



A Bioversity International / WAHO Initiative in technical cooperation with FAO

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Partnerships for Mobilizing the Diversity in Traditional Food Systems to Ensure Adequate Nutrition and Health within ECOWAS Member States

A Regional Workshop for ECOWAS Member States

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PREAMBLE

The **West African Health Organization (WAHO)** is a specialized Public Health Agency of the Economic Community of West African States (ECOWAS). WAHO coordinates the ECOWAS Nutrition Forum which was established in 1996 by the ECOWAS Commission as a mechanism to organize the network of nutrition actors and stakeholders within the 15 ECOWAS member states. The overarching goal of the Nutrition Forum is to increase the visibility of nutrition and regional cross-sectoral dialogues and actions that would result in impact oriented food and nutrition programmes. Nutrition advocacy is thus a strategic role of the Forum aimed at raising awareness about key nutrition issues among policy and decision makers at national and regional levels.

Bioversity International was established with a mandate to promote biodiversity research for development – to promote the conservation and sustainable use of genetic resources to attain development goals. The organization’s food and nutrition programme aims to improve food security, nutrition and health among resource poor populations in particular by making the most of agricultural biodiversity. Bioversity promotes a food systems based approach to food and nutrition interventions, an approach that employs the agricultural biodiversity of traditional and locally adapted food materials as primary and frontline resources to ensure food and nutrition security.

Partnerships constitute the foundation of Bioversity’s strategy. The organization has no laboratories or field sites of its own but works cross-sectorally with national, regional, international, as well as non-governmental organizations. One such regional partner is the West African Health Organization.



This report and supporting presentations and documentation are available at:
http://www.biodiversityinternational.org/News_and_Events/Events/Past_Events/WAH_O_workshop.asp



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LIST OF ACRONYMS

ADB	Agricultural Development Bank
AUC	Africa Union Commission
CBD	Convention on Biological Diversity
CIDA	Canadian International Development Agency
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization
GFU	Global Facilitation Unit for Underutilized Species
HKI	Helen Keller International
IDRC	International Development Research Centre
IEC	Information, Education and Communication
IFPRI	International Food Policy Research Institute
ITN	Insecticide Treated Nets
MDG	Millennium Development Goals
PRSPs	Poverty Reduction Strategy Papers
SCN	(United Nations) Standing Committee on Nutrition
SFP	School Feeding Programmes
WAEMU	West African Economic and Monetary Union
WAHO	West African Health Organisation
WB	World Bank



EXECUTIVE SUMMARY

The West African sub-region with its several agro-ecological zones holds a rich and varied agricultural biodiversity which in the past played, and today continues to play, a vital role in the food security and nutrition of both rural and urban populations. West Africa's diverse agricultural ecosystems provide a wide selection of traditional foods that can be mobilized to increase food availability and expand household food choices, thus ensuring dietary diversity and better nutrition. Against this background of food diversity and relative abundance in the sub-region are current reports of decreases in agricultural productivity and increases in food insecurity. This deteriorating food and agriculture situation in the sub-region has negatively impacted on household food security as well as the nutrition and health status of populations within the region.

Experiences from past food and nutrition intervention programmes, and the disappointing results of past and ongoing health sector nutrition improvement programmes have prompted the conclusion that neither the health nor the agriculture sector working alone can meet the food, nutrition and health targets set by the MDGs. It is this realization of the complex nature of nutrition and health problems, particularly in developing countries, that is driving the current calls for collaborative policies and intervention programmes which engage all sectors. It was against this backdrop that this workshop was planned to bring together policy and decision makers from health, agriculture, and the private sector of ECOWAS member states, who worked together during a two day period to build and strengthen collaboration between their respective sectors.

A total of 43 representatives from national, regional and international institutions and organizations participated in the workshop. Seven technical presentations provided the relevant information to establish the context for the workshop and to build capacities for effective policy formulation and programme implementation.

Priority issues were identified during the course of the workshop. The first is the need to create an inventory of indigenous and traditional foods available and map where they can be found. Second is to research and document how they can be used for better nutrition. This is how to ensure the safety of these foods and improve their quality and competitiveness through food processing. There was a general recognition of the fact that there already exists a wealth of information and experience on which to build but these need to be documented and shared. Participants identified the need to create capacity, to share knowledge across sectors and to identify champions in other sectors in order to establish effective multidisciplinary and multi-sector alliances.

The working groups drafted achievable national and regional advocacy action plans. Participant countries have agreed to execute the action plans. A meeting is recommended in spring 2008 to follow up on progress and establish how the countries can give each other support and how the participant international organizations can underpin action plan activities.



ACKNOWLEDGEMENTS

The West African workshop on partnerships for mobilizing the diversity in traditional food systems to ensure adequate nutrition and health within ECOWAS member states, together with this report, are the result of the commitment, support and efforts of the Canadian International Development Agency (CIDA), International Development Research Centre (IDRC) Global Facilitation Unit for Underutilized Species (GFU) and the organisers at the West African Health Organisation (WAHO) and Bioversity International. The decision to provide financial support to an effort that cut across sectors provided the needed validation that efforts to work across boundaries – national, sectoral and disciplinary – could bring new ideas, policies and actions to solve the persistent and emerging problems of malnutrition in West Africa. In light of the important regional and policy implications of this event, we are appreciative of the support provided by the West African Economic and Monetary Union (WAEMU). This confirms our belief that by working together, health and agriculture policy makers can demonstrate that investing in improved nutrition is a sound investment for the economic development of West Africa.

