Practical actions to promote food safety

FAO/WHO
Regional Conference on Food Safety for Africa

3–6 October 2005
Harare, Zimbabwe

FINAL REPORT

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FOREWORD

Ensuring safe food is essential for the protection of human health and for improving the quality of life in all countries. The importance of safe food, whether domestically produced and consumed, imported or exported, is well known by the countries of Africa. Many poor households in the region spend up to 70% of their income on food, so it is essential that imported and domestically produced foods are safe for human consumption and are not subject to fraudulent practices. In a region where food may not always be readily available, it is essential that the foodstuffs which are consumed do not cause illness as each food-borne disease outbreak results in a number of direct and indirect costs, in addition to the resultant human suffering. Many other diseases, such as HIV/AIDS and malaria, already affect millions of people in the region and receive a great deal of media and political attention. The effects of these diseases are further exacerbated by food-borne disease as persons with other diseases are more likely to contract food-borne diseases and vice versa. Furthermore, practices aimed at improving food safety also reduce food losses, thus increasing food availability. African countries can also increase their foreign earned income by exporting food products; however, these products must meet strict food safety and quality standards of the importing countries in order to gain access to the most lucrative markets.

Despite these well-known and important reasons, many challenges remain to improving food safety in the region. The countries of the region recognize the importance of developing practical actions and recommendations for capacity building to overcome these challenges and to promote food safety in the region. Accordingly, at the request of the 15th Session of the FAO/WHO Coordinating Committee for Africa (CCAfrica- Kampala, Uganda, November 2002), following the guidance of the FAO/WHO governing bodies, in line with the suggestions made by the participants at the first and second Joint FAO/WHO Global Fora of Food Safety Regulators (GF1 - Morocco, January 2002 and GF2 - Thailand, October 2004), and at the decision of the group of permanent representatives of the Africa region to FAO in Rome, FAO and WHO jointly convened the first Regional Conference on Food Safety for Africa in Harare, Zimbabwe from 3 to 6 October 2005.

The conference brought together over 185 participants from 45 member countries of Africa, along with observers from two member countries outside the region and nine international governmental and non-governmental organizations to discuss food safety issues in the region, under the general theme of "Practical Actions to Promote Food Safety".

The participants at the conference unanimously adopted a resolution recommending a nine-point Five-year Strategic Plan for Food Safety in Africa for adoption by FAO and WHO, along with the African Union, including numerous recommendations of practical actions to strengthen food safety systems in the region. It was generally recognized by the participants that although the convening of the conference itself was successful, its true success can only be measured by the degree of implementation of the strategic plan and the improved safety of foods produced and consumed in the region.

ACKNOWLEDGEMENTS

The Joint Secretariat of the FAO/WHO Regional Conference on Food Safety for Africa wishes to express its sincere thanks to all those who contributed towards the success of this conference, in particular to the Zimbabwean authorities for their willingness to host the conference and their warm hospitality. The Joint Secretariat also expresses its thanks to the co-chairs, rapporteur, and working group co-chairs for their dedicated hard work and the exceptional manner in which they conducted the conference; all those who prepared and presented working papers for the conference; those who prepared Conference Room Documents and those who made interventions during the conference.

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Report of the FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

I. EXECUTIVE SUMMARY

A Regional Conference on Food Safety for Africa, jointly convened by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), took place from 3 to 6 October 2005 in Harare, Zimbabwe, at the decision of the group of permanent representatives of the African region to FAO in Rome. Over 185 participants from 45 member countries of Africa, along with observers from two member countries outside the region and nine international governmental and non-governmental organizations participated in the conference, which was designed to i) facilitate dynamic and sustainable communication on continuing and emerging food safety issues important to all countries of the African region and identify harmonized, practical and sustainable actions to address these issues; ii) identify opportunities for improving international and regional cooperation in promoting food safety in order to protect consumers and their health and to develop positive food trade relations, taking into account the prevailing conditions in the entire food chain; iii) promote the strengthening and/or the establishment of regional and sub-regional networks for the exchange of food safety-related information and experiences among all stakeholders; iv) encourage public/private partnerships for consumer awareness raising, capacity building, and food safety issues in general; and v) identify strengths in specific subjects of food safety within the region and means to utilize these strengths as part of an over-arching policy to continuously improve food safety.

Countries have recognized the need for increased national attention and international, regional and national cooperation to strengthen food safety systems in the countries of the region. Within this context, the conference unanimously adopted a resolution recommending a nine-point Five-year Strategic Plan for Food Safety in Africa for adoption by UN food and health agencies and the African Union, including numerous recommendations of practical actions to strengthen food safety systems in the region. The key elements of the plan include the following:

- Food safety policies and programmes
- Legislative and institutional aspects
- Standards and regulations
- Food inspection programmes and techniques
- Food analysis and food safety testing laboratories
- Monitoring food-borne diseases and the safety of foods on the market
- Participation in Codex
- Communication and stakeholder involvement (including industry officials and consumers)
- National, regional and international cooperation

The conference agreed that its bureau, along with representatives of FAO and WHO, would constitute the follow-up committee that would ensure the monitoring of the implementation of the strategic plan.

II. INTRODUCTION

1. The Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) jointly convened the FAO/WHO Regional Conference on Food Safety for Africa (the conference) in an effort to facilitate discussion on practical actions and recommendations to promote food safety in the countries of the African region. The conference was held in Harare, Zimbabwe from 3 to 6 October 2005 at the request of the African countries. The conference was attended by high-ranking policy officers and technical experts from 45 member countries of the African region of FAO and WHO. It was also attended by nine international governmental and non-governmental organizations as observers. A list of all participants is included in Annex 1.

2. This conference is part of a series of global and regional events that FAO and WHO are convening to meet the needs of member countries for policy guidance and capacity building in food safety. This series includes the First and Second FAO/WHO Global Fora (GF) of Food Safety Regulators (GF1 - Morocco, 28 to 30 January 2002 and GF2 - Thailand, 12 to 14 October 2004), and regional events in Europe (Hungary, February 2002), Asia and the Pacific (Malaysia, May 2004), and the Near East (Jordan, March 2005). The conference was convened in light of the recommendations and feedback from these events, direction from FAO/WHO governing bodies, and the request of the 15th Session of the FAO/WHO Coordinating Committee for Africa (CCAfrica - Kampala, Uganda, November 2002).

3. The objectives of the conference were to i) facilitate dynamic and sustainable communication on continuing and emerging food safety issues important to all countries of the African region and identify harmonized, practical and sustainable actions to address these issues; ii) identify opportunities for improving international and regional cooperation in promoting food safety in order to protect consumers and their health and to develop positive food trade relations, taking into account the prevailing conditions in the entire food chain; iii) promote the strengthening and/or the establishment of regional and sub-regional networks for the exchange of food safety-related information and experiences among all stakeholders; iv) encourage public/private partnerships for consumer awareness raising, capacity building, and food safety issues in general; and v) identify strengths in specific subjects of food safety within the region and means to utilize these strengths as part of an over-arching policy to continuously improve food safety.

4. The Provisional Agenda for the conference is found in Annex 2 (CAF 05/1).

III. OPENING CEREMONY (AGENDA ITEM 1)

5. The opening ceremony began with welcome remarks from the Minister of Health and Child Welfare of Zimbabwe, the Honourable Dr P.D. Parirenyatwa. In his remarks, he underlined the importance of food safety as well as food security and the need for appropriate strategies and regulations to address, in particular, the issues of street foods and the monitoring of food imports and exports. The text of his address is appended as Annex 3.

6. In his opening remarks on behalf of FAO, Mr Hartwig de Haen, Assistant Director-General, Economic and Social Department, informed the conference of the series of regional and global events that FAO and WHO are jointly organizing to provide fora for food safety officials to share information on national experiences in regulating and promoting food safety. He highlighted the importance of food safety for all people, in the interest of food security, public health and economic efficiency and competitiveness. He recalled the challenges for the countries of the region to improve the efficiency and effectiveness of their food control systems and the specific conditions of the region, which increase the potential of food safety risks. Mr de Haen further informed the conference of various actions taken by FAO, in partnership with WHO and other organizations, to assist member countries in their efforts to improve food safety and quality and reiterated his Organization's readiness to further expand its

capacity building programme to assist the countries of the region in this field, if funds become available. The text of his speech is appended in Annex 4.

7. Dr Chris Mwikisa, Director, Division of Healthy Environments and Sustainable Development in the WHO African Regional Office, welcomed the participants on behalf of WHO. The speaker noted that consumers in the region are experiencing considerable changes in the way food is produced and processed; yet the regulatory tools have changed minimally. He emphasized the importance of food-borne disease surveillance and food monitoring for policy advice and planning of food safety programmes. The speaker recalled that in May 2000, the World Health Assembly endorsed food safety as an essential public health issue and referred to WHO's Global Strategy for Food Safety as well as Resolution AFR/RC53/R5 endorsed by the WHO Regional Committee for Africa in 2003, which provide guidance to Member States on food safety matters. Dr Mwikisa detailed the activities being carried out by WHO in the countries of the region and stated that ensuring food safety not only improves the health of the consumer but increases food exports and thus contributes to the achievement of some of the Millennium Development Goals. He concluded by reiterating WHO's commitment to contribute to improving the safety of food for Africans, despite the many challenges. The text of his address is appended as Annex 5.

8. The conference was officially opened by His Excellency, Robert Mugabe, President of the Republic of Zimbabwe, who thanked FAO and WHO for providing Zimbabwe the honour of hosting this conference and for their work in improving food safety in the region, particularly in Zimbabwe. He underscored the timeliness of the conference, as developing countries are increasingly facing challenges in the areas of food safety, food security and emerging food-borne diseases. The President noted that the challenges to food safety in the region are compounded by the HIV/AIDS pandemic. It was noted that the increasing popularity of street foods, influx of new food technologies and the sub-standard food products in the markets all contributed to the increased attention to food safety. The President also emphasized the need to enhance agricultural development on the continent. He highlighted Zimbabwe's commitment to food safety, as evidenced by its active participation and contribution to the work of the Codex Alimentarius Commission, the World Organization for Animal Health and the International Plant Protection Convention. The President concluded his speech by expressing his hope that the conference would enable the countries of the region to implement workable and realistic actions to improve food safety and also impel countries to include food safety as part of their national development goals. The text of his speech is appended as Annex 6.

9. The Minister of Agriculture and Rural Development of Zimbabwe, the Honourable J. Made, closed the ceremony with a note of thanks in which he reiterated the need for the conference to address and facilitate the implementation of practical actions to improve food safety in the region. The text of his address is appended as Annex 7.

IV. DESIGNATION OF CONFERENCE CHAIRS AND RAPPORTEUR (AGENDA ITEM 2)

10. The conference designated Mr Médi Moungui of Cameroon, Ms Jennifer Ratebe of South Africa and Mr David Nhari of Zimbabwe as conference co-chairs and Mr Kilinda Kilei of Kenya as conference rapporteur. The conference expressed its appreciation to these members for their agreement to serve in these roles.

V. ADOPTION OF THE AGENDA (AGENDA ITEM 3)

11. The conference adopted the proposed agenda and agreed to the timetable as presented by the secretariat.

VI. KEYNOTE SPEAKER (AGENDA ITEM 4)

12. Dr Edward S. Ayensu, Chairman of the Council for Scientific and Industrial Research of Ghana, presented the keynote address, stressing the critical importance of addressing all stages of the food chain in ensuring wholesome and safe food. The speaker emphasized the need for governments and private sector entities of the region to take responsibility to improve food safety, as well as the need to educate and involve all stakeholders in the food chain in the production of safe food, including farmers and consumers. He noted that it was important that the countries of the region confront the issue of genetically modified foods in a pragmatic manner, rather than only with emotions. He advised that the region should base decisions related to food safety on scientifically justifiable facts. The speaker called upon African countries to improve collaboration within the region, with international organizations and with public, private, and civil society organizations. He called on governments of the region to take the lead in addressing food safety issues and honestly acknowledge the challenges facing the region. He concluded by recognizing the support and assistance received from FAO and WHO and requested their support in the future. The text of his speech is available as Annex 8.

VII. NATIONAL FOOD SAFETY SYSTEMS IN AFRICA - A SITUATION ANALYSIS (AGENDA ITEM 5)

13. Dr Cheikh Ndiaye, FAO Regional Food and Nutrition Officer for Africa, presented the contents of the first discussion paper on "National food safety systems in Africa - a situation analysis (CAF 05/2)." The discussion papers and a list of Conference Room Documents (CRDs) for the Conference can be found in Annexes 9 and 10. The speaker indicated that the paper was intended to be a general overview of the situation in the region, and that countries were invited to provide more information on the various aspects of their national food control systems to complement that presented in the tables annexed to the document. He highlighted the importance of food safety and the short and long term benefits and costs of food safety systems. The presentation further outlined the situation regarding various aspects of national food control systems, such as food legislation, risk assessment, food inspection, laboratory support, and participation in Codex standard setting activities. Multiple recommendations for improving national food safety systems were presented and are included in the relevant section of the recommended five-year strategic plan for food safety in Africa (strategic plan).

14. The conference expressed its appreciation to FAO for preparing the paper and agreed on the importance of strengthening national food control systems and the needs of the region in this regard.

15. Delegations provided further information on various aspects of their national food control system to supplement that in the tables and commented on specific facets of food safety control of interest. The conference noted the important role of consumers in national food safety systems, along with the need for increased consumer education. The importance of sharing successful experiences in food safety, such as the case study of street foods in Ghana, among the countries of the region was also highlighted. Various member countries informed of their legislation in the area of biotechnology, their institutional arrangements in food safety control and other aspects of national food safety systems.

16. The conference noted the essential nature of raising the awareness of the need for food safety, as well as actually strengthening the practices of the food industry in their countries. The importance of sensitizing government policymakers on food safety concerns and the necessity of basing food safety legislation on science were also underlined. The need for effective food control laboratories was also noted, as well as the great expense involved in strengthening laboratories.

17. The conference highlighted the importance of strengthening all aspects of national food control systems, including enforcement of legislation, as well as the need for increased funding and political will to enable this to occur. It was also emphasized that countries are at various stages of strengthening their food control systems and that many positive developments are also taking place in the region, which should be recognized in the document and further encouraged.

VIII. PRIORITIZATION AND COORDINATION OF CAPACITY BUILDING ACTIVITES RELATED TO FOOD SAFETY (AGENDA ITEM 6)

18. Ms Londa Vanderwal, Food Quality and Standards Service, FAO, presented a paper on "Prioritization and coordination of capacity building activities related to food safety (CAF 05/3)". The presenter highlighted the importance of food safety capacity building, the reference to capacity building in the WTO SPS and TBT Agreements, and the necessity of evaluating the capacity building needs related to each of the components of the food control system. The presenter emphasized that countries need to identify and prioritise their specific, urgent, and important capacity building needs in the area of food safety so that a systematic and effective programme can be implemented accordingly. Specific areas where coordination at the national, regional and international levels was needed, such as in public-private sector partnerships was outlined. Examples of potential areas for regional coordination were provided, and it was noted that many of these areas were included in the draft regional strategic plan for food safety. The need to ensure the long-term sustainability of the results of capacity building was also emphasized. A number of recommendations to improve the prioritisation and coordination of capacity building activities were presented, which are included in the appropriate section of the strategic plan.

19. The conference welcomed the document, thanked FAO for presenting the paper, and highlighted the essential role of capacity building in food safety in the African region.

20. The conference noted the diversity in the food safety situations and capacity building needs among the countries of the region, as well as the extenuating circumstances faced by some of the countries of the region. It recognized, however, that there are several common deficiencies requiring urgent attention and which could be addressed regionally. It emphasized the importance of political will and commitment as a prerequisite to any capacity building effort. The conference recognized the need to stress the connection between food safety and food security to further emphasize the significance of food safety to political leaders.

21. The conference underlined the importance of basing capacity building on a careful analysis and prioritization of actual needs and linking them to available resources, and it noted that FAO has developed a set of guidelines to assist in this needs assessment. The conference also considered the implementation of an integrated *Biosecurity* approach to food safety, animal and plant health in their respective countries, as well as the tools under development by FAO to implement such an approach.

22. The conference noted the various initiatives that the countries of the region are undertaking to strengthen their national food safety situation. Delegations also indicated their appreciation for the various capacity building initiatives in the region by FAO and WHO, as well as the need for well-developed, larger-scale, longer-term assistance. The conference emphasized that all areas of the food chain must be strengthened and that the various agencies within each country must continuously improve their working relationships and seek the best interest of the entire country in terms of food safety. Several specific areas where food safety capacity building is needed were outlined, including the education of all stakeholders in the food chain, strengthening consumer associations, laboratories, and in developing effective legislation.

23. The need for the conference to develop a clear, global vision for food safety in the region, rather than only making recommendations, was emphasized. The conference noted the necessity to plan the methods to use in implementing such vision, as well as the follow-up actions to assess its implementation. The conference also recognized the value of instating a follow-up committee to monitor progress in the region with regard to the vision. The development of a strategic plan for CCAfrica was also noted, as well as the need to ensure synergies between this plan and the regional food safety strategic plan.

24. The conference noted the difficulties in measuring the implementation of coordination/ collaboration/integration/networking efforts, but rather that evaluation of capacity building efforts should be based on outcomes.

25. Several delegations expressed their concern about sub-standard food imports that may be unfit for consumption. The conference noted that the Codex Code of Ethics for International Trade in Food was under revision by the Codex Committee on General Principles to reflect recent developments in relation to the WTO Agreements on SPS and TBT.

IX. INFORMAL FOOD DISTRIBUTION SECTOR (STREET FOODS AND FOODS SOLD IN SCHOOLS): IMPORTANCE AND CHALLENGES (AGENDA ITEM 7)

26. Dr Henry Gadaga, Zimbabwe, presented a document on the "Informal food distribution sector (street foods and foods sold in schools): importance and challenges (CAF 05/4)". The speaker provided a definition of street foods and highlighted the social, economic and nutritional importance of street foods in Africa. A review of the street food-vending situation in the region was presented, which revealed that there are many similarities in the status of street food vendors in the countries of Africa. He noted that the reasons for the increase in street food vending in Africa are mainly related to poor national economic performance and poverty. The presentation also highlighted the role of street food vending in improving the economic status of vulnerable groups, especially women. The speaker also outlined various aspects of national food control systems in Africa, their relation to street foods and the associated challenges. Several recommendations on strategies to improve food safety in the street food sector were presented and are included in the relevant section of the strategic plan.

27. The delegates thanked Zimbabwe for preparing the paper and agreed on the need to have a coordinated approach to addressing the food safety issues related to street foods.

28. The conference noted that street food vending is an important activity in the region, although it is illegal in many countries and by nature, is largely unregulated. The conference considered the possible value of regulating the sector and recording the names of the vendors to attempt to control the safety of the food produced.

29. The conference emphasized that ensuring the safety of street foods is essential. The challenges to improving the safety of street foods, such as low literacy rates of vendors, were also underlined. The conference recognized the need to include street food vendors as partners in the process of planning improvements in the safety of street foods. A multi-stakeholder approach was proposed as a more effective way of achieving the intended objectives of improving the safety of street foods. It was noted that other UN agencies, such as the United Nations Children's Fund (UNICEF) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), should also play a role in the control of street food, particularly to deal with the issue of children involved in street food vending. The conference recognized that NGOs, including consumer groups, also have a role to play in promoting the safety of street vended foods.

30. The conference noted the socio-cultural dimension of street foods and highlighted the importance of involving social scientists in advocating the improvement of the safety of street foods. The conference agreed that the source of raw materials as well as the practices of vendors would impact on the quality and safety of street foods.

31. Several delegations discussed the programmes to improve street food safety underway and planned in their countries and expressed their willingness to share that information as appropriate.

32. The conference appreciated the projects that FAO and WHO have implemented in street food safety and noted that FAO will be publishing a training manual on street food safety in the forthcoming

months. The conference requested FAO and WHO to continue supporting initiatives to improve the safety of street foods in Africa through awareness raising and training of street food vendors, information sharing and exchange and pilot projects that showcase the impact of improved safety.

X. ASSURING FOOD SAFETY AND QUALITY IN THE SMALL AND MEDIUM-SIZE FOOD ENTERPRISES (AGENDA ITEM 8)

33. The Government of Botswana prepared a paper on "Assuring food safety and quality in the small and medium-size food enterprises (CAF 05/5)". Dr Claude Mosha of Tanzania presented the paper in the absence of a representative of Botswana. The paper provided information on the economic and social importance of small and medium food enterprises (SMEs) in Africa, definitions of SMEs and the application of appropriate quality assurance schemes in food SMEs, including the benefits of GAP/GHP/GMP, HACCP and ISO quality management standards. The paper further outlined the obstacles to applying food safety management systems in SMEs in Africa, strategies for implementation of food safety and quality management systems in SMEs and case studies on approaches to food safety management systems. The paper presented several recommendations for assuring food safety and quality in SMEs, which are reflected in the subsequent section of the strategic plan.

34. The conference expressed its appreciation to Botswana for preparing the paper and to Dr Mosha for presenting it and agreed on the importance of improving food safety and quality in SMEs in Africa.

35. The conference stressed the importance of SMEs to the economies of the region and recognized the constraints facing SMEs in producing safe and high quality food, as well as the need to generate and implement practical solutions to address these problems. The conference emphasized that SMEs should not be intimidated by the implementation of HACCP systems or its pre-requisite programmes, but should view these principles as tools to improve the safety of the food they produce. The challenges related to certification of HACCP systems in SMEs were highlighted. The importance of implementing control systems on a case-by-case basis, rather than at a theoretical level was also noted.

36. The need for strong political commitment to implement policies to assist SMEs in producing safe food was underlined. The conference emphasized that government officials should serve as partners with SMEs, rather than simply policing the safety of their products. The conference also noted the importance of including provisions for improving the safety and quality of foods produced by SMEs in national food safety strategic plans.

37. The conference noted the successful experiences in some countries, as well as the particularly challenging issues faced by other countries recovering from war or with extenuating political circumstances in assuring the safety and quality of foods produced by SMEs. The need for sharing experiences in this regard was emphasized.

38. The conference agreed that food producers and regulators need to change their mindset from traditional food control approaches to modern, HACCP based approaches to ensuring food safety and quality. The need for training of trainers in this regard at the regional level, followed by national level training tailored to the situation of the country was emphasized.

39. The conference underlined the need for the countries of the region to be proactive in identifying their own problems as well as in developing and implementing solutions to those problems and then requesting external assistance if needed. The importance of implementing a "farm to table" approach to food safety, by educating farmers and small-scale producers and processors of practical actions to promote food safety, was emphasized.

XI. INTERNATIONAL, REGIONAL, SUBREGIONAL AND NATIONAL COOPERATION IN FOOD SAFETY (AGENDA ITEM 9)

40. Dr Patience Mensah, Regional Adviser for Food Safety from the WHO Regional Office for Africa, presented a paper on "International, regional, subregional and national cooperation in food safety (CAF 05/6)". The paper discussed the challenges facing food safety regulators and food safety assurance systems in Africa. It also identified opportunities for improving cooperation, collaboration and communication related to food safety by citing examples of good practices from the region, which emphasized that food safety assurance is *a shared responsibility*. In particular, the paper listed examples of cooperation between FAO and WHO and emphasized the need for cooperation at several levels, including cooperation between and within sectors at country level; cooperation between the public and private sectors, consumer groups and civil society and cooperation at regional, subregional and international levels. The paper provided several recommendations for consideration by member states that are reflected in appropriate sections of the strategic plan.

41. The conference agreed on the importance of cooperation in the region and expressed its appreciation to WHO for preparing the paper.

42. The conference discussed several problems associated with food control in the region, including dumping of sub-standard food in countries coming out from war situations, non-functional laboratories, lack of reference standards for laboratories, non-maintenance of equipment and improperly labelled food donations. The conference shared best practices on cooperation and coordination of food safety activities, including the following: a one source food safety information centre (Ghana); establishment of a Food Control Authority (Mali, Morocco, Zimbabwe); sharing of laboratory facilities (SADC region); and sharing of information in food safety emergencies (SADC region).

43. Many delegates recognized the ineffectiveness of existing systems and provided suggestions for future regional collaboration. These suggestions included the following: establishment of pan-African standards based on Codex standards; strengthening of regional positions in the Codex fora; publication of a list of rejected shipments to ensure that the shipment will not be received by another country; inventory of the capabilities of food safety laboratories in the region and identification and strengthening of centres of excellence in various aspects of laboratory analysis; establishment of a food safety desk within the African Union; and inclusion of food-borne disease surveillance in national integrated disease surveillance systems for reporting at the regional level.

XI. PROCEEDINGS OF THE WORKING GROUPS (AGENDA ITEM 10)

44. The conference agreed to discuss the following items in two concurrent working groups: 1) Strategic plan for food safety in Africa and 2) Food safety issues of regional concern. The two working groups were requested to discuss their respective themes and to propose concrete recommendations and practical actions to improve food safety in the region in these specific areas. The conference designated Dr Mohamed Majdi of Morocco as chairperson and Dr Mahamadou Sako of Mali as rapporteur of the first working group and Dr William Ssali of Uganda and Mrs Ethan Talatu of Nigeria as rapporteur of the second working group. The conference expressed their appreciation to these delegates for their agreement to serve in these roles.

45. The Working Group that discussed the recommended five-year strategic plan for food safety in Africa proposed revisions to the draft plan (CRD 20), as well as the draft resolution accompanying the strategic plan. The revisions to the strategic plan and to the resolution were reflected in a second version of these documents that were further discussed in the re-convening of the subsequent plenary session.

46. The discussions of the Working Group on food safety issues of regional concern were enhanced by presentations on the topics of food-borne disease surveillance in the region, as well as mycotoxins

and their effects on human health in Africa, which were intended to provide information and to stimulate discussion.

47. Dr Patience Mensah, WHO AFRO, provided information on the status of food-borne disease surveillance systems in the region, and stressed the need for individual countries of the region to collect data and report it to WHO for compilation and dissemination to the other countries of the region.

48. The Working Group noted that symptomatic food-borne disease surveillance is occurring in the region, for example, for cholera, but that the nature of symptomatic surveillance cannot specify the exact causative agent. The Working Group further noted that WHO would soon issue guidelines for conducting food-borne disease surveillance.

49. It was emphasized that laboratory surveillance is needed to determine the causative agents of food-borne diseases, but that this surveillance should be incorporated with the existing integrated disease surveillance system. However, it was emphasized that even if countries do not have strong laboratory structures, they should begin with what resources and infrastructure they have and continue to improve.

50. The Working Group called for an inventory of the laboratory capacity in the countries of the region, which would also allow for identification of Centres of Excellence in various aspects of laboratory food-borne disease surveillance.

51. The Working Group noted that food-borne disease surveillance is an extension of surveillance for other diseases, and should be integrated into such programmes. It was noted that food-borne disease surveillance must include information from medical professionals, food contaminant data, as well as veterinary and other data. The importance of food-borne disease surveillance data being integrated with veterinary surveillance data, especially related to zoonotic diseases from wild animals, was emphasized.

52. The Working Group noted that the countries of the region should be more proactive in seeking assistance from FAO and WHO and that the concerned government agencies must take ownership of projects implemented to ensure its long-term sustainability.

53. Dr Gordon Shephard of South Africa presented on the Mycotoxin situation in Africa. The presentation included information on the detrimental public health and economic effects of mycotoxin consumption in Africa. It was noted that exposure to mycotoxins is extremely wide spread in Africa, as Africans consume large amounts of foods such as maize and sorghum, which often contain high levels of mycotoxins when raised in the hot and humid conditions prevailing in many parts of the region. The speaker also emphasized the need for awareness raising and political commitment to address the issue of mycotoxins, in addition to simply enforcing legislation on the subject. The need for Good Agricultural Practices (GAPs), Good Storage Practices (GSPs), Good Manufacturing Practices (GMPs), and a HACCP approach was underlined, in addition to the need for the following: effective regional research on the issue, economic incentives for farmers to work to reduce the levels of aflatoxins in their products, education of consumers and producers, training, strengthened laboratory systems, reduction of poverty to decrease the likelihood of people consuming low quality food and improved agriculture extension services.

54. Dr Kafui Kpodo of Ghana presented on the Exposure to aflatoxins through food: a silent public health emergency. The presentation demonstrated that the levels of mycotoxins in various food products in selected countries of the region are excessively higher than the regulatory limits for exports into the EU and the US and the level recommended by Codex. The speaker also outlined several recommendations to address the issue of mycotoxins in Africa, including the following (those not indicated by the previous speaker): encourage national governments to recognize the importance of mycotoxins, utilize a multi-disciplinary approach, develop emergency assistance systems to replace

unsafe foods with safe foods in times of crises, validation of rapid and practical methods for screening of mycotoxins in an African context and establishment of regional centers of excellence in mycotoxins.

55. The Working Group recognized the need to utilize the alarming information provided in the presentations to obtain the political commitment necessary to effectively and sustainably address the issue of mycotoxins in the countries of the region. The necessity of linking public health data with economic data and presenting briefs to policy makers to convince them of the importance of addressing the issue of mycotoxins was also emphasized.

56. The Working Group emphasized the need for prevention of mycotoxins through the application of GAPs and education of producers and farmers. The Working Group considered the potential value of using novel and micro-level approaches to reduce mycotoxin levels in foods.

57. The importance of accurate sampling for the assessment of mycotoxins was also emphasized. The Working Group emphasized the need for increased advocacy, as well as for regular evaluation of the implementation of programmes to reduce levels of mycotoxins in foods in Africa.

58. The chairs of each working group presented the outcome of their group discussions in the subsequent re-convening of the plenary session.

59. Following the presentation of the report of the working group on "Food safety issues of regional concern", the conference discussed various issues raised in the report. The conference emphasized that the magnitude of the problem of mycotoxin contamination of foods in the region should be reflected accordingly in the regional strategic plan. The conference recognized the need to make available to farmers, extension agents and food producers, simple tests to screen for mycotoxins in the field and in production settings.

60. The conference discussed the issues related to the safety of foods derived from modern biotechnology and acknowledged that the issues were very complex. Some delegations expressed their concern over the safety of such products and other legitimate factors. The majority of the countries present at the conference indicated their view that all products containing genetically modified organisms should be labelled as such. The conference agreed that the countries of the region should have a well articulated regional position on the various aspects of genetically modified foods for presentation in the relevant international fora, such as the Codex Committee on Food Labelling and the Codex *Ad Hoc* Intergovernmental Task Force on Foods Derived from Biotechnology, the World Trade Organization, and the Cartagena Protocol on Biosafety. The conference agreed that discussions on the safety of foods containing genetically modified organisms is dealt with at the above-mentioned Codex Committees and that countries of the region should communicate their positions on this matter to the secretariats of these committees, keeping the FAO/WHO Regional Coordinating Committee for Africa (CCAfrica) informed of their positions.

61. The conference noted that developing a regional position on this matter would be difficult in this conference because of the multiple facets of this issue and the need to involve various stakeholders. Some countries did express reservations to developing a common position on the matter at this conference, as the scientific information available to the conference was not complete. It was suggested that the matter could be further discussed through an electronic discussion forum to develop a regional position on the issue. The conference stressed the need for countries to develop national regulations covering these products, taking into account their national conditions.

62. Following the presentation of the report of the Working Group on the revised recommended five-year strategic plan for food safety in Africa and related resolution, the conference suggested various revisions to the strategic plan and resolution, as well as the next steps for the implementation of the

plan. The resolution and strategic plan, which reflect the outcome of these discussions, are attached as Annexes 11 and 12, respectively.

XII. RECOMMENDATIONS OF THE CONFERENCE

63. The conference made a number of recommendations to member countries, to FAO/WHO, other relevant organizations and to donor governments. These recommendations are included in the resolution and strategic plan (Annexes 11 and 12).

XIII. ADOPTION OF THE REPORT

64. The conference reviewed and adopted the draft report, resolution and strategic plan, agreed that they would be public documents and requested the Secretariat to post them on the conference website and publish them through the usual channels.

65. The conference agreed to forward the report, resolution and strategic plan as an informational document to the 29th Session of the Codex Alimentarius Commission (Geneva, 3-8 July 2006) and to other relevant fora.

XIV. CLOSING OF THE CONFERENCE

66. The conference expressed its thanks to the Government of Zimbabwe for hosting the conference and to the group of permanent representatives of the region to FAO for their support in promoting this conference. It noted that the voice of Africa was heard in the organization of the conference, as well as in the discussions held during the conference. The conference also expressed its appreciation to FAO and WHO for organizing the event.

67. The FAO/WHO secretariat expressed their support for the implementation of the strategic plan and suggested that the first meeting of the follow-up committee could take place in conjunction with the 29th Session of the Codex Alimentarius Commission (Geneva, 3-8 July 2006). The secretariat noted that the updates on the activities of the follow-up committee would be posted on the website of the Conference (www.foodsafetyforum.org/african/index.asp). The conference noted the need for FAO/ WHO and the governments of the region to work together to have food safety included on the agendas of FAO and WHO governing bodies and to achieve the goal of safe food for all.

68. The Chairperson then closed the conference on behalf of the Minister of Health of Zimbabwe.

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ANNEX 2
(CAF 05/1)

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

PROVISIONAL AGENDA

Agenda Item	**Subject matter**	**Document Reference**
1.	Opening of the conference	
2.	Election of officers	
3.	Adoption of the Provisional Agenda and Timetable	CAF 05/1
4.	Keynote Address	CRD
5.	National food safety systems in Africa - a situation analysis	CAF 05/2
6.	Prioritization and coordination of capacity building activities related to food safety	CAF 05/3
7.	Informal food distribution sector (street foods and foods sold in schools): importance and challenges	CAF 05/4
8.	Assuring food safety and quality in small and medium-size food enterprises	CAF 05/5
9.	International, regional, subregional and national cooperation in food safety	CAF 05/6
10.	Working group discussions	
11.	Other matters	
12.	Adoption of the draft report	CRD Z

NOTES ON THE PROVISIONAL AGENDA

Item 1 - Opening of the conference: The FAO/WHO Regional Conference on Food Safety for Africa will be opened by a high-ranking African official.

Item 2 – Election of officers: Delegates will designate a Chairperson and a Vice-Chairperson to lead the plenary meeting of the conference.

Item 3 – Adoption of the Agenda and Provisional Timetable: In order to keep the conference focused, any proposals for additional topics must be relevant to the agenda and integrated and discussed with existing items.

Item 4 – Keynote address: A keynote address will be made by a senior food safety official from the African region.

Item 5 - National food safety systems in Africa - a situation analysis: The preparation of the paper will be led by the FAO/WHO regional and subregional food safety officers, including information and inputs from the countries of the region. It will address the economic, health, and social impacts of food safety systems of the region; analyze the strengths of the region and effective methods to utilize these strengths to overcome the challenges of improving food safety; and other relevant issues.

Item 6 - Prioritization and coordination of capacity building activities related to food safety: The preparation of the paper will be led by one of the countries of the region. It will address the long-term sustainability of the results of capacity building activities, prioritization for utilizing limited timeframes and budgets, and other relevant issues.

Item 7 - Informal food distribution sector (street foods and foods sold in schools): importance and challenges: The preparation of the paper will be led by one of the countries of the region. It will address the challenges of ensuring safe products, the current initiatives underway to improve the safety of these products, and other relevant issues.

Item 8 - Assuring food safety and quality in small and medium-size food enterprises: The preparation of the paper will be led by one of the countries of the region. It will address the economic importance of the sector, the barriers to the application of appropriate safety assurance schemes to control safety and quality, ways to mitigate these barriers and other relevant issues.

Item 9 - International, regional, sub-regional and national cooperation in food safety: The preparation of the paper will be led by the FAO/WHO regional and subregional food safety officers. It will address the challenges in sustainability of regional and subregional networks; the role of public/private partnerships; the need for collaboration, coordination, and communication between and among all partners involved in food safety; and other relevant issues.

Item 10 - Working group discussions: Participants will divide into two working groups to further discuss various aspects of an action plan to improve food safety in the region.

Item 11 – Other matters: Any other matters will be discussed at this time.

Item 12 – Adoption of draft report: The Chairperson of the conference will present the draft report of the discussions as drafted by the Secretariat. The draft report should fully reflect the different points of view and approaches expressed during the conference.

ANNEX 3

Welcome remarks by the Minister of Health and Child Welfare
Hon. Dr D. Parirenyatwa

Your Excellency the President of Zimbabwe, Cde R.G. Mugabe,
Our honoured guests – Dr H. de Haen, Assistant Director-General, Food and Agriculture Organization and Dr C. Mwkisa, World Health Organization, Representative for the Africa Region.
Our Guests the Honourable Ministers from various countries in the region.
Honourable Ministers, Your Excellencies members of the Diplomatic Corps, distinguished delegates and observers, ladies and gentlemen.

I am happy and honoured to welcome you all to our country and to this important Regional Conference on Food Safety for Africa. We hope and wish you have a successful meeting and that the proceedings go on well.

The conference underlines the importance of food safety and food security in this our region Africa.

There is an urgent need to develop appropriate strategies and regulations for the food safety control systems to address such issues as street vended foods and the monitoring of food that is imported as well as exports.

Outside the conference rooms, we invite you to a reception where we expect further interactions with each other in less formal environment.

On Wednesday we have organized tours to some of our food processing plants and markets for all of you. We hope you also enjoy these visits.

We encourage you to visit our many shopping malls and other attractions in Harare.

Once again, welcome to Zimbabwe, we are very honoured to have you as our guests.

Thank you.

ANNEX 4

OPENING REMARKS
Hartwig de Haen
Assistant Director-General, Economic and Social Department
Food and Agriculture Organization of the United Nations

Excellencies, honourable guests, distinguished delegates, ladies and gentlemen.
Your Excellency, Mr Mugabe, President of Zimbabwe,
Your Excellencies Dr Parirenyatwa, Ministry of Health and Child Welfare of Zimbabwe, and Mr Made, Minister of Agriculture and Rural Development of Zimbabwe,
Your Excellencies, Ministers from various countries of the Africa region,
Distinguished Ambassadors and representatives of the Diplomatic Corps,
Dear colleagues from WHO and other UN agencies;
Distinguished delegates, ladies and gentlemen!

It is my pleasure to welcome you on behalf of the Food and Agriculture Organization of the United Nations to the FAO/WHO Regional Conference on Food Safety for Africa. This conference is part of a series of regional conferences that FAO and WHO are convening to provide a forum where food safety officials from the region can get come together to share information and experiences on how the safety of foods may be improved. FAO is grateful to the Government of Zimbabwe for hosting this conference and I thank the organizing committee for the efforts made to make this a successful event.

The importance of food safety

The issue that has brought us together here, food safety is of critical importance to Africa. Let me just mention four reasons:

- **First, food safety is a critical element of food security**. More than one third of the African population suffers from chronic undernourishment. Moreoever, FAO's latest Africa Report lists 24 sub-Saharan African countries in which people face food emergencies. X # of people in Africa are considered to be food insecure, some of which may be due to a lack of food safety controls.For many of these food insecure people, the problem is not just the lack of food, but also the lack of safety of the food they eat and the water they drink.

- **Secondly, lack of food safety has a high cost**. Each outbreak of food-borne illness causes not only human suffering, but also direct and indirect costs. In developed countries, these costs amount to US$100/person/year on average. They and t could be even greater in developing countries, and they include the loss of lives. For Africa, it is estimated that 800,000 children in Africa die each year from diarrhea and dehydration. 70 % of the cases are likely caused by unsafe food. .

- **Thirdly, improving food safety has the added advantage that it helps reduce food losses** or even avoid them. In short, improved safety of food can contribute to increased availability of food.

- **Finally, greater food safety is important for both exports and imports**. For example, Kenya was able to increase its exports of Nile perch to the EU more than five-fold, by implementing a Hazard Analysis Critical Control Point system to improve the hygiene of fish processing. It was predicted that failure to meet the food safety requirements of the 2001 EU aflatoxin standard would lead to a decrease in the value of African exports of cereals, dried fruits and nuts to the EU by 64 percent or US$670 million. And proper import inspection is needed to avoid that contaminated foods reach consumers in importing African countries.

Challenges to improving food safety

Despite increased global knowledge and availability of advanced tools and approaches, many challenges remain technologies to improving food safety in the region. Let me mention some:

1) The ability of many countries to **monitor** food-borne diseases and **to implement food safety measures** is inadequate. A number of countries even lack the basic infrastructure such as regular access to electricity, safe water, transportation and storage. They need capacity building in food safety.

2) **However**, **capacity building efforts in the region are often lacking or fragmented**. Where donors provide technical assistance, their interventions may not be well coordinated.

3) Many national borders are large and basically unchecked, allowing movements of substandard food.

4) **Foods crossing the often long national borders are commonly unchecked**. As a result, sub-standard foods cross the borders. The challenge is to improve subregional cooperation to ensure the safety of food in transit.

5) There is **an increasing burden on the food supply in locations with high population density**. This trend is growing with rapid urbanization and with at times massive population movements following emergencies. Special measures are needed to ensure the safety of foods in these locations. For example there is a need to improve the safety of street foods.

6) The **extreme weather conditions** that often affect the region further strain food control systems. Crops grown and stored under such conditions are more susceptible to mycotoxin contamination. As was reported, more than 100 people died in one country in mid-2004, as a result of consuming maize that was heavily contaminated by aflatoxins.

Many of these issues will be addressed in the plenary and working group sessions, the side events, and in informal discussions held at this Conference this week. We encourage you to take advantage of these opportunities to learn more about these important subjects and to share your experiences with others so they may also benefit.

Strategic actions needed to ensure food safety

In light of these many challenges to improving food safety, **a strategic plan of action** is needed for the African region. The draft version of such a plan will be discussed and hopefully adopted during this conference. Once adopted, we hope donors will also support it.

This draft plan foresees **measures at all levels** ranging from legislation to inspection services, surveillance and communication. While the main responsibility for action lies with governments, civil society and the private sector at national level, certain measures are better taken at subregional and regional levels.

The **aim of the Plan** is to improve the safety of food consumed by the Africans and also to enable African exporters to better comply with the standards existing in countries to which food is to be exported.

FAO promotes the utilization of a **food chain approach to food safety**. The application of good agricultural practices at the primary production level, as well as good practices throughout the chain, should improve the safety of food products.

Practical actions by FAO and partners to promote food safety

FAO is already working with other partners to implement practical actions to promote food safety in the region and throughout the world. These include:

1) **Capacity and technical assistance**. For instance, building on past actions, FAO is currently supporting three regional and 14 national projects, with several others under development.

2) FAO is working with WHO, OIE and the World Bank in the **Standard and Trade Development Facility**, housed in WTO and aiming to mobilize and coordinate support for capacity building in the areas of food safety, plant and animal health.

3) FAO and WHO are also managing a **Trust Fund for Participation in Codex.**

4) FAO, together with WHO, provide **expert scientific advice on food safety risks** to members of the Codex Alimentarius Commission.

5) Holding of expert consultations (often with WHO) on open issues. Recent examples include Microbial Risk Assessments, Acrylamide in foods, and the Safety Assessment of Genetically Modified foods.

6) FAO, with other agencies, has developed the **International Portal on Food Safety, Animal and Plant Health,** which offers national governments and trading partners' access to relevant official information.

Conclusion

Many countries in Africa have made great progress in improving their food safety systems and increasing the competitiveness of their food products on the international market. **These efforts need to be strengthened and expanded.**

The region has **great potential** for producing high quality food products for both domestic consumption and export around the world. However, countries must give higher priority for food safety, not only to enable the region to further improve its trading opportunities, but also to protect the health of their own consumers domestically.

Regional cooperation and information exchange at all levels can provide a means to advance this goal. FAO and WHO have jointly convened this Regional Conference on Food Safety for Africa for exactly these purposes.

We in FAO stand ready to assist your countries in the efforts to strengthen capacity to better regulate and ensure the safety of food for all your citizens.

ANNEX 5

OPENING REMARKS
Dr C.N. Mwikisa
Director, Division of Healthy Environments and Sustainable Development
WHO Regional Office for Africa

Your Excellency, President of the Republic of Zimbabwe,
Honourable Ministers,
Assistant Director-General of FAO,
Excellencies, Members of the Diplomatic Corps accredited to Zimbabwe,
Distinguished Guests and Participants,
Fellow Colleagues from FAO and WHO,
Ladies and gentlemen,

I welcome you all on behalf of the Director-General of the World Health Organization, Dr Lee Jong-wook and on behalf of Dr Luis Gomez Sambo, the Regional Director, to the First Regional Conference on Food Safety for Africa, organized jointly by the Food and Agriculture Organization and the World Health Organization.

Permit me to use this occasion to thank Your Excellency, and the Government and friendly people of Zimbabwe for having accepted to host the First Conference on Food Safety for Africa. Mr President we are most grateful. May I say on behalf of WHO/FAO and the participants at this forum that the preparations made by Zimbabwe have been excellent?

Excellencies
Distinguished Ladies and Gentlemen,

Food is a source of energy and nutrition and also contributes to our general well-being. Food acts nevertheless as a vehicle for the transmission of a variety of disease causing agents such as bacteria, parasites, viruses, fungal toxins and pesticides. The burden of all food-borne diseases is difficult to estimate but is likely to be significant. The incidence of diarrhoea diseases caused by consumption of contaminated food and water is estimated at 3.3 to 4.1 episodes per child per year, is indicative of the problem. The total mortality due to diarrhoea is around 700,000 for all age groups in Africa. Several devastating outbreaks of food-borne diseases such as cholera, salmonellosis, entero-haemorrhagic *Escherichia coli* (EHEC), hepatitis A and acute aflatoxicosis have occurred in a number of African countries recently. For example, outbreaks of cholera in 2004 in 28 countries resulted in 85,807 cases and 2,221 deaths. In 2005, reports from 30 countries indicated that so far 33,934 cases and 1,161 deaths have occurred. During the 2004, an outbreak of acute aflatoxicosis, in Kenya reported 317 cases and 125 deaths. Another outbreak reported a further 74 reported cases and 28 deaths in 2005. We should remind ourselves that the outbreak cases only shows us the tip of the iceberg and many more sporadic cases go unrecorded.

It is also noteworthy that, in addition to death and ill health, food-borne diseases have profound economic consequences. The economic cost in food replacement during the 2004 outbreak of acute aflatoxicosis in Kenya was 166,000 metric tonnes of safe food for 1.8 million people over six months. In 1990, the Food and Drug Administration of Nigeria destroyed aflatoxin-contaminated food worth more than US$ 200,000. In 1997, a ban imposed on Ugandan fish exports to the European Union markets that resulted in losses amounting to US$36.9 million. A cholera outbreak in Tanzania in 1998 cost about US$36 million in lost revenue.

Some Member States have good infrastructure for food safety activities but most countries share similar health related characteristics, namely: poverty, poor environmental hygiene and sanitation, poor public health funding and inadequate disease surveillance. Civil strife, border conflicts, population displacement, droughts, floods and weak communication and information systems also compound the problem. Member States are urged to aspire to ameliorate these factors and build efficient integrated food safety systems covering the entire food chain. These systems must be developed in close collaboration between the health and the food production/agriculture sectors.

In recent years, African consumers are seeing changes in the way food is produced and processed that impact on safety. For example, there is a shift from eating home-prepared food to consumption of ready-to-eat foods, which are often sold as street foods in many countries. Street food vendors provide essential service to workers, shoppers, travellers, school children and people on low incomes. The hygiene aspects of vending operations are a major source of concern for food control officers as street vended foods are often associated with frequent food poisoning.

Food insecurity is also pervasive, making it critically important that we use the resources at our disposal effectively and efficiently. Food being a scarce resource requires special attention to ensure that the little that is available is **safe** for human consumption. In many African countries, food still continues to be produced on subsistence basis. As a result, Africa imports about 60% of its food supply. This presents huge challenges, as it is especially difficult to monitor the safety of food grown and processed abroad.

Globally, there is a paradigm shift, which will no longer only consider food as an agricultural/trade commodity but also as a public health issue. At the international level, the 1992 FAO/WHO International Conference on Nutrition recognized that '*access to nutritionally adequate and safe food as a right of each individual'*. As a basic human right, food safety was endorsed by the World Health Assembly in May 2000 and accepted by all Ministries of Health as an **essential public health function**. WHO in consultation with its Member States developed a Global Strategy for Food Safety, which provides guidance to WHO and countries' activity in this area. At the regional level, Resolution AFR/RC53/R5 endorsed by the WHO Regional Committee for Africa in 2003 urged the Regional Director and Member States to strive to improve food safety programs in order to assure the safety of the food of the people in the region.

Despite this and the dramatic changes in the market place, the regulatory tools available to Member States to prevent food poisoning have changed minimally. One area of oversight that needs improving is food-borne disease surveillance and food monitoring. WHO is supporting Member States in food-borne diseases surveillance through the Global Salmonella Surveillance Program (Global Salm surv). WHO will continue to build capacity and strengthen Public Health Laboratories to enable them carry out these activities effectively and efficiently as components of Regional and National Integrated Disease Surveillance. Member States are encouraged to maintain comprehensive and up-to-date inventory of trends in food-borne diseases including outbreaks to inform decision-making and risk management.

WHO will continue to provide support for the revision of food laws and legislation, implementation of Codex standards, effective participation in the work of Codex Alimentarius and preparation of national action plans. Our programmes will in particular focus on consumer education by reaching out to schools, hospitals, and market places as well as by working closely with civil society.

Making food safe will not only protect the health of the consumer but will also produce a healthy work force and increase food exports. It will thus contribute significantly to activities aimed at poverty alleviation (MDG 1) as well as reducing child mortality (MDG 4). We will work with Member States and our partners on micro-projects, aimed at improving the safety of food from all producers and processors, in the hope that this will improve the economic status of the people and thus contribute to

the achievement of the Millennium Development Goals including also MDG8: developing a global partnership for development, which will have to be based on increased food export from our countries to richer parts of the world.

Excellencies,
Distinguished Participants and Guests,

To conclude I wish to reiterate our optimism despite the numerous food safety challenges in Africa. At WHO we remain convinced that with increased dialogue, harnessed energies of various actors, cooperation and focused efforts at all levels as well as increased resources, we can collectively improve the safety of the food of the people in Africa. Our vision is very clear and we strongly believe we have the discipline to achieve it.

Thank you very much.

ANNEX 6

Speech by
His Excellency the President of the Republic of Zimbabwe
Comrade R.G. Mugabe,
On the occasion of the official opening ceremony of the
Regional Conference on Food Safety for Africa
Harare International Conference Centre
3 October 2005

Honourable Minister of Health and Child Welfare, Dr David Parirenyatwa,
Honourable Minister of Agriculture, Dr Joseph Made,
Honourable Ministers from Kenya, South Africa, Zambia, Mozambique, Gabon,
Democratic Republic of the Congo and Angola,
Representatives of the Food and Agriculture and the World Health Organization,
Your Excellencies Members of the Diplomatic Corps,
Distinguished Delegates,
Ladies and Gentlemen,
Comrades and Friends,

Zimbabwe is indeed honoured to host this Regional Conference on Food Safety for Africa, which is jointly sponsored by the Food and Agriculture Organization and the World Health Organization, in partnership with the Government of the Republic of Zimbabwe. In this spirit of partnership, let me welcome you all to Zimbabwe and to this important conference.

This conference comes at a time when developing countries, particularly those in Africa, are facing enormous challenges in the areas of food safety and security while also contending with the emergence of food-borne diseases.

Relatively weak food safety systems, coupled with unpredictable droughts, have had a negative impact on regional food security, thereby resulting in a growing prevalence of food-borne diseases. These challenges are compounded by the HIV/AIDS pandemic, a rise in informal food vending practices which are often unregulated, the influx of new foods from new technologies and the dumping of other foods into developing countries, often under Food Aid Programmes. Indeed, the so-called food aid gestures have, to a large extent, crippled the commitment and seriousness that should attend agricultural development on the continent. We need a rethink on matters of agriculture, especially given the fact that much of our economic activity revolves around it.

Zimbabwe's much-vilified Land Reform Programme is our response to the challenge of empowering more of our people and therefore creating a wider base of farmers in the country. At no time have we regarded the programme as one to dispossess those, who through colonialism were in possession merely for the sake of it. Rather, its objective was to redress the fact of colonial injustice, empower the majority of our people, and proceed to improve the agricultural sector performance by increasing the numbers of our farmers. In our fight for freedom and independence, one of the pillars of the struggle was the land grievance.

Having restored the land to the people, we have learnt a host of lessons, all pointing to the challenge of ensuring food security for the people. Chief among these is that of engaging more scientific methods to ensure greater productivity of all the resettled land. Further, the droughts that I made reference to earlier have raised the need for us to plan and embark on a systematic national irrigation development programme.

Our countries should also develop sufficient capacity to regulate informal food vending practices. This is particularly important as the need to monitor the quality of food from outside our borders is becoming more urgent.

In most of our countries of the region, livelihood mainly depends on agriculture and trade in agro-based products. Global trade in such products is at present at the disadvantage of our developing countries because the current World Trade Organization rules have created fertile ground for unscrupulous competition and bad practices in the selling and marketing of food products. In its 2004 Millennium Development Goals Progress Report, Zimbabwe underscored the imperative of working towards open, rule-based, predictable and non-discriminatory trading and financial systems.

Under these circumstances, it is imperative that the region, in partnership with others, develops integrated strategies and practices to protect the health of our populations. For this reason, this conference comes at an appropriate time, giving our countries an opportunity to work towards safe food standards. Let me assure you that you will find Zimbabwe a willing partner in this regard. Zimbabwe's commitment is evident, judged by its active participation and contribution to organs of the Food and Agriculture Organization and those of the World Health Organization such as the Codex Alimentarius Commission, the World Organization for Animal Health and the International Plant Protection Commission.

In Codex, Zimbabwe had the honour of being the coordinator for the Africa region for two terms during the years 1995 to 1999. In addition, Zimbabwe was elected to the Vice Chairmanship of Codex for the period 1999 to 2003, during which period the Commission underwent extensive reform and saw the establishment of the Codex Trust Fund to support the participation of developing countries in Codex activities. Currently, Zimbabwe is a member of the World Organization for Animal Health executive. I wish to thank you for the trust you have placed in us.

Let me also take this opportunity to acknowledge the support which Zimbabwe has received from the Food and Agriculture Organization, the World Health Organization and the United Nations Industrial Development Organization.

In particular, I note with satisfaction the support rendered to the legal framework for the establishment of the Zimbabwe Food Safety Control Authority. This will further enhance the country's capacity in monitoring food safety.

It is my hope that this conference will not only be a forum for the exchange and sharing of information and experiences, but will go further in enabling our countries to be equipped with workable, practical and realistic actions, for improving the safety of food consumed in our countries. The conference must propel us to engage seriously in actions and activities that make food safety and security a necessary part of national development programmes.

Let me once again thank the Food and Agriculture Organization and the World Health Organization for sponsoring this conference. I also wish to thank our Ministry of Agriculture and that of Health and Child Welfare for organizing the same meeting.

May I wish all of you fruitful and productive deliberations and indeed an enjoyable stay in Zimbabwe. It now gives me pleasure to declare this Regional Conference on Food Safety for Africa officially open.

I thank you.

ANNEX 7

Vote of thanks
On the occasion of the official opening ceremony
on the Regional Conference on Food Safety for Africa
by Hon. Dr J.M. Made (MP) Minister of Agriculture
of the Republic of Zimbabwe

Master of Ceremonies
Your Excellency the President of the Republic of Zimbabwe Cde R.G. Mugabe
Hon. Minister of Health and Child Welfare
Dr David Parirenyatwa
Hon Ministers from Kenya; South Africa; Zambia; Mozambique; Gabon;
The Democratic Republic of the Congo and Angola
Hon Ministers and Members of Parliament of the Republic of Zimbabwe
Your Excellencies Representative of

- The Food and Agriculture Organization (FAO) Dr H. De Haen
- The World Health Organization (WHO) Dr L Sambo

Your Excellencies Members of the Diplomatic Corps
Senior government officials (Permanent Secretaries)
Distinguished Delegates and Observers
Ladies and Gentlemen
Comrades and Friends

On behalf of everyone here, I propose and move a special vote of thanks to you Your Excellency. We appreciate your warm welcome to our visiting delegates from outside Zimbabwe.

Your Excellency we thank you for your wise counsel and guidance on what we should achieve in the coming few days of the conference meeting and that is:-

'We should not only exchange and share information and experiences but to actually equip ourselves with workable practical and realistic actions for improving the safety of food consumed in our countries'.

Which means in the first place the farmers should produce crops and livestock the right way in the light of new technologies that are not correct (modified organisms and diseases in livestock such as mad cow etc.) and you further noted from a health and food safety point of view that food vending without noting potential threats to consumers is not acceptable.

Your Excellency we also thank you for reclaiming our land rights and other natural resources from the Anglo Saxon as you said in your interview aired on CNN International on the 1st and 2nd October 2005.

Your position on behalf of Zimbabwe, Africa and the down trodden at large has laid the basis on which we chart our destiny in producing safe and healthy food on the African Continent.

Your leadership is highly appreciated. Thank you Your Excellency for taking this time from your busy schedule to be with us.

We wish you Your Excellency continued good health, strength and greater determination.

I also give great thanks to those who have spoken and those who have attended this official opening ceremony of our Regional Conference.

Last but not least, every worker, sweeper, driver, cook and organizer who has made this day and indeed the days to come comfortable and our regional conference to be a great success.

Once more thank you, Your Excellency.

ANNEX 8

Keynote Address by
Prof. Edward S. Ayensu
Chairman, Council for Scientific and Industrial Research (CSIR), Ghana

Distinguished Delegates,
Ladies and Gentlemen,

I would like to take this opportunity to express my sincere thanks to the organizing committee for inviting me to deliver the keynote address for this Regional Food Conference on Food Safety for Africa under the theme "Practical Actions to Promote Food Safety".

The importance of food goes beyond it being the main source of energy and nutrition. Food also plays the enviable role of being the strategic tool for sustaining our health, for providing our livelihood security and for maintaining the very survival of the human race. That is why the world is no longer just interested in how much food is produced and consumed, but even more importantly, what quality of food is being supplied to consumers.

This demand for wholesome food has driven scientific researchers to probe and to deepen our understanding of the inputs, production, handling and end products of food, and possible hazards that they could pose to the consumer. We are all now aware that there exist some stages in the food chain which are critical in ensuring that wholesome food gets to the table of every consumer.

For example, the unsatisfactory post harvest handling of grains in many African countries, especially the countries that experience continuous hot and humid climatic conditions, has been held responsible for the high incidence of aflatoxin contamination of large quantities of crops that are produced in the region. Research studies indicate that in Africa the incidence of liver cancer shares a distinctive geographical distribution with that of aflatoxin contamination of food. Furthermore, this and other data show conclusively that aflatoxins are potentially carcinogenic to humans. These results should be a matter of great concern to all African governments and their friends because these grains constitute major staples for the people in the region.

It is therefore imperative that Africa builds the needed capacity to ensure that enough quantities of wholesome food are made available to consumers. This is a responsibility that our governments and the private sectors of our economy cannot afford to shed to others. The reason is that wholesome food holds the key to our livelihood security. Frankly speaking, the time has come for us to call on our own governments to take full responsibility to protect our consumers instead of placing their total reliance on this issue at the doorsteps of the traditional donors and international financial institutions.

I am, however, pleased to note that these concerns have been brought on board for deliberation at this conference.

It is also heart warming to observe that laudable efforts are being made by a number of African countries to put in place the necessary institutions and regulatory measures to promote and ensure consumer confidence in the food production chain. In my own country, Ghana, for example, the Food and Drugs Board, (FDB) the Ghana Standards Board, (GSB) the Ministries of Health, Food and Agriculture, Fisheries, the Environment and Science, and Tourism, just to mention a few, are all actively engaged in one way or the other in the surveillance and monitoring of food safety regulations in the country. Other countries also have made great efforts in improving the coordination of their national food control systems. For example, Morocco has instituted a Permanent Inter-ministerial Committee for Food Control.

It is therefore a good sign that African governments are increasingly conscious of the multi-sectoral nature of food safety issues. But there still exists the need to encourage national food safety bodies to become more active in the promotion and application of the Hazard Analysis and Critical Control Point (HACCP) concept. Creative ways have to be found in the identification, strict control and monitoring of the most critical points of possible contamination within the African context which is characterized by many scattered producers and food handlers. It is obvious that we cannot ensure food safety successfully without dealing holistically with the concerns of the main players in the food industry. One cannot for instance, expect our farmers, with their present state of knowledge, to readily accept and voluntarily comply with all the regulations in respect of chemical handling and application on their farms.

Therefore, it is absolutely essential that a policy is developed to bring on board all the stakeholders in the food chain to share in the responsibility for safe, fit to eat, nutritious and wholesome food to all our people. Such a policy framework would ensure that farmers are trained to become conversant with the rules for applying various chemicals on their fields, while others in the succeeding points in the crop handling chain are equipped with the necessary skills to identify and accordingly handle the varied types of chemical and microbiological contamination.

In addition, African governments should put in place national monitoring programmes to provide accurate data on levels and trends in food contamination. Such monitoring programmes can be used as a basis for instituting preventative regulations. This is one of the surest ways of preventing unsafe food to be sold to the public.

All these measures cannot amount to much without extensive public education. The need for consumer awareness creation on a mass scale is not only highly desirable but also critical. I am pleased to observe that a number of NGOs in our countries are becoming consumer protection advocates, because they realise that consumers are becoming vulnerable to the commercial instincts of local and foreign distributors and importers of food. It is unfortunate to note that some food importers and their local distributors do not care if they put on the market expired food items which in many cases are not fit for human consumption.

It is gratifying to note that the countries of the region, in planning this conference have indicated in the objectives that they hold the issue of consumer awareness very dear in their calculation. Indeed, no effort must be spared to find practical solutions to create and strengthen consumer awareness in our countries as soon as practical. Africa's quest to become successful at pushing back some of its myriad problems, including the provision of wholesome food to the population and for export, depends in a large measure on the raising of food safety awareness of consumers.

The increasing globalization of food trade has notably resulted in shifting food consumption patterns, new production methods and technologies, faster trans-boundary transfer of microbiological and chemical hazards into the region. We need to be prompt in developing the human, legal and material capacities to deal with the aforementioned threats as well as the outbreak of new animal diseases such as the mad cow disease and the bird flu which is currently raging in some countries and also affects the human food supply.

In this regard, it is also important that Africa confronts the issue of genetically modified foods in a pragmatic manner, and not with just emotions, since biotechnological engineering has become a realistic scientific proposition for boosting agricultural productivity, improving resistance of crops to attacks by insects and diseases, and enhancing food quality. These are quite attractive prospects for Africa to consider in attempting to provide answers to the difficult challenges of providing both enough quantity and wholesome quality food to our peoples.

We cannot however, forget that no matter how attractive these scientific breakthroughs are, serious concerns have been raised in respect of biodiversity preservation, biosafety, and food safety in the long term. African scientists cannot remain passive or unconcerned while the rest of the world battles with new ideas which are conducive to the creation of the right institutional framework and regulatory safeguards for food safety. We must be actively involved in the cutting edges of the science and technology research being done in other countries.

Africa must begin to assert itself based on scientifically justifiable facts in order not to become a dumping ground, not only for unwholesome foods, but also, unworthy ideas in the bargain. I trust that this conference is more than capable of raising some of the critical interventions to ensure that food, whether produced locally or imported would meet the generally acceptable international standards of food safety.

I would like to take this opportunity to call on African countries to look beyond their individual country borders and to begin to explore ways and means of collaborating with other countries in the region, with international organizations, both public and private, and with civil society organizations in order to harmonise their legal and policy framework.

African governments must take the leadership role in handling this issue. We should not be passive! In fact we should not be despondent about the enormous difficulties that lie ahead. It is very possible that if African governments vocalise the terrifying statistics of our people who are exposed to unwholesome foods and the ensuing needless health problems we may encourage donor agencies, who are losing heart of Africa's numerous problems, to rekindle their spirit of cooperation and development assistance programmes.

Finally, I would like to acknowledge the fact that we have always benefited greatly from the support and assistance of the United Nations Organizations such as the FAO and the WHO, especially in the area of food safety. I trust that we can continue to count on them in the years ahead.

Thank you for your attention, and I wish you a successful conference.

Agenda Item 5

ANNEX 9
(CAF 05/2)

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

NATIONAL FOOD SAFETY SYSTEMS IN AFRICA – A SITUATION ANALYSIS

(Paper prepared by FAO Regional Office for Africa, Accra, Ghana)

1. Introduction

In a region where food insecurity, political instability, communicable diseases, natural disasters and other major concerns dominate government agendas and the news media, the importance of food safety is often not well understood. However, food safety is of critical importance to Africa because of its aggravating impact over the above listed concerns.

The 1996 World Food Summit Plan of Action recognized the importance of food safety, as it defined food security as: "…when all people … (have) access to sufficient, safe and nutritious food …". Furthermore, food-borne illnesses contribute to decreased worker productivity, disability, and even early death, thus lowering incomes and access to food. Food-borne illnesses also contribute to human suffering in the region. There is a high incidence of diarrheal diseases in African children, estimated as 3.3 to 4.1 episodes per child per year. It is estimated that 800,000 children in Africa die each year from diarrhea and dehydration[1].

Practices aimed at improving food safety also reduce food losses and increase food availability. In addition, countries that are able to ensure safe food can take advantage of international trade opportunities, thereby increasing income levels. For example, Kenya was able to increase its fish exports to the EU from 742 metric tons in 1999 to 2 818 tons in 2001 as a result of strengthening their food safety measures. For various reasons, governments of the region may not be able to enforce proper food import inspections, causing potential inflow of sub-standard and even unsafe imported food. This lack of access to safe food, low income levels and a sense of injustice in trade issues are often an important factor in increased political turmoil, further underlining the importance of food safety for the region.

Persons suffering from diseases such as HIV/AIDS, tuberculosis, malaria, and other various ailments affecting the region are at a greater risk to be debilitated by unsafe food, as their immune systems are already compromised. Thus, the assurance of safe food is essential to improving the quality of life for those already affected by disease. Equally, persons suffering from food-borne illness are more likely to contract other communicable diseases. Furthermore, food-borne diseases are one of the most important underlying factors for malnutrition and, indirectly, for respiratory tract infections in developing countries. Repeated episodes of food-borne diseases over a period of time can lead to malnutrition with a serious impact on the growth and the immune systems of infants and children.

Natural disasters such as droughts and floods also often affect the region. Crops grown and stored under such conditions are more susceptible to mycotoxin contamination, a harmful naturally occurring toxin. For example, more than 100 deaths were reported in the region in mid-2004, due to acute mycotoxin intoxication.

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[1] Fact Sheet No. 109: Childhood Diseases in Africa. WHO. 1996.

Unfortunately, the food safety systems in most countries of the region are generally weak, fragmented and not well coordinated; and thus are not effective enough to adequately protect the health of consumers and to enhance the competitiveness of food exports. It is, however, recognized that improving food safety systems has many short and long-term costs and can be a challenging process for many countries to undertake.

Although the situation in every country is affected by the particular country conditions, some common principles and components of an effective food safety system are generally needed in each country. Each of the main components of an effective food safety system will be discussed below, addressing the overall situation of each, as well as recommendations to be considered by the Conference. It should be noted, however, that a full analysis of the food safety control systems in Africa would require a much lengthier and more comprehensive study of the situation in the individual countries, and would go beyond the size limit of the present document.

2. Overview of the components of FSMS in Africa and actions required to address deficiencies

2.1 National food safety policy

Coherent national food safety policies are the foundation for effective food safety management systems. In general, food safety concerns are not adequately addressed in national governmental policies in most African countries; therefore, coordinated and sustainable approaches to the holistic management of food safety cannot be adopted. As previously indicated, most countries of the region do not appreciate the major public health and economic implications of food safety, so food safety remains a low priority in national policy making. Therefore, governments of the region must work to understand the public health and economic benefits of improving food safety systems, and, accordingly, develop coherent national food safety policies, in consultation with all stakeholders, including the food industry, relevant research institutions and consumers.

2.2 Food legislation

The traditional food control systems in most African countries do not provide the concerned agencies with a clear mandate and authority to prevent food safety problems. Furthermore, food legislation that is in line with international requirements (Codex) is lacking in many African countries. As evidenced in Table 1, the existing food legislation is outdated, inadequate, fragmented and can be found in various statutes and codes, creating an evitable confusion among food control enforcement agents, producers and distributors. Enforcement of food legislation is also problematic, often resulting in insufficient consumer protection against fraudulent practices and contaminated food products, and leading to the importation and domestic production of substandard food items as well as trade rejections of food exports from the region. The informal sector, which is often a significant producer and distributor of fresh and processed food products (including street foods[2]) for direct consumption, is often outside the scope of official control systems and remains the least controlled, except by municipal environmental hygiene authorities.

Basic food laws must emanate from national food safety policies that acknowledge the importance of a science based approach to food safety and clearly define responsibilities for the implementing agencies. Governments are encouraged to utilize tools and advice provided by FAO and WHO in the development of food legislation, as well as all other aspects of national food control systems. In particular, the 2003 FAO/WHO Guidelines for Strengthening National Food Control

[2] An in-depth discussion of issues related to the safety of foods from the informal distribution sector in Africa, including street foods is available as CAF 05/4.

Systems[3] offers interesting options that may be considered in this field. As with food safety policies, all relevant stakeholders must also be involved in the development of food legislation, which should also increase the rate of compliance with the laws and regulations.

2.3 Development of national food standards

Globalization of food markets compels nations to develop food standards that are responsive to the needs of users as well as being accepted and recognized internationally. The WTO SPS Agreement stipulates that national sanitary and phytosanitary standards that are based on internationally agreed Codex Alimentarius, IPPC or OIE standards do not require further scientific justification. As indicated in Table 2, some of the countries of the region have national standards bodies that establish food standards, often based on the relevant Codex standards. However, the food standards authorities in many other countries are not well defined and are not actively engaged in the establishment of national food standards.

As part of the overall food safety management system, national governments should establish food standards based on the Codex Alimentarius. Similar to food safety policies and legislation, all stakeholders, including consumers, must be involved in the development of national food standards.

2.4 Science-based risk assessment of food safety issues

While there is an almost universal agreement that a sound scientific risk assessment is an essential part of the basis for any food safety risk management decision, meeting the need for competent, timely and independent risk assessments presents a considerable challenge to most African countries. Risk assessments are needed for establishing relevant food safety legislations, as well as to assist in the establishment of food inspection priorities and other food safety policies. FAO and WHO have recently developed a Food Safety Risk Analysis Manual that further describes the concept and process of risk assessment, as well as risk management and communication.

However, the number of food safety hazards whose risk must be assessed is large, and expanding. The magnitude of adverse health effects associated with food contaminants continues to expand as scientific research develops additional ways to measure harm. Almost all African countries face similar problems of lack of expertise and difficulty in collecting their own toxicological and exposure assessment data to conduct risk assessments.

Governments of the region should utilize the risk assessments carried out by the FAO/WHO risk assessment bodies in their food safety decision-making. Countries must also actively supply their national data on contaminant levels, food consumption patterns, and all other data requested by the FAO/WHO risk assessment bodies so that these international assessments accurately reflect the situation in countries of the region. However, the countries of Africa often have different needs and priorities than the international bodies for the substances on which to conduct risk assessments. As most countries of the region do not have adequate resources to effectively conduct the needed risk assessments at a national level, a regional risk assessment body may provide a valuable service in conducting risk assessments required by national governments.

2.5 Inspection mechanisms/schemes

An effective food safety management system requires clear inspection policy and procedures that are applied by inspectors who are well trained not only to apply these procedures but also to act as quality assurance advisors and extension officers to the food industry. Food inspectors in Africa suffer

[3] FAO/WHO. 2003. Assuring Food Safety and Quality: Guidelines for Strengthening National Food Control Systems. FAO Food and Nutrition Paper 76.

generally from (i) a low professional status which is not commensurate with their responsibilities, (ii) a lack of logistical support to carry out the inspections (transport, inspection equipment, etc.) and (iii) the cumulative tasks often requested from them (price control, inspection of non-food consumer items, weights and measures, environmental hygiene, etc.). National food inspection services are often located in the capitals and major cities, with little if any control exercised in small towns and rural areas. Few countries of the region have efficient national import/export inspection and certification systems, as indicated in Table 2. Some countries do conduct partial inspections of meat and/or fish imports and exports. In countries where a strong export market exists in a particular sector, the inspection services are often engaged in the control of the concerned products. In order to benefit from potential food export earnings and to protect themselves against sub-standard imported foods, governments of the region must actively upgrade their inspection systems, in both quality and quantity, to meet their national needs in this field.

2.6 Laboratory support service

Effective enforcement of food legislation and the implementation of food-borne disease surveillance systems require sound and efficient food analysis capabilities at national and sub-national levels. Unfortunately, food control laboratories in the African region are generally very weak, as indicated in Table 2. The majority of public health laboratories do not have the capacity to test for chemical contaminants and naturally occurring toxins. Some identified causes of this weakness are as follows:

- Inadequate resources in terms of funding, equipment and personnel;
- Lack of recurrent expenditure to enable the repair of equipment and to maintain adequate supplies of chemicals and materials needed for analyses; and
- Inadequate quality assurance procedures.

Only a few of the testing laboratories in Africa are accredited for specific tests in accordance with the quality, administrative and technical requirements of ISO 17025, the international standard that provides general requirements for the competence of testing and calibration laboratories. As a result, competence in terms of equipment and operator skills, as well as reliability of results may not be satisfactory. Furthermore, food exporters may need to send samples of their products to accredited laboratories outside the country for testing in order to be accepted by the importing country. This adds to the cost and inconvenience of the process of exporting foods from the region.

The countries of the region must give greater priority to strengthening food control laboratories. Neighbouring countries could also work together to develop inter-laboratory testing programmes, joint training programmes or even sub-regional laboratories that could serve the needs of multiple countries. Governments could also work to strengthen public-private partnerships between laboratories to better utilize scarce resources within a country.

2.7 Capability of the food industry to supply safe food

Food production, processing, and marketing in most countries in the region is highly fragmented among a large number of small producers and handlers who lack appropriate knowledge and expertise in the application of modern practices and food hygiene. The challenges and possibilities for these small and medium producers to produce safe and high quality food is further detailed in CAF 05/5. Coupled with the challenges of small and medium enterprises, there are few well established systems for assisting these companies to develop their capacity to provide safe food, as indicated in Table 2. Some countries that actively export products to high-income countries from particular sectors, such as fish, horticultural crops and meat, do have adequate training and support for industries in those sectors. In many of these cases, the food industry has accepted the primary responsibility for food quality and safety, as occurs in other regions of the world. Therefore, the food industry often leads the training and

development in these fields, with other stakeholders as facilitators. However, many sectors in many countries are still in need of restructuring to be in line with current food safety and quality assurance requirements, including the application of Good Hygienic Practices (GHP), Good Manufacturing Practices (GMP) and the Hazard Analysis and Critical Control Point (HACCP) system.

In addition to food products for export, national governments are also responsible for the safety and quality of food produced for domestic consumption through open markets, supermarkets, schools, hospitals, restaurants, street food vending and other methods. Efforts to improve the safety and quality of foods for these markets are often very poorly financed. Accordingly, all stakeholders, including the food industry, governments and civil society must make a conscious effort to train and equip the food industry to produce safe and high quality food in all the countries of the region.

2.8 Information network on food safety issues

An increasingly important role for national food control systems is the delivery of information and advice to stakeholders across the farm-to-table continuum, both within the country and in other countries. These activities include the following:

- the provision of balanced factual information to consumers and the media;
- the supply of information packages and educational programmes for key officials and labourers in the food industry;
- the provision of reference literature to extension workers in the agricultural and health sectors;
- sharing relevant food safety information with other countries, especially within the region.

Structured and regular acquisition and dissemination of relevant information to the public on food safety problems and corresponding measures taken to resolve them is lacking in most of the countries of the region (Table 3). Such information systems would serve as a basis for building confidence among consumers and the media. This would cause consumers to be prepared to raise issues related to food safety and expect that the concerned agencies will take the necessary action to protect consumers. Furthermore, governments should have a mechanism to share information on outbreaks of food-borne diseases and their results, including the loss of productivity and economic implications. This information is currently not readily acquired or disseminated to the relevant agencies for necessary action.

It is also essential that governments share information with other countries within the region, as well as with countries outside the region. For example, countries should follow the Codex Guidelines for the Exchange of Information in Food Safety Emergency Situations (CAC/GL 19-1995, Rev. 1-2004). Also, many countries recognize the importance of sharing information on food imports that are rejected due to inferior quality or safety, but a network to effectively share this information with other countries has yet to be developed for use by the countries of the region. Concerned agencies also need to have access to information on rejection and/or downgrading of food exports from their country so that corrective actions may be taken.

2.9 Training/education in food safety

It is generally recognized that knowledge related to food safety provides the basis for the development of intervention strategies and initiatives aimed at preventing food-borne illness. However, no single country in the region has established on-going educational programmes for government food control officials, food industry officials and/or consumers. Training/education that does exist is sporadic, not focused and not based on actual and/or possible food safety problems. Most importantly, such education is currently unsustainable because beneficiaries do not appreciate its usefulness enough to prompt them to pay for the services, therefore reducing the quality of education available.

2.10 Consumer awareness raising

The importance of consumer education in the prevention of food-borne illness is universally recognized. When consumers are quality and safety conscious, they are able to complement the efforts of food control agencies in encouraging the food industry to provide good quality and safe food.

In view of the catalytic role played by consumer associations in promoting the quality and safety of food supplies, governments of the region should facilitate the establishment and sustainability of these associations. These associations are active in some parts of Africa, but should be encouraged to increase their efforts to educate consumers and to hold the food industry and governments accountable for safe and high quality food.

2.11 Coordination of food safety activities at national level

Assuring food safety in a global economy requires a high degree of communication, coordination, and cooperation within and between countries. Management of food safety is a multi-sectoral affair, often involving the ministries of health, agriculture, trade/industry and at times fisheries, tourism, and local governments. In the absence of a well-defined national food safety policy with implementation plans, these organizations tend to operate in accordance with their own aspirations of food safety. Furthermore, without well-established responsibilities for these organizations, the scarce resources available in the countries of the region often dissipate through the duplication of efforts. When agencies are nominated to coordinate national food safety activities, they often lack the required resources to perform assigned duties effectively.

Accordingly, a properly established and sustainable co-ordination mechanism with well-defined responsibilities for each agency is essential. However, as evidenced in Table 3, very few countries in the region currently have effectively functioning coordination mechanisms. Conference paper CAF 05/6 further describes the coordination and cooperation at national and regional levels.

2.12 Epidemiological surveillance of food-borne diseases

As previously indicated, many food-borne disease incidents are reported every year in Africa. Numerous factors, many of which are discussed in this document, contribute to this high number of incidents. However, it is extremely important to note that most cases of food-borne disease in the region are not reported, so the true extent of the problem is unknown.

In most countries in the region, the surveillance infrastructure for food-borne diseases of both microbiological and chemical etiology is weak or non-existent. With the exception of cholera (which is subject to the WHO International Health Regulations), there is no obligation to report food-borne disease internationally. As evidenced by Table 4, only some of the countries of the region require national reporting of food-borne disease incident and even fewer actually have accurate reporting. This absence of reliable data on the burden of food-borne disease impedes understanding about its public health importance and prevents the development of risk based solutions to its management.

2.13 Membership in Codex

Most countries in the region (48 out of 53) are members of the Codex Alimentarius Commission and have established National Codex Committees and National Codex Contact Points (Table 4). Most of these countries have also indicated their adoption of one or more Codex standards. Some have utilized Codex standards in the development of their national food legislation while others have, in the absence of other national legislation, enforced Codex standards. Each Codex member country in the region must effectively monitor and adopt Codex standards and participate in the elaboration of Codex standards, codes and guidelines so that these standards reflect the needs of African countries.

2.14 Biosafety concerns (regulations on biotechnology or GMOs)

Only a few countries in the region have established regulatory frameworks concerning foods derived from modern biotechnology, including Genetically Modified Organisms (GMOs). Most of the countries are, however, signatories to the Cartagena Protocol on Biosafety (Table 5). With the rapid development of the application of modern biotechnology in food production, it is important that each country of the region determines its policy in this field. Because of the trans-border effect of GMOs, it in essential that such policies are harmonized sub-regionally to ensure effectiveness.

3. Recommendations for establishing integrated, suitable and effective food safety management systems

The food safety management system as well as the food control needs of each country in Africa are unique. Accordingly, the countries of the region must develop strategies to respond to these needs in their own context, using best practice principles adopted by other regions.

The countries of the region must accurately identify their specific food safety capacity building needs so that they can prioritize where to focus their scarce resources. FAO and WHO have recently developed a Food Safety Capacity Needs Assessment tool for official food control systems to assist governments in this regard. Countries should seek to utilize this tool and adhere to the results of the assessment.

African countries often depend on development partners who are not always committed to the sustained strengthening of food safety management systems. As a result, the assistance provided may be donor driven and not based on actual needs. Such assistance is often not "owned" by the beneficiaries and accordingly, may not be sustainable. Donors and beneficiaries must work together to determine the needs to be addressed, as well as the means of addressing them.

The governments of the region must be more prepared to deploy adequate resources for establishing effective food safety management systems. However, governments must also have accurate, timely and relevant information in order to compel policy makers to prioritize improvements to food safety systems higher than other competing requests for scarce national resources. Policy makers require reliable data on the economic and health implications of food safety management systems and on the possible measures to be instituted to attain quality and safety in food supplies. Academia and research institutes, along with all other stakeholders within the country and within the region, must work together to ensure this accurate collection of data to assist policy makers in their decisions.

In addition to the points raised elsewhere in this document, governments should undertake the following actions in an effort to improve food safety management systems:

(A) Health and economic implications

In order for national food safety policy makers to better prioritize scarce resources, governments must generate the necessary information, including the following:

- Approximation of the costs of ensuring quality and safety for the most important locally produced food;
- Estimation of the economic loss to the nation as a result of rejection or down-grading of food exports on the international market;
- Estimation of the cost of treatment of food-borne diseases caused by the consumption of unsafe/unwholesome food.

(B) Legal and institutional framework for FSMS

- Develop national food safety policies from which relevant food legislation and enabling regulations can be derived;
- Develop the necessary legislative and institutional framework for food control taking into account regional and international requirements as well as local conditions;
- Seek to better coordinate the functions of agencies involved in food safety management to reduce overlap or gaps of activities, to better utilize scarce public resources.

(C) Inspection schemes

- Pay due attention to the important role that food inspection services play in the national food control systems and take appropriate measures to improve the professional status of the food inspectors and to provide them with the necessary means to perform their duties adequately;
- Assess the relevance, appropriateness and reliability of the inspection schemes and procedures used, as well as the training provided to the inspectors, all in relation to current international practices;
- Ensure that food inspection services cover the entire national territory, and are managed in a manner that takes into account priorities in terms of risks to the consumer as well as available resources.

(D) Laboratory support services

- Review the capabilities of all food testing laboratories, determine competence in specific fields as verified through accreditation, allocate responsibilities based on areas of competence and ensure that expensive equipment are used efficiently, including by clients outside the country (within the sub-region);
- Promote the consolidation of laboratory facilities and services, for maximum efficiency and seek regional and international accreditation for the services provided;
- Establish sub-regional networks of food testing laboratories and conduct proficiency testing programmes to upgrade the performance of these laboratories.

(E) Food standards

- Establish a mechanism for developing and reviewing national food standards in relation to current international practices.
- Determine the nature of the involvement of the food industry and other stakeholders in the development of national food standards and in their participation in the international food standard setting fora.

(F) Consumer education

- Facilitate the establishment and sustainability of consumer associations to enable them assume a catalytic role in the food safety management systems.

(G) Information network

- Channel all information on food safety issues through a focal point for circulation to concerned organizations for necessary action and feedback reports. The focal point should be in a position to better explain issues to the media which will, in turn, inform the general public accordingly.

(H) Stakeholder involvement

- All stakeholders operating along the food chain should be encouraged and assisted in building their respective food safety capacity;
- Stakeholders must adopt relevant practices in their food handling operations including Codex texts, and implement the forthcoming ISO 22 000 standard for food safety management;
- Governments must assist the food industries by providing the enabling legislative environment, laboratory, inspection and other needed services;
- All stakeholders must communicate and work together to improve food safety.

4. Conclusions

Every country has some type of a food safety management system at the national level. However, not all of these systems are effective and suitable for the purpose. Governments must establish the different components of the national food control system, determine the inter-relationships of these components and define and implement the responsibilities they have in ensuring the safety of food.

Every national FSMS must work towards the two major objectives of protecting the health of consumers and enhancing the competitiveness of local food products on both the internal and external markets.

National governmental FSMS can be effectively complemented by the food industry if all the stakeholders along the food chain build the necessary capacity for producing and handling food in a safe manner.

Safety conscious and dedicated stakeholders along national food chains will be in a position to promote consistent and safe food trade both domestically and internationally. This will increase domestic food security through the improved access to safe and wholesome food and the resultant rise in national incomes due to increased international food trade.

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ACRONYMS

BSE - Bovine Spongiform Encephalopathy
EU - European Union
FDB - Food and Drugs Board
FSMS - Food Safety Management System
GAP - Good Agricultural Practices
GHP - Good Hygienic Practices
GMP - Good Manufacturing Practices
GSB - Ghana Standards Board
GVP - Good Veterinary Practices
HACCP - Hazard Analysis & Critical Control Points
ISO - International Organization for Standardization
KEBS - Kenya Bureau of Standards
MBS - Malawi Bureau of Standards
MDA - Ministries, Departments & Agencies
NCC - National Codex Committee
NCCP - National Codex Contact Point
NGOs - Non-Governmental Organizations
NSI - Namibia Standards Institutions
PHL - Public Health Laboratory
PPRS - Plant Protection and Regulatory Services
QA - Quality Assurance

QMS - Quality Management System
SABS - South African Bureau of Standards
SLSB - Sierra Leone Standards Bureau
TBS - Tanzanian Bureau of Standards
UNBS - Uganda National Bureau of Standards
ZBS - Zambia Bureau of Standards

Annex 1

TABLE 1 – BASIC FOOD LAWS AND ENABLING REGULATIONS AND THE MINISTRIES, DEPARTMENTS AND AGENCIES INVOLVED

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
1	Algeria	Presidential Decree n° 05-118 on iodisation food	Ministry of Commerce
		Executive Decree n° 04-320 of October 2004 on the transparency of the sanitary and phytosanitary measures and obstacles on trade	Ministry of Trade
		Law on veterinary public health	Ministry of Agriculture
		Law on Standardization	Ministry of Industry
2	Angola	Law No. 5/87 approving the Sanitary Regulation	Ministry of Health
3	Benin	Law 84-009. Basic Law governing the control of staple food	Ministry of Agriculture
		Regulations on food imports and exports, Street food, food hygiene and labelling	Ministry of Health and Food, Applied Nutrition Directorate
4	Botswana	Food Control Act, 1993 (No. 11 of 1993)	Ministries of Agriculture, Health, Trade, Tourism
		Disease and Pest Act	Food Control Unit
		Permit licensing and Registration of Food Establishments	National Food Control Board
		Botswana Agricultural Marketing Board Act, 1974 (No. 2 of 1974)	Ministry of Agriculture
		Control of Goods Act, 1973 (No. 23 of 1973)	
		Livestock and Meat Industries Act (No. 32 of 1962)	Ministry of Agriculture - Permanent Secretary
		Livestock and Meat Industries (Producers' Agents) Regulations (No. 8 of 1968)	Ministry of Agriculture
5	Burkina Faso	Food Hygiene Law 23-94/ADP	Standardization & Quality Promotion Dir. & National Public Health Lab
		Law no. 022-2005/AN regarding a Code on public Health	Ministry of Health
		Decree n° 2003-670 on the establishment of a general cooperation framework on food safety between the government/partnerships	
		Control of Pesticide Law 041-96	Ministries of Agriculture and Health
		Standards Decree 98-296	

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
6	Burundi	Decree-law No. 1/036 of December 1989 providing general rules on control quality	Ministry of Trade & Industry
		Decree-law No. 1/16 of May 1982 regarding a code on public health	Ministry of Health
7	Cameroon	Law No. 64/LF/123 of November 1964 regarding the public health protection	Ministry of Health
		Decree no. 011 /CAB/PM of March 2004 on the establishment of an ad hoc committee on food safety	
8	Cape Verde	Decree-Law No. 100/92 of 17 August 1992 regulating the export of bananas	
		Government Decree no. 1/2005 on infant food public information campaigns, labelling requirements and the related information	
		Government Resolution No. 6/2004 on the National Food Security Sustainable Strategy	
		Decree no. 1/2005 on infant food public information campaigns, labelling requirements and the related information.	
		Decree-Law No. 89/92 providing general rules for the quality control of nationally produced, imported or exported food	
		Decree-Law No. 32/2003 ruling on rice used for human consumption	
		Order No. 6/2001 approving the Regulation of sanitary measures to be applied on fish products	
		Resolution No. 72/98 creating the National Agency for Food Safety - ANSA	
		Decree-Law No. 12/2004 ruling on production, import, export, commercialisation and use of iodated salt	
		Order No. 10/2001 prohibiting bovine importation from areas infected by BSE disease	
9	Cent. African Republic	Decree 95030,1995 on Salt Iodization	Ministries of Agriculture, Health and Trade and National Animal Husbandry
		Decree 040-1984 on import and exports	

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
10	Chad	Decree 94/499 ruling on production, import, export, commercialisation and use of iodated salt in the Chad Republic	
		Law nº 95-3 1995-02-18/PR on the restructuring of the national office on cereals	
11	Comoros	Decree nº 82-001/PR on the establishment of a national bureau import and trade of rice	Ministry of Trade
12	Congo, Rep	Decree nº 86-121 on the commercialisation of dry and salty fish	
13	Congo, DR	Decree no.364 of September 2000 establishing the list of the authorized additives in the fishery sector	
14	Cote d'Ivoire	Decree No. 86-454 establishing the power of the government to the municipalities and to the city of Abidjan on veterinary public hygiene measures	Ministries of Finance, Rural Development
15	Djibouti	Decree n°2002-0226/PR/MERN on the regulation of the production, commercialisation and use of the salt of lac Assal.	
		Decree n°2001-0010/PR/MCIA on the regulation of the water for human consumption	Ministry of Health
		Decree n°97-0189/PR/MS - ruling on production, import, export, commercialisation and use of iodated salt	Ministry of Health and Ministry of Trade
		Decree n°2004-0130/PR/MCIA ruling on production and commercialisation of «bred of the people».	Ministry of Trade
16	Egypt	Over 45 Ministerial Resolutions of MDAs concerning the obligation to a wide range of food items according to the Egyptian Standardization and Metrology	
17	Equatorial Guinea	N/A	
18	Eritrea	Fisheries Product Regulations (L.N. No. 40, 41, 105/1998)	
		Fishery Products Additives/Import and Export Regulations (L.N. No. 65/69 of 2003)	
		Heavy Metals Regulations (L.N. No. 66 of 2003)	
		Potable Water Regulations (L.N. No. 68/2003)	

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Regulations regarding Import Permits and Declared Goods (L.N. No. 78 of 2003)	
		Fishery Products Importation and Exportation Regulations (L.N. No. 69 of 2003)	
19	Ethiopia	Quality & Standards Authority of Ethiopia Establishment Proclamation (No. 102/1998)	
		Emergency Food Security Reserve Administration Establishment Council of Ministers Regulations (No. 67/2000)	Emergency food security reserve administration
20	Gabon	Decree 00766,1963 on Public Health	Ministries of Trade, Agric and Health
		Decree 01574 on import and exports	Dir. of Competition & Fraud Control
		Decree nº 834/PR/MAEDR establishing a national Codex Alimentarius Committee	Ministry of Agriculture
21	Gambia	Public Health Act, 1989 (Act No. 1 of 1989)	National Nutrition Agency (NaNA)
		Public Health and Fisheries Acts	Dept of State for Agriculture, Health & Trade
		Regulations on Imports/Exports, Food Establishment, Food Labelling & Certification of Fish Processing Plants	National Nutrition Agency (NaNA)
22	Ghana	Food and Drugs Law (P.N.D.C.L. 305B, 1992)	Food and Drugs Board
		Standards Decree (N.R.C.D. 173, 1973)	Ghana Standards Board
		General Labelling Rules, 1992 (L.I. No. 1541, 1992)	Food and Drugs Board
		Ghana Standards Board Certification Mark Rule, LI 662,1970	Ghana Standards Board
		Pest and Plant Disease Act 307, 1965 (L.I. No. 1541, 1992)	Plant Protection and Regulatory Services
		Pesticides Act 528, 1997.	Ministries of Health, Food & Agriculture & Trade
23	Guinea	Decree D/2003/4/PRG/SGG on the establishment of a national commission on food safety and quality (CNSSA)	CNNSSA
24	Guinea Bissau	Decree No. 62-E/92 establishing sanitary food protection	
25	Kenya	Use of Poisonous Substances Act	Ministries of Health, Agriculture, Trade & Industry
		Fertilizer and Animal Foodstuffs (Importation and Use of Meat Animal Bone Meal) (Prohibition) Regulations 2001 (L.N. No. 19 of 2001).	Dept. of Veterinary Services

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Meat Control (Importation of Meat and Meat Products) Regulations, 2001 (L.N. No. 28 of 2001)	Fish Quality and Safety Unit
		Sugar (Imports, Exports and By-products) Regulations, 2003 (L.N. No. 39 of 2003)	Kenya Plant Health Inspectorate Service
		Tea (Packing) Regulations, 1999 (L.N. No. 41 of 1999)	Customs and Excise Dept., KEBS
		Food, Drugs and Chemical Substances Act Cap 254	Ministry of Health
		Public Health Act Cap 242	Ministry of Health
		Standards Act Cap 496	Ministry of Trade and Industry
		Meat Control Act Cap 356	Ministry of Health
		Import Inspection Directive	Customs and Excise Dept., KEBS
		Radiation Protection Act Cap243	Ministries of Health, Department of Public Health
		Liquor Licensing Act Cap 121	Ministries of Health, Department of Public Health
		Meat Control Act 356	Ministries of Health, Livestock, development and fisheries, Department of Public Health
		Pharmacy and Poisons Act Cap 244	Ministries of Health, Pharmacy and poisons Board
		Animal Health Act Cap 364	Livestock, development and fisheries, Department of Veterinary Services
		Fertilizer and Animal Feedstuff Act Cap 345	Livestock, development and fisheries, Department of Veterinary Services
		Dairy Act Cap 336	Livestock, development and fisheries, Agric., Department of Veterinary Services
		Fisheries Act Cap 378	Livestock, development and fisheries, Agric., Department of Fisheries
		Pest Control Products Act Cap 346	Ministry of Agriculture, Pest Control and Products Board
		Seed Act Cap 326	Ministry of Agriculture, Kenya Plant Health Inspectorate Services
		Noxious Seed Act Cap 325	Ministry of Agriculture, Kenya Plant Health Inspectorate Services

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Plant Protection Act Cap 324	Ministry of Agriculture, Kenya Plant Health Inspectorate Services
		Legal notice under Cap 318	Ministry of Agriculture, Horticultural Crops Development Authority
		Science and Technology Act Cap 256	Ministry of Education, Science and Technology, National Council for Science and Technology
		Agric. produce Act Cap 319	Ministry of Agric.,
26	Lesotho	Public Health Order 12, 1970	Ministry of Health and Social Welfare
		Agricultural Marketing (Import of Sugar) Regulations (L. N. No. 176 of 1989).	Minister of Agriculture
		Marketing Registration 23, 1971	Ministry of Industry, Trade & Marketing
		Food Establishment Act 13,1997	Ministry of Agriculture
		Milk Hygiene Regulation 28, 2000	Dept. of Chem. - University of Lesotho
		Street Food Legal Notice 13, 1971	Dept. of Chem. - University of Lesotho
27	Liberia	N/A	
28	Libya	Health Law No. 106	Ministry of Health
		Standards Law No. 5	
29	Madagascar	Food Law, 1st August 1905	
		Ordinance 73-054 and 73-055	
		Ordinance 88-015, 1st September 1988 (Facilitate food product import and export)	Ministry of Trade & Industry
30	Malawi	Meat and Meat Products Act	Depts of Fisheries, Animal Health & Industry
		Malawi Dairy Industries Corporation (Establishment) Order, 1987.	
		Milk and Milk Products Act	Veterinary Labs, MBS
		Public Health Act	Ministry of Health and Population
		Meat Inspection Regulations	Ministry of Commerce and Industry
		Meat Marketing Regulations	Ministry of Agriculture and Irrigation

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Pig Grading Regulations Public Health (Condensed Milk) Rules	National Quality Control Lab Veterinary Labs, MBS
31	Mali	Decree n°01-175/pm-rm on capacity building against poverty	Ministry of Agriculture, Ministries of Heath, Trade
		Decree n°00-183/p-rm on the ruling of the public services of the water for consumers	Ministry of Public Health
32	Mauritania	Food Regulations made under the Food Act 1998	Ministries of Health and Trade
		Decree nº R-0017 on the definition of the elaborate product of fishing	Ministry of Fisheries
		Sale of Frozen Foods Regulations 1985 (G.N. No. 113 of 1985)	Food Hygiene Lab and Cen. for Animal Husbandry & Vet. Research
33	Mauritius	Environment protection (Polyethylene Terephthalate) (PET) bottle Permit) Regulations 2001 (G.N. No. 33 of 2001).	
		Food Act 1998 (Act No. 1 of 1998)	Ministry of Health & Quality of Life
		Food and Drugs Act 25 May 1940	Ministry of Health & Quality of Life
		Meat Act 3/665 November 1974	Mauritius Meat Authority
		Food Regulations made under the Food Act 1998	Ministry of Health & Quality of Life
34	Morocco	Decree nº 1041-03 ruling the wheat vending conditions for the production, commercialization of flour	Ministry of Finance, Ministry of Agriculture and Irrigation and Fisheries
		Decree nº 738-96 ruling animal health (importation)	Ministry of Agricultural Development
		Dahir nº 1-02-119 promulgating law nº 49-99 run the sanitary protection measures on animal production and the commercialization of poultry products	
		Decree nº 1409-01 ruling precaution us measures in case of tuberculosis	Ministry of Agriculture, Water & Rural Dev, Forestry
35	Mozambique	Order No. 56/2001 approving the Customs regime applicable to sugar import.	Ministries of Development, Agriculture, Trade & Industry
		Decree No. 72/98, implementing the water supply policy	Ministries Of Fisheries, Trade and Agriculture
		Public Health Act 11, Fisheries Law 3, 1990	National Inst. of Standards and Quality
		Standards Decree 2, 1993	National Food Lab

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Ministerial Order No. 120/87 approving quality standards for wheat, corn and their flours	Ministry of Trade
		Ministerial Order No. 51/84 approving hygiene regulations for food handling establishments	Ministry of Health
		Ministerial Order No. 80/87 approving the hygiene Regulation on food imports	Ministry of Health
		Order No. 184/75 establishing copra oil as edible oil and defining its characteristics	
		Order No. 23.964 defining sunflower seed oil as an edible oil and establishing quality standards	
36	Namibia	Public Health Act No. 36 of 1919	Ministry of Health
		Standards Act No. 33 of 1962, Export/Registration of Foodstuffs	Ministry of Agriculture, Water & Rural Development
		Cosmetics and Disinfectants Order No. 18 of 1979	University of Namibia (Dept of FS & Tech) SABS
		General Registration GN 121 of 1969	Customs & Excise
		Prevention of Undesirable Residue in Meat Amendment Act, 1994 (Act No. 11 of 1994)	Prime Minister
		Meat Act, 1991 (G.N. No. 220 of 1994)	Meat Board of Namibian Agronomic Board
		Amendment of Regulations relating to the standards of food, drugs and disinfectants (No. 124 of 1994).	Ministry of Health & Social Services
		Regulations Relating to Grading and Classification of Maize (No. 71 of 1994)	Ministry of Agriculture, Water, Rural Development
		Standards of Composition of Maize Products: Agronomy Industry Act, 1992 (No. 72 of 1994)	Ministry of Agriculture
37	Niger	Decree 98-108, 1998 on Food Imports/exports	Ministry of Agricultural Development
		Decree nº 76/MDR/CABon the promotion and organization of agricultural exportation projects implemented by decree nº 77/MDR/CAB and decree nº 78/MDR/CAB	Ministry of Rural Development
		Order nº 35/MDR/CAB,2001 on the establishment of a Committee on food safety implements decree n. 2000-147 ruling the rural development ministry assignments	

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Order nº 09/CAB/PM/2001 establishing a committee for food safety policies	
		Laws on fraud control 1905	Ministry of Public Health
		Gen Order 131, 1941 on the preparation of meat	Ministry of Trade & Industry
		Order 3278, 1942 on imports/exportation of animals, Meat and other animal products	National Public Health Lab
38	Nigeria	Counterfeit and Fake Drugs and Unwholesome Processed Food Decree, (Act No. 25 of 1999)	Federal Ministry of Health
		National Agency for Food and Drug Administration and Control (Amendment) Decree 1999 (No. 19 of 1999)	Food and Drug Agency
		Food and Drugs (Amendment) Decree 1999 (No. 21 of 1999)	Food & Drug Administration & Control (NAFDAC)
		National Agency for Food and Drug Administration and Control Decree 1993 (No. 15 of 1993)	Standards Organization of Nigeria (SON)
		Public Health Ordinance Cap 164 of 1958	National Codex Committee
		The Standards Organisation of Nigeria Decree, No. 56 of 1971	Standards Organization of Nigeria (SON)
		The Animal Disease Control Decree, No. 10 of 1988	Federal Ministry of Agriculture
		The Marketing of Breast Milk substitute Decree, No. 41 of 1990	
39	Rwanda	Order no. 74/453 of December 1952 ruling the sanitary procedure on food amended by order 74/416 of December 1953	
		Order nº 41-38 of March 1956 ruling the commercialization of Wheat	
40	Senegal	Decree nº 99-259 on horticultural products quality and control	Ministry of Agriculture
		Decree n° 98-554 on the establishment of a national food safety Counsel	Ministry of Agriculture
41	Seychelles	Food Act 1987 (Act No. 14 of 1987)	
42	Sierra Leone	Public Health Act 23, 1960	Ministry of Health & Sanitation
		Fisheries Management Act, 1994	Ministry of Agriculture, Forestry & Marine Resources
		Standards Act 12, 1996, Registration on Food Establishment, Street Foods, Export & Imports	Sierra Leone Standards Bureau (SLSB)

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
43	Somalia	Livestock Development Agency Law (No. 34 of 1970)	Secretary of State for Rural Development and Livestock
44	South Africa	Regulations relating to labelling of alcoholic beverages (No. 109 of 2005)	Ministry of Health
		Regulations governing general hygiene requirements for food premises and the transport of food of 12 July 2002	Ministry of Health
		Agreement between the European Community and the Republic of South Africa on trade in spirits - November 2002	
		Meat Safety Act, 2000	Dept. of Health & SABS
		Foodstuffs, cosmetics & Disinfectant, Act No. 54 of 1972	Dept. of Agriculture
		Health Act No. 63 of 1977	Ministry of Health
		Standards Act No. 29 of 1993	SABS
		Food, Drugs & Disinfectant Act No. 13 of 1929	Dept. of Trade & Industry
		Trade Metrology Act No. 77 of 1973	Dept. of Trade & Industry
		Regulations on Food Establish & Export/Import	Customs & Excise Division
		The International Health Regulations Act, 1974 (Act 28 of 1974)	Ministry of Health
		The Medicines and Related Substances Act, 1965 (Act 101 of 1965)	Ministry of Health
		Wine and Spirits Control Act	
		Regulations governing general hygiene requirements for food premises and the transport of food (G. N. No. R.918 of 1999)	
45	Sudan	Environmental Health Act 1975	Ministry of Health - health authorities
46	Swaziland	Public Health Act No. 5 of 1969	Ministry of Health & Social Services (MOHSS)
		Slaughter House Act. No. 10, 1964	Vet. Services Laboratory & Swaziland Meat Industries
		Sale of Adulterated Food Act No. 25, 1968	University of Swaziland (Lect. of Health Sev.)
		Food Hygiene Regulation 1973	Ministry of Enterprises & Employment
		Bakery Regulation, 1974	Ministry of Enterprises & Employment
47	Tanzania	Coffee Industry Act, 2001 (Act No. 23 of 2001)	Ministry Agric & Food Security
		Food (Control of Quality) Act, 1978 (Act No. 10 of 1978)	Government Chemist Lab, Agency
		Sugar Industry Act, 2001 (Act No. 26 of 2001)	Ministry of Industry & Trade

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Produce Export Ordinance	
		Adulteration of Produce Decree (Cap. 109)	National Food Control Commission
		Cashew Nut (Marketing) Regulations, 1996 (G.N. No. 369 of 1996)	Ministry of Health
		Fish (Quality Control and Standards) Regulations, 2000 (L.N. No. 300 of 2000)	Ministry of Agriculture & Food Security
		Tea Regulations (S.I. No. 92 of 1999)	Tanzania Bureau of Standards (TBS)
		Plant Protection Act 13, 1975	Ministry of Natural Resources & Tourism
		Public Health Act	Ministry of Health
		Fisheries Act 6, 1970	Ministry of Fisheries
		Vet. Act	
		Standard Act 3, 1975	
48	Togo	Law nº 57-16 on the commercialization of local fishing	Ministry of Commerce and Industry, Finance
49	Tunisia	Law no. 117 concerning consumer protection, 1994	
		Decree nº 2005-388 amending decree nº 2000-2574 on the establishment of "Codex Alimentarius" Committee, its ruling, organization and composition.	Ministry of Commerce and Industry and Finance Ministries of Health, Development
		Order on public health of March, 30, 2004, ruling the mother's milk substitutes list implements law n° 83 - 24	Ministry of Public Health
		Decree nº 2003-1718 related to food packaging	Ministry of Commerce and Industry
		Law nº 92-117 on consumer protection	
50	Uganda	Public Health Act, 1964	Ministry of Health, Tourism, Trade & Industry
		Plant Protection Act 1962	Ministry of Agriculture, Animal Industry & Fisheries
		Fish Quality Assurance Rule	Uganda National Bureau of Standards
		Import/Inspection of Clearance Rules, 2002	Uganda Revenue Authority (Chemist)
		Standard Act, 1983, Registration on Food Establishment	Ministry of Agriculture
52	Zambia	Dairies and Dairy Produce Act (Chapter 342)	Ministry of Agriculture & Cooperation
		Food Reserve (Designated Commodities) Standard of Conduct) (Amendment) Regulations (S.I. No. 41 of 2004) amending Regulations S.I. No. 94 of 1996	Ministry of Agriculture

S/N	Country	Legislation	Ministries, Departments and Agencies involved in enforcement and monitoring*
		Dairy Produce Board (Establishment) Act (Cap. 350)	Central Board of Health
		Dairies and Dairy Produce Regulations (Chapter 342)	Central Vet. Research Institute
		Grain Marketing (Acceptance Standards) Regulations. (S.I. No. 296 of 1969)	Customs & Excise Division
		Food & Drugs Acts, Cap 303	Food & Drugs Laboratory
		Food/Drug Registration SI 90/2001	Ministries of Health, Commerce, Trade & Industry
		Public Health Act, Cap 295	ZBS National Food & Nut Commission
		Plant Pesticides Act Cap 252	
		Standard Act Cap 416, Registration on Exports/Imports and Food Establishments	
53	Zimbabwe	Dairy Act	Ministry of Agriculture
		Food and Food Standards Act	Minister of Health and Child Welfare
		Fruit Marketing Act (No. 55 of 1966)	Ministry of Agriculture
		Public Health Act (Chapter 15:09)	Minister of Health and Child Welfare Advisory Board for Public Health
		Animal Health (Import) Regulations (S.I. No. 57 of 1989)	Ministry of Agriculture
		Produce Export Act	Ministry of Agriculture
Source of Information/Data		FAOLEX, ECOLEX	FAO Background paper for Global Forum by L. E. Yankey, FAO Consultant, Nov. 2004 Revised by E. Bonanno, FAO Consultant, Sept. 2005
N/A - Not Available			

*MDAs not in any particular or specific order in relation to the enforcement of food laws for each country. Mandates and functions overlap.

TABLE 2 – FOOD STANDARD SYSTEMS, INSPECTION MECHANISMS, LABORATORY SUPPORT SERVICES AND CAPABILITIES OF THE FOOD INDUSTRIES TO PROVIDE SAFE FOODS

S/N	Country	Food Standards System	Inspection Mechanism	Laboratory Support Services	Capability of Food Industries to Provide Safe Food
1	Algeria	Algerian Institute of Standardization establishes food standards	Ministry of Commerce oversees import, export and domestic food inspection.	The Algerian Centre for the Control of Quality and Packaging oversees 19 laboratories covering the country	N/A
2	Angola	N/A	N/A	N/A	N/A
3	Benin	No well-defined system for the elaboration of Food Standards. Codex Committee is not functional. No available information on SPS measures	Rudimentary inspections carried out by agents of the Cotonou Abattoir. No well-established mechanism for food inspection	Food and Applied Nutrition Directorate provides basic lab support services. No labs currently have accreditation; however 3 labs are working towards accreditation	No established system for assisting companies to build capacity to provide safe food. Sea products industries partially encouraged to adopt QA practices to meet safety requirements of target markets.
4	Botswana	National standards prepared by Bureau of Standards in collaboration with other key stakeholders; mainly based on Codex standards.	No well established system	Rudimentary. Selected labs being assisted to build capacity. No lab accredited to ISO 17025	Meat industry has been assisted to build capacity and capability to provide safe products for the export market.
5	Burkina Faso	Directorate of Standardization and Quality Management is yet to establish a system for development/review of food standards	Inspection at both inter-national and domestic level not well established	Lab support services are rudimentary	Directorate of Standardization and Promotion of Quality is mandated to promote quality and safety in the food industry. Agency is in its infant stage and so unable to perform functions properly
6	Burundi	N/A	N/A	N/A	N/A
7	Cameroon	N/A	N/A	N/A	N/A

S/N	Country	Food Standards System	Inspection Mechanism	Laboratory Support Services	Capability of Food Industries to Provide Safe Food
8	Cape Verde	Establishing agency for control of pharmaceutical and food products to set standards	N/A	Laboratory services are very weak except for fishery products and water analysis. New food control agency will serve as reference laboratory.	N/A
9	Cen. African Republic	No system in place	National Animal Husbandry Development Agency conducts some inspection at both domestic and international levels	Lab support service is rudimentary	The National Animal Husbandry Development Agency issues sanitary certificates and indirectly compels the relevant industry to focus on safety
10	Chad	Working to harmonize national standards with Codex standards.	N/A	Working to establish a food analysis and control laboratory in 2005	N/A
11	Comoros	N/A	N/A	N/A	N/A
12	Congo, Rep	No system in place	No regulations on imports	No routine laboratory activities	No system in place
13	Congo, Demo. Rep.	N/A	N/A	N/A	N/A
14	Cote d'Ivoire	N/A	N/A	N/A	N/A
15	Djibouti	N/A	N/A	N/A	N/A
16	Egypt	Egyptian Organization for Standardization coordinates food standards work	General Organization for Import and Export Control in Ministry of Trade coordinates	Good laboratories in Ministry of Health and Ministry of Agriculture	N/A
17	Eq. Guinea	N/A	N/A	N/A	N/A
18	Eritrea	N/A	N/A	N/A	N/A
19	Ethiopia	Quality and Standards Authority of Ethiopia is responsible for approving national standards	Various regulatory bodies enforce regulations associated with food safety.	N/A	N/A

S/N	Country	Food Standards System	Inspection Mechanism	Laboratory Support Services	Capability of Food Industries to Provide Safe Food
20	Gabon	No system in place	Ministry of Trade and Consumer Affairs partially involved in inspection	Lab support service rudimentary	No well-defined assistance to the food industry to build the capacity to provide safe food
21	Gambia	No system in place. NCC established to initiate action on food standards development	Inspection mechanism for fish exports. Food imports not adequately inspected	Rudimentary lab support. Capacity building for selected labs	No established system for building the capability to deliver safe food
22	Ghana	Fairly good system in place	GSB/FDB PPRS involved in Food Inspection at both the domestic and international levels	Good lab support services. GSB lab is seeking accrediting for pesticide analysis	No on-going programme for assisting the food industry. Training in HACCP and other quality assurance practices provided on request
23	Guinea	Technical Commission for Agricultural and Food Standards coordinates all actors involved in elaborating food standards.	N/A	Requires strengthening	N/A
24	G. Bissau	N/A	N/A	N/A	N/A
25	Kenya	Fairly good system in place. Codex standards are used as reference documents in the development of food standards.	A mechanism for food imports/export inspection. KEBS inspects food imports.	Good lab support service. Accreditation for specific food tests secured	No on-going programme for building capability in the food industry in general. However, the milk, meat and fishery industries are adequately assisted to build capacity for the provision of safe food. Horticultural produce for exports also targeted for assistance
26	Lesotho	Not well established	No well established system; mechanism for imports/exports of livestock available	A system in place for microbiological examination of food. No lab accredited to ISO 17025	Capacity developed for export products
27	Liberia	N/A	N/A	N/A	N/A

S/N	Country	Food Standards System	Inspection Mechanism	Laboratory Support Services	Capability of Food Industries to Provide Safe Food
28	Libya	National Centre for Standards and Codes develops food standards.	National Centre for Food and Drug Control has authority for all inspections	Adequate and competent laboratory support services	N/A
29	Madagascar	N/A	N/A	N/A	N/A
30	Malawi	Fairly good system in place	Not well established	Needs improvement. No accreditation	No on-going programme to assist the food industry to build capacity
31	Mali	N/A	N/A	N/A	N/A
32	Mauritania	National Centre for Food Hygiene which serves as the Codex Contact Point can initiate standards development	National Centre for Oceanographic and fisheries research inspects fish destined for export markets	National Veterinary Lab provides rudimentary lab support	No established system for assisting the food industry in general to build the capacity to provide safe food; received assistance to improve fish processing establishments, which has been successful.
33	Mauritius	N/A	N/A	N/A	N/A
34	Morocco	N/A	N/A	N/A	N/A
35	Mozambique	No well-established system in place	Inspection of fish for exports well established	Rudimentary laboratory support service. No accreditation	Capacity of the fishing industry adequately developed to provide safe fish for the export market
36	Namibia	No well established system in place. NSI yet to be established	No well established system in place	South Africa Bureau of Standards labs in Walvis Bay provide support	No on-going programme to assist the food industry to build capacity. The fishing industry is assisted to provide safe fish for the export market
37	Niger	Ministry of Trade developed national standards based on Codex texts	Basic inspection & examination programme for imports; Sanitary inspection of meat for export	National Public Health Lab & the Food Tech Lab of the National Institute for Agronomic Research, as well as at Adbou Moumouni University provide basic analysis	No formal assistance to build the capacity to provide safe food. A few companies are in the process of installing quality systems to assure safety and quality in outputs
38	Nigeria	N/A	N/A	N/A	N/A

S/N	Country	Food Standards System	Inspection Mechanism	Laboratory Support Services	Capability of Food Industries to Provide Safe Food
39	Rwanda	N/A	N/A	N/A	N/A
40	Senegal	Senegal Standardization Institute has elaborated more than 50 food-related standards.	N/A	N/A	N/A
41	Seychelles	N/A	N/A	N/A	N/A
42	Sierra Leone	Established NCC is to handle standards development in connection with the SLBS. Adopting Codex standards as national food standards.	Standards Bureau to start import and export and certification procedures in February 2005.	Rudimentary laboratory support service by the Public Health Laboratory. No Accreditation	No established system for building capacity
43	Somalia	N/A	N/A	N/A	N/A
44	South Africa	Good system in place	Well established inspection mechanism at both domestic and international levels	Adequate and competent laboratory support services	Assistance is provided to the food industry to build capacity to provide safe food. Emphasis, as usual, is on the export food industry
45	Sudan	Sudanese Standards and Metrology Organization establishes food standards	Sudanese Standards and Metrology Organization conducts food inspections	N/A	Government committee formed to deal with industrial establishment safety issues.
46	Swaziland	No well established system	Established mechanism for food exports and imports	Lab support available in City Council and Vet Med labs (Ministry of Agriculture). No accredited labs at this time.	Export food industry (meat) is assisted to build capability to provide safe meat for export market
47	Tanzania	A fairly good system in place. Tanzania food safety standards are based on Codex standards where they exist.	Not well established	Basic lab support service, without accreditation. No capacity or ability to quantify pesticide residues in food and foodstuffs	Trade & Industry Associations, in collaboration with National Food Control Agencies have just started instituting measures for educating their members on QA practices
48	Togo	National Standards Board established in 1983 as part of the Ministry of Industry	N/A	Laboratory equipment has been provided through UEMOA project. Three laboratories will	N/A

S/N	Country	Food Standards System	Inspection Mechanism	Laboratory Support Services	Capability of Food Industries to Provide Safe Food
				be assisted for accreditation.	
49	Tunisia	80% of national standards are in compliance with international standards and working towards 100% compliance	Well established inspection mechanism at both domestic and international levels	Multiple laboratories operating in multiple industries. Many labs are accredited.	Technical Centre for Food Industries provides capacity building for food industry, including training in HACCP
50	Uganda	A fairly good system in place	Established system for imports clearance, including food	Food laboratories of UNBS provide basic lab support. The Microbiology Lab is accredited for selected tests.	As a result of the ban on fish exports to EU in 1997&2000, the fishing industry has been assisted to develop the capacity to meet the safety requirements of the market
52	Zambia	Zambia Bureau of Standards establishes voluntary standards while the Min of Health establishes mandatory standards.	Established mechanism for imports. Inspection of fruits/vegetable exports is satisfactory	Lab support service is quite satisfactory. No accreditation for any of tests conducted	Horticultural industry has been assisted by the Zambia Export Growers Association to develop their capability to meet the safety requirements of the export markets
53	Zimbabwe	Food Standards Advisory Board established in 1996.	No documented policies and procedures for imported food inspection. Port health food inspection manual has been developed	Food control activities supported by laboratory services of the Ministry of Health Government Analyst Laboratory and others.	N/A
Source of Information / Data		FAO Background paper for Global Forum, **Status of Food Safety Management Systems in African Countries with Recommendations for the way forward** by L. E. Yankey, FAO Consultant, Nov. 2004 Report of Sixteenth Session of the Codex Committee for Africa, Rome, Italy, 25-28 January 2005			

TABLE 3 – TRAINING PROGRAMMES, CREATION OF SAFETY CONSCIOUSNESS, INFORMATION NETWORK AND COORDINATION OF FOOD SAFETY ACTIVITIES

S/N	Country	Creation of Food Safety Consciousness among Consumers	Information Network on Food Safety	Coordination of Food Safety Activities at the National Level
1	Algeria	N/A	N/A	Ministry of Commerce plays a central role, along with other relevant ministries
2	Angola	N/A	N/A	N/A
3	Benin	Consumer associations are very active in food control activities and training, but require additional funding.	No Network exists	National Technical Committee for food control is mandated to coordinate food control activities.
4	Botswana	Many consumer organizations exist and are very involved in NCC, but no national umbrella consumers organization exists, making further activities difficult.	No network exists	The food control unit of the National Food Control Board acts as the lead agency. No established coordination mechanism.
5	Burkina Faso	No system for consumer education	No Network exists	No established coordination mechanism.
6	Burundi	N/A	N/A	N/A
7	Cameroon	N/A	N/A	N/A
8	Cape Verde	Two main consumer organizations exist and are very active in awareness raising, etc.	N/A	Establishing agency for control of pharmaceutical and food products to control food.
9	Cen. African Rep.	No system for consumer education.	No Network exists	No established coordination mechanism.
10	Chad	An association for the protection of consumer rights exists, but suffers from lack of funds and inexperience.	N/A	N/A
11	Comoros	N/A	N/A	N/A
12	Congo, Rep	Two consumer organizations exist but their activities are hampered by a lack of funds.	No system exists	Only national food safety programme is in the Special Programme for Food Security.
13	Congo, DR	N/A	N/A	N/A
14	Cote d'Ivoire	National Association of Consumers a member of NCC, but participation is limited by lack of funds.	N/A	CODINORM, under the Ministry of Industry, includes all agencies involved with food safety and is in charge of all texts related to Codex.

S/N	Country	Creation of Food Safety Consciousness among Consumers	Information Network on Food Safety	Coordination of Food Safety Activities at the National Level
15	Djibouti	N/A	N/A	N/A
16	Egypt	N/A	N/A	Coordination carried out by Ministry of Health through the Food Safety Supreme Committee.
17	Eq. Guinea	N/A	N/A	N/A
18	Eritrea	N/A	N/A	N/A
19	Ethiopia	Low level of awareness among consumers. A consumer rights protection organization is currently involved in food safety activities, but not the NCC and requires strengthening.	N/A	Food control activities are scattered among various regulatory bodies and not well coordinated.
20	Gabon	No system for consumer education	No Network exists	No established coordination mechanism
21	Gambia	No system for consumer education	No Network exists	One agency (NaNA) is mandated to coordinate food control activities
22	Ghana	Two consumers associations are active in NCC, but with only ad hoc consumer training activities.	No Network exists	On-going review to re-align the functions and responsibilities of the 12 agencies involved in food safety to overcome overlapping areas.
23	Guinea	Two consumer associations, ALCO and HYCOV are active in NCC.	N/A	A National Food Safety Commission has existed since 2003 but is not yet functional because of a lack of funds. Activities are poorly coordinated.
24	G. Bissau	N/A	N/A	N/A
25	Kenya	Consumers Information Network is active in NCC and all food control activities in country, including consumer advocacy.	No system exists	National Codex Committee links all stakeholders involved in food safety, but need further coordination.
26	Lesotho	Collaboration between government and consumer organisations hampered by fragmentations and weakness of consumer organizations.	No system exists	Working to develop policy instruments and implement a representative Governing Board to ensure wider participation by stakeholders.
27	Liberia	N/A	N/A	N/A
28	Libya	N/A	N/A	N/A
29	Madagascar	N/A	N/A	N/A

S/N	Country	Creation of Food Safety Consciousness among Consumers	Information Network on Food Safety	Coordination of Food Safety Activities at the National Level
30	Malawi	No system for consumer education	No Network exists	No established coordination mechanism. Malawi Bureau of Standards acts as a lead agency in food control activities
31	Mali	N/A	N/A	N/A
32	Mauritania	Food safety awareness is high among all consumers after a dioxin scare in imported poultry was well advertised by the media.	No Network exists	Government identified the key agency in food control as the National Research Institute
33	Mauritius	N/A	N/A	N/A
34	Morocco	More than 20 consumer organizations exist in two different federations and are involved in the NCC.	N/A	Coordination carried out within consultative bodies such as the Permanent Interministerial Committee for Food Control or the National Codex Alimentarius Committee.
35	Mozambique	No system for consumer education	No Network exists	No coordinating mechanism
36	Namibia	No system for consumer education	No Network exists	No established coordination mechanism
37	Niger	No system for consumer education	No Network exists	Coordination carried out through active NCC.
38	Nigeria	Consumer Protection Council is an active member of the NCC and educates consumers.	N/A	N/A
39	Rwanda	N/A	N/A	N/A
40	Senegal	N/A	N/A	N/A
41	Seychelles	N/A	N/A	N/A
42	Sierra Leone	The Consumer Protection Agency of Sierra Leone has designed on-going national education programmes on food safety.	No Network exists	Sierra Leone Standards Bureau coordinates work with other concerned agencies.
43	Somalia	N/A	N/A	N/A
44	South Africa	South African National Consumer Union is active in NCC and national food control activities	No Network exists	Established mechanism in place
45	Sudan	N/A	N/A	All relevant committees include stakeholders from government, industry, and NGO groups.

S/N	Country	Creation of Food Safety Consciousness among Consumers	Information Network on Food Safety	Coordination of Food Safety Activities at the National Level
46	Swaziland	Consumer associations were formerly quite active, but currently require strengthening.	No Network exists	No established mechanism in place
47	Tanzania	Consumer organizations are represented in NCC, but need further support to be more active in food safety awareness raising.	No Network exists	National Food Control Commission coordinates national food safety activities. Tanzania Food and Drugs Authority established in 2003 to coordinate food control activities
48	Togo	Consumers organization is represented on NCC and active in food control matters.	N/A	Coordination through National Codex Committee must be strengthened.
49	Tunisia	National Board of Consumer Protection exists	N/A	National Agency for Health and Environment Control coordinates food safety activities
50	Uganda	Two consumer associations are active in NCC and undertake some consumer training and advocacy.	No Network exists	National Food Safety Strategic Plan has been drafted to support the stakeholders in implementing the proposed Food Safety Law.
52	Zambia	The Consumer Welfare and Protection Directorate of the Zambia Competition Commission has embarked on an elaborate quality/ safety awareness programme.	No Network exists	National Food Safety Committee established in Ministry of Trade, but needs strengthening. National SPS committee (Min of Ag) addresses food safety of exports, but needs strengthening.
53	Zimbabwe	Consumer Council of Zimbabwe involved in food control activities, but needs additional assistance in technical training	N/A	Food Standards Advisory Board established in 1996; proposed to form a Food Safety Control Authority. National Codex Committee not yet established.
Source of Information /Data		FAO Background paper for Global Forum, Status of Food Safety Management Systems in African Countries with Recommendations for the way forward by L. E. Yankey, FAO Consultant, Nov. 2004 Report of Sixteenth Session of the Codex Committee for Africa, Rome, Italy, 25-28 January 2005		

N/A - Not Available

TABLE 4 – MEMBERSHIP IN CODEX: NOTIFIABLE FOOD-BORNE DISEASES IN THE AFRICAN REGION

S/N	Country	Membership in Codex and establishment of National Codex Committees (NCC) and National Codex Contact Points (NCCP)	Notifiable food-borne diseases in the African Region	
			Food-borne diseases	Incidence of diseases
1	Algeria	Member of CCNEA. NCC and NCCP currently under development	N/A	N/A
2	Angola	Member - The NCC comprises Min of Agriculture & Rural Dev, Health, Industry, Trade, Fisheries & Environment Affairs. NCCP in Ministry of Agriculture.	N/A	N/A
3	Benin	Member - NCC established in 1990. NCCP located in the Min of Rural Dev. in the Department of Food and Applied Nutrition (DANA). NCC is being strengthened in terms of membership, technical activities, sensitization and communication.	N/A	N/A
4	Botswana	Member - Food Control Unit of the Ministry of Health serves as the NCCP.	Cholera, diseases caused by *Salmonella*	No data
5	Burkina Faso	Member- NCCP in Ministry of Agriculture	N/A	N/A
6	Burundi	Member- NCCP in Standards Bureau	N/A	N/A
7	Cameroon	Member - Codex Contact Point located in Ministry of Trade & Industry	N/A	N/A
8	Cape Verde	Member. Establishing agency for control of food products which will serve as NCCP. Min of Agriculture currently serving as NCCP.	N/A	N/A
9	Cen. African Rep.	Member- Ministry of Agriculture serving as NCCP.	N/A	N/A
10	Chad	Member- Hygiene division serves as NCCP	N/A	N/A
11	Comoros	Not a member	N/A	N/A
12	Congo, Rep	Member. Ministry of Industry serves as NCCP.	Cholera	No data
13	Congo, DR.	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
14	Cote d'Ivoire	Member. CODINORM, the national organ in charge of Codex, includes all agencies working in food safety and is represented within the NCC. Ministry of Agriculture serves as NCCP.	N/A	N/A
15	Djibouti	Not a member	N/A	N/A

S/N	Country	Membership in Codex and establishment of National Codex Committees (NCC) and National Codex Contact Points (NCCP)	Notifiable food-borne diseases in the African Region	
			Food-borne diseases	**Incidence of diseases**
16	Egypt	Member of CCNEA. Ministry of Health coordinates the NCC through the Food Safety Supreme Committee. Egyptian Organization for Standardization and Quality serves as NCCP.	N/A	N/A
17	Eq. Guinea	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
18	Eritrea	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
19	Ethiopia	Member. NCCP located in the Quality and Standards Authority of Ethiopia which is also the secretariat of the NCC. Needs further strengthening	Diseases caused by *Staph. aureus, Salmonella, Shigella & Bacillus cereus*	38 notified cases for 2001
20	Gabon	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
21	Gambia	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
22	Ghana	Member for over 30 years - NCCP located in the Ghana Standards Board. The National Codex Committee has 22 members and is actively involved in matters of food standards and safety.	N/A	N/A
23	Guinea	Member. The National Standardization and Metrology Institute (INNM), serves as the NCCP. Requests assistance in establishing a NCC.	Diseases caused by *Staph. aureus, Salmonella, Shigella & Bacillus cereus*	Cholera:44%;
24	G. Bissau	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
25	Kenya	Member - NCCP and NCC chair is the Kenyan Bureau of Standards; the NCC comprises government ministries, universities, the private sector, and consumer organizations. Functions need further coordination and strengthening.	N/A	N/A
26	Lesotho	Member - Contact Point is located in the Food and Nutrition Coordinating Office	N/A	N/A
27	Liberia	Member- Ministry of Commerce serves as NCCP.	N/A	N/A

S/N	Country	Membership in Codex and establishment of National Codex Committees (NCC) and National Codex Contact Points (NCCP)	Notifiable food-borne diseases in the African Region	
			Food-borne diseases	Incidence of diseases
28	Libya	Member of CCNEA. National Centre for Standards serves as NCCP. NCC recently formed.	N/A	N/A
29	Madagascar	Member - NCC membership comprise Govt. Ministries, Private Labs, Private Sector, Consumer and Producers Associations. Ministry of Commerce serves as NCCP.	N/A	N/A
30	Malawi	Member - NCC involves all relevant ministries, industries and consumers. Bureau of Standards serves as NCCP.	N/A	N/A
31	Mali	Member. Ministry of Health serves as NCCP.	N/A	N/A
32	Mauritania	Member. National Center of Hygiene serves as NCCP.	N/A	N/A
33	Mauritius	Member. Ministry of Agriculture serves as NCCP.	Food poisoning (bacteria etc), Cholera & diarrhea due to *Salmonella*	Cholera:44%; Diarrhoea:21%
34	Morocco	Member. The NCCP is located in the Fraud Repression Division of the Min of Agriculture. This Division serves as the secretariat to the NCC, established in 1997.	N/A	N/A
35	Mozambique	Member. NCCP is in the Min of Health and is responsible for distributing Codex texts, coordinating the activities of Codex within the country, and supporting the National Institute of Standardization and Quality in their work. NCC comprises Ministries of Agriculture, Trade, Fisheries & consumer organizations.	Diseases caused by *Shigella, Rotavirus*	No data
36	Namibia	Member. Ministry of Agriculture serves as NCCP.	N/A	N/A
37	Niger	Member - NCC formed in 1998; comprised of all concerned parties. NCCP located in the Ministry of Public Health and Reproduction. It encourages decision-makers to rely on and adopt Codex standards	N/A	N/A

S/N	Country	Membership in Codex and establishment of National Codex Committees (NCC) and National Codex Contact Points (NCCP)	Notifiable food-borne diseases in the African Region	
			Food-borne diseases	**Incidence of diseases**
38	Nigeria	Member. NCC was re-activated in August 2000, with representation of all identifiable stakeholders. Technical sub-committees have been established, and plans are being made to strengthen and empower the NCC and the NCCP. The Standards Organization of Nigeria is the NCCP and also the Secretariat of the NCC, chaired by the National Agency for Food and Drug Administration and Control.	Diseases caused by *Salmonella, Botulinum, Shigella, Listeria,* pesticides and natural toxins	No data
39	Rwanda	Member. Ministry of Commerce serves as NCCP.	N/A	N/A
40	Senegal	Member - NCC is located in the Food and Applied Nutrition Unit of the Ministry of Health and serves as technical support to the Senegal Standardization Institute (ISN). To date, it has elaborated more than 50 food-related standards.	N/A	N/A
41	Seychelles	Member. Bureau of Standards serves as NCCP.	N/A	N/A
42	Sierra Leone	Member. Standards Bureau serves as NCCP and chairs the NCC.	N/A	N/A
43	Somalia	Not a member	N/A	N/A
44	South Africa	Member. NCCP and secretariat of NCC is located in the Dept of Health. NCC includes Depts of Health, Foreign Affairs, Agriculture, the South African Bureau of Standards and the National Consumer Forum.	N/A	N/A
45	Sudan	Member of CCNEA. NCC established with all relevant stakeholders. Ministry of Agriculture serves as NCCP.	N/A	N/A
46	Swaziland	Member. NCC comprises relevant Ministries, Local Government, University, the food industry and consumer associations. NCCP is in the Ministry of Health. Committee meets on an ad hoc basis	N/A	N/A
47	Tanzania	Member. NCC was established in 1980, with secretariat located in the Tanzania Bureau of Standards. Have an active and well established NCCP in TBS.	N/A	Outbreak of cholera around Lake Victoria in 1997
48	Togo	Member. Division of Nutrition and Food Technology of the Ministry of Agriculture serves as the focal point for the NCC and NCCP. NCC was established in 2004 and involves all relevant stakeholders.	N/A	N/A

S/N	Country	Membership in Codex and establishment of National Codex Committees (NCC) and National Codex Contact Points (NCCP)	Notifiable food-borne diseases in the African Region	
			Food-borne diseases	Incidence of diseases
49	Tunisia	Member of CCNEA. Active NCC and NCCP- in Bureau of Standards.	N/A	N/A
50	Uganda	Member. NCCP located in National Bureau of Standards. NCC established in June 2002 comprising Government ministries, the industry and trade associations, academia, research institutions, and consumer organizations.	N/A	N/A
52	Zambia	Member. Ministry of Health is the NCCP. NCC not yet established due to lack of funds and continuity.	N/A	N/A
53	Zimbabwe	Member. Food Standards Advisory Board (FSAB) serves as the NCC. The NCCP and secretariat of the NCC and the FSAB is the Government Analyst Laboratory of the Ministry of Health	N/A	Food- related disease outbreaks are recurrent, in particular, cholera and anthrax
Source of Information / Data		Report of Sixteenth Session of the Codex Committee for Africa, Rome, Italy, 25-28 January 2005	WHO/AFRO Regional Survey	

N/A= Not available

NCC - National Codex Committee: NCCP - National Codex Contact Point

TABLE 5 – REGULATIONS ON BIOTECHNOLOGY AND GMOS (SIGNATORY TO THE CARTAGENA PROTOCOL ON BIOSAFETY)

S/N	Country	Regulations on Biotechnology or GMOs	Signatory to the Cartagena Protocol on Biosafety			
			Signature	Ratification (rtf) Accession (acs)		Entry into force
1	Algeria	Does not have regulations on biotechnology or GMOs	25-May-00	05-Aug-04	rtf	03-Nov-04
2	Angola	Does not have regulations on biotechnology or GMOs				
3	Benin	Does not have regulations on biotechnology or GMOs	24-May-00	02-Mar-05	rtf	31-May-05
4	Botswana	Does not have regulations on biotechnology or GMOs	01-Jun-01	11-Jun-02	rtf	11-Sep-03
5	Burkina Faso	Regulatory framework on all functions pursuant to the Cartagena Protocol on Biosafety	24-May-00	04-Aug-03	rtf	02-Nov-03
6	Burundi	Does not have regulations on biotechnology or GMOs				
7	Cameroon	Does not have regulations on biotechnology or GMOs	09-Feb-01	20-Feb-03	rtf	11-Sep-03
8	Cape Verde	N/A				
9	Cen. African Rep.	Regulatory framework	24-May-00			
10	Chad	Does not have regulations on biotechnology or GMOs	24-May-00			
11	Comoros	Does not have regulations on biotechnology or GMOs				
12	Congo, Rep	Does not have regulations on biotechnology or GMOs	21-Nov-00			
13	Congo, DR	Does not have regulations on biotechnology or GMOs		23-Mar-05	acs	21-Jun-05
14	Cote d'Ivoire	Does not have regulations on biotechnology or GMOs				
15	Djibouti	Does not have regulations on biotechnology or GMOs		08-Apr-02	acs	11-Sep-03
16	Egypt	Does not have regulations on biotechnology or GMOs	20-Dec-00	23-Dec-03	rtf	21-Mar-04
17	Eq. Guinea	Does not have regulations on biotechnology or GMOs				
18	Eritrea	Does not have regulations on biotechnology or GMOs		10-Mar-05	acs	08-Jun-05
19	Ethiopia	Does not have regulations on biotechnology or GMOs	24-May-00	09-Oct-03	rtf	07-Jan-04
20	Gabon	Does not have regulations on biotechnology or GMOs				
21	Gambia	Does not have regulations on biotechnology or GMOs	24-May-00	09-Jun-04	rtf	07-Sep-04
22	Ghana	Does not have regulations on biotechnology or GMOs		30-May-03	acs	11-Sep-03

S/N	Country	Regulations on Biotechnology or GMOs	Signatory to the Cartagena Protocol on Biosafety			
			Signature	Ratification (rtf) Accession (acs)		Entry into force
23	Guinea	Does not have regulations on biotechnology or GMOs	24-May-00			
24	G. Bissau	Does not have regulations on biotechnology or GMOs				
25	Kenya	N/A	15-May-00	24-Jan-02	rtf	11-Sep-03
26	Lesotho	Policy- still in draft form		20-Sep-01	acs	11-Sep-03
27	Liberia	Does not have regulations on biotechnology or GMOs		15-Feb-02	acs	11-Sep-03
28	Libya	Does not have regulations on biotechnology or GMOs		14-Jun-05	acs	12-Sep-05
29	Madagascar	Does not have regulations on biotechnology or GMOs	14-Sep-00	24-Nov-03	rtf	22-Feb-04
30	Malawi	Does not have regulations on biotechnology or GMOs	24-May-00			
31	Mali	Does not have regulations on biotechnology or GMOs	04-Apr-01	28-Aug-02	rtf	11-Sep-03
32	Mauritania	Does not have regulations on biotechnology or GMOs		22-Jul-05	rtf	20-Oct-05
33	Mauritius	Does not have regulations on biotechnology or GMOs		11-Apr-02	acs	11-Sep-03
34	Morocco	Does not have regulations on biotechnology or GMOs	25-May-00			
35	Mozambique	Does not have regulations on biotechnology or GMOs	24-May-00	21-Oct-02	rtf	11-Sep-03
36	Namibia	Regulatory framework	24-May-00	10-Feb-05	rtf	11-May-05
37	Niger	National legislation	24-May-00	30-Sep-04	rtf	29-Dec-04
38	Nigeria	National guideline on handling, transport, packaging and identification, public awareness and participation	24-May-00	15-Jul-03	rtf	13-Oct-03
39	Rwanda	Does not have regulations on biotechnology or GMOs	24-May-00	22-Jul-04	rtf	20-Oct-04
40	Senegal	Does not have regulations on biotechnology or GMOs	31-Oct-00	08-Oct-03	rtf	06-Jan-04
41	Seychelles	Regulatory framework	23-Jan-01	13-May-04	rtf	11-Aug-04
42	Sierra Leone	Does not have regulations on biotechnology or GMOs				
43	Somalia	Does not have regulations on biotechnology or GMOs				
44	South Africa	National legislation on the following topics: Intentional introduction into the environment (Advanced Informed Agreement); LMOs for use as food, feed or for processing; Transit and contained use; Genetic modification of organisms		14-Aug-03	acs	12-Nov-03

S/N	Country	Regulations on Biotechnology or GMOs	Signatory to the Cartagena Protocol on Biosafety			
			Signature	Ratification (rtf) Accession (acs)		Entry into force
45	Sudan	N/A		13-Jun-05	acs	11-Sep-05
46	Swaziland	Does not have regulations on biotechnology or GMOs				
47	Tanzania	Does not have regulations on biotechnology or GMOs		24-Apr-03	acs	11-Sep-03
48	Togo	Does not have regulations on biotechnology or GMOs	24-May-00	02-Jul-04	rtf	30-Sep-04
49	Tunisia	Does not have regulations on biotechnology or GMOs	19-Apr-01	22-Jan-03	rtf	11-Sep-03
50	Uganda	N/A	24-May-00	30-Nov-01	rtf	11-Sep-03
52	Zambia	N/A		27-Apr-04	acs	25-Jul-04
53	Zimbabwe	Does not have regulations on biotechnology or GMOs	04-Jun-01	25-Feb-05	rtf	26-May-05
Source of Information / Data		FAOLEX, ECOLEX	Parties to the Convention on Biological Diversity / Cartagena Protocol on Biosafety CDB/UNEP, 2001-2005			

Agenda Item 6 CAF 05/3

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

PRIORITIZATION AND COORDINATION OF CAPACITY BUILDING ACTIVITIES

(Paper prepared by the FAO/WHO secretariat)

1. INTRODUCTION

In the midst of the numerous other concerns facing the region, effective food safety systems are essential to the well-being of the people of Africa. As discussed in the *Situation Analysis of National Food Safety Systems in Africa* (CAF 05/2), access to safe food is an important element of food security, which is a daily concern to many in the region. Furthermore, due to the many other significant public health concerns facing the region, food-borne illnesses often go unnoticed, despite their unfortunate effects, both in terms of human suffering and economic costs. However, the task of attempting to accurately estimate the occurrence of food-borne diseases in the region is truly formidable, as surveillance systems are inadequate and occurrences are poorly recorded in most countries of the region. Accurate reporting of the occurrence of disease as well as the potential hazards in the food supply is needed in order to develop an effective national strategy to reduce food-borne disease and to increase the political will among national policy makers to give higher priority and the necessary resources to food safety programs. This reporting itself also requires a great deal of capacity building to implement.

Some of the countries of the region have realized that food exports provide significant foreign income that contributes to the economic development of their country, and thus also improve the standard of living of their people. However, access to food export markets, particularly the most lucrative markets, depends on their capacity to meet the regulatory requirements of the importing countries. In order to build long-term relationships with importers, the countries of the region must build the trust and confidence of their trading partners in their food control system.

Food supply systems in Africa are often fragmented, involving a multitude of middlemen. This exposes it to various types of contamination and fraudulent practices. In addition to the previously mentioned food security, public health and international trade issues, adulteration and fraud in the food supply are of significant concern to the consumers of the region. Considering that in many African countries, people spend almost 50% of their earnings on food, and among lower-income households this figure may rise to above 70%, the impact of such fraudulent practices can be quite devastating.[1]

Document CAF 05/2 outlines the importance of food safety in each of these contexts, as well as the challenges to be overcome in improving each of the specific components of national food safety management systems. Because of the many improvements required in national food safety systems in the region, effective, coordinated, and pragmatic food safety capacity building programmes are needed.

[1] Malik R.K. 1981. "Food: a priority for consumer protection in Asia and the Pacific region." *Food and Nutrition*, 7:2.

Although many activities have been implemented in Africa by various multi-lateral and bi-lateral agencies[2] and much progress in food safety capacity building has been made in recent years, many of the basic weaknesses in food safety systems in the countries of the region still exist. Accordingly, this document addresses the need for national identification and prioritization of specific, urgent and important capacity building needs, coordination of capacity building activities and the long term sustainability of the capacity building activities in the African region.

2. SPECIAL CONSIDERATIONS

2.1 Capacity building and the WTO Agreements

Article 9 of the World Trade Organization (WTO) Agreement on Sanitary and Phytosanitary Measures, (SPS Agreement) and Article 12 of the WTO Technical Barriers to Trade (TBT) Agreement emphasize the need for 'Technical Assistance' to assist developing country members meet the SPS measures of the developed importing countries to facilitate market access. The Agreement further provides that the technical assistance may cover creation of infrastructure, research activities and processing technologies. It stipulates not only for technical expertise and training to the developing members but also the hardware necessary to achieve the appropriate levels of sanitary and phytosanitary protection needed in their export markets.

Under Article 9 of the SPS Agreement, members of the WTO agreed to facilitate the provision of technical assistance to other members either bilaterally or through the appropriate international organizations. However, many African countries are not fully aware of the agreement of members to provide technical assistance under the SPS Agreement and therefore do not request the assistance. Also, many developed country members do not take adequate initiatives in providing the necessary technical assistance.

The technical assistance provided to date has, in many cases, been inadequate to permit African countries to meet their obligations and accrue the benefits of the SPS Agreement. Substantial investment and a coordinated and concerted effort among bi-lateral donors and the appropriate international organizations, international banks and other potential partners is needed if the real challenges faced by the countries of the region are to be addressed.

2.2 Evaluation of strengths and weaknesses of national food control systems

CAF 05/2 provides an analysis of the strengths and weaknesses of the national food control systems of the region. As evidenced, many of the national systems and institutions suffer from a number of weaknesses that make them vulnerable in addressing food safety and quality issues. The weaknesses documented include all the fundamental elements of an effective national food control system including: basic infrastructure; national food safety and quality strategies and policies; food legislation; food inspection services; food control laboratories; effective participation in the work of Codex and other international standard setting and trade related organizations; implementing quality and safety assurance systems throughout the food chain; collaboration and cooperation of national agencies; information exchange; consumer involvement; food-borne disease surveillance and contaminant monitoring; and scientific and technical expertise. The safety and quality of street foods is also a major concern to the region, and is discussed in-depth in CAF 05/4.

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[2] A complete list of FAO and WHO's capacity building activities in the Africa region and world-wide in 2004 and 2005 is available as CAC 28/INF 5: ftp://ftp.fao.org/codex/cac/cac28/if28_05e.pdf

In addition to the components of effective food control systems discussed in CAF 05/2, a foundational concern in strengthening food control systems is the development of national infrastructure. In many countries of the region, investment in basic infrastructure including sanitation, potable water supplies, cold storage, transport facilities and power supplies may be a prerequisite for addressing previously indicated concerns of personnel, laboratories, and other elements of food control systems. In addition, substantial investment in information technologies is important to improve communication and access to relevant information. Due to the large number of weaknesses in national food safety systems in the region, a well- coordinated and integrated set of actions for building capacity are needed.

2.3 Identification of specific urgent and important capacity building needs

The capacity building process must begin with an honest assessment by that country, involving all stakeholders, to identify the specific urgent and important needs of that country and to develop an optimal approach to meeting those needs. The needs assessment process requires the review of the existing structure including legislation, agencies involved, existing capabilities, and priorities. The assistance needs would broadly include various aspects of human and institutional capacity building.

FAO is in the process of testing *Guidelines to Assess Capacity Building Needs in Official Food Control Systems* that encourages a participatory approach of all stakeholders to ensure ownership and that the process is demand driven. As it is recognized that some lesser developed countries of the region may require assistance in employing such a tool, FAO is also in the process of developing a more concise tool that can easily be administered by consultants visiting these countries. FAO is also in the process of peer reviewing a *Biosecurity* Capacity Needs Assessment tool, which addresses cross-sectorial needs related to food safety, animal and plant health. After testing in pilot countries, all of these tools will be translated into all FAO languages and widely disseminated, likely in early 2006.

The results of such a needs assessment would provide useful information on which to design a national action plan outlining a coherent and integrated approach for internal actions and external assistance to meet the specific needs of individual countries. Capacity building and technical assistance activities could then be based on the actual requirements and these activities could be prioritized, designed and sequenced to meet the specific needs most efficiently and effectively. The specific assistance provided should be coordinated by all stakeholders involved, taking into consideration the agencies' respective mandates, resources and expertise. Development of such a plan would ensure collaboration between the national agencies involved, as well as external agencies, which often tend to provide disjointed assistance to the countries of the region.

In addition to an action plan at the national level, it is also essential that regional actions are well-coordinated through a regional action plan. Such a regional plan to address the food safety concerns of the region, including a plan of action for the FAO/WHO Regional Coordinating Committee for Africa (CCAfrica), will be subsequently presented and discussed in the working group sessions of this Conference.

3. COORDINATION OF CAPACITY BUILDING ACTIVITIES[3]

Countries may be able to implement various useful capacity building and technical assistance activities that strengthen specific elements of national food safety and quality control without conducting a needs assessment and developing a subsequent food safety action plan. However, these independent activities are often not well coordinated within the country, or with other efforts in the region, thus they

[3] Conference document CAF 05/6 further describes the coordination and cooperation in general food safety issues, at both national and regional levels.

may be ineffective or inadequate in achieving optimal or sustainable results. Unfortunately, information regarding or generated from these activities is normally not shared between agencies.

Capacity building activities can be expensive and time-consuming for both the provider and the benefactor; however, poor coordination often leads to duplicative activities, poor synergy between initiatives, and may not actually address the real needs of the country. Therefore, to complement the national and regional food safety action plans that are developed, it is necessary to improve the collaboration and coordination amongst the various agencies involved in food safety capacity building, whether within a specific country, regionally, or internationally.

3.1 National level

As a part of the national food safety action plan that is developed, it is essential that all the agencies within a country having mandates related to food safety work together to ensure coordination and long-term sustainability. Government agencies must also collaborate with the private sector to promote and ensure the safety and quality of the food they produce[4]. Government agencies and the private sector also must assure that they involve consumer and other advocacy groups in food safety activities to ensure that their needs are being met. Academia and other research organizations are also valuable partners in various aspects of assuring food safety and quality in the region.

National governments must also work to ensure that the assistance they receive from various multi-lateral and bi-lateral donors is well coordinated. Agencies working in food safety must ensure that the support they receive is shared with all concerned stakeholders, and that external inputs are not duplicative of each other, thus making the best use of available resources.

3.2 Regional level

There is great potential for effective regional collaboration among the countries of Africa. Many strong regional and sub-regional economic groupings already exist, some of which also address food safety issues. These groups include COMESA, EAC, ECOWAS, NEPAD, SADC and UEMOA, among others. However, many current capacity building activities do not adequately address the needs of the region or address areas of common concern. Accordingly, a regional action plan for food safety has been developed and will be discussed in order to improve the food safety situation in the entire region. The following actions are examples of practical capacity building actions that could be carried out a regional level in order to improve food safety:

3.2.1 *Joint participation in international standards formulation*

With greater acceptance of Codex standards and the initiation of the Codex Trust Fund[5], there has been an increased interest by the countries of the region in the activities of the Codex Alimentarius Commission. The SPS Agreement also clearly emphasizes that all member countries should participate in international standards work.

Participation by individual African countries in the work of international standards setting organizations is very difficult due to cost and capacity constraints. Making known the viewpoint of a

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[4] More information on the particular challenges and possibilities for small and medium producers to produce safe and high quality food is further detailed in CAF 05/5.

[5] More information on the Trust Fund is available from: http://www.who.int/foodsafety/codex/trustfund/en/index.html

developing country can require a great deal of effort. Regional capacity building efforts that would foster more regional cohesiveness would enable all the countries of the region to have a more effective voice in the Codex process. Countries also need assistance to provide relevant data to the Codex system and to take part fully in the standard setting process, including physical attendance at Codex meetings.

An action plan for the strengthening of CCAfrica will be further discussed during the subsequent working group session on the regional action plan for food safety. The biennial sessions of the CCAfrica committee can also serve to provide a regular review of the implementation of the food safety regional action plan, as well as addressing other food safety related issues of concern to the region.

3.2.2 *Safety management systems approach*

The HACCP based approach is being incorporated into the new hygienic codes under development by Codex, as well as the regulatory requirements of many countries including Australia, Canada, USA, members of the European Union, and others, especially for more risk-prone products such as marine, meat, poultry and dairy products.

To develop the industries and control authorities in the region, regional programmes can be arranged on a rotational basis to cover the following aspects:

i) Study the HACCP systems being implemented in countries, both outside and inside the region;
ii) Develop HACCP modules for various important sectors that would assist the food industry of the region;
iii) Arrange training for industry and for competent authorities on all aspects of HACCP, including auditing.

3.2.3 *Establishment of subregional centres for human resource development in food safety and quality*

Training has been identified as an essential activity to develop and upgrade human resource skills and to implement food quality and safety programmes as per international requirements. Because of the previously mentioned strong regional economic sub groupings and the common languages spoken in the various countries of the region, subregional training centres associated with the various economic sub groupings would be very effective. Small countries with limited funds could not support such training programmes individually, but regional efforts would also allow the countries of the region to learn from others in similar situations. Such training centres could address the training needs of the region in areas such as food inspection, laboratory analysis, the application of HACCP, etc. Required funding could be sought from potential bi-lateral and multi-lateral donors through the existing structures in place in the region.

3.2.4 *Equivalence Mutual Recognition Certificates*

The concept of equivalence has been recognized in the SPS Agreement and is also being encouraged at the international level by Codex with a view to using pooled resources more effectively, avoiding duplication of inspection and testing, and ensuring that health and safety requirements are met effectively. These also serve as an important means of facilitating trade by recognition of the standards and certification systems of the exporting country to provide for an equivalent level of protection against health risks as those of the importing countries and also lead to reduced rejection rates and provide for reduced inspection of export products in overseas markets.

Such equivalence agreements are normally signed between the importing and exporting countries individually. However, if such agreements are developed regionally – a form of regional agreement for recognition of the equivalence of specified SPS measures of all countries in the region, it would not only benefit intra Africa trade, but also give strength for negotiating equivalence agreements with third party countries on regional basis. Such agreements would also help reduce the financial burden for each member. For example, the members of the East African Community are currently developing regional food standards for the benefit of all its member countries and to facilitate inter-regional trade and transit. Other similar initiatives are on-going in other subregional groupings as well.

As many countries of the region are small, land-locked, share largely unpatrolled borders with multiple countries, and depend on other countries for food imports, mutual recognition agreements are also especially important for neighbouring countries of the region. Mutual recognition is the recognition by two trade partner countries of the validity of each others' control procedures. The agreement may cover all foods or only specified foods.

3.2.5 *Risk-based approach [6] and harmonization at regional level*

Risk to consumers resulting from hazards in foods has been identified as a significant concern at the international level. Article 5 of the SPS Agreement provides that sanitary and phytosanitary measures should be based on risk assessments, taking into account an appropriate assessment of the actual risk involved, and, if requested by the exporting country, make known details of this assessment. Codex is also promoting the application of risk analysis principles throughout all Codex Committees in establishing and adopting standards. It becomes necessary, at times, to carry out risk assessments before fixing standards for domestic use, especially when these relate to indigenous products or are different to international standards due to local or regional conditions. It is proposed that such standards are formulated at the regional level, based on joint risk assessment studies which are conducted by utilizing the strengths of respective countries. As most countries of the region do not have adequate resources to effectively conduct the needed risk assessments at a national level, a regional risk assessment body may provide a valuable service in conducting risk assessments required by national governments to meet the risk assessment needs of the region that are not addressed by risk assessment bodies form outside the region. The establishment of regional food standards may also require harmonization of food standards within the region.

3.2.6 *Laboratory networking*

Increasing sophistication of laboratory instrumentation and methods of food analysis has handicapped many African countries. Accordingly, strengthening the equipment, manpower and infrastructure of laboratories has been identified as an important area for most countries of the region. A system of networking of laboratories within the region may be useful so that the facilities in one country could be utilized by other countries so that facilities are not unnecessarily duplicated, while at the same time are available to all countries of the region. Accreditation of these laboratories on common international criteria would be a prerequisite for being used in a regional network.

Joint training programmes for laboratory personnel may also be organized. It may also be useful to have a system of specific laboratories given the responsibility of development and maintenance of standard methods and sharing of the same. Inter laboratory calibration tests could also be organized within the

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[6] FAO and WHO are in the process of peer reviewing a Food Safety Risk Analysis manual that provides a framework for conducting all aspects of risk analysis (risk assessment, risk management and risk communication) at a national level.

region. This would also facilitate sharing of analytical test data for decision making as well as standards development.

3.2.7 *Certification*

Facilities for certification in different areas, such as export certification, HACCP, ISO 9000, etc. should be recognized within the region, irrespective of the country of operation. A country which has additional experience in a particular area could assist the other countries of the region without existing systems in that area until they are able to establish their own system.

3.2.8 *Technical assistance between countries of the region*

In addition to multi-lateral and bi-lateral assistance from countries outside of the region, many of the countries of the region have a great deal of knowledge and experience that could be shared with other countries of the region, with mutual benefit for both countries. Many countries of the region face similar issues and have related climates, histories, infrastructures, etc, so they would be best suited to assist other countries in similar situations. The strengths of each country of the region should be identified and a system developed for maintaining and sharing this information, and then providing the necessary technical assistance to other countries. Some of the areas identified could include laboratory testing, inspection and certification, including export certification.

This collaboration would reduce dependency on outside, and often irrelevant, technical assistance. Cooperation in provision of technical assistance may also lead to the strengthening of intra regional trade, which has great potential to assist the countries of Africa to ensure food security without dependence on foreign markets.

3.2.9 *Communication and exchange of information*

Access to information is essential in a rapidly changing global food economy. FAO and WHO provide a number of resources in this area, but further assistance is still needed. These activities are described in CAF 05/6, International, Regional, Subregional and National Cooperation in Food Safety in Africa.

3.3 International level

FAO and WHO must also work to further coordinate food safety capacity building activities at the international level, including activities such as those given below:

- Arranging regional or global food safety events to discuss and share experiences on food safety issues of regional or global concern;
- Organizing workshops on specific technical matters, such as the application of HACCP in the prevention and control of contaminants, mycotoxin issues, foods derived from modern biotechnology, etc;
- Formulation and implementation of projects on food safety in which different countries may take part and thus improve the safety and quality of the trade- intensive products common to each other. These projects might also include trans-boundary movement and prevention of animal and plant diseases, as a part of the food chain approach to food safety.

FAO currently serve as the chair and co-chair, respectively, of the Working Group for the Standards and Trade Development Facility, which seeks to improve coordination of SPS related capacity building activities. The WTO serves as secretariat for this facility and IPPC, OIE, and the World Bank are also involved in the working group. The STDF also funds standards and trade related capacity building projects.

The STDF also seeks to collaborate with the Integrated Framework trade facilitation programme (involved partners include WTO, UNCTAD, ITC, IMF, World Bank and UNDP) and other trade related initiatives.

As previously indicated, many countries of the region do receive bi-lateral technical assistance from countries outside of the region, and could also take part in twinning programmes where the countries can learn about food safety systems directly from the country with which they are paired.

4. LONG-TERM SUSTAINABILITY OF THE RESULTS OF CAPACITY BUILDING ACTIVITIES

In order for technical co-operation activities to be effective and sustainable in the long term, all stakeholders must be involved and the project must be needs based. Special emphasis should be given to appropriate sensitization of key persons, such as policy makers, and to the development of public education programmes related to food safety, such as inclusion of quality and safety aspects in all levels of educational curriculum. Food control systems must be strengthened by implementation of international systems standards such as Codex, ISO 17020, ISO 17025, ISO 22000, ISO/IEC Guide 62 and 65 and must seek accreditation to ensure continued implementation of international norms.

To ensure its sustainability and effectiveness, there is a need for a regular review and evaluation of the technical assistance provided to individual developing countries. This review should include all of the agencies involved and officials of the developing countries concerned. The purpose is to evaluate the effectiveness of the assistance provided in meeting its objectives and, if needed, to make any necessary adjustments in the approach to ensure its sustainability and effectiveness.

5. CONCLUSION

Effective capacity building must reflect the needs, priorities and conditions of the countries of the region. Although there have been many capacity building activities in the region, efforts have been sporadic and critical mass and multiplier effects have not been achieved. Most of the capacity building activities have been focused on training and seminars, while infrastructure development, such as equipment for laboratories, has been limited. Action is required to improve cooperation and collaboration between the various organizations involved and to build alliances so that the available resources are optimally applied. Capacity building must be addressed in an integrated manner with a national, regional and international perspective.

6. RECOMMENDATIONS

In addition to the points mentioned throughout this and other conference documents, the following recommendations are proposed for consideration by the conference:

The countries of the region should:

- Prioritize their food safety capacity building needs and develop capacity building programmes to meet these needs, using tools such as the soon to be released FAO Guidelines for Assessing Food Safety Capacity Building Needs;
- Design and implement a national food safety action plan outlining a coherent and integrated approach for internal actions and external assistance;
- Endorse and work to implement the regional plan to address the food safety concerns of the region;
- Work to accurately report the occurrence of disease as well as the potential hazards in the food supply to increase the political will to give higher priority to food safety capacity building efforts;
- Request technical assistance in food safety from developed countries under the framework of Article 9 of the SPS Agreement;
- Develop basic infrastructure for food safety including sanitation, potable water supplies, cold storage, transport facilities and power supplies;
- Ensure that the assistance they receive from various multi-lateral and bi-lateral donors is well coordinated;
- Request assistance in providing relevant data to the Codex system and to take part fully in the standard setting process, including physical attendance at Codex meetings;
- Seek assistance to develop subregional training centres on food safety matters;
- Develop regional equivalence and mutual recognition certificates;
- Develop regional food standards;
- Consider the implementation of a regional risk assessment body;
- Develop regional/subregional laboratory networks;
- Identify and record the strengths of each country of the region to enable the sharing of necessary technical assistance to other countries of the region.

FAO and WHO should:

- Work to further coordinate food safety capacity building activities at the international level;
- In collaboration with providers and donor agencies, continue to assist countries of the region in training of technical staff involved in various food safety related activities;
- In collaboration with providers and donor agencies, assist countries in prioritizing their food safety capacity building needs and develop capacity building programmes to meet these needs, using tools such as the soon to be released FAO Guidelines for Assessing Food Safety Capacity Building Needs.

Agenda Item 7 CAF 05/4

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

INFORMAL FOOD DISTRIBUTION SECTOR IN AFRICA (Street foods): Importance and challenges

(Paper prepared by Zimbabwe)

1. Introduction

Street-vended foods are defined as those foods prepared on the street and ready to eat, or prepared at home and consumed on the street without further preparation[1]. Due to faltering economic development as a result of various factors, street food vending has become increasingly important in the economies of many African countries. The street food vending business is thought to contribute significant income inflows for households involved in selling these foods. Furthermore, street foods are a source of inexpensive, nutritious meals[2].

The types of street foods sold vary greatly between countries (Table 1). However, most meals consist of the staple food served in various forms and in combination with side dishes such as stews, gravies and spices[3]. In addition, snacks such as dried meat, fish and cereal based ready to eat foods are also prepared and served. Street food vending is therefore a source of a wide range of foods that may be nutritionally important for various groups of the population.

There is a general perception that street-vended foods are unsafe, mainly because of the environment under which they are prepared and consumed, which exposes the food to numerous potential contaminants. Street food vendors usually take their products to their customers and therefore operate from such places as bus terminals, industrial sites, market places and other street corners where there are ready and numerous clienteles. Unfortunately, these locations usually do not meet all food safety requirements. For example, large amounts of garbage accumulate and provide harbourage for insects and animal pests[4]. The utensils used are also of a nature that may lead to contamination, especially through leaching of toxic heavy metals or simply due to unsanitary exposure to the environment. Some studies, however, have shown that food prepared on the street can also be safe, thereby providing alternative outlets for consumers[5]. The business of street food vending, therefore, needs to be addressed carefully and in an innovative way in order to derive maximum benefits from it.

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1 Martins and Anelich, 2000.
2 Mosupye and von Holy, 1999.
3 Tomlins et al., 2004.
4 Bryan et al., 1997.
5 Mosupye and von Holy, 1999.

Table 1: Examples of street-vended foods in some African countries

Country	Type of food
Ghana[6],[7],[8]	Fufu, kenkey, banku, waakye, akamu, jollof rice, moi-moi, agidi, koko, koose, boiled rice, gari, yam and plantain, fried fish, light soup, groundnut soup, okra soup, palm nut soup, tomato stew, nkontmre
Zambia[9]	Nshima, chicken/beef stew, fried vegetables, smoked sausages, buka buka fish, offals, (i.e. bovine stomach), vegetables (ifisashi - vegetable mixed with pounded groundnuts and beans)
Zimbabwe[10]	Sadza, chicken, beef stew, boiled/fried vegetables, roasted beef/chicken/sausage, offal, boiled beans
South Africa[11]	Maize porridge (pap), chicken/beef stew, gravy, salads
Kenya[12]	Sausages, meat, fish, eggs (boiled), French fries, cereals, coffee, tea, porridge, root tubers (yams, cassavas, sweet potatoes, arrow roots), maize cobs, pumpkin pieces, bananas, potatoes, peeled carrots, onions, garlic, whole milk, yoghurt, ice cream, mangoes, water melons, pineapples, pawpaws, beef stew, African sausage
Malawi[13]	Nsima, rice, sweet beer (beverage), meat, fish, eggs, fruits and vegetables, frozen foods
Benin, Togo, Senegal, Burkina Faso, Côte d'Ivoire[14]	Cereal or tuber based porridges (fermented or not), buttered bread, coffee/tea, bean purees, cowpea/cereal mixtures, maize/groundnut mixtures, pasta, salads, "monyo", potato chips, peanuts, cashew-nuts, etc.

This paper highlights the current status of the issue of street food vending in Africa, including the socio-economic impact, the safety concerns and the strategies that are needed in order to address this growing phenomenon**.**

2. Socio-economic status of street food vendors

Street foods play an important socio-economic role in African economies in terms of employment potential. Although street food vendors come from diverse backgrounds, the majority are female heads of households. For example, a 2003 census of street vendors in Harare, Zimbabwe showed that about 8 631 people were involved in the business of street food vending[15], of which 81% were women. Most of these vendors employ other people to assist with the business and thus consider themselves as employers. A similar census conducted in Lusaka, Zambia in 2003 recorded 5 355 food vendors with a further 16 000 people employed by the business owners. It is estimated that the Lusaka food vendors sell about 81 million

6 Tomlins et al, 2004
7 Ehiri et al., 2001.
8 Mensah et al., 2002
9 Graffham et al., 2005
10 Graffham et al., 2005
11 Kubheka et al., 2001
12 Mwangi, 2005
13 Masuku, 2005
14 Nago, 2005
15 Graffham et al., 2005

meals per annum[16], and make profits ranging from US$ 0.20 to US$31 per day. Such income is significant considering that a large proportion of the African population survives on less than US$1 per day. A separate study in Ghana[17] also revealed similar trends in terms of the participation of the different groups of people, with women constituting the majority of vendors. However, men are now playing an increasingly prominent role in this lucrative business.

Street food vendors operate from various places including municipal markets, cooperative markets, industrial sites, vacant bus shelters and other undesignated sites. Food vending takes place alongside other activities such as the sale of haberdashery and clothes, commuter omnibus ranking, push cart operations, cleaning of commuter omnibuses and the hawking of other items including sweets, tobacco and cigarettes, thereby exposing the food to multiple sources of contamination. In addition, uncontrolled street food vending could result in serious environmental hygiene problems and possible deterioration in law and order in the event of unscrupulous practices by the vendors.

3. Consumers of street food

All age groups consume street foods in Africa. However, there may be differences in the type of clientele depending on locality. While it is often thought that children under 5 are fed from home, Mensah et al., (2002) observed that many mothers working at the markets in Accra also bought some food items from vendors to feed their babies. This has serious implications on the health of the children.

The majority of consumers of street foods in West Africa were found to be male[18] (more than 65% of the consumers in Benin, Senegal, Togo and Côte d'Ivoire). While most of the consumers are from the low or middle income group, a significant number are professionals and represent the diverse ethnic groups in the countries concerned. The consumers also include the illiterate and people who have achieved a variety of educational levels.

4. Safety of street foods

The hygienic aspects of street food vending are a major concern for food control officers[19]. Vending stands are often crude structures, and running water, washing facilities and toilettes may not be available. Improved safety of street foods can be achieved through awareness raising programmes involving several partners such as local authorities, the food vendors, government departments, consumer organizations, standard setting bodies and some non-governmental organizations. In some instances, the vendors are keen to participate in programmes that provide basic facilities that make it possible for them to work in clean environments. For example, in a survey of street food vendors in Lusaka and Harare, the vendors indicated that they would be willing to pay for basic facilities such as running water and electricity, but would want the local authorities to provide the water points, refuse receptacles and washing facilities[20]. A viable partnership involving local authorities, vendors and policy makers is therefore encouraged as this should lead to the improvement of business conditions and allow for the improvement of the livelihoods of vendors and their families.

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16 Graffham et al., 2005
17 Tomlins et al., 2004.
18 Nago, 2005.
19 Mensah et al. 2002.
20 Graffham et al., 2005.

4.1 Microbiological safety

The major concern with street foods is their microbiological safety, mainly because vending is done in places that may have poor sanitation. Street foods in some African countries have been tested for various microorganisms of public health concern, including feacal coliforms, *Escherichia coli*, *Staphylococcus aureus*, *Salmonella* spp and *Bacillus cereus*. *E. coli* and *S. aureus* were recovered in a significant proportion of the food, water, hand and surface swabs tested in Harare. Samples of fufu, kenkey and waakye tested in Accra, Ghana also had positive counts for *E. coli* and *Staphylococcus aureus*[21]. Mensah et al. (2002) reported that of 511 street food items examined in Accra, 69.7% contained mesophilic bacteria, 5.5% contained *Bacillus cereus*, 31.9% contained *S. aureus* and 33.7% contained Enterobacteriaceae. *Shigella sonnei* was isolated from macaroni, *Salmonella arizonae* from meat-based soup and enteroaggregative *E. coli* from macaroni, tomato stew and rice[22]. Although the microbiological quality of most of the foods tested in Accra was within the acceptable limits, samples of salads, macaroni, fufu, omo tuo and red pepper had unacceptable levels of contamination[23]. However, kenkey had low microbial counts and is considered a low risk food because of the low pH, which protects against pathogenic organisms. In a separate study, it was observed that over 26% of street food samples analyzed in Nigeria contained *B. cereus,* while 16% contained *S. aureus*[24]. These observations indicate that although street foods are a major source of nutritious food, they are also a possible source of food poisoning microorganisms.

4.2 Heavy metals and pesticide residues

Due to the conditions under which street foods are sold, there is concern that food may be contaminated by heavy metals and pesticide residues. These contaminants may come from the utensils, raw materials, or transport methods used and may also occur due to the lack of appropriate storage facilities.

A study carried out in Accra revealed that street food vendors source their pots and other utensils from both formal and informal manufacturers/retailers. Some of the street food samples had higher levels of lead, cadmium, arsenic, mercury and copper than average food samples[25], suggesting possible leaching from the utensils. Further tests showed that lead from the pots obtained from informal manufacturers could leach into the food. These pots are manufactured using scrap metal that could come from diverse sources such as derelict cars, car batteries and industrial machinery, which are obviously not suitable for use with foods. Their continued use must be discouraged.

Interviews with vendors in Harare also showed that some of their utensils come from informal sources. This was attributed to the fact that when police raid these vendors, they usually confiscate their wares, including the pots and utensils. For fear of losing their more expensive pots, the vendors resort to using informally fabricated pots, thereby exposing consumers to the possibility of food contamination by heavy metals. Further work must be done in order to reduce the exposure of consumers to heavy metals and pesticide residues through street-vended food.

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21 Tomlins et al., 2004.
22 Mensah et al*.,* 2001.
23 Mensah et al., 2002.
24 Umoh and Odoba, 1999.
25 Tomlins et al., 2004.

4.3 Personal hygiene

Purchasing ready-to-eat foods and ingredients from street/market vendors poses a considerable risk to public health, especially due to the observed poor hygienic practices[26]. In most cases where studies of street food vending have been done, the vendors do not have adequate washing facilities, and some vendors started their duties without taking a proper bath. Some of the vendors sleep at the vending sites in order to protect their wares. Foods and ingredients are also subjected to repeated contamination from unwashed hands and the materials used for wrapping, such as leaves, old newspapers and reusable polyethylene bags.

However, many vendors are aware of the need to wear clean and appropriate clothes. Some of the female vendors wear headgear and aprons. After a few awareness-raising meetings for vendors at the Soweto market in Lusaka, most of them heeded the need to have clean clothes and utensils. However, the vendors felt let down by the poor drainage facilities and the absence of water points near their work places. Some food handlers at markets in Accra, Harare, Lilongwe and Lusaka washed their hands in the same bucket used for cleaning utensils, which may lead to the contamination of food with faecal matter. An additional concern is that most food vendors operate without health certificates or licenses that indicate that the vendors have gone through a training programme on food handling techniques.

Street food vendors find it cheaper to use bar soap than liquid soap, which may be more effective, to clean their utensils. They also use cold water, resulting in inefficient cleaning. Washed plates are often stored in an unclean corner, plastic bowl or cardboard box, leading to re-contamination of the plates.

4.4 Environmental hygiene

Inadequate refuse disposal facilities lead to the accumulation of refuse at food vending sites. This leads to an increased pest population and will result in an increased risk of food contamination. In many instances, the vending sites are not included within the city or town plans, and therefore amenities such as refuse collection are not available. City authorities are often faced with the dilemma that if they provide services to illegal operations, this will imply recognition of these operations. At the same time, because the vending operations are illegal, vendors do not contribute anything towards the maintenance of infrastructure or provision of public services. This contributes to further deterioration of the hygienic condition of the area where the foods are vended.

Poor sanitary conditions in the area where foods are vended also contribute to poor food storage and transport conditions. Street food vendors in Lusaka, Harare and Johannesburg (Gauteng), obtain their vegetables, maize meal and other condiments from licensed shops, and therefore there is less concern regarding the safety of these raw materials. However, most of the vendors have no fixed stalls where they can store their raw materials on site. They usually store their goods at home overnight and transport them the following day, often improperly covered, to their operating sites. Thus, the food becomes prone to contamination during transportation.

5. Food control systems

Food control refers to the systematic set of activities carried out by food producers, processors, retailers and national or local authorities in an effort to provide consumers protection against food poisoning and unscrupulous food traders. Food control ensures that all foods produced in or imported into the country conform to national food safety requirements. The food control system therefore consists of food

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[26] Ehiri et al., 2001.

legislation, a food inspection department, food analysis facilities (laboratories), and information dissemination and management[27].

In many African countries, the informal food distribution sector often escapes formal inspection by regulatory authorities, mainly because most vendors operate without licenses and from un-designated places. Many of the vendors are itinerant, moving from one site to another. In some countries, such as Kenya, Malawi, Mozambique, Zambia and Zimbabwe, vendors operating from undesignated places are forcefully removed from the vending sites, mainly because their activities violate existing laws governing the sale of food. However, in many African countries, food control programmes still need to be strengthened.

5.1 Challenges to food control activities in Africa

A number of studies have revealed that food control activities, including control of street-vended foods, in African countries have been hampered by a number of factors, including:

- Inadequate or out of date food legislation,
- Ill-equipped food inspectorates,
- Inadequate laboratory facilities,
- Poor management, and
- Lack of coordination and cooperation among government food control agencies.

Recently, the food control authorities in Zimbabwe noted that their duties were being hampered by fragmentation of food laws and lack of coordination between food control departments. In addition, some of the laws and regulations are outdated and do not effectively address new trends, especially street food vending. Therefore, efforts to create a Food Control Authority that would administer the Zimbabwe Food Control Act are at an advanced stage. Similar fragmentation was observed in South Africa and the creation of a food control agency has been investigated as a way of addressing such fragmentation.

Although the street food vendors in Uganda are recognized as an important part of the food supply system, there is no comprehensive law governing street food vending. A comprehensive Food Safety Bill is currently being considered by parliament. A number of pieces of legislation, however, are available to ensure safety of the consumers, including;

- Public Health Act, CAP 269, Sec 109 – Laws of Uganda, 2000
- Food & Drugs Act, CAP 271 – Laws of Uganda, 2000, and
- By-laws made by local authorities

The Uganda Public Health Act, Section 109, (The Eating Houses Rules) establishes the minimum requirements for and practices in public eating places. It also empowers authorized officer(s) to license eating places and to revoke the license where a violation has taken place. On the other hand, the Food & Drug Act requires that every food vendor be registered and that food sold to the public is fit for human consumption. It also empowers the authorized officer to inspect premises and sample foods for analysis.

In West Africa, the situation regarding regulation and control of street foods is not satisfactory[28]. In countries such as Benin and Senegal, legislation and various regulations have been adopted to regulate the production and sale of street foods. These regulations establish official requirements for an operator to be

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27 FAO/WHO, 2003.

28 Nago, 2005.

licensed, conditions and practices required for the production and sale of street foods, penalties for fraud and other infractions, and institutions and staff in charge of food control. However, quality and safety standards required for street foods have not been specifically defined in these regulations. In Togo, the food regulations and by-laws/ordinances do not include any specific provisions on street foods.

In many African countries, the lack of resources does not allow some institutions to carry out their control, education and enforcement tasks efficiently[29]. This constraint has been cited in Benin, Burkina Faso and Togo. A similar situation has been reported in Malawi and Mozambique[30]. In some countries such as Senegal and South Africa (Ethekwini Municipality), achievements in food control activities in the street food sector have been significant. These achievements have been attributed to good organization, availability of well trained staff and consumer awareness.

5.2 Codex Guidelines on Street Food Vending

The Standards Association of Zimbabwe has formulated guidelines for the design of control measures for street-vended foods. The guidelines are based on the Codex Guidelines for the Design of Control Measures for Street-Vended Foods in Africa (CAC/GL-22-Rev.1 (1999)). These guidelines emphasize the need for local authorities to provide structures and hygienic facilities, as well as training for vendors. The Codex guidelines also outline general requirements for legislation, vendor health status, and food preparation, including cooking, handling, serving, transportation and storage. African countries were consulted in the development of the Codex guidelines; however, there are two main problems in implementing them. First, African countries do not have adequate resources to provide a suitable infrastructure for the vendors. Second, where facilities are provided, vendors shun the premises, either because they are far away from their clientele or are conceived to be unaffordable.

5.3 Initiatives to improve the safety of street foods in Africa

Because street food vending is a relatively recent phenomenon, many African countries have realized that their existing food legislation does not adequately address the new challenges brought about by street food vending. Some food control authorities have tried to deal with this issue by forcefully removing vendors from the streets, which has been met with a lot of resistance. As many African economies falter against the background of a growing population and an increasing HIV/AIDS pandemic, more and more people find their way into street food vending. A number of initiatives aimed at developing innovative ways of improving the safety of street foods and improving the livelihood of vendors in African countries have been commissioned, including the following:

- FAO's Food and Nutrition Division and the WHO Regional Office for Africa support numerous activities to improve the safety and quality of street food, including:
  - Development of information materials and training of public health and food safety officials.
  - Training to help street food vendors comply with regulations and implement safer food handling practices.
  - Improvements to equipment and materials used by vendors to prepare, store or serve street food.
  - Education campaigns to increase consumer awareness about nutrition and safety of street foods.

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29 Nago, 2005.

30 Franco, 2005.

- Updating codes of hygienic practice and other food safety recommendations.
- Supporting the development of street food vendors associations to: i) improve access to credit; and ii) enable vendors to influence decision-making processes that affect their work and take appropriate corrective measures.

- FAO, through its Technical Cooperation Programme (TCP), supports a number of initiatives to improve the safety of street foods in Africa, including;

  - Workshops at national and regional level for exchanging information and experiences on street foods.
  - Multidisciplinary studies and research activities in different countries in order to accomplish the following:
    - determine the characteristics and implications of the street food sector;
    - evaluate the problems in the sector;
    - identify practices, technologies and actions which could ensure food safety and quality and improve the situation of the sector; and
    - elaborate proper regulations.

  - Multi-sectoral field projects in some countries, including:

    - diagnosis studies (socio-economic, judicial, institutional and technical aspects),
    - pilot interventions (training operators, educating consumers, improving food legislation and control systems, developing technologies, improving infrastructures).

- WHO/AFRO has also initiated a number of similar programmes to improve the safety of street-vended foods.

- The United Kingdom Department for International Development (DFID) funded Crop Post Harvest Programme (CPHP) implements projects in various countries to improve the safety of street-vended foods.

- Other bi-lateral projects.

- Consumers International (CI) conducted a preliminary survey of street food vendors in 14 African countries, namely: Benin, Burundi, Cameroon, Malawi, Mali, Morocco, Mozambique, Nigeria, Senegal, Seychelles, Togo, Uganda, Zambia, and Zimbabwe in order to:

  - develop a database of legal provisions, government and NGO programmes for street foods and
  - draft recommendations and guidelines to improve the sector.

Building on the on-going efforts to address the safety of street-vended foods, FAO and CI jointly organized a sub-regional workshop in Lilongwe, Malawi from 15 to 17 June 2005, with the theme of: '*Street-vended Foods in Eastern and Southern Africa:Balancing Safety and Livelihood.'* Thirty-three participants from seven eastern and southern African countries, namely Kenya, Malawi, Mozambique, South Africa, Uganda, Zambia, and Zimbabwe attended the workshop, along with representatives of FAO and CI. This effort to ensure safe food while also improving the livelihoods of vendors brought together a variety of stakeholders to formulate a consensual plan of action to promote safer street foods and secure the livelihood of street food vendors in Eastern and Southern Africa. The presentations made at the workshop

allowed the participants to exchange experiences from the region and also learn from experiences in West Africa and Asia. The workshop resulted in participants pledging to do the following activities as follow-up:

1. In countries that have not already done so, the participants will initiate surveys to determine the extent of street food vending with special emphasis on the impact of street food vending on the social, economic and health sectors of the country.
2. The participants will lead in convening stakeholders' meetings to highlight the importance and contribution of street food vending to the economies of the different countries and to emphasize the need to balance food safety and livelihood as a poverty alleviation strategy.
3. The participants will help in creating a network of relevant stakeholders in each country, which will include the FAO and CI.

A great deal of work has been undertaken in the past decade to improve the situation of the street food vendor and those who consume their products. However, in a number of countries, the efforts have not been converted to tangible actions or improvements in street food safety. Therefore, it is logical that the vendors be empowered to spearhead these efforts to achieve sustainable improvement of the sector. It is with this in mind that the following recommendations are proposed, some of which have been cited in the various referenced initiatives, for a coordinated approach to improve the safety of street foods and improve the livelihoods of vendors.

6. Recommendations

1. The various stakeholders (national government, local government, industry, scientists, consumers and vendors) related to street food vending must work together in a coordinated manner to avoid developing conflicting legislation and regulations.
2. Local authorities should provide the informal vendors with appropriate facilities where they can carry out their activities, including well-designed shelters, ample supply of potable water and sanitary facilities (toilets, washing facilities). All this should be done in consultation with the vendors in order to develop user-friendly sites.
3. Food laws should be adapted to changing circumstances but should retain the ability to ensure the safety of the food. Member countries should adopt the Codex Guidelines for Street Food Vending into their food laws or national standards.
4. Food vendors and health inspectors should understand the provisions of the laws governing street foods, and these laws should be written in all national languages.
5. There should be minimum interference with the duties of health inspectors by other stakeholders at the vending sites who may have conflicting interests to that of the inspector.
6. Health inspectors must be continuously trained to ensure uniform application of legal procedures and more thorough assessment during inspections.
7. Health inspectors should be adequately equipped with the tools necessary for on site tests and measurements.
8. The street food vendors should be trained in all issues pertaining to their business such as hygiene, food laws and financial matters. Awareness campaigns should be carried out through the radio, television, posters and billboards.
9. The vendors should form associations that facilitate communication with other groups such as consumers and health authorities.

10. Consumers should be informed of the requirements for healthy and safe food, especially street-vended foods.

11. Local authorities should establish reasonable and affordable licensing fees so that vendors will be more likely to register.

12. The vendors should be assisted to grow their operation into viable businesses, which can employ a number of people and can generate real income.

Further work must be carried out in other African countries under a common action plan. This also should be backed by concrete policy plans at the national government level.

7. Conclusion

Street-vended foods have become increasingly important in most African countries. However, the vendors continue to operate in less than satisfactory environments. There is need for concerted efforts to improve the safety of street-vended foods and the livelihood of street food vendors in Africa. The food handlers need more information on food safety, which can be disseminated through various media outlets such radios, television, posters and billboards. The street food vendors themselves concede that there is need to re-emphasize the important points of the hygienic handling of food through on-site training and regular visits from the health inspectors. Food vendors should be encouraged to operate from designated places and local authorities should provide the necessary infrastructure in order to improve the safety of street-vended foods.

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Agenda Item 8 CAF 05/5

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

ASSURING FOOD SAFETY AND QUALITY IN SMALL AND MEDIUM SIZE FOOD ENTERPRISES

(Paper prepared by Botswana)

1. INTRODUCTION

1.1 Small and Medium Size Enterprises

There is no single, clear and widely accepted definition of Small and Medium Size Enterprises (SMEs); rather, definitions vary from country to country. These variations depend largely on the size of the economy, types and structure of businesses, and the levels of development. Indicators such as annual turnover (sales) and number of workers are generally used to categorize SMEs. The SMEs nomenclature is used to mean micro, small and medium enterprises and is sometimes referred to as Small and or Less Developed Businesses (SLDBs) [1] (FAO/WHO, 2005).

Within the food business sector in most countries, SMEs account for the highest proportion of the Gross Domestic Product (GDP) and are responsible for producing a large share of the food consumed in a country. SMEs provide a significant proportion of the total employment in the food sector and make a vital contribution to the economic well being of the community at the local level (FAO/WHO, 2005).

SMEs promote industrial and economic development through the utilization of local raw materials/resources and the production of intermediate goods, through appropriate technologies and traditional practices. SMEs contribute to the economies of many countries worldwide and provide opportunities for job creation and rural development. In countries with food insecure populations, SMEs can assist in maximizing the use of local produce and providing an important source of food.

The SME sector is extremely diversified. At one end of the spectrum is the micro-enterprise sector, often referred to as the informal sector, which is made up of entities employing one or two persons, including the owner (includes the street food sector). Small enterprises have a somewhat broader scope and many operate on a more structured basis. Some have established links with medium and large firms as their market for goods and services. Medium-size firms tend to have developed a more outward looking approach to market their products or services, often looking beyond their country's borders to seek new markets. They also may establish linkages with larger firms to create opportunities. In general however, SMEs cater for the local markets and are normally not involved in international trade.

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[1] The term SLDB used here refers to businesses that because of their size, lack of technical expertise, economic resources, or the nature of their work, encounter difficulties in implementing HACCP in their food business. The term 'less developed business' refers to the status of the food safety management system and not to the number of staff or volume of production.

1.2 Food Safety Considerations

Food trade globalization, urbanization, lifestyle changes, international travel and advances in food technology have made the food production and distribution chain more complex, providing greater opportunities for food contamination from more diverse sources. Accordingly, food safety is an increasingly important public health issue with governments all over the world intensifying their efforts in this area. These efforts are in response to an increasing number of food safety problems and rising consumer concerns (WHO, 2001). Earlier approaches to ensuring food safety were based only on end product testing, which is no longer adequate to ensure food safety. This is now being replaced by a food safety management system approach that focuses on food hazard prevention throughout the food chain. This approach includes the application of Good Agricultural Practices (GAP)[2], Good Hygienic Practices (GHP)[3] and Good Manufacturing Practices (GMP), Hazard Analysis and Critical Control Point (HACCP)[4] systems, food safety management systems and traceability/recall systems. GAPs, GHPs and GMPs are considered as prerequisite systems or programmes (PRPs) for implementation of HACCP systems.

In many countries, SMEs represent a large proportion of food enterprises and are responsible for a large share of the food consumed in a country. Accordingly, they are often an important source of food-borne illness transmission (Walker *et al*, 2003). Furthermore, the informal sector represents a large number of food businesses, but in many countries they operate in poor hygienic conditions and lack adequate resources and technical expertise on how to better their situation. In some cases, this has led to the creation of special government policies/programmes to provide support to improving the safety of foods produced by SMEs.

Recognizing the aforesaid importance of SMEs and the challenges in food hygiene faced by this sector, the Codex Committee on Food Hygiene deliberated on the improvement of food hygiene for SMEs in a number of sessions. The 35th Session noted the positive experiences that had been acquired in some countries in implementing GHP and HACCP, based on industry developed sector-specific hygiene codes, the Codex General Principles of Food Hygiene and Codex Guidelines for the Application of HACCP; and recommended similar approaches for SMEs (CCFH, 2003).

2. ECONOMIC AND SOCIO-ECONOMIC IMPORTANCE OF SMALL AND MEDIUM FOOD ENTERPRISES

It is generally acknowledged that food SMEs have a vast array of important potential economic and social characteristics linked to them (Ntsika, 2000; SACOB, 1999; UN-ECE, 1994); these include:

- Generation of employment opportunities;
- Can act as a seed-bed for the development of entrepreneurial skills and innovation;
- Increase the competitiveness of the marketplace and curb the monopolistic positions of large enterprises;
- Contribution to national Gross Domestic Product (GDP);
- More equal economic opportunities in the economy;

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2 More information on FAO's concept of GAPs and FAO's work in this area is available from http://www.fao.org/prods/GAP/gapindex_en.htm

3 More information on FAO's work related to GHPs. GMPs and HACCP, as well as a published training manual on the subject, is available from: http://www.fao.org/es/ESN/food/quality_haccp_en.stm

4 HACCP is defined as "A system which identifies, evaluates, and controls hazards which are significant for food safety." CAC, 2003.

- More flexible and adaptable to changing market demand and supply situations;
- Optimal utilization of local raw materials;
- Promotion of traditional food production;
- Supply of nutritious and inexpensive foods;
- Provides social support for the underprivileged (informal sector);
- Important role in sustainable food security;
- Promotion of economic development in rural centres, limiting rural/urban migration;
- Promotion of local agricultural food production, distribution and trade;
- Act as sub-contractors to larger corporations in the economy;
- Activities result in a multiplier effect in the socio-economic activities in the economy; and
- Can serve as the point of entry to big business in the economy: many multi-national organizations grew from SMEs.

Many countries have acknowledged that SMEs are crucial for industrial restructuring, social and economic development and have formulated national SME policies and programmes to stimulate their growth and competitiveness.

For example, the implementation of the Small, Medium and Micro Enterprises (SMMEs) Policy (SMMEs, 1999) and legislation (Small Business Act, 2004) in Botswana has established and mandated a number of agencies to financially and technically assist SMEs. In South Africa, the implementation of the National Small Business Strategy (White Paper; 1995), the National Small Business Act (1996), and other policies have provided a favourable environment for the development and expansion of SMEs, particularly among disadvantaged groups. Similarly, the implementation of a SMEs policy in Tanzania (SME, 2002) provided for the establishment and strengthening of a number of institutions to assist SMEs, with special emphasis on businesses in the food sector operated by women. Zimbabwe has a Ministry of Small to Medium Enterprises that is specifically intended to promote and assist SMEs. Similar developments have taken place in many other countries in the region and elsewhere.

As previously discussed, the term “SMEs” is used to mean micro, small and medium enterprises. Different countries use various measures of size depending on their level of development. The commonly used indicators are total number of employees, total investment and sales turnover; for instance:

a) In Botswana SMEs are classified as (SMMEs, 1999):

i) Micro-enterprises: Less than 6 workers including the owner;
ii) Small enterprises: Less than 25 employees and an annual turnover of between Pula 60 000 and 1.5 million (1US$= approximately 5 Pula);
iii) Medium enterprises: Less than 100 employees and an annual turnover of between 1.5 million and 5 million Pula.

b) Tanzania defines SMEs as follows (SME, 2002):

i) Micro enterprise: 1– 4 workers and capital investment of up to 5 million Tanzania shillings (Tshs.) (1US$= approximately 1 050 Tanzania shillings);
ii) Small enterprise: 5– 49 workers and capital investment from 5 million to 200 million TShs;
iii) Medium enterprise: 50– 99 workers and capital investment from 200 million to 800 million;
iv) In the event of an enterprise falling under more than one category, then the level of investment is the deciding factor.

c) The South African National Small Business Act defines five categories of SMEs (Table 1) i.e.:

i) Survivalist enterprise: The income generated is less than the minimum income standard (below the poverty line). This category is considered pre-entrepreneurial, and includes hawkers, vendors and subsistence farmers. (In practice, survivalist enterprises are often categorized as part of the micro-enterprise sector.)

ii) Micro enterprise: The turnover is less than the VAT registration limit (that is, R150 000 per year). These enterprises usually lack formality in terms of registration. They include, for example, *spaza* shops, minibus taxis and household industries. They employ no more than five people.

iii) Very small enterprise**:** These are enterprises employing fewer than 10 paid employees, except mining, electricity, manufacturing and construction sectors, in which the figure is 20 employees. These enterprises operate in the formal market and have access to technology.

iv) Small enterprise**:** The upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices.

v) Medium enterprise**:** The maximum number of employees is 100, or 200 for the mining, electricity, manufacturing and construction sectors. These enterprises are often characterized by the decentralization of power to an additional management layer.

Table 1: Definition of SMEs in South Africa as given in the National Small Business Act.(IUS$ = 7 Rand)

Enterprise size	**Number of employees**	**Annual turnover**	**Gross assets, excluding fixed property**
Medium	Fewer than 100 to 200, depending on industry	Less than R 4 million to 150 million, depending upon industry	Less than R 2 million to R 18 million, depending on industry
Small	Fewer than 50	Less than R 2 million to R 25 million, depending on industry	Less than R 2 million to R 4.5 million, depending on industry
Very small	Fewer than 10 to 20, depending on industry	Less than R 200 000 to R 500 000, depending on industry	Less than 150 000 to R 500 000, depending on industry
Micro	Fewer than 5	Less than R 150 000	Less than 100 000

The street food sector is very much a part of the informal sector of SMEs. It is growing rapidly all over the world, providing employment to millions. It can also provide fresh, low cost, nutritious and tasty foods. Street foods also provide a variety of traditional foods. Apart from providing a social support system for the under-privileged, street foods have a major impact on local agricultural food production, distribution and trade. The importance and challenges assuring food safety and quality in the street food sector are discussed in detail in CAF 05/4.

3. APPLICATION OF APPROPRIATE QUALITY ASSURANCE SCHEMES IN FOOD SMEs

There are two distinct but inter-related aspects of food quality assurance schemes that are of concern to the food producer/processor. The first approaches quality in terms of conformity to certain market requirements, such as perceptible superiority of desirable attributes or characteristics such as size, colour or organoleptic properties. The second approaches quality as a being synonymous to food safety, which requires that the food is free from unacceptable levels of physical, chemical and microbiological hazards. In many countries, the government focuses more of its resources on the safety aspects of food

quality in the interests of consumer protection, trade facilitation and preservation of the national reputation as a supplier of safe foods. This assumes that the food producer ensures adequate controls for the quality attributes of the food.

In general, SMEs may lack adequate skilled personnel and knowledge of methods of improving food safety. Improper food handling and storage practices, poor hygiene, limited access to a safe potable water supply, poor quality of raw materials, unsuitable production environments and problems of garbage disposal and pests are some of the many public health concerns facing food producing SMEs.

3.1 Traditional quality control

The traditional quality control programmes in food were based on establishing effective hygiene controls. Confirmation of food safety and identification of potential problems were usually obtained by end-product testing. Very often this has been the only quality and safety assurance system applied. Problems related to this procedure include (Huss *et al*, 2004).:

- High cost implications of well equipped laboratories and well trained personnel. The running costs of such laboratories are also high, as well as the cost of products "lost" in destructive testing;
- Retrospective results (it may take several days before results from end-product testing are available); all production cost and expenses have already been incurred if any hazards are identified in the end-product testing.
- The chances of finding a hazard will be variable, but most often very low. Nevertheless, the hard work of sampling and testing will give a sensation of "being in control" and create a strong, but false sense of security.
- There is no test that will always give an absolutely accurate result with no false positives and no false negatives.

Food safety management systems have evolved from these traditional methods with a major shift towards preventive control systems where the main responsibility for food quality and safety lies with the food businesses. Apart from ensuring compliance with national food legislation, the role of governments should be to assist SMEs in implementing food safety management systems, particularly GHPs. Government should also provide a supporting role in terms of information dissemination and training so that the SMEs can take full responsibility in the safety of their food products. Accordingly, effective partnerships between government and food SMEs through trade and industry associations are especially important in this regard (FAO/WHO, 2005).

3.2 Modern approaches to food safety and quality systems

The best known systems for ensuring food safety are GAP/GHP/GMP and HACCP systems. The basic principles of these systems have also been adopted in other quality management systems addressing food safety.

3.2.1 GAP/GHP/GMP

GAP, GHP and GMP are measures that are required to produce safe food. These requirements are prerequisites to HACCP and are essential in all food businesses.

GAPs are basic food safety principles associated with minimizing biological, chemical and physical hazards at primary production stages. GHPs mandate that all persons working in direct contact with food,

surfaces that food might contact and food packaging materials conform to sanitation and hygienic practices to the extent necessary to protect against contamination of food from direct or indirect sources.

Food legislation in many countries requires that a food business operator be responsible for the hygiene conditions in his food business. One of the key elements of GHPs is that food businesses assess their own standards and make decisions regarding the practices and procedures which ensure good food hygiene practices. Industry guides of good hygiene can be produced through the cooperation of the food industry and the Government, based on the Codex Recommended International Code of Practice for General Principles of Food Hygiene (CAC, 2003). Formulation of industry guides has the potential to incorporate the best of self and government regulation and should operate to the mutual benefit of both government and the industry.

For an industrial guide of good hygiene to be officially recognized, the industry may be expected to demonstrate that the guide (Holt and Benson, 2000):

- provides an appropriate definition of the sector to which it applies;
- provides guidance on compliance with all parts of the regulations relevant to the sector;
- has a justifiable technical basis;
- distinguishes clearly between guidance on compliance with legal food safety requirements and guidance related to good manufacturing practice or quality requirements;
- has been drawn up by a representative section of the industry sector affected, including SME representatives, in consultation with enforcement and consumer bodies; and
- has followed the format advised by the government.

3.2.2 HACCP

The Codex Hazard Analysis and Critical Control Point (HACCP) system is recognized worldwide as the foremost means of assuring food safety throughout the food chain, from primary production to final consumption, particularly when used in combination with the pre-requisite programmes (CAC, 2003).

HACCP is a systematic approach that identifies, evaluates, and controls hazards that are significant for food safety (CAC, 2003). HACCP ensures food safety through an approach that builds upon foundations provided by the pre-requisite programmes of GAP/GHP/GMP. It identifies the points in the food production process that require constant control and monitoring to make sure the process stays within identified limits. The approach set out by Codex is applicable throughout the food chain.

Codex-based HACCP has become a requirement for international food trade; however, it is not a panacea for all food safety problems. It must be integrated with effective pre-requisite programmes. The combination of GAP/GHP/GMP and HACCP is particularly beneficial in that the effective application of GAP/GHP/GMP allows the HACCP system to focus on the true critical determinants of food safety. Food business (including SMEs) can demonstrate a systems-based approach to assuring food safety and quality by implementing a HACCP based approach.

HACCP based systems: The Codex General Guidelines for HACCP allow flexibility in interpreting its methodology, provided they are underpinned by all the 7 HACCP principles. Alternative methods, often referred to as ***HACCP Based Approaches*** (OMAF, 2004) may be the most useful way to facilitate HACCP implementation in SMEs. If national governments decide to develop HACCP based approaches, it is important that they first pilot such programmes before full implementation.

Generic HACCP based plans: Generic HACCP based plans have been generated by some governments and other stakeholders as a means of helping SMEs to implement HACCP. This approach aims to produce a pre-developed general HACCP plan that will be further tailored and adapted by the individual food business (WHO, 1999). Because these HACCP-based systems do not look like traditionally developed HACCP systems, it is essential that governments are involved in the development of such programmes. This is particularly important where HACCP is mandatory because enforcement officers may not recognize the system as compliant with the legislation.

Due to the many barriers facing SMEs in fully implementing the Codex HACCP system (CCFH, 2003; FAO/WHO, 2005; Jirathana, 1998; Taylor, 2001; Taylor and Kane 2004), many other approaches have also been successfully implemented. In developing other approaches, it is important that public health is not compromised, that there is sufficient ownership and dialogue with stakeholders and that the approach is appropriate to the national food businesses that will be applying the approach.

3.2.3 ISO Quality Management Standards

The best known International Organization for Standardization (ISO) standard for quality assurance is ISO 9000. The ISO 9001:2000 is an ISO 9000 standard whose requirements can be certified by an external agency and replaces the old ISO 9001, 9002 and 9003 standards with one standard (Huss *et al,* 2004).

Compliance with ISO 9001:2000 provides assurance to a customer that the company has developed procedures (and adheres to them) for all aspects of the company's business. It can assure quality of products but does not necessarily provide for food safety, except when the system is combined with food safety management systems such as GHP and HACCP. To address this shortfall, ISO is now finalizing ISO standard 22000:2005- *Food Safety management systems – Requirements throughout the food chain,* which combines Codex HACCP principles with pre-requisite programmes. Another document, *ISO 22004,* is also under preparation to provide guidance on the application of ISO 22000, including guidance for SMEs and developing countries (ISO, 2005). These new ISO standards are intended to contribute to a better understanding of Codex HACCP and not to add to the list of barriers or confusion for SMEs on GHP/HACCP implementation.

4. CONTROLLING OF FOOD SAFETY AND QUALITY IN SMEs

Food safety management systems based on the principles of GHP/HACCP have been recognized worldwide as essential management tools to enhance food safety and prevent cases of food-borne diseases. GHP/HACCP principles are now the requirements for major food export markets and trans-national supermarkets. However, many SMEs worldwide are faced with a low level of GHP/HACCP uptake due to a myriad of barriers. Promotion of food safety management systems in SMEs therefore requires a logical approach to address barriers and to explain to SMEs, the government and consumers the clear benefits of these systems. Such initiatives depend very much on cultural, economic, organizational and geographical factors, which vary for every country.

4.1 Benefits of GHP/HACCP

There are clear benefits of implementing GHP/HACCP for government, food enterprises and consumers alike. The following are some of the projected benefits that should encourage businesses and governments to implement GHP/HACCP (Jirathana, 1998; OMAF, 2004; Taylor 2000 & WHO, 1999).

Benefits to consumers:

- Reduced risk of food-borne diseases
- Increased food safety awareness
- Increased confidence in the food supply
- Improved quality of life (health and socio-economic)

Benefits to food enterprises

- Increased consumer and government confidence
- Higher assurance of safe food
- Reduced legal and insurance costs
- Increased market access
- Reduction in production costs (reduced recall and wastage of food)
- Improved product consistency
- Improved staff and management commitment to food safety
- Decreased business risk

Benefits to governments

- Improved public health
- Improved food security
- More efficient and targeted food control
- Reduced public health costs
- Trade facilitation
- Increased confidence of the community in the food supply

4.2 Overview of obstacles to apply food safety management systems in SMEs

Changing to preventive, risk based systems based on GHP and HACCP, with a shift in responsibilities for food businesses and government agencies has not come without some difficulties. Anticipating and mitigating these difficulties will be critical in building a successful science based system. These difficulties range in chronology from prior to GHP/HACCP implementation, during the process of implementation and after the HACCP systems have been implemented. Barriers to HACCP implementation in SMEs are well documented (Jirathana, P, 1998; OMAF, 2004; Taylor E, 2000; WHO, 1999; CCFH, 2003) they include:

Internal obstacles within SMEs:

a) Inadequate basic food hygiene;
b) Lack of expertise and information;
c) Human resources constraints;
d) Inadequate infrastructure and facilities; and
e) Perceived and real financial constraints.

External obstacles

a) Insufficient government infrastructure and commitment;
b) Absence of legal requirement (for GHPs or HACCP);
c) Lack of business awareness and positive attitude of industry and trade associations;
d) Lack of customer awareness of or demand for GHPs/ HACCP;
e) Lack of effective education and training programmes;
f) No expertise, information and technical support made available to SMEs; and
g) Inadequate communications.

4.3 Implementation of food quality/safety management systems

Government commitment and support for and partnership with the industry and trade associations are probably the most important factors in food quality management systems development, as demonstrated by a number of countries that have successfully implemented GHP/HACCP (OMAF, 2004). The food industry has the responsibility to put in place systems to ensure the production of high quality, safe food. However once the systems are in place, the government task is to audit the systems for compliance (FAO/WHO, 2005).

The following elements are considered important for comprehensive implementation of food safety management systems:

a) National Food Safety Policy;
b) Food safety/quality management system strategy (GHP/HACCP);
c) Activities to facilitate implementation of food quality management system strategy in SMEs.

4.3.1 National Food Safety Policy

Governments are charged with the protection of public health and also with driving economic development. Improvements in food safety can have a positive effect on both of these issues. Implementation requires participation from several relevant government departments and other key stakeholders. Therefore, it is important that a government led national policy on food safety is adopted. It is necessary that any activity regarding food quality management systems is taken as part of this coherent inter-departmental and multi-disciplinary approach with full stakeholder involvement.

4.3.2 Strategies for implementation of food safety and quality management systems in SMEs

Given the obstacles facing the implementation of GHP/HACCP in SMEs, it is evident that many activities will need to be implemented on many different fronts. For these activities to deliver the desired goals of the food safety policy, it is necessary to organize them in the most efficient and effective manner, which is best achieved by developing a coordinated strategy. The key to facilitating GHP/HACCP implementation in SMEs is the development of a strategy which enables the national policy on food safety to be realized.

The following is a logical sequence of steps to be followed to successfully develop such a strategy (FAO/WHO, 2005):

1) Gather information;
2) Define the obstacles and identify their causes;
3) Develop and select possible solutions;

4) Draft strategy and consult widely;
5) Conduct an assessment of the potential impact of the strategy;
6) Modify and publish the strategy; and
7) Implement the strategy (including monitoring of results and feedback).

4.3.3 Activities to facilitate food safety and quality management system implementation in SMEs

Once the strategy is in place a number of support mechanisms will have to be developed in preparation for its implementation. They include, but are not limited to the following (FAO/WHO, 2005):

- Financial support (e.g. for training, development of plans etc);
- Guidance and explanatory information (e.g. manuals, booklets, leaflets and videos);
- Implementation training programmes and manuals;
- Generic food quality management system models;
- Pilot scale projects (for demonstration to SMEs);
- Sample Hazard Analyses;
- Recognition auditor training;
- Voluntary schemes;
- Mandatory provisions and enforcement (laws and regulations); and
- Provision for technical expertise (e.g. consultants).

The selection of the various elements of a national food safety management system to implement needs to be made at a national level to match national needs.

4.4 Case studies on approaches to food safety management systems

Globally, the approaches taken with respect to HACCP vary considerably. Some countries have integrated the requirement for HACCP or HACCP based systems into their food laws. Other countries have maintained the implementation of HACCP as voluntary, while still other countries have utilized a staged approach to HACCP, starting with voluntary GHP/HACCP and subsequently moving to mandatory HACCP (FAO/WHO,2005; OMAF, 2004). In all cases, the important role of GAPs, GHPs and GMPs is stressed.

The UK is an example of a country where a HACCP based system, at minimum, is required and exists as part of the country's food laws. The UK, along with other members of the EU, is now required to comply with regulation DIR 93/43/EEC (2003) throughout all aspects of the food continuum except primary production. This directive requires that food business operators ensure that adequate safety procedures are implemented, maintained and reviewed on the basis of HACCP.

Many member states in the EU used a staged approach to implementing HACCP which allowed considerable time for the transition from a prescriptive, inspection-based food safety system to an outcome-based HACCP system. During this transition phase, both systems were supported but the focus was on the transition to the newer system.

In the U.S., HACCP is now mandatory only in meat, poultry, and seafood plants. Countries such as Canada, Australia and New Zealand began with a system of voluntary HACCP and are moving to mandatory HACCP. The South African regulations relating to HACCP application in food enterprises (RSA/HACCP, 2003) provide an enabling framework for mandatory implementation of HACCP, including in street food vending.

SMEs in all these countries have not incorporated HACCP systems to the same degree as the larger facilities, due to the many obstacles faced. However, it is agreed that food safety and quality is important and that there is a need to improve levels of hygiene and a systems approach to food production – but that added support is required to do so.

The pressure from the food importing countries is a major factor for HACCP implementation in many other countries; otherwise for local markets, basic hygiene regulations are enforced to ensure food safety. Despite government support, there are many obstacles for SMEs to implement GAPs/GHPs/GMPs, which are the basic regulations that need to be implemented prior to a HACCP system.

Both approaches, mandatory and voluntary, present benefits and challenges. One of the benefits of mandatory food quality management systems is that it brings all food plants to an equivalent level with respect to food safety. One of the challenges with a mandatory system is encouraging industry ownership. As businesses tend to view the process as another government requirement, they may be more inclined to expect the regulatory authority to solve their problems when it comes to implementing and maintaining food quality management systems. One of the benefits of voluntary system is that enterprises are able to work through the development and implementation processes at their own pace. Because plants are choosing to implement the systems, they are more likely to want to do a good job of it. One of the disadvantages associated with voluntary food safety management systems is that the potential exists for high-risk facilities to operate without utilizing the best known systems for ensuring food safety.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions:

- Poor infrastructures and a lack of adequate facilities can seriously handicap food safety/quality management system application in SME. This is a critical area for government intervention.

- Consumer demand can be an important driving force for encouraging businesses to implement effective food quality management systems. Government and international organizations have an important role in educating consumers in this regard.

- SMEs often have inadequate manpower and expertise due to inadequate training of employees and a lack of management commitment and understanding of food safety and quality management systems. The lack of expertise is perpetuated by the absence of food safety in the curricula of professional schools.

- SMEs often lack the technical expertise required to implement food safety and quality management systems and therefore may need external support. The capacity of government and industry/trade associations to provide adequate technical support is a critical factor in the successful implementation of food quality management systems by SMEs.

- GHP and HACCP are considered as the benchmark systems to ensure food safety throughout the food chain. However there are many barriers facing SMEs in implementing HACCP; thus it may be premature for governments to enforce HACCP at this juncture. GHP application is a foundation for HACCP and for ensuring food safety and quality.

- As the full implementation of HACCP is quite detailed and requires various resources which are a challenge to SMEs worldwide, stakeholders in the African region should be promoting good hygiene practices as well as implementing other pre-requisite programmes. The primary aim should

be to assist and sensitize SMEs in food hygiene matters to ensure safer food provisions, improved customer satisfaction and thus better business returns.

- Recognizing the difficulties facing SMEs, it is acknowledged that there is merit in applying HACCP based systems to improve food safety and quality where adequate support is available.

- Government commitment and raising the awareness of the food industry to the benefits of and the need for introducing GHP/HACCP are the most important factors in the development and implementation of a successful food quality management system initiative. The food industry and trade associations have an important role to play in promoting these initiatives in SMEs.

5.2 Recommendations

i) Governments should develop and implement national food safety policies and strategies, including provisions to initiate and accelerate implementation of GHP and eventually HACCP in SMEs.

ii) Implementation of the Codex General Principles of Food Hygiene, applicable codes of practices and relevant national food hygiene legislation should be promoted in food SMEs by both the Government and trade/industry associations. Appropriate national legislation should be drafted if needed.

iii) Governments should initiate mentoring schemes for those enterprises that have successfully implemented GHP/HACCP principles to assist other SMEs develop and implement their own plans.

iv) FAO, WHO and other development partners should provide technical assistance to support governments, trade and industry associations and SMEs in the implementation of GHPs and HACCP.

v) Consumers groups should demand for improved food safety through the implementation of GHPs and/or HACCP.

vi) Basic food hygiene, sanitation and GHP principles should be introduced and or strengthened in school curricula at all levels; the application of HACCP should be taught at professional schools for food sciences, catering and related disciplines.

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Agenda Item 9 CAF 05/6

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

INTERNATIONAL, REGIONAL, SUBREGIONAL AND NATIONAL COOPERATION IN FOOD SAFETY IN AFRICA

(Prepared by the WHO Regional Office for Africa, BP 06, Brazzaville, Republic of Congo)

1. Introduction

Many African countries do not have adequate food security, resulting in a situation where as much as 60% of the food supply may be imported to supplement local production in some countries. Guaranteeing the safety of both imported and locally produced food begins on the farm and follows through the entire food chain until meals are on the table. This important task of assuring food safety requires a multidisciplinary approach in food science, toxicology, public health, microbiology, chemistry and food law, among others. The pressure of growing human populations has also resulted in globalization of food trade that is associated with substantial increase in food production and movement of food through international trade. This massive movement of food and the threat of its widespread contamination make individual interventions in food safety ineffective. It is therefore imperative that governments, the private/public sectors, consumers and other stakeholders work in a concerted manner in this shared responsibility of assuring food safety from farm-to-fork. Cooperation at the national, sub-regional, regional and international levels provides opportunities in synergy and maximized benefits for improved human health and economic development.

This paper discusses the modalities for bettering cooperation in food safety assurance by describing food control systems in selected countries. It further discusses good practices in cooperation and collaboration in food safety at national, regional and international levels and provides recommendations for consideration by member states.

2. Food control systems in Africa

In 2002, WHO conducted an assessment of the status of food safety programmes in the African Region and collected data on the availability of food safety acts and their coverage, food inspection systems, mechanisms for monitoring of food exports and imports, surveillance systems for food-borne diseases and microbiological monitoring, manpower development and public education. The findings from 28 responding countries in the WHO African Region showed significant gaps in national food laws and inadequate linkages between strategies to ensure food safety. The study further showed that a limited number of countries had legislation that adequately tackled current and emerging food safety problems in relation to pesticide residues, food additives, contaminants and biotoxins. Twenty-two of the responding countries had an Act or Ordinance governing food safety standards and regulations, however, only 12 countries found existing legislation satisfactory. Countries that had Food Acts and regulations often lacked complete and effective food control infrastructure, as well as institutional capacities to ensure compliance and to provide consumer protection. Existing laws were often outdated, traditionally prescriptive and fail to adequately address the whole range of food safety concerns. Studies by other international organizations identified similar problems associated with food legislation, regulations, laboratory, inspection and monitoring services, administration of food control, manpower development as well as funding of food

safety programmes. The following examples describe food control systems in selected African countries, which have several institutions working towards achieving the common goal of protecting the health of the consumer. These systems are associated with duplication of functions due to absence of clear guidelines on responsibilities and mandates.

In Mozambique, the Food Safety Unit is under the Department of Environmental Health within the Ministry of Health and is responsible for regulation, standards etc. The main partners of the Ministry of Health in the area of food control are the Ministries of Agriculture, Commerce, Fisheries and the National Institute of Normalization and Quality. In Malawi, the Ministry of Health and Population, Ministry of Local Government, Malawi Bureau of Standards and Consumer Association of Malawi are responsible for the implementation of Food Laws. The Food Control Unit in Botswana is under the Community Health Services Division in the Ministry of Health while in the Comoros, the Ministry of Environment and Ministry of Agriculture are responsible for the implementation of food policy. In the Democratic Republic of Congo, through several decrees, the Ministry of Agriculture is responsible for animal health, the Ministry of Health for food safety and hygiene at the borders, the Ministry of External Trade for export and import inspection and the Ministry of Justice for food regulation.

The Ghana Food and Drugs Law (PNDC Law 305 B) and Amendment Act 523 seeks to ensure that only safe and wholesome food, drugs and other substances are made available for public consumption. The production and sale of food is governed by food standards established and promulgated by the Ghana Food and Drugs Board of the Ministry of Health. There are regulations and by-laws to control food hygiene and the Metropolitan Medical Officer has the vested authority for their enforcement. The Ghana Standards Board, the Ministries of Agriculture and Trade as well as Customs and Excise are all involved in food safety. Identical systems are in operation in Benin, Central African Republic, Liberia, Nigeria, Tanzania and Zimbabwe.

Activities for food safety and control in Uganda, as in many other countries, are uncoordinated and scattered in Ministries and are implemented by different agencies and authorities whose mandates are provided for under different laws and regulations. The Ministry of Health is the custodian of food legislation and has two agencies with food safety functions. The Department of Environmental Health coordinates food safety matters and supervises the semiautonomous Local Government Units, which employ health and food inspectors. The National Drugs Board controls the use and sale of medical and veterinary drugs and importation of food supplements. Other agencies, such as the Ministry of Agriculture, handles control of seeds, phytosanitary issues, marketing of food products etc. Other agencies are responsible for WTO matters such as SPS and TBT Agreements as well as promotion of food exports and certification. Inspection of food premises and their licensing, as well as meat inspection in abattoirs, are under the jurisdiction of the local governments.

The Department of Health, the Department of Agriculture, and the South African Bureau of Standards, are the key stakeholders in food control in South Africa. For day-to-day implementation, the food control system operates at the national, provincial and local levels. An evaluation of the system in 1995 revealed that it was impossible to determine which department represented the country in food control policy. The evaluation recommended the creation of a new modern, effective and internationally recognized food control system. There is general consensus on the way forward but high level acceptance and approval for implementation is still awaited.

In order to overcome the problems associated with fragmentation of food control systems and the lack of collaboration between sectors some countries have established modern and effective single food control agencies that are internationally recognized or national food control authorities with inter-ministerial and interdepartmental representation. The Kingdom of Morocco has established and transferred

all food control functions to a single government department called l'Agence du contrôle de la qualité de la sécurité sanitaire des aliments (ACQSA). The establishment of ACQSA yielded several benefits including the modernization of the food control system, improvements in the efficacy of risk analysis, efficient use of material and financial resources as well as increased visibility and credibility.

Certain countries, for example Ethiopia, Senegal and the Gambia are in the process of establishing national food control authorities. In Ethiopia, the lead government institutions responsible for food safety include the Ministry of Health, Ministry of Agriculture and Rural Development, Quality and Standards Authority of Ethiopia, Ministry of Trade and Industry and the Ethiopian Manufacturing Industries Association. These institutions work together in organizing training workshops, standard setting and drafting regulations. Since 2002, these bodies have established a Technical Committee that implements food safety assurance systems in accordance with the international market requirements supported by the United Nations Industrial Development Organization (UNIDO). However, coordination of activities at the lower level of the hierarchy remains to be established and strengthened. Responsibilities and mandates are not clearly defined demarcated and streamlined, resulting in insufficient coordination of activities, duplication of efforts, misuse of human resource and wastage of meagre resources allocated to the sectors. In order to overcome these problems, the existing Ethiopian Technical Committee has established the National Food Safety Council whose members are drawn from regulatory bodies, research institutes, industry, consumers and higher learning institutes involved in food safety. Similarly in the Gambia, a Council on Nutrition was formed which embraces all the agencies involved in food safety and is directly under the Office of the President. In Sierra Leone, the Bureau of Standards in the Ministry of Health is the National Codex Contact Point and works collaboratively with all food safety stakeholders through a number of technical committees, namely, Animal and Animal Products, Plant and Plant Products, General Purpose and Special Committees. All the agencies involved in food safety work collaboratively with the police on a nation-wide campaign on expired products.

3. Cooperation at local and national levels

3.1 Collaboration and coordination between food safety related laboratories

Laboratories are the backbone of all food control systems. In order to meet the requirements prescribed by international standards, laboratories should have state-of-the-art equipment as well as qualified and well trained manpower to operate such equipment. Laboratories used for food control, especially those for export inspection and certification services, require accreditation as per international standards. Sufficient numbers of qualified personnel in food science, technology, biochemistry microbiology, chemistry etc. are also required.

Upgrading functional laboratories and other systems also require high resource outlays, which many African economies cannot afford on their own. DFID evaluated the cost of surveillance and food monitoring activities for aflatoxins for one laboratory at 125,000 US$ per year. Cato (1998)[1] quantified the cost of compliance with sanitary and phytosanitary measures by developing countries and showed that upgrading sanitary conditions in Bangladesh required about US$ 17.6 million and US$2.2 million per annum to maintain the system. Such costs would have been contained if different specialized laboratories sought synergies through coordination and collaboration. Unfortunately, such collaboration and coordination hardly exist. To facilitate the sharing of facilities, existing facilities could be assessed in order to determine their capabilities. These may be further strengthened to allow sharing of facilities both at national and regional levels. For example, the Tobacco Research Board in Zimbabwe, which offers services

[1] Cato J.C. Economic issues associated with seafood and implementation of seafood HACCP programmes. Rome FAO, 1998

in food and water analysis, has capacity to detect Genetically Modified foods. Member States of the region could share such a facility to ensure the identity of foods that are available to African consumers.

In Sierra Leone, as in many Member States, some private laboratories, such as the Chemistry and Biological Sciences Laboratories of the University of Sierra Leone carry out laboratory analyses for the Ministry of Health. These laboratories and their technical staff could be internationally accredited in order to enable them carry out this important function. In Zimbabwe, cooperation between the Veterinary, Home Affairs and Environmental Health Departments ensures that cattle movement is restricted when outbreaks of anthrax or other zoonotic diseases occur. Cholera alert messages are also quickly transmitted to other provinces during outbreaks.

3.2 Communication between food control laboratories, Government Ministries, industry, NGOs, consumers and consumer groups

Food control laboratories are required to communicate effectively with all stakeholders along the food chain, including government bodies, research and academic institutions, the food production and processing sector and consumers. An informed and active public and knowledgeable industry are cornerstones to effective risk management. Communication and knowledge are the only ways to deal effectively with consumer concerns and fears. Transparent systems and procedures are required to ensure that consumers and other stakeholders are properly informed on both sporadic cases of food-borne illness and food safety emergencies. The procedures for managing such risks should involve all stakeholders. This also applies to routine food safety matters which will require easy-to-understand summaries on current matters for public distribution.

An especially important role of the food industry is communication with consumers. The industry widely uses integrated communication including advertising, marketing and product promotion. Product labelling is another means of communication that allows the consumer to make informed decisions on products. Labels must therefore avoid making false and misleading health claims. Advertising and labelling must not only be used as one-way communication systems but must allow informed consumer feed-back to food producers and distributors.

4. Cooperation at regional and subregional levels

4.1 Collaboration and coordination between food control and public health laboratories

In addition to the importance of cooperation in food control laboratories at national and local levels, cooperation at regional and subregional levels could identify centers of excellence to encourage the sharing of facilities and expertise.

There is good cooperation in the area of food contamination emergencies between the members of the Southern African Development Community (SADC). A case in point is the adulteration of food with the carcinogen Sudan Red where information came in from Botswana to request all the member countries to remove the affected food from the shelves. The SADC Consultative Forum on SPS/Food Safety Issues, Windhoek, November 2002, noting that laboratory capacity amongst member states was unevenly distributed, recommended the upgrading of existing facilities into regional centers of excellence. These facilities could be shared among several states as a more cost-effective and sustainable arrangement to deal with the problem of poor laboratory facilities in some countries.

A WHO Expert Group meeting in 2005 on aflatoxins and health recommended the strengthening of health sector laboratories to include aflatoxin detection capability for human and food samples through

collaboration with agriculture and other sectors. Indeed, an assessment of laboratories involved in food safety work could be carried out in order to identify the strengths and weaknesses of existing laboratories in the region. This information could be made available to member states indicating where to seek assistance for laboratory support. Additionally, such information could be used to prepare action plans for strengthening of laboratories in the region.

This could function effectively through the establishment of WHO Collaborating Centers for food safety in the region. These Centers have clearly defined functions, which severally and collectively include (i) collection, collation and dissemination of information (ii) training, including research training and (iii) the coordination of activities carried out by several institutions among others.

4.2 Collaboration in international standard setting

The aim of the Codex Alimentarius Commission is to protect the health of consumers and to ensure fair practices in the food trade. This is achieved through the standard-setting work of the Commission. The WTO SPS Agreement recognizes Codex standards as benchmarks for international trade and the TBT Agreement also refers to the use of international standards. Participation by individual countries in the work of Codex had proved difficult due to cost and capacity constraints. This greater acceptance of Codex standards, as well as the establishment of the FAO/WHO Codex Trust for Enhanced Participation in Codex, has increased the interest of countries in the activities of the Codex Alimentarius Commission. Preparation and presentation of country positions on issues often require a great deal of effort so WHO and FAO have developed a training package on the work and procedures of Codex to assist member states. Countries in the region do not only need to be physically present in Codex meetings, but they also need assistance to provide relevant data to the Codex system and to take an active part in the standard setting process. Strengthening of regional capacity building efforts in order to foster regional cohesiveness that will allow all countries of the region to have a common and more effective voice is paramount. In view of the fact that national standards are often dictated by trading partners whose standards may be too stringent, member states could consider the application of regional standards for levels of contaminants in foods.

4.3 Sharing experiences in food control

In the region there is no mechanism for the exchange of technical information on SPS and food safety issues on a regular basis. The situation is no better within countries where information available within one agency is often not shared with or accessed by others. It is more cost effective to have such information available at the regional level. Such a process could begin at the national and subregional level and feed into a system at the regional level. It is therefore important to develop a regional network which will include a website, regular publications and other existing modes of communication that will be available to member states.

4.4 Public/private partnerships for regional and sub-regional capacity building in food safety

Assuring food safety along the entire food chain requires partnerships and education at all levels especially consumer education. Training is an essential element of the implementation of HACCP and all other activities involved in producing safe food. In order to achieve this result, all those employed in food production must be thoroughly trained in their responsibilities. In particular, the management should be conscious of the risks associated with the food business and must take adequate steps to mitigate such risks. The application of Good Hygienic Practices using the Codex Code of Principles of Food Hygiene as well as other Codex specific guidelines for certain foods must be applied.

Supplier and distributor controls are essential to the production and marketing of safe foods. The large food companies achieve this by ascertaining that suppliers of ingredients comply with strict specifications. Contractual arrangements, which test and verify as well as conduct on-site inspections, are often employed. For the primary producer, training in the safe use of pesticides, herbicides, antibiotics etc. is paramount and the large companies in the private sector as well as extension staff of the Ministry of Agriculture could facilitate such activities.

Education is also essential for the informal sector of the food trade. The street food sector requires special attention as it provides employment for more than 20% of the population who would otherwise be unemployed. In a study in Accra, Ghana, the street food sector had 15,000 vendors and employed 60,000 people. This resulted in a sector turn over of US$114 million and a sector profit of US$24 million (Obeng-Asiedu 2000)[2]. Educating street food vendors in safe food handling and personal hygiene can improve the safety of street foods, protect this important sector of the economies of poor countries and heighten consumer protection. Training these vendors through consumer outreach programs that are organized by the private sector and NGOs could facilitate this process.

Private companies in developing countries could implement outreach programmes as a valuable public service by providing effective messages to consumers, educators, health workers etc. Such support would complement efforts of Governments through dissemination of brochures and other promotional materials. Media campaigns and interaction with local government officials and schools could be used to educate the consumer about food safety. Such activities could be undertaken collaboratively with governments, professional groups and consumer organizations. Industry could also assist government to carry out training in proper food handling using the WHO Five Keys for Safer Foods and other tools from FAO, WHO and other agencies.

Non-governmental organizations, especially consumer protection NGOs should be interested in activities for food safety assurance as these ultimately seek to protect consumers from the adverse effects of contaminated food. They could therefore serve on national food safety committees to discuss emerging food safety issues, make inputs on setting research agendas and act as a source of independent advice to food safety authorities. They could also participate in consultations in order to direct the process based on consumer concerns. They would thus assure that data and information to consumers are available and in a transparent manner. The consumer would thus be educated on safe food handling and management of food-borne illness using simple and easy to understand messages.

5. Cooperation between FAO, WHO, other agencies and member states

5.1 Activities in capacity building

There are many international organizations involved in food safety activities at national level. Notable amongst these are FAO, WHO, UNEP, UNIDO, UNESCO and several Non-governmental organizations. The mandates of these organizations differ in most cases. Given the complexity of the food chain and the problems encountered at each level, working in isolation may provide piece-meal solutions. It is imperative therefore that close collaboration is most needed between all stakeholders at the national level in order to avoid the fragmentation of efforts. At the national level, FAO, WHO, UNIDO and UNEP have carried out some joint projects on food safety assurance, environmental monitoring and have organized joint seminars and training courses. Representatives of these international organizations could further strengthen their relationships through the signing of Joint Protocols to provide a platform for setting

[2] Obeng-Asiedu, Socioeconomic survey of street-vended foods in Accra, 2000

up of rapid and timely alert systems to approach the issues linked to food safety and in mobilizing funds from the donor countries and financial associations.

FAO and WHO have historically worked towards improving food safety along the entire food chain. A report on activities in capacity building and in the provision of scientific advice was presented as Agenda items 3 and 4 during the 16th Session of the Codex Coordinating Committee for Africa in January 2005. Capacity building and the provision of technical assistance have been achieved through collaboration between international organizations, national governments, international and regional financial institutions and NGOs. Activities conducted include evaluation of institutional structures for food control, formulation of recommendations for improvement and training of food control officers, food control managers, food inspectors and food analysts in seminars, workshops and study tours. FAO and WHO also prepare joint training manuals and guidelines; provide support for the establishment and strengthening of National Codex Committees and; provide policy advice and assistance in the development of regulatory frameworks. FAO/WHO have also been working together to provide technical assistance to member states in the preparation of applications to the Codex Trust Fund.

FAO and WHO work to complement each other in order to ensure effective utilization of resources. They successfully organized the two Global Fora for Food Safety Regulators in Marrakesh, Morocco in 2002 and Bangkok, Thailand in 2004. In June 2005, FAO/WHO facilitated a meeting of consumer non-governmental organizations at which the Guidelines for Consumer Organizations to Promote National Food Safety Systems was developed. Many other joint activities have been implemented as described in CAC/28 INF.5. This Conference on Food Safety for Africa is another collaborative effort between the two sister organizations.

The two organizations are working towards improving their coordination and communication mechanisms, especially at headquarters, regional and national offices. This need has never been more urgent, particularly for the nomination of participants to attend meetings. Accurate information is not always communicated in a timely manner to interested parties, resulting in countries not being properly represented at FAO/WHO events. Experiences with countries applying for support from the Codex Trust Fund further underscore this need.

5.2 International food standards

FAO and WHO work together through the Codex Alimentarius Commission to establish international food standards and related texts; through expert bodies such as the Joint FAO/WHO Expert Committee on Food Additives and Contaminants (JECFA), the Joint FAO/WHO Meeting on Pesticide Residues (JMPR), the Joint Expert Meetings on Microbiological Risk Assessment (JEMRA) to provide scientific advice to Codex member countries. In order to facilitate effective participation of Member States in the international standard setting activities of the Codex Alimentarius Commission, FAO and WHO provide funding for participation and training from the Joint FAO/WHO Codex Trust Fund.

5.3 Food contamination monitoring

The WHO Global Environmental Monitoring System/Food Contamination Monitoring and Assessment Programme (GEMS/Food) started in 1976. The programme collects and provides information on chemical contaminants in food and their intake via food with a view to evaluate their significance to public health and trade. The programme has been collecting data on the levels of some priority contaminants such as organochlorine and organophosphate pesticides, toxic metals and aflatoxins in selected foods and in total diets. These data can be used to estimate the dietary intake of contaminants that

can be applied in risk assessment and in establishing limits for these contaminants in foods in the international and national standard setting processes. The programme maintains and utilizes a network of WHO Collaborating Centers, national focal points and participating institutions. In Africa, Benin, Burkina Faso, Cameroon, Djibouti, Egypt, Kenya, Madagascar, Senegal, South Africa and Tunisia have planned total diet studies. GEMS/Food maintains links with a number of international organizations such as FAO, the International Atomic Agency (IAEA) the United Nations Environmental Programme (UNEP) and non-governmental organizations like the International Union of Food Technology (IUFoST) and the International Union of Pure and Applied Chemists. WHO is currently developing more representative and relevant diets for the programme. African countries are encouraged to cooperate in providing necessary data.

WHO Global Salm-Surv is a collaborative effort between WHO, the Danish Institute for Food and Veterinary Research, the United States Centers for Disease Control and Prevention, Réseau international des Instituts Pasteur, Health Canada, The Animal Sciences Group, The Netherlands, the United States Food and Drugs Administration, Enter-net-human enteric pathogen surveillance network, Europe and OzFoodNet – Enhanced Food-borne Disease Surveillance Network, Australia. The programme aims to reduce food-borne diseases worldwide through capacity building for enhanced laboratory-based surveillance and outbreak detection and response. The activities of the programme facilitate collaboration and communication between epidemiologists and microbiologists at national and international levels. In the African Region, courses have been conducted for ten Francophone countries. Regional and national projects are used to foster collaboration and to promote continued development and application of skills as well as concepts. In the African Region, the *Salmonella hadar* project currently being carried out by participating countries and the Institut Pasteur has detected multiple antibiotic resistant strains in isolates. For food-borne disease surveillance data to be effective, it must be integrated with food monitoring data along the entire food chain. This will improve the ability to link pathogens in food to etiological agents of disease in humans.

5.4 Cooperation in information sharing

The rapid globalization of food production and trade has increased the likelihood of spread of international incidences involving microbial and/or chemical contaminants in foods. What happens in one part of the world is likely to spread rapidly to other parts through air travel. Exchange of routine information on food safety and rapid access to information in case of emergencies is indicative. Establishment of mechanisms to promote the exchange of food safety information and improve collaboration among food safety authorities both at national and international levels will facilitate appropriate and timely management of food risks. Several rapid alert systems exist and systems that allow rapid exchange of information to member states have proved useful. One such system is the Food Safety Authorities Network (INFOSAN) through which information on *Salmonella agona* associated with infant formula, among others, was communicated to member states. There were some successes in tracking down the product in the African region. The network has INFOSAN and INFOSAN EMERGENCY Contact Points in member states who receive and disseminate information as appropriate. Further details on this project, funded by the governments of the Australia, Ireland, Spain, United Kingdom and United States of America, are available at the WHO website: http://www.who.int/foodsafety/fs_management/infosan/en/. Such communication systems may not be effective as stand-alones without the strengthening of food-borne disease surveillance and food monitoring systems as well as systems that will rapidly trace and withdraw contaminated food.

The International Portal on Food Safety, Animal and Plant Health (www.ipfsaph.org) - a joint initiative with IPPC, OIE, Codex and WTO provides notifications on international standards and other official information from partner international agencies. The Portal also provides a view on national

legislation and related texts from the EU, USA, and smaller data sets from a pilot group of developing countries (21,000 records in May 2005). The latest version includes up-to-date information on the Codex-established maximum residue limits (MRLs) for veterinary drugs and pesticides, as well as the JECFA and JMPR evaluations of these substances; navigation in English French and Spanish; and a "help desk" for questions users may have regarding the portal. With funding from the Standards and Trade Development Facility, work is proceeding with partners in developing countries to exploit the work undertaken on the Portal project so far. This includes activities with in-country data owners looking at information management and metadata standards, and with national users of portal information. The first regional demonstration workshops will be held in the near future.

6. Conclusions

Assuring food safety is a shared responsibility between all stakeholders, especially, civil society, consumers and industry that must have a common vision in order to succeed. In Africa, guaranteeing food safety involves activities conducted by several agencies and institutions whose mandates are often not clearly defined. This has resulted in fragmentation of the food control system and inefficient use of resources. Cooperation and coordination at national, subregional, regional and international levels is required to improve effectiveness and thus protection of the health of the consumer.

7. Recommendations

The following are for consideration by the conference when formulating recommendations for member governments and FAO/WHO on this important subject.

7.1 Member states are urged to:

(i) Establish a permanent national, sub-regional and regional technical food safety framework and scientific committees to provide data for and perform relevant risk analysis.
(ii) Seek synergies between different specialized laboratories through coordination and collaboration.
(iii) Establish a network of accredited food safety laboratories and accreditation of inspection schemes.
(iv) Establish a frame work for cooperation and collaboration in control of informal food imports across porous borders of countries.
(v) Consider the establishment of modern and effective single Food Control Agencies that are internationally recognized or national food control authorities with inter-ministerial and interdepartmental representation.
(vi) Develop transparent systems and procedures for sharing all types of information to ensure that consumers and other stakeholders are properly informed on both sporadic cases of food-borne illness and food safety emergencies.
(vii) Identify centers of excellence to encourage the sharing of facilities and expertise.
(viii) Work towards strengthening regional capacity building efforts in order to foster regional cohesiveness for all countries of the region to have a common view on international standard-setting processes.
(ix) Develop a regional information-sharing network which will include a website, regular publications and other existing modes of communication.
(x) Engage all stakeholders involved in food safety assurance including the public sector and NGOs.

7.2 WHO/FAO should:

(i) Continue to support member states in their efforts at improving food safety.

(ii) Strengthen their joint efforts in capacity building, international standard-setting, food contamination monitoring, information sharing etc.
(iii) Continue to engage international partners and NGOs involved in food safety work.

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ANNEX 10

FAO/WHO Regional Conference on Food Safety for Africa

Harare, Zimbabwe, 3-6 October 2005

LIST OF CONFERENCE ROOM DOCUMENTS

Agenda Item	Title	CRD No.	Language
5.	National Food System in Ethiopia – A situation analysis	CRD 1	E
5.	Analyse de la situation des systèmes de sécurité sanitaire des aliments en République du Congo	CRD 2	F
5.	Food Safety Situation in Sierra Leone	CRD 3	E
5.	Communication sur la situation de la sécurité sanitaire des aliments de la Guinée Bissau	CRD 4	F
5.	Analyse de la situation de la sécurité sanitaire des aliments au Bénin	CRD 5	F
5.	National food safety systems: A situational analysis (Zimbabwe)	CRD 6	E
5.	Analyse de la situation des systèmes de sécurité sanitaire des aliments de la République de Madagascar	CRD 7	F
5.	Analyse de la situation des systèmes de sécurité sanitaire des aliments en République centrafricaine	CRD 8	F
	Sécurité sanitaire des produits alimentaires au Sénégal	CRD 9	F
5.	Système national de sécurité sanitaire des aliments d'origine animale et halieutique au Cameroun	CRD 10	F
8.	Assuring food safety and quality in SME enterprises - Zimbabwe	CRD 11	E
5.	Situation nationale en matière de sécurité sanitaire des aliments au Bénin	CRD 12	F
5	Système national de sécurité sanitaire des aliments en Côte d'Ivoire	CRD 13	F
7.	Improving street food vending in South Africa : Achievements and lessons learned – IUMS/ South Africa	CRD 14	E
5.	Análise da Situação dos Sistemas De Segurança Sanitária Dos Alimentos Em Angola – Angola + Summary in English	CRD 15 CRD 15A	P E
5.	Système national de sécurité sanitaire des aliments et ses impacts socio-économiques et sanitaires - Côte d'Ivoire	CRD 16	F
5.	Kenya National Food Safety Situation	CRD 17	E
5.	Contrôle de la sécurite des aliments en Mauritanie (Mauritanie)	CRD 18	F
7.	Le Secteur informel de distribution des denrées alimentaires: importance et problèmes- (aliments vendus sur la voie publique) – Chad	CRD 19	F
10.	Strategic Action Plan for the African Region	CRD 20	E, F, P
5.	Sécurité sanitaire des aliments au Gabon (*not available electronically*)	CRD 21	F
5.	National food safety situation in Kenya	CRD 22	E
6.	Prioritization and Coordination of Capacity Building Activities in Kenya	CRD 23	E
7.	Informal Food Distribution Sector - Kenya	CRD 24	E
8	Assuring Food Safety and Quality Assurance in SMEs - Kenya	CRD 25	E
9.	International , regional, subregional and national cooperation in food safety - Kenya	CRD 26	E
5.	Additional notes on the Food Safety Situation in Ghana	CRD 27	E

Agenda Item	Title	CRD No.	Language
5.	Salubrité des aliments: Analyse de la situation et perspectives – Burkina Faso	CRD 28	F
8.	Actions contre la commercialisation des produits alimentaires nocifs – Burkina Faso	CRD 29	F
5.	National Food Safety Systems in Africa: A Situation Analysis - Nigeria	CRD 30	E
5.	Tunisian national food safety system	CRD 31	E
5.	Situation analysis of food safety systems in Malawi	CRD 32	E
	Présentation de la délégation nationale du Mali	CRD 33	F
5.	Analysis of the Food Safety Situation in Zambia	CRD 34	E

ANNEX 11

RESOLUTION

FAO/WHO Regional Conference on Food Safety for Africa
Harare, 3-6 October 2005

THE FAO/WHO REGIONAL CONFERENCE ON FOOD SAFETY FOR AFRICA,

Recalling the discussions held on the need to elaborate a strategic plan for food safety adapted to Africa in various fora such as the 15th Session of the FAO/WHO Coordinating Committee for Africa (CCAfrica-Kampala, Uganda, November 2002) and the First FAO/WHO Global Forum of Food Safety Regulators (GF1- Marrakech, Morocco, January 2002).

Recognizing that:

(a) food safety is an essential element in food security and is necessary for the health and well-being of the people of Africa;

(b) the food safety systems in most countries of the region currently have limited capacity to effectively ensure the safety of domestically produced and imported foods for the protection of the health of consumers;

(c) in order to take full advantage of international food trade opportunities, countries of the region must ensure the safety of the food that they produce;

Considering that:

(a) the difficulties that exist in most of the countries of the region are similar and that efforts to improve food safety must be combined in order to utilize the synergies that are afforded by the sharing of experiences and resources available in the countries of the region;

(b) it is the responsibility of the countries of the region to undertake such activities as are needed to ensure the safety of food; to provide financial and political support to national and subregional governmental and non-governmental agencies engaged in improving food safety; and to ensure national, subregional and regional coordination of necessary activities;

(c) strengthening the cooperation within and between food safety authorities, at the national, subregional and regional levels, is a prerequisite to food security, consumers' health and increased food trade opportunities;

1. Recommends the Five-Year Strategic Plan for Food Safety in Africa attached hereto;

2. Requests FAO and WHO to transmit this Resolution and the attached Recommended Five-Year Strategic Plan for Food Safety in Africa to their relevant Governing Bodies for endorsement and to other Specialized Agencies of the United Nations and relevant international institutions, in particular the African Union, for their consideration;

3. Requests donor governments, other specialized agencies, international and regional financial institutions to support the countries of the region in the implementation of the Strategic Plan, through the provision of necessary funds, in-kind support (direct technical assistance, twinning projects, etc) and by

ensuring coordination and collaboration with other ongoing bi-lateral and multi-lateral projects in the region;

4. Urges Governments of the region to give effect to the principles of the Strategic Plan by according higher priority to food safety, to support and participate in the implementation of the Strategic Plan and to make every effort to mobilize the necessary resources to implement the plan;

5. Urges FAO and WHO member countries to support, and actively participate as appropriate, the follow-up committee established through this Recommended Five-Year Strategic Plan for Food Safety in Africa.

(Adopted 6 October 2005)

ANNEX 12
(Conference Room Document 20)

RECOMMENDED FIVE-YEAR STRATEGIC PLAN FOR FOOD SAFETY IN AFRICA

INTRODUCTION

Food safety and its regulation has become a major international concern. Recent outbreaks of food-borne diseases within and outside the region and the intense media coverage of food safety problems have resulted in a crisis of confidence between consumers, the food industry and the public institutions in charge of food safety. The current escalation of consumers' activism in food safety is no longer a characteristic only of developed countries, but also a growing force for change in developing countries.

Furthermore, due to the globalization of food trade and the World Trade Organization (WTO) Agreements' requirements related to food safety and quality, governments in developing countries are increasingly concerned that food safety standards and regulations are creating obstacles to the entry of their foodstuffs into international markets. Even when efforts have been made to meet international standards (such as the Codex Alimentarius), countries of the region are still finding it difficult to reach certain markets because of stringent national food safety and quality requirements. On the other hand, consumers and regulatory agencies in developed countries fear that the weaknesses in food safety capacities of developing countries undermine the level of protection established by the international standards.

Food-borne diseases are a serious threat to people in Africa, causing an unbearable public health burden and massive economic losses. WHO estimates that some 700 000 deaths per year in Africa are due to food and water-borne diseases. These are caused by a variety of disease causing agents such as bacteria, parasites, viruses, toxins and chemical residues. These outbreaks only show the tip of the iceberg, as many more sporadic cases go unreported. Other regions have also experienced similar problems. Bovine Spongiform Encephalopathy (BSE) and dioxin contaminated poultry are well known examples in Europe. In 2004, an outbreak of acute aflatoxicosis in Eastern Africa due to contaminated maize caused more than 120 deaths. The associated economic cost included the provision of 166 000 metric tons of replacement food to the affected areas. Numerous bans on fishery and other food products exported from the region have cost African countries millions of $US in lost revenues - income that could have contributed to improving the life of Africans.

In Africa, the above examples are symptomatic of a lack of efficient food safety systems. Many countries lack adequate food safety policies and programmes that are capable of addressing current food safety challenges. National food safety systems are often characterized by the existence of multiple agencies with overlapping mandates and with little collaboration among themselves, which results in inefficient use of resources due to duplication and gaps in the coverage of important food safety issues. Food legislation in most countries of the region is either outdated or incomplete and does not provide the basic legal foundation for efficient food safety control. In addition, enforcement agencies do not have the necessary means to carry out their responsibilities in food control. This includes a lack of adequately trained human resources as well as poor inspection and laboratory facilities. Stakeholders, including the food industry and consumers, are often not involved in food safety policy making and do not play the necessary role in improving food safety.

In this context, the need to elaborate a strategic plan for food safety, specially tailored to address the needs of Africa, was particularly emphasized at the 15th Session of the FAO/WHO Coordinating Committee for Africa (CCAfrica - Kampala, Uganda, November 2002). The FAO/WHO Regional Conference on Food Safety for Africa (Harare, Zimbabwe, October 2005) has acknowledged this situation and the need to build

well integrated and multisectoral systems covering the entire food chain in order to ensure the safety of food produced and consumed in the region.

The Recommended Five-Year Strategic Plan for Food Safety in Africa is an attempt to provide African solutions to the challenges of improving food safety, taking account of the international arena in which the countries of the region must operate. Given this situation, several activities have already been undertaken by FAO and WHO, in collaboration with member countries of the African region, to prepare the necessary elements to ensure the fulfilment of these objectives. In this regard, an evaluation of national food safety management systems in the region was carried out in 20 countries of the region (FAO Regional Office for Africa, November 2004) and 28 countries (WHO Regional Office for Africa, October 2002). Furthermore, during the 16th Session of CCAfrica (Rome, January 2005), FAO and WHO organized a workshop on "Effective food control systems - Practical approaches in Africa". This workshop provided an opportunity to present the food safety situation in the countries of the region and to discuss several related issues. Many similar events have also occurred.

Similarly, the 16th Session of the CCAfrica also initiated discussion of a strategic plan for Codex in Africa to provide a basis for the strengthening of Codex activities in the region. The Codex Strategic Plan will play an important complementary role to the more comprehensive Recommended Five-Year Strategic Plan for Food Safety in Africa.

The implementation of such a Strategic Plan will not be possible without a strong political commitment from African leaders at the highest level to ensure the mobilization of the necessary resources, human and financial, to carry out the proposed activities.

I. ELEMENTS OF THE STRATEGIC PLAN

ELEMENT 1 - Food safety policies and programmes

1.1 Governments of the region are encouraged to:

1.1.1 Ensure that this document is presented to the highest policy and decision making body in the region, such as the African Union.

1.1.2 Ensure that policy makers are sensitized to the importance of food safety to ensure the political will needed to implement this strategic plan.

1.1.3 Adopt clear and coherent food safety policies as part of a comprehensive national strategy, based on the sharing of responsibilities in food safety between public authorities, industry and consumers, and taking into account the entire food chain from farm to table.

1.1.4 Establish necessary mechanisms to ensure effective coordination between all those involved in food safety and facilitate the active participation of all stakeholders, including relevant public institutions, private sector representatives and consumers' associations, in the entire food safety decision-making process.

1.1.5 Develop and implement national food safety programmes, consistent with the Strategic Plan, to reduce food-borne risks and improve the safety of the food supply. These programmes, which should be based on comprehensive consultations among all stakeholders (official authorities and private sector representatives), should be periodically evaluated and revised to ensure their relevance and effectiveness.

1.1.6 Strengthen the capacity of national food safety systems through the provision of the necessary human and physical resources needed to achieve their mandate, so that they can ensure food safety to the extent possible.

1.1.7 In line with decentralisation policies adopted in several countries of the region, efforts should be made to effectively decentralise technical capacities and promote participation of local authorities in food safety programmes, in particular those requiring community-based actions such as organizing the informal food sector.

ELEMENT 2 - Legislative and institutional aspects

2.1 Governments of the region are encouraged to:

At the national level:

2.1.1 Establish a harmonized and integrated legislative framework and institutional set up, using a risk analysis approach to address food safety issues throughout the entire food chain.

2.1.2 Work towards the harmonization of regulations, standards and control processes applied to products for export and for domestic consumption, both imported and domestically produced.

At the regional level (for Elements 1 and 2)

2.1.3 Encourage the sharing of experiences in the field of organization and coordination and harmonize food safety legislation between countries of the region.

ELEMENT 3 - Standards and regulations

3.1 Governments of the region are encouraged to:

At the national level:

3.1.1 Promulgate food control regulations that would eventually bring together fragmented food control provisions that make it difficult to approach food safety issues in an integrated and coherent manner. These regulations should guarantee food safety and protect consumers against fraudulent practices.

3.1.2 Update and/or review national regulations and standards in order to harmonize them with international requirements, in particular with Codex Alimentarius standards.

At the regional level:

3.1.3 Work towards the harmonization of food safety regulations and standards between the countries of the region, giving particular attention to the standards of products with a potential for regional and international trade.

3.2 Regarding Elements 1, 2 and 3, relevant international organizations are encouraged to:

At the national level:

3.2.1 Provide the necessary support to the countries of the region to assist them in strengthening their national food safety systems and, in particular, in establishing adequate and effective legal, regulatory and organizational framework for food control.

At the regional level:

3.2.2 Assist in the harmonization of food standards and regulations between the countries of the region and in the establishment of a network for the exchange of information and experiences between the national food safety authorities.

3.2.3 Provide the necessary support to a regional scheme to replicate successful experiences by the countries of the region in the field of food control organization and elaboration of basic food laws, in particular those that have successfully integrated a risk analysis approach.

ELEMENT 4 - Food inspection programmes and techniques

4.1 Governments of the region are encouraged to:

At the national level:

4.1.1 Adopt coherent and effective food inspection programmes with proper prioritization of actions and based on the risk analysis paradigm, consisting of 3 distinct but complementary components, namely: risk assessment, risk management and risk communication.

4.1.2 Develop advisory services to encourage and assist food producers to practice due diligence by implementing voluntary food safety control systems, based on international standards; and promote official auditing of such food safety management systems to replace final product testing.

4.1.3 Identify and apply inspection methods adapted to the unique needs of street foods, in addition to supporting advisory services to the operators in this sector to progressively improve the preparation, handling and serving of street foods.

4.1.4 Upgrade inspectors' technical expertise through continuous training and by disseminating all necessary food inspection tools (guides, handbooks, standards and regulations compendia, preliminary field inspection and fraud detection equipment).

4.1.5 Ensure the coordinated and concerted use of the food safety tools elaborated by international organizations, in particular FAO and WHO, in the field of food safety, good agricultural, manufacturing and hygienic practices.

4.2 Relevant international organizations are encouraged to:

4.2.1 Assist the countries of the region in the harmonization of their inspection methods as well as in the creation of an early warning system for imported products that do not meet food safety standards.

4.2.2 Assist in the development of a uniform regional inspection programme for food imports and exports, as well as in the establishment of procedures for mutual recognition of inspection and certification systems among the countries of the region.

4.2.3 Organize regional/subregional training sessions and advanced courses on risk management principles and on food inspection techniques, and facilitate the countries' access to relevant published materials.

ELEMENT 5 - Food analysis and food safety testing laboratories

5.1 Governments of the region are called upon to:

At the national level:

5.1.1 Strengthen the capacity of official laboratories by providing adequate human resources and equipment, and by encouraging their accreditation in accordance with international requirements.

5.1.2 Encourage the creation of private sector laboratories for public and private sector use and ensure their official recognition in accordance with pre-established criteria and in conformity with international requirements.

5.1.3 Create a network of national laboratories to facilitate the exchange of information and expertise, as well as the creation of centres of excellence.

5.1.4 Create/strengthen national laboratory accreditation bodies and work towards their recognition regionally and internationally.

5.1.5 Encourage the development and availability of rapid detection methods, particularly for screening samples for mycotoxin contamination.

At the regional level:

5.1.6 Work towards the creation of an African network of reference laboratories with expertise in complementary disciplines, and formalize the exchange of information, trainees and requests for analysis between these laboratories.

5.2 Relevant international organizations are encouraged to:

At the national level:

5.2.1 Assist with the importation of laboratory chemicals and laboratory reagents, including biological reference materials, that are currently import/trade restricted and that are needed for food safety testing and research.

5.2.2 Support countries in their efforts to strengthen the capacity of their laboratories and in the training of laboratory personnel.

At the regional level:

5.2.3 Support the implementation of a regional network of laboratories and the creation of centres of expertise in complementary disciplines.

5.2.4 Organize regional needs oriented training for laboratory personnel.

ELEMENT 6 - Monitoring food-borne diseases and the safety of foods on the market

6.1 Governments of the region are encouraged to:

At the national level:

6.1.1 Organize and implement food safety monitoring programmes, at the national or local level, to prevent possible problems and assist in the implementation of targeted policies and programmes.

6.1.2 Strengthen and, if necessary, establish an alert and reference system for the monitoring of food-borne diseases with the following objectives: measure disease incidence, track the tendencies and forms taken by endemic diseases, detect the sources, examine the causes of diseases and help prioritize efforts in this field. This work must aim to continuously improve the quality and safety of the food supply.

6.1.3 Encourage all food safety stakeholders to communicate and share information on the incidence of food-borne diseases, in a transparent manner, in order to strengthen warning and monitoring mechanisms.

At the regional level:

6.1.4 Develop close regional and international partnerships to strengthen national actions for prevention and control of food-borne diseases.

6.2 Relevant international organizations are encouraged to:

At the national level:

6.2.1 Support the countries of the region in their efforts to strengthen food-borne disease surveillance systems within the framework of capacity building programmes such as the "WHO Global Salmonella Surveillance Programme"; assist in training concerned staff, in particular in the improved use of the global warning and epidemic outbreak response systems.

At the regional level:

6.2.2 Assist in establishing a regional network of early warning and information exchange on food-borne diseases; link it to other specialized global networks such as GOARN, INFOSAN, GLEWS, etc.

ELEMENT 7 - Participation in Codex

7.1 Governments of the region are encouraged to:

At the national level:

7.1.1 Implement, in coordination with the other countries of the Region and in line with agreed modalities, the Strategic Plan for CCAfrica once adopted. In this regard, Governments should increase their participation in Codex activities so that the established standards, guidelines and recommendations reflect the situation that prevails in the countries of the region. In this context, countries must:

- Strengthen, and if necessary establish, a national Codex committee with active participation of all stakeholders, including public and private sector officials and consumers;
- Strengthen, and if necessary establish, a national Codex contact point and give it the necessary resources, including financial, human, material and logistical.

At the regional level:

7.1.2 Work towards more effective participation of African countries in the Codex system through dynamic and sustained participation in the work of the CCAfrica. Countries of the region must, as far as possible, seek to define common positions that are sound and well justified.

7.2 Relevant international organizations are encouraged to:

At the national level:

7.2.1 Provide the necessary support to the countries of the region to establish and/or strengthen national Codex committees and Codex contact points.

At the regional level:

7.2.2 Provide the necessary support to CCAfrica to implement its strategic plan.

7.2.3 Organize periodic regional fora to discuss Codex and food safety issues of regional concern.

ELEMENT 8 - Communication and stakeholder involvement (including industry officials and consumers)

8.1 Governments of the region are encouraged to:

At the national level:

8.1.1 Create a permanent food safety coordinating body which meets regularly and is open to food industry officials and consumers; and establish dynamic mechanisms for the exchange of information and opinions.

8.1.2 Motivate the food industry to practice due diligence by implementing voluntary food safety control systems and involve them in all relevant food safety issues, such as participation in Codex meetings, training sessions, etc.

8.1.3 Provide the necessary support to national consumer organizations to access and/ or disseminate information related to food safety and strengthen their role in the implementation of national food safety programmes.

8.1.4 Develop a dynamic partnership with the media, public and private, for the dissemination of information on food safety, to which all stakeholders should contribute appropriately (consumers, food industry officials, and government officials).

At the regional level:

8.1.5 Encourage exchange programmes between food industry officials and consumers from all African countries.

8.2 Relevant international organizations are encouraged to:

At the national level:

8.2.1 Assist countries of the region in promoting the use of voluntary food safety control systems, such as HACCP, by the food industry and disseminate or, if necessary, elaborate appropriate guidelines adapted, in particular, to the traditional and informal sectors.

At the regional level:

8.2.2 Organize joint workshops and training courses to make information on food safety management methods at food production and distribution level accessible to all stakeholders and to disseminate the relevant documents prepared by the international organizations.

ELEMENT 9 - National, regional and international cooperation

9.1 Governments of the region are encouraged to:

At the national level:

9.1.1 Take note of the multi-disciplinary nature of activities related to food safety and consequently of the need to strengthen national cooperation between all stakeholders. This cooperation must take several forms: cooperation with experts from multiple disciplines (nutrition, toxicology, microbiology, chemistry, legal services, public health, etc.); public/private sector cooperation with food production, distribution and food catering stakeholders interested in food safety; and vertical cooperation with the local, municipal and even regional authorities.

At the regional level:

9.1.2 Strengthen regional, subregional and international cooperation in view of trade liberalization and the trans-boundary nature of food safety issues. This cooperation can be realized by implementing cooperation programmes in various fields such as food inspection, laboratories, Codex activities, harmonization of legislation and standards, import and export certification and food-borne disease surveillance.

9.2 Relevant international organizations are encouraged to:

9.2.1 Strengthen the assistance provided to African countries in food safety; based on accurate national and regional needs assessments and through an improved targeting of issues, while ensuring, in particular, the following:

- strengthening of synergies and coordination between the regional and national projects undertaken by various organizations and donors;
- favouring of regional and sub-regional projects that share the resources provided by donors and implementing organizations for their optimal use.

II. STRATEGIC PLAN IMPLEMENTATION AND MONITORING :

The countries of the region and relevant international organizations, FAO and WHO in particular, with financial support from donors and financial institutions, are invited to efficiently and effectively collaborate in the implementation of this Recommended Five-Year Strategic Plan for Food Safety in Africa. For this reason, they are asked to provide the necessary budgetary means and in-kind technical support required to carry out the following actions, aimed at building the national capacity to ensure a constant monitoring of the implementation of the concerned plan.

1. The Conference agreed that its bureau, composed of the three co-chairs and the rapporteur of the Conference and the chairs and rapporteurs of the two working groups, would constitute the follow-up committee that would ensure the monitoring of the implementation of the strategic plan. Representatives of FAO and WHO will also serve on this committee. The committee would provide progress reports on the implementation of the strategic plan on the Conference website (www.foodsafetyforum.org/african/index.asp) in order to receive input from other countries of the region and will meet virtually and physically as frequently as possible, particularly in connection with regional and international meetings related to food safety (e.g. Codex).

2. FAO and WHO are requested to:

2.1 Lead a diagnostic study of the regional food safety situation in order to determine the most urgent regional needs and priority areas for improvement; and thus provide African countries with a good basis for the implementation of the strategic plan.

2.2 Organize, as soon as possible, a seminar in order to establish the priorities of the strategic plan and identify potential financial resources to carry them out.

2.3 Oversee the organization, within the framework of the regular sessions of CCAfrica, of meetings to evaluate the degree of realization of the strategic plan, discuss encountered difficulties and seek suitable solutions to solve them and establish future priorities.

2.4 Strengthen and improve the coordination between the capacity building activities of the United Nations organizations, donors and other sources of support in helping to build the capacity of the national food safety systems of the region.

2.5 Develop training programmes on voluntary control and quality management systems in the food industry, intended for the personnel in the private sector.

2.6 Work with donors and other financing organizations for the creation in Africa of the following centres:

2.6.1 Subregional centres for training food control inspectors and laboratory personnel. The number of such centres will depend on the availability of resources.

2.6.2 A surveillance centre for tracking food-borne diseases and coordinating actions and programmes employed in this field, both by the initiative of African countries and via projects financed within bilateral or multilateral frameworks.