. 1/

8.2 Net Contents

The contents shall be declared by weight either according to the metric system ("International System Units") or the Avoirdupois system or in both systems of measurement in accordance with the requirements of the country where the product is sold.

8.3 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the product shall be declared.

8.4 Date Marking

The date of manufacture or packaging and the date of minimum durability shall be declared. 2/

8.5 Country of Origin

8.5.1 The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

8.5.2 When the product undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

9. METHODS OF ANALYSIS AND SAMPLING

9.1 Sampling

According to ISO 2170-1972 cereals and pulses - sampling of milled products.

9.2 Determination of Granularity

According to ISO 259-1973 Test sieving.

9.3 Determination of moisture

According to ISO 712-1979 Cereals and Cereal Products - determination of moisture (routine method).

9.4 Determination of Ash

According to ISO 2171-1972 cereals, pulses and derived products - determination of ash.

9.5 Determination of hydrocyanic acid

According to ISO 2164-1975 Pulses - Determination of glycosidic hydrocyanic acid.

9.6 Determination of crude fibre

According to ISO/DIS 5498 - Determination of crude fibre content.

1/ Note by the Secretariat: The terms "fine" and "course" may have to be permitted in relation to Sections 2.2.1 and 2.2.2.

2/ Note by the Secretariat: The full text as given in the Codex Guidelines on date-marking should be used and there may be a need for storage instructions.

PROPOSED DRAFT AFRICAN REGIONAL STANDARD FOR DESSICATED COCONUT [FLOUR]

(At Step 3 of the Codex Procedure)

1. SCOPE

This standard applies to Dessicated Coconut.

2. DESCRIPTION

2.1 Definition of the product

Dessicated coconut is the finished product obtained from coconut *(Cocos nucifera L.)*. The processing consists of de-husking, halving, peeling, milling, drying and sifting. The product is initially produced in a range of particle sizes.

2.2 Classification

Dessicated coconut is classified for the purposes of commercialization in four categories as follows:

2.2.1 Extra-fine dessicated coconut

This is dessicated coconut of which not less than 90 percent of the weight shall pass easily through a sieve with square apertures of 0.85 mm, but of which maximum 25 percent of the weight passes through a sieve of 0.50 mm aperture size.

2.2.2 Fine dessicated coconut

This is dessicated coconut of which not less than 80 percent of the weight shall pass easily through a sieve of square aperture size of 1.40 mm, but of which maximum 20 percent of the weight passes through a sieve of 0.71 mm square aperture size.

2.2.3 Medium dessicated coconut

This is dessicated coconut of which not less than 90 percent of the weight shall pass easily through a sieve of square aperture size of 2.80 mm, but of which maximum 20 percent of the weight passes through a sieve of 1.40 mm square aperture size.

2.2.4 Unclassified dessicated coconut

Dessicated coconut which has not been classified according to particle size.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw materials

(a) Dessicated coconut shall be prepared from white meat obtained from the whole nut.

(b) The fruit should be wholesome and free of disease.

3.2 Organoleptic properties

(a) The colour should be pure white.

(b) The taste should be characteristic of the product without off-flavours due to deterioration or absorption of extraneous substances.

(c) The odour should be characteristic of the product and not mouldy, fermented or rancid.

3.3 Analytical characteristics

3.3.1 Total acidity of extracted oil

The total acidity of extracted oil from dessicated coconut should not be more than 0.15 percent m/m, measured as lauric acid.

3.3.2 Moisture

The water content of dessicated coconut shall not exceed 3.5 percent m/m.

3.3.3 Oil Content

The oil content of dessicated coconut should not be less than 65 percent m/m.

3.3.4 Ash Content

The ash content shall not exceed 2.20 percent m/m.

3.3.5 Extraneous Vegetable Matter

The extraneous vegetable matter consisting exclusively of fragments of shell, fiber, peel and burnt particles should not exceed 15 fragments per 100 g.

4. FOOD ADDITIVES

No food additives shall be permitted in dessicated coconut.

5. CONTAMINANTS

Where pesticides or other authorized chemicals are used against insects, rodents or other pests, the greatest care is recommended in the choice of these substances and in the method of application so as not to run the risk of contaminating the dessicated coconut with toxic residues.

6. HYGIENE

It is recommended that the product covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Hygienic Practice for Dessicated Coconut (CAC/RCP 4-1969 Rev.1).

7. PACKAGING, TRANSPORT AND STORAGE

7.1 Dessicated coconut shall be packaged, transported and stored in containers which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

7.2 The packaging material shall be such as to protect the product against bacteriological and other contamination; it shall protect the product as far as possible against any infiltration of moisture, re-hydration and against leaking. The packaging material should not impart any odour, taste or colour or any other extraneous property to the product and should not result in contamination of the product with the packaging material.

8. LABELLING

In addition to the Codex General Standard for Labelling of Pre-Packaged Foods (Ref. No. CODEX STAN 1-1981), the following specific provisions shall apply:

8.1 Name of the Product

8.1.1 The name of the product to be shown on the label shall be "Dessicated coconut" preceded or followed by the common or ordinary name legally accepted in the country where the product is sold.