We express our profound thanks to the participants from ECOWAS countries and international organisations (Food and Agricultural Organisation (FAO) International Food Policy Research Institute (IFPRI)), who provided the expertise and dedication to confirm that the biodiversity resources in the region, if properly mobilized and supported, can be the basis for a healthy and productive future for West African peoples.

At the global level, this policy workshop is one of the first of its kind. We thank the technical organisers, Dr Ismael Thiam of WAHO and Dr I. Francisca Smith of Bioversity International, for their leadership in conceiving and delivering the successful outcome. We also thank Mrs Rosanna Agble (Nutrition consultant) and Dr Pablo Eyzaguirre and Ms Arwen Bailey of Bioversity for their contributions to producing the materials and report from this event.



1.0 Introduction

The West African sub-region with its several agro-ecological zones holds a rich and varied agricultural biodiversity which in the past played, and today continues to play, a vital role in the food security and nutrition of both rural and urban populations. While in many cases the healthy components in West Africa's food traditions are still found in the lives and cooking pots of rural households, there is an overall trend of neglect and underutilization of these traditional food crops and edible species. West Africa's diverse agricultural ecosystems provide a wide selection of traditional foods that can be mobilized to increase food availability and expand household food choices, thus ensuring dietary diversity and better nutrition. This rich variety of tubers, rhizomes, roots and starchy fruits, cereals, legumes, pulses and small game, when used in diversified diets can provide a population's daily needs of energy, proteins and micronutrients. Indigenous fruits, vegetables, oil seeds, sauce thickeners, condiments and spices are considered non-staples and are thus often neglected in agricultural research and food production programmes. They are however major sources of micronutrients and health protecting and promoting phytochemicals in daily diets.

Against this background of food diversity and relative abundance in the sub-region are current reports of decreases in agricultural productivity and increases in food insecurity. This deteriorating food and agriculture situation in the sub-region has negatively impacted on household food security as well as the nutrition and health status of populations within the region.

The International Food Policy research Institute (IFPRI) has consistently advocated through workshops, research and discussion papers, the need for the agriculture and health sectors to perceive improved nutrition as a critical impact target of their respective sectoral policies and programmes. To achieve this however, there is a compelling need for inter-sectoral collaboration among relevant sectors of government. Getting policy makers in health and agriculture to work together has often been a difficult task. Nevertheless, the ongoing debates on the issue among food and nutrition professionals and advocates are a positive indication that there is a general shift in perceptions and a realization of the pressing need to build cross-sectoral collaborative partnerships for more effective and impact driven intervention programmes in most developing countries.

Furthermore, the Food and Agriculture Organisation of the United Nations (FAO), and in particular its Sub-regional Office for Western Africa, assists its member-states in developing National Food Security Programmes, in line with the New Partnership for African Development. Within the FAO/Netherlands Partnership Programme (FNPP), it is working on integrating agro-biodiversity into national agriculture and environmental policies with a view to improve local management and utilization of agro-biodiversity for sustainable livelihoods thereby addressing poverty and food insecurity in pilot sites.

African countries are experiencing the negative consequences of globalization and socio-cultural changes which have negative effects on food availability and dietary habits, and have contributed to the high prevalence of nutritional deficiencies and diet-related diseases. The reduction in household purchasing power being experienced to date has negatively affected the use of traditional foods in household



dietary patterns. To compensate for the growing trends in consumption of high energy but nutrient poor foods, with resulting increases in incidences of micronutrient deficiencies and diet-related chronic diseases, there is increasing but disproportionate attention being given by governments and development agencies to nutrition intervention strategies using single or multiple-nutrient supplementation, and food fortification. While the effectiveness of these interventions is well established, there is concern that these interventions are often difficult and costly to sustain over the long term in marginal areas where infrastructure and market institutions are poorly developed. There is therefore a compelling argument for stakeholders from agriculture and rural development, health/nutrition, education, research and the private sectors to build partnerships that make the best use of their specific comparative advantages in order to work towards nutrition intervention programmes that are based on foods as part of a whole food system, not just single components of foods.

National policy and decision makers have thus a fundamental role to play in ensuring the success of such national and regional initiatives aimed at re-dressing the poor food, nutrition and health situation. There have been moves by international and regional institutions to find ways of addressing this multi-faceted problem. Among several actions proposed in its March 2005 Call for Action document to ensure that locally available biodiversity is optimized for food and nutrition, the Convention on Biological Diversity (CBD) strongly recommended the convening of regional advocacy and policy workshops that bring together stakeholders from all sectors whose activities have an impact on the food, nutrition and health needs of populations in developing countries in particular. In March 2006, the CBD established the cross-cutting initiative on Biodiversity for Food and Nutrition which is led by FAO and Bioversity International. A further call for inter-sectoral collaborations to address the problems of food, nutrition and health in the ECOWAS sub-region was made by the participants at the 2006 ECOWAS regional nutrition forum, held in Cape Verde, who in one of their recommendations charged WAHO to “establish partnerships with ECOWAS department of Agriculture for increasing linkages between health and agriculture policies”.

The workshop’s organizing institutions therefore aim to jump start inter-sectoral food and nutrition initiatives in the ECOWAS sub-region by bringing together policy and decision makers in health, agriculture, education and the private sectors to review the respective sectoral policies with improved nutrition as a major objective, and to develop inter-sectoral strategies that have nutrition and health outcomes as major impact targets.

See separate background papers on CD or on Website for further details.

http://www.bioversityinternational.org/News_and_Events/Events/Past_Events/WAHO_workshop.asp

1.1 Background to the Policy Advocacy Workshop

Experiences from past food and nutrition intervention programmes, and the disappointing results of past and present health sector nutrition improvement programmes have prompted the conclusion that neither the health nor the agriculture sector working alone can meet the food, nutrition and health targets set by the MDGs. It is this realization of the complex multi-faceted and multi-sectoral nature of nutrition and health problems particularly of developing countries that is driving the



current calls for inter-sectoral collaborative policies and intervention programmes. But, policy and decision makers have yet to look beyond the traditional targets set by their sectoral strategies. It was against this backdrop that this workshop was planned in order to bring together policy and decision makers from health, agriculture, and the private sectors of ECOWAS member states, who worked together during a two day period to build and strengthen collaboration between their respective sectors. The workshop was unique and strategic because the initiative and push for a cross-sectoral policy dialogue on the production, availability and use of indigenous and traditional foods as frontline resources against malnutrition emanated from the health sector that traditionally look to the pharmaceutical industries and dietary supplements in the fight against micronutrient malnutrition and diet related chronic diseases. Also, an enabling environment was provided for participants through technical update presentations, which put the prevailing issues in context thus arming them with information that will aid in their discussions and the development of mechanisms for cross-sectoral collaboration in policies and programme implementation.

1.2 Workshop Objectives

The workshop had the following broad objectives:

Objective 1: Build capacities of workshop participants for more effective policy formulation and programme implementation by increasing their awareness of the very close link between the populations' change from traditional diet patterns as a result of changes in food availability, and the increasing prevalence rates of nutritional deficiencies and diet related chronic diseases.

Objective 2: Convince the participants of the need to re-assess existing food and nutrition related policies, harmonize such policies and develop cross-sectoral strategies to effectively address the high prevalence of micronutrient malnutrition and diet related chronic diseases through collaborative partnerships in food and nutrition programme implementation.

1.3 Expected Outputs

Based on these broad objectives the following outputs were expected:

- a. Collaboration is initiated between policy and decision makers in agriculture, health/nutrition sectors.
- b. Mechanisms for cross-sectoral collaboration are defined.
- c. Constraints to collaboration identified and solutions proposed
- d. A cross-sectoral working group (coalition of workshop participants) established to develop and ensure sustainability of collaborative activities
- e. A joint strategy and action plan for advocating positive changes in dietary patterns of population groups in West Africa developed.

1.4 Level of Participation

The fundamental premise of the workshop was for it to be a meeting ground for top level decision-makers from agriculture, health, education, nutrition, research, private sector and international organisations. The original intention was to invite four participants from each country, representing health, agriculture, education and the private sector from each of the fifteen ECOWAS member states. However, because costs were prohibitive, the strategic decision was made to focus on the key players in agriculture and health sectors, with private sector perspectives provided by representatives from the research community, farmers, consumers and food



processors associations. A total of 43 representatives of national, regional and international institutions and organizations participated in the workshop. Eleven out of the fifteen ECOWAS countries were represented and seven countries had representations from both the health and agriculture public sectors.

The representation from The Gambia came close to the organizers' original plan of having national representatives from agriculture, health, education, nutrition and the private sector as it had four representatives from agriculture, health, the private sector and a national nutrition focal point. The national nutrition focal points are considered the "foot soldiers" that are expected to operate from bottom-up to ensure sustainability of identified collaborative activities. Due to restricted funding, only four national nutrition focal points participated in the workshop. The private sector was represented by the president of the consumers association of the West African Economic and Monetary Union (WAEMU) and by the president of the Gambian National Association of Small Scale Food Processors. The regional food and agricultural research community was represented by researchers from Senegal and Burkina Faso.

In addition to these and the organizing institutions, other partners actively participated in the workshop. These include the International Food Policy Research Institute (IFPRI), the Food and Agriculture Organization (FAO), Helen Keller International (HKI) the West African Economic and Monetary Union (WAEMU), the ECOWAS Agriculture directorate as well as Canada's International Development Research Centre (IDRC) who co-funded the workshop with the Canadian International Development Agency (CIDA).

See Annex 2 for detailed participants list

2.0 Opening

The workshop was opened by the Commissioner of the Department for Rural Development, Natural Resources and the Environment of the West African Economic and Monetary Union (WAEMU), Mr. Ismaïl K. Binguitcha-Faré. He welcomed participants to the workshop and stressed that the relevance of the meeting could not be over-emphasized as it is evident that over-nutrition is affecting groups in urban areas due to lifestyle and sedentary activities while populations in the rural areas are experiencing the effects of under-nutrition and malnutrition. He indicated that the agricultural policy of WAEMU, which covers many agricultural programmes, aims at contributing to the improvement of food security. The Union is therefore working together with FAO to improve food security through use of local foods and also actively collaborates with WAHO in their nutrition programme activities particularly in the area of food enrichment through fortification.

In her opening remarks, the Director, Primary Health Care and Disease Control of WAHO, Dr Johanna Austin-Benjamin, who represented the Director General of WAHO observed that the workshop is a fulfilment of one of the recommendations adopted at the 2006 ECOWAS nutrition forum held in Cape Verde in which WAHO was mandated to engage in cross-sectoral collaborations in order to enhance nutrition activities. This initiative with Bioversity is therefore to strengthen efforts being made



to ensure adequate health and nutrition through addition of value to locally produced foods while at the same time supporting the synergy needed by the organizations.

The Acting Representative in Burkina Faso, of the Food and Agriculture Organization (FAO), Mr. Jérôme Kasongo, on behalf of the Regional Director for Africa Dr Edouard K. Tapsoba, lamented the fact that ten years after member Heads of State committed themselves at the World Food Summit to the reduction of hunger and malnutrition, the size of the problem is still immense. He reiterated that it is the belief of FAO that with a better understanding, partners can help accelerate the outcome of nutrition programmes by finding appropriate roles to play. He concluded that FAO has great interest in the recommendations and the action plans which will be adopted at the end of the workshop and will continue to offer its technical expertise.

In his opening comments, the Director General of Bioversity, Dr Emile Frison said that the workshop was the start of great dynamics in the sub-region and that complementarity with FAO was one important aspect of Bioversity International/FAO collaboration.

2.1 Keynote Address

Dr Frison delivered the keynote address on the topic “Agricultural Biodiversity for better Nutrition and Health in West Africa: Global Imperatives and Opportunities”. Using the first Millennium Development Goal (MDG) – “To eradicate extreme poverty and hunger” - as his theme, he indicated that the focus of poverty alleviation programmes has tended to address only the income poverty target set by the MDG. He reiterated that while most countries are on track to meet the income poverty target, only 34 (24%) of 143 countries including two countries in the ECOWAS region (Benin and The Gambia) are on track to achieve the hunger target. Referring to the 2006 World Bank Report: “Repositioning Nutrition as Central to Development: A Strategy for Large Scale Action”, Dr Frison indicated that investing in nutrition saves billions in health costs, improves productivity, reduces poverty, and improves education. He stated that there is a growing consensus that agricultural biodiversity can improve nutrition and health through diversified diets, based on traditional and locally adapted food crop and animal species. However to achieve this, a multi-disciplinary and multi-sectoral approach is needed. The challenge is linking food security, good nutrition and health, to long term sustainable agricultural policies and practices. Policy makers have an opportunity to tap the potential contributions of agricultural biodiversity to improve nutrition through increased collaboration between agriculture and the health sectors.

During the discussions that followed, the participants acknowledged the need to modernize and increase availability of traditional foods through (1) improved processing to satisfy urban demand, (2) review and update of policies and regulations that impede the production and availability of traditional foods in several member states (3) use of the media in public awareness programmes to sensitize the population to the benefits of consuming traditional foods (4) putting into place mechanisms for multi-sectoral collaborative partnerships at national, regional and international levels and (5) development of agronomical research that would enhance the production and availability of the diversity of indigenous and traditional foods in the sub-region.



2.2 Workshop Background, Objectives and Expected Outcomes.

Dr Ismael Thiam, WAHO

Using United Nations rankings to illustrate the paradox of the nutrition situation in West Africa, Dr Thiam noted that nutrition transition is occurring in ECOWAS countries together with the processes of economic development, industrialization and increasing urbanization. He presented data to show that countries no longer have just under-nutrition as a problem, but that obesity is rising in adults, giving rise to the paradox of economic development taking place in tandem with these two forms of malnutrition. Dr Thiam called for a change in paradigm and policy to address the identified challenges. With this background, he noted that it was thus timely to convene the workshop and so presented to the participants the objectives and expected outcomes of the workshop (As listed above).

3.0 Summaries of Technical Briefing Presentations

The presentations during this session were used to provide the participants with relevant technical background information in related subject areas that would help build capacities of workshop participants for effective policy formulation and programme implementation. Below are brief summaries of the presentations.

Details of each of the presentations can be found in Annex 6.

3.1 West African Indigenous and Traditional Foods- Frontline Resources against Malnutrition and Diet related Chronic Diseases

Dr Francisca Smith, Bioversity International

Dr Smith presented some available research data to support the assertion that West African indigenous and traditional foods need to be employed as frontline resources against malnutrition and diet related chronic diseases. She gave examples of the wide variety of traditional and indigenous African foods ranging from root tubers, starchy staples, cereals, fruits, vegetables and spices, which West Africa abounds in and which have immense nutritional value. The examples given demonstrate that the non-nutrient bioactive compounds found in indigenous and traditional legumes, fruits, vegetables, sauce condiments and spices protect health and reduce the risks of chronic diseases.

3.2 Food Security and Sustainable Livelihoods: a pre-requisite for improving Nutrition and attaining the MDGs.

Dr Florence Egal, FAO/Rome

Dr Egal indicated that the main determinants of malnutrition are demographic, economic and ecological. Malnutrition in West Africa is related to changes in lifestyles and diets. The vicious cycle of malnutrition, poverty and degradation of natural resources need to be transformed into a virtuous cycle of improved diets, food security and sustainable management of natural resources. She outlined some of the strategies that will ensure better linkages between agriculture and health for good nutrition and the role of the food and agriculture sector in alleviating malnutrition.

3.3 Update on Research Programmes and Activities (agronomic and processing) on Traditional Foods

Pr Amadou Tidiane GUIRO, University Cheikh Anta Diop, Dakar , Senegal

From a review and analysis of nutrition related research results published in peer reviewed journals, Dr Guiro reported that very little research work has been done on



the link between traditional foods consumption, improved nutrition and health. For most of the reports from published literature, the greatest emphasis is put on child malnutrition and ideal formulations for complementary foods. Dr Guiro also observed that work on the nutrition and health attributes of the indigenous and traditional foods of the sub-region is very limited and called for more research funding to make possible the compositional analysis of these foods and the development of regional food composition tables.

3.4 Review of Food and Nutrition related Agriculture and Health Policies of ECOWAS member states- the role of Advocacy in effecting Policy changes

Dr Raymond Vodouhe, Bioversity International

Dr Vodouhe listed strategies that have in the past years been developed to address food insecurity in the sub-region but regretted that nations have not been able to translate regional and international commitments into concrete actions. This according to Dr Vodouhe is due to a low level or lack of support for agricultural research required to make research more competitive, and the lack of an institutional forum for dialogue and consultation among various actors for a better development of local resources in the fight against malnutrition and diet related chronic diseases. He suggested strategies for improving the situation.

4.0 Preparatory Enabling Presentations

The working group sessions which took place on day 2 of the workshop (See Workshop agenda, 3) were preceded by two contextual presentations aimed at stimulating ideas on how best to work together. The presentations led into a plenary discussion whose main themes are reported in section 5.2.

4.1 Agriculture - Health Linkages

Marie T. Ruel, IFPRI

Dr Ruel called the attention of the participants to the fact that policy makers face new challenges such as globalization, urbanization, high demand for a longer food chain, and changing markets. Thus while recognizing that linkages between agriculture and health are vital, they are dynamic and complex, and there are significant institutional challenges which often lead to competition rather than collaboration, coordination and integration. Difficulties in monitoring and evaluating inter-sectoral policies also exist and so it is important to recognize that there is need to convince policymakers, practitioners, and donors to work together. She considers this is a key challenge for the integration of cross-sectoral policies and activities.

4.2 Working together to fight all forms of malnutrition

Dr Florence EGAL, FAO/Representative of SCN

Using the UN Standing Committee on Nutrition (SCN) as an institution that operates and fosters the concept of working together, Dr Egal reiterated that mission of the SCN is to promote cooperation and collaboration among UN agencies and partner organizations in their support of national, regional, and international efforts to end all forms of malnutrition.



5.0 Working Group Sessions

Three parallel working groups were constituted and given the tasks listed below to perform. Two groups were constituted from participants from francophone countries while the third group comprised participants from anglophone countries

Session Activities

1. Analyse agriculture/health sector collaboration within your countries, indicate the strengths, weaknesses, opportunities and possible threats to such collaboration
2. Using the SWOT analysis, develop action plans for the implementation of advocacy strategy(ies) within ECOWAS member states
3. Identify key issues that need to be addressed through advocacy at regional level

5.1 *Analysis of Agriculture/Health sector collaboration, its strengths, weaknesses, opportunities and possible threats (SWOT)*

In their analysis of agriculture/health sector collaboration the participants acknowledged that countries within the ECOWAS region were at different levels in such a collaborative process. From the group discussions it was evident that some countries such as Ghana, Senegal and Nigeria have more clearly defined areas of collaboration and long existing collaborative relationships between agriculture, health and, in some cases, education. In some other countries, collaborations were less clearly defined, loose and ad hoc in nature. Nevertheless the discussions revealed several previous and current agriculture/health sector cross-sectoral collaborations. These include national plans of action for nutrition, national programmes on food security, school meal programmes, school health programmes which in most countries are based in ministries of education, national food safety programmes, community nutrition programmes, public awareness programmes against HIV/AIDS in particular, as well as national programmes on food fortification. Existing and functional collaborative arrangements common to most of the participating countries are presented in Section 5.2

Concerning the strengths, weaknesses, opportunities and threats to current partnerships, in spite of the differences in the scale of such partnerships between countries, the participants expressed similar views on the strengths of existing partnership, the opportunities created by such partnerships as well as factors that threaten existing partnerships. The issue of the weaknesses of existing partnerships generated more debates and views. As articulated by one participant, because a number of the partnerships are ad hoc in nature, there are no clear rules of association between collaborating sectors, slowness in developing processes and guidelines, and no system is usually put in place to ensure the continuity of the newly formed cross-sectoral steering committees. The summaries of discussions on the strengths, weaknesses, opportunities and threats to existing partnerships are presented in Sections 5.3 to 5.6.



5.2 Existing Cross-Sectoral Collaborative Arrangements

Participants first identified various collaborating committees and task forces established to address specific areas and issues in their various countries. They gave various reasons for the formation of these committees as follows:

- Some collaborating committees were formed in response to recommendations adopted at international forums to control avian influenza and other zoonotic diseases such as Anthrax and Trypanosomiasis.
- A few collaborating committees have been established in response to initiatives of African Heads of States to improve nutritional status of school children through Home Grown School Feeding Programmes in Ghana and Nigeria, or global initiatives to address specific micronutrient deficiency needs through the National Food Fortification Alliance Programmes in Ghana, Nigeria and Cote d'Ivoire.
- Others partnerships have been formed because of the high profile nature of the issue being addressed and which demands an intersectoral approach such as Malaria and Guinea worm eradication, Cholera outbreaks as well as HIV/AIDS control. Cross-sectoral collaborations for the HIV/AIDS programmes are however rudimentary in nature and not formalized in many countries.

The identification of these committees and discussion of their performance by the groups formed the basis for the SWOT analysis which followed.

5.3 Strengths of Existing Partnerships

The groups identified factors that have helped to strengthen the existing partnerships which include:

- **Political will:** Many countries have shown commitment to partnerships by instituting committees and commissions in response to commitments made at international forums. This is evidenced by the establishment of the various committees to address the programmes identified in section 5.1.1.
- **Pooling of human resources:** Both human capacities and skills in the various sectors are maximised which enables consultations and resulting in the harmonization of programme objectives, synergy of programmes, and information sharing among the various sectors. It also enables consensus building in programmes as found in the Food Fortification Alliance Programme that is being implemented in some of the countries in the region. Cross-sectoral partnerships have encouraged the participation of non-government organizations (NGOs) in implementation of programmes at the community level thus maximising benefits of government programmes to communities.
- **Integration of nutrition into existing programmes:** Partnership has enabled nutrition education and the use of local foods to be integrated into school feeding programmes. They however recognized that there is need to adapt the foods to local habits in this particular programme



- **Community engagement:** Communities are more engaged in community based programmes when the approach to such programmes is multi-sectoral and integrated in contrast to single agency approaches.

5.4 Weaknesses of Existing Partnerships

The groups identified the following weaknesses in the existing partnerships they had identified earlier:

- **Leadership conflict:** Participants recognized that strong leadership is essential for continued partnerships. In many cases, however, lead agencies prefer to claim ownership of programmes resulting in the lack of interest of collaborating partners especially when their roles are not clearly spelt out.
- **Lack of common funding mechanism to support collaboration:** Although partnerships exist within countries, collaborations have been hampered by over-reliance on the initiating agency for leadership and funding. Participants noted that identified lead agencies are quite often expected to provide financial and logistical support for meetings of steering committees and when this is not available due to financial constraints of lead agencies, the partnerships collapse.
- **Cumbersome donor disbursement procedures:** The participants noted that donors have different systems for the disbursement and accounting for funds provided. Also donors often specify what programmes and activities for which such allocated funds can be used, this which makes cross-sector programming difficult. The school health and nutrition programmes, and national food security programmes were cited as case examples. Agencies therefore tend to opt for single sector programmes with donor funding that benefit them most.
- **Inappropriate representation on Steering Committees:** The sectoral representatives in several of the established steering committees are often not ideal and appropriate. Junior officers who do not have appropriate knowledge and skills, as well as the authority to make important decisions are quite often delegated to such steering committee meetings. Some participants also reported of non permanent representation in steering committee meetings and therefore depending on who is available, different officers represent their agencies at different meetings without prior knowledge of what discussions have been held in previous meetings. Such situations often lead to a lack of progress in the implementation of multi-sector programmes and activities.
- **Problem with donors and partners:** Participants also noted the conflicting and hidden agendas, and lack of transparency among donor agencies and partners as one of the weaknesses of partnerships. There were also at lot of views expressed on loss of donor focus as well as shifting interests, these were identified as important among the factors that weaken existing partnerships.
- **Inadequate monitoring and weak enforcement of regulations:** Citing the National Plan of Action on Nutrition developed by member countries as an example, participants cited inadequate monitoring as one of the weaknesses in the cross-sectoral partnership. Some national sectoral partners do not



recognize monitoring as core activity within some programme implementation strategies.

5.5 **Opportunities Provided by Cross-Sectoral Partnerships**

Participants noted that multi-sector partnerships created opportunities for the funding of national strategies and programmes.

- **Political commitment:** Cross-sectoral partnerships solicit high political commitment by governments. An example of this is the Presidential Special Initiatives that have been instituted in Ghana to support some areas such as cassava production and processing and salt mining and processing among others.
- **Fostering of international commitments:** Participants observed that cross-sectoral collaborations push national governments to make concerted efforts at honouring and meeting signed commitments made such as those relating to poverty reduction programmes, as well as those that entail meeting the food, nutrition and health related goals of the Millennium Development Goals (MDGs).
- **Support of initiatives by NEPAD:** The participants noted that initiatives involving multi-sector partnerships stand a better chance of getting support from the New Partnerships for Africa's Development (NEPAD). The nascent home grown school meal programmes in some countries that utilize local food resources, and which is replacing the WFP supported school meals is an example of such NEPAD initiative.
- **Active engagement of international partners:** Participants agreed that international partners are more likely to commit to supporting national initiatives and programmes when such initiatives and programmes involve multi-sector and multi-disciplinary groups.
- **Harnessing available donor funds:** The participants agreed that it is much easier to harness donor funding for multi-sectoral projects or programmes because such projects or programmes make use of the comparative advantage of each partner, and donors are increasingly leaning towards partnerships in programmes development and implementation.

5.6 **Threats to Cross-Sectoral Partnerships in the Sub-region**

Participants listed possible threats to cross-sectoral partnership in the region which include:

- Limited funding of cross-sectoral programmes by governments and donors
- Weak governance systems in some countries
- Limited opportunities for human resource development
- Loss of donor focus and shifting interests
- Mid-stream disengagement of some donors and partners
- Internal conflicts, natural disasters
- Brain drain of qualified professional in government public sector institutions



6.0 Development of action plans and recommendations

6.1 Plenary Discussions of Presentations and Key Outcomes

In the discussions that followed the presentations, participants overwhelmingly appreciated the opportunity that the workshop presented for professionals from different public and private sectors to meet, discuss and exchange views. They recognized the key role nutrition should play in linking agriculture and health, but recommended that other development sectors such as finance and trade be involved. They confirmed that it is generally believed that traditional foods are healthier foods but they noted that indigenous foods have now become more expensive than foods introduced into contemporary food systems. In response to this Dr Smith indicated that this was an issue of supply and demand. Because of low production, supply and availability of these foods, when they are available the producers or most often the intermediaries increase their prices in response to increasing demand for these foods. Other areas covered during the plenary discussions include:

Availability of compositional data: The participants noted that there seem to be conflicting research reports on the value of these foods. The use of palm oil was a case at issue. Some of the participants noted that palm oil was once considered a source of cholesterol and saturated fats and so was used sparingly or avoided in food preparation. Today palm oil is promoted as a very good source of beta carotene and a good resource in the fight against vitamin A deficiency. Such conflicting information leads to confusion on the part of the general public. The lack of clarity of health information on the traditional foods was acknowledged but it was also noted that the decrease in the consumption of indigenous foods, including particularly condiments and spices, which supply micronutrients and health-protecting bioactive compounds, is a factor associated with the observed increase in chronic diseases related to simplified, high-energy diets. This relationship needs to be investigated further.

Information sharing: The participants noted that it was not enough to obtain research information on the foods in question, disseminating such information to the population at large is an equally important tool in the fight against malnutrition and diet related diseases. They indicated that it is necessary to explore ways of sharing knowledge in nutrition using multidisciplinary groups especially teachers and Agricultural Extension Services. To facilitate progress in sharing ideas, data on healthy foods and suggestions for their use should be provided and employed in the dissemination of nutrition information. The participants urged for information on the composition of indigenous and traditional foods to be made available and properly disseminated in simple, easily understandable language as part of an information and public awareness package. They specifically requested that the FAO work with other agencies and research institutions in the sub-region to make such information more widely available.

Funding and focus of research: As illustrated by Dr Guiro's report, very little research has been done on the link between consumption of traditional foods and improved nutrition and health. The participants made a strong plea for funds to be made available by governments and the private sector for all aspects of research into the indigenous and traditional foods of the sub-region. Some participants believed that there is a significant body of information currently available which needs to be



collated and would constitute a good starting point for identifying existing gaps in knowledge and areas that require immediate attention. It was recommended that the search for existing data should not be restricted only to peer-reviewed journals, but should include information from reliable unpublished research reports and other grey literature. The participants also noted the duplication of agricultural research by the various research institutes thereby wasting resources and personnel and suggested the need for a regional strategy for research on these foods. The need to have an inventory of these foods and to map their availability was also discussed. This, the participants believed would help in the design of nutrition education/public awareness programmes that take into consideration the locations and seasonal availability of these foods.

Advocacy: Participants suggested that advocacy be conducted at both regional and national levels, targeting regional institutions and country level organizations beyond agriculture and health. Some participants noted the absence of representatives from the Ministries of Finance and Planning, as well as Trade. The participation of the finance sector they observed is vital because it (the Finance Sector) determines the resources allocated to each sector for programme activities. The participants also deliberated on the need to identify champions in other sectors who strongly identify with the need for cross-sectoral collaboration, to establish alliances and maintain cross-sectoral communications.

Cross-sectoral collaboration: The collaboration of agriculture and health sectors being the main theme of the workshop, Dr Ruel wondered why there was no representation from the World Health Organization (WHO) at the workshop. The question solicited a debate on the general lack of collaboration among international agencies and organizations which according to the participants encourages waste of resources and fragmentation in programme activities. The participants felt that it was essential to critically examine the reasons for this general lack of collaboration between sectors. They were nevertheless reminded that their presence and participation at this workshop was in itself a ground-breaking experience and it is expected that the workshop and its outcomes would encourage closer ties and collaboration between sectors and organizations at national, regional and international levels.

The role of cultural practices and traditions: Some participants noted that a number of the nutrient rich indigenous and traditional foods are not consumed by the populations at risk (pregnant women and children) because of cultural beliefs and practices. They listed several cultural practices and taboos that prevented the consumption of some traditional foods and suggested aggressive public awareness campaigns to counteract such negative practices.

New food products and processing techniques: The need to have these indigenous and traditional foods in forms that are easy and less time consuming to prepare was also extensively discussed. The participants expressed the need to improve the quality and competitiveness of traditional foods through processing into various food products. This would imply the development of new technologies and improvements in traditional processing techniques that ensures a significant reduction in the time required for food preparation.



6.2 Country level Post-Workshop Action Plan

From the SWOT analysis, participants developed action plans for advocacy to be implemented at national and regional levels.

- Briefing of ministers from various sectors: Health, Agriculture, Environment, Education, Finance
- Delivery of the workshop report from WAHO/Bioversity International to sector Ministers of countries that participated in the workshop
- Establishing/Reactivating National Steering Committee for cross-sectoral collaboration
- Convene National Stakeholders' meeting/workshop comprising Agriculture, Health, Education, Finance, UN agencies, Environment, Private sector, NGOs, Research institutes, Media
- Establish national technical sub-committee
- Develop detailed action plan which would involve:
 - Development of Advocacy tools
 - Mapping the distribution of available indigenous/traditional foods
 - Developing strategic plan and programme for promoting the use of indigenous/traditional foods in the country
 - Undertaking countrywide Information, Education and Communication (IEC) campaigns on the health benefits of these indigenous/traditional foods
 - Monitoring and Evaluation of the programmes

6.3 Regional Level Post-Workshop Advocacy Action Plan

- Circulate WAHO/Bioversity International workshop report to all ECOWAS Ministers of Agriculture and Health.
- Convene ministerial meeting involving agriculture, environment, health and finance.
- Advocate for inclusion of discussions on cross-sectoral partnership on agenda items of ECOWAS Heads of State meetings
- Influence agendas of regional and international health and agriculture fora
- Advocate for funding of research to improve production and processing of traditional foods by governments and regional private organizations
- Advocate for the development & wide dissemination of database of the health benefits of traditional/indigenous foods

For the regional level advocacy activities, the following organizations were identified as targets for advocacy:

- Africa Union (AU)
- Agricultural Development Bank (ADB)
- World Bank (WB)
- Food Manufacturers
- Regional Consumer Associations
- Regional Farmers Associations
- Regional Offices of international organisations



6.4 Participants' Recommendations for Actions

The participants also recommended the following actions for national representatives at the workshop in order to maintain the momentum of collaboration established through workshop activities, and to ensure that such partnership activities are sustained:

- Step up national and regional level awareness and policy advocacy activities targeting opinion shapers in national and regional institutions
- Expand cross-sectoral partnerships to include environment, rural development, finance, education, farmers and consumer associations, food manufacturers
- Advocate for increased government and private sector involvement in research into the production, processing and distribution of traditional/indigenous foods
- Through advocacy, leverage funds for research on the nutritional and functional properties of these foods, and develop national food composition tables

6.5 Consultant's Recommendations for Actions

1. Identify within each country a lead person who will work closely with the directors for the implementation of follow-up activities
2. All the existing programmes that involved partnership with other sectors were built around specific issues and that is what holds them together. Therefore one of the key follow-up actions would be to identify a key issue within countries which can be introduced as the stepping stone to partnership.
3. In order to ensure that nutrition becomes an area to be considered when developing programmes in various sectors, it is necessary to popularize the concept of the "nutrition lens" and use it for advocacy on biodiversity at all levels including agriculture and health/nutrition related institutions. A key step would therefore be to organize a workshop on the application of the "nutrition lens" concept at both the regional and country levels.
4. A small working group under the direction of the lead participants of the workshop should develop such action plan to be considered by the wider group.

7.0 Conclusions

7.1 Wrap up

Dr. Pablo Eyzaguirre (Bioversity International) described the two day meeting as very fruitful. He reiterated that with so much shared information resulting from workshop activities now at the disposal of the West African Health Organization, WAHO has to step up regional advocacy activities. He urged the international organizations to support the implementation of the national and regional advocacy strategies developed during the workshop. He also informed participants that funds have been provided by IDRC for the production and distribution of the workshop report and so participants should expect to receive copies of the report in due course.

He proposed that the participants identify at least 2 or 3 cross-sectoral activities that were discussed during the meeting which could be implemented at the national level but supported with strong regional advocacy activities in order to accelerate the



momentum that was created during the workshop . Dr Eyzaguirre noted that there are already some programmes from which lessons can be learnt where the health and agriculture sectors are collaborating, citing collaboration during avian influenza, as well as the School Feeding Programmes which enjoy cross-sectoral collaborations in several countries in the sub-region.

7.2 Closing ceremony

The workshop closing ceremony was presided over by Dr Raymond Vodouhe, Bioversity International's Coordinator for West & Central Africa. In his closing remarks, Dr Vodouhe reiterated the key issues that were raised at the workshop - the worrying food, nutrition and health situation within ECOWAS countries, the very rich agricultural biodiversity that abounds in the sub-region, the traditional and indigenous foods that are part of the food systems as well as indigenous know-how that the local communities use in food preparation. He also noted that although the sub-region has immense expertise in the various sectors related to agriculture, food, nutrition and health, this expertise is unfortunately not effectively harnessed and channelled towards finding common solutions to shared problems. There continues to be fragmentation of efforts. While commending the participants on the workshop recommendations and the development of national and regional advocacy strategies aimed at promoting the production and use of indigenous/traditional foods in the fight against malnutrition and diet related diseases, Dr Vodouhe reminded participants on the need for the setting up or consolidating existing cross-sectoral collaborations, the strengthening of existing steering committees comprising such sectors as agriculture, health, education, rural development and environment, and other related sectors. These committees according to him are vital for the success of implementations of workshop recommendations and action plans.

He also commended the participants and the workshop organizers on the quality of presentations made, the discussions during the various sessions coupled with the relevance of the recommendations and the ideas proposed on collaborative projects. These according to him clearly demonstrated that the meeting objectives were met to the satisfaction of the organizing institutions - Bioversity International and the West African Health Organisation.

He concluded by expressing on behalf of the Director General of Bioversity International Dr. Emile Frison, profound gratitude to CIDA, IDRC, WAEMU, GFU for their financial support, to the ECOWAS secretariat, the FAO, IFPRI, and other partners who provide technical support for the workshop, as well as the support staff who assisted during the workshop.

8.0 Evaluation

The workshop proceedings were evaluated by use of an adaptation of the instrument developed in the region by WAHO for use in participants' evaluation of the organization's workshops. The questionnaire was used to solicit information relating to the level of awareness of the link between agriculture, nutrition and health; the level of conviction of the need for cross-sectoral partnerships in policy development and implementation; and the participants' ability to articulate the workshop's broad objectives and anticipated outcomes.



The twenty-one participants who evaluated the workshop proceedings had very positive views of the organization of the workshop and its content. The participants very much appreciated the singular opportunity the workshop provided them to deliberate on troubling food, nutrition and health issues of common interest with colleagues from other disciplines and sectors – agriculture, health, nutrition, researchers in agriculture and food technology, as well as representatives from consumer associations and the food industry. They found the technical update sessions and the group work very educative. The presentation on West African indigenous and traditional foods was