8.1.2 The name shall indicate the grade of the product in accordance with the descriptions contained in Section 2.2.

8.2 Date Marking

The date of manufacture or packaging and that of expiry shall be declared.

9. METHODSS OF ANALYSIS AND SAMPLING

9.1 Sampling

According to ISO 2170-1972 Cereals and Pulses - sampling of milled products.

9.2 Determination of granularity

According to British Standard Mesh Nominal Test Sieves: BS 410 - 1969.

9.3 Determination of Total acidity of extracted oil

Principle: The sample is extracted by ethyl aether at ambient temperature (25°C). The free fatty acid content of the extracted oil is determined by titrations with alkali and the results expressed as percent lauric acid.

Apparatus: (1) Rotary evaporator with N_2 flow

(2) 25 ml burette with divisions of 0.05 ml

(3) Mechanical agitator.

Reagents (1) Anhydrous ethyl aether, peroxide free

(2) Ethyl aether and ethyl alcohol 95% (1:2) mixture neutralized with sodium hydroxide 0.1N using phenolphthlein as indicator

(3) 1% ethanolic solution of phenolphthalein.

Procedure 50 g of the sample is extracted at ambient temperature in an Ehrlenmeyer flask of 500 ml with 300 ml of ethyl aether (Reagent 1) for one hour with mechanical agitation. The extract is filtered through filter paper Whatman No.542 and further undergoes dry evaporation in rotary evaporator with nitrogen flow at a maximum temperature of 40°C.

20 g of the extracted oil is weighed and dissolved with addition of 100 ml of ethyl alcohol mixture (Reagent 2) and further titrated with 0.1N sodium hydroxide using 5 drops of indicator (Reagent 3).

Expression of results Acidity is calculated as below:

$$\text{Acidity} = \frac{V.N.200}{m\ 10}$$

V = Volume of NaOH used

N = Normality of NaOH solution

m = Weight of the sample used, expressed in grams

The results as obtained above, are expressed as percent lauric acid m/m up to two decimal points.

9.4 Determination of Moisture

According to AOAC Methods 27.005 (Official Methods of AOAC) 13th Ed, 1980, page 435.

9.5 Determination of Oil Content

According to AOAC Methods 27.006 (Official Methods of the AOAC) 13th Ed, 1980, page 435.

9.6 Determination of Ash

According to ISO 2171 - 1980 - Cereals, pulses and derived products.

9.7 Extraneous Vegetable Matter

The determination is carried out by spreading 100 g of the sample in a thin layer against a white background and counting the extraneous material with the naked eye.

ALINORM 85/28A
APPENDIX VIII

DRAFT AFRICAN REGIONAL STANDARD FOR GARI

(Advanced to Step 8 of the Codex Procedure)

1. SCOPE

This standard applies to gari.

2. DESCRIPTION

2.1 Defintion of the Product

Gari is the finished product obtained by artisanal or industrial processing of cassava tubers (*Manitot esculenta Crantz)*. The processing consists of peeling, washing and grating of the tubers, followed by fermentation, pressing, fragmentation, granulation, drying if necessary, sifting and suitable heat treatment. 1/ Gari is presented as flour of variable granule size.

2.2 Classification

Gari grains are classified in five categories as follows:

2.2.1 "Extra-fine grain gari"

This is gari of which not less than 100 percent by weight shall pass easily through a sieve of 0.50 mm aperture size but of which not more than 40 percent by weight shall pass easily through a sieve of 0.25 mm aperture size.

1/ Suitable heat treatment means toasting, grilling or any other method of cooking capable of producing the characteristic organoleptic properties of the product. During the heat treatment, there is a partial gelatinization of the starch and the dehydration of gari grains.

2.2.2 "Fine grain gari"

This is gari of which not less than 100 percent by weight shall pass easily through a sieve of 1 mm aperture size, but of which not more than 40 percent by weight shall pass easily through a sieve of 0.5 mm aperture size.

2.2.3 "Medium grain gari"

Gari of which not less than 100 percent by weight shall pass easily through a sieve of 1.25 mm aperture size, but of which not more than 40 percent by weight shall pass easily through a sieve of 1.00 mm aperture size.

2.2.4 "Coarse grain gari"

This is gari of which not less than 100 percent by weight shall pass easily through a sieve of 2 mm aperture size, but of which not more than 40 percent shall pass easily through a sieve of 1.25 mm aperture size.

2.2.5 Unclassified gari

Gari which has not been classified by the sieve method to determine its category according to grain size.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw materials

Gari shall be prepared from clean cassava tubers in good physiological condition.

3.2 Organoleptic Properties

The colour, taste and odour of gari shall be characteristic of the product, as is acceptable in a given locality.

3.3 Analytical characteristics

3.3.1 Total acidity

The total acidity of gari shall not be less than 0.6 percent nor more than 1 percent m/m, determined as lactic acid.

3.3.2 Cynogenic glucocides and hydrocyanic acid

Total hydrocyanic acid content shall not exceed 2 mg/kg, determined as free HCN.

3.3.3 Moisture content

The moisture content of gari shall not exceed 12 percent m/m.

3.3.4 Crude fibre content

The crude fibre content of gari shall not exceed 2 percent m/m.

3.3.5 Ash content

The ash content of gari shall not exceed 2.75 percent m/m.

3.4 Extraneous vegetable matter

According to good manufacturing practices, gari shall be practically free from extraneous matter.

3.5 Optional ingredients

Gari may contain one or several of the following ingredients in amounts conforming to the legislation of the country in which it is sold.

(a) Edible fats or oils

(b) Salt

3.6 Enrichment

The addition of vitamins, proteins and other nutrients shall be in conformity with the legislation of the country in which the product is sold.

4. FOOD ADDITIVES

4.1 No food additives shall be added to gari.

4.2 Para 3 of the Principle of the Carry-over of Food Additives (Ref. CAC/VOL XIV-Ed 1, Part III) shall apply.

5. CONTAMINANTS

Gari shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the cassava, or gari, or the premises and equipment used for processing do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

6. HYGIENE

6.1 It is recommended that the product covered by the provisions of this standard should be prepared in accordance with the International Code of Hygienic Practice entitled "Recommended International Code of Practice, General Principles of Food Hygiene" (CAC/RCP 1-1969, Rev.1).

6.2 When tested by appropriate methods of sampling and examination, the product:

(a) shall be substantially free from pathogenic microorganisms;

(b) shall be substantially free from substances originating from micro-organisms in amounts which may represent a hazard to health; and

(c) shall not contain any other poisonous or deleterious substances in amounts which may represent a hazard to health.

7. LABELLING

In addition to Sections 1, 2, 4 and 6 of the General Standard for Labelling of Prepackaged Foods (Ref. CODEX STAN 1-1981) the following particular provisions shall apply:

7.1 Name of the Product

7.1.1 The name of the product to be shown on the label shall be "gari" preceded or followed by the common or ordinary name legally accepted in the country where the product is sold. The name shall show the size of the grain in accordance with the descriptions contained in section 2.2.

7.1.2 Where ingredients have been added in accordance with section 3.6 of this standard, the label shall indicate in close proximity with the name of the product that the product has been enriched and the ingredient or ingredients used for enrichment.

7.2 List of Ingredients

7.2.1 A complete list of ingredients present in the product shall be declared on the label in descending order of proportion in accordance with section 3.2 of the Codex General Standard for the Labelling of Prepackaged Foods (Ref. CODEX STAN 1-1981) except that in the case of added nutrients used for enrichment of the product, the amounts added shall be indicated on the label.

7.2.2 The origin of added fats and oils shall be declared in conformity with section 3.2 of the Codex General Standard for the Labelling of Prepackaged Foods (Ref. CODEX STAN 1-1981).

7.3 Net Weight

Net weight shall be shown either according to the metric system ("International Système" units) or the Avoirdupois system or in both systems of measurement in accordance with the requirements of the country where the product is sold.

7.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter, or vendor of the product shall be declared.

7.5 Date Marking

The date of manufacture or packaging and the date of minimum durability shall be declared.

7.6 Country of Origin

7.6.1 The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

7.6.2 When the product undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

8. PACKAGING, TRANSPORT AND STORAGE

8.1 Gari shall be packaged, transported or stored in containers which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

8.2 The packaging material shall be such as to protect the product against bacteriological and other contamination; it shall protect the product as far as possible against any infiltration of moisture, rehydration and against leakage. The packaging material should not impart any odour, taste or colour or any other extraneous property to the product and should not result in contamination of the product with substances of which the packaging material is made.

9. METHODS OF ANALYSIS AND SAMPLING

9.1 Sampling

According to ISO 2170-1972 Cereals and pulses (see also ICC Method of Sampling No. AICC 101-1960) - sampling of milled products.

9.2 Determination of Granularity

According to ISO 2591-1973 Test sieving. The sieves used are AFNOR sieves with square mesh.

9.3 Determination of Moisture

According to AICC No. 109/1-1976 and ISO No. 712-1979 Cereals and cereal products - determination of moisture. This method measures water content by determining loss of weight of the sample heated under given conditions.

Determination of Ash

According to ISO 2171-1972 Cereals, pulses and derived products - determination of ash.

9.5 Determination of Cynogenic glucocides and hydrocyanic acid

According to ISO Method 2164 - Legumes - Determination of hydrocyanic acid.

9.6 Determination of Acidity

According to AOAC Methods 14.064 - 14.065 (Official methods of the AOAC, 12th Ed, 1975, page 232), and ISO/DP 7305 Wheat flour, determination of fatty acids.

9.7 Determination of Crude Fibre

According to ISO Method 5498 - 6451(1981) - Determination of crude fibre content in agricultural food products.

9.8 Extraneous Vegetable Matter (EVM)

Definition and method of test to be developed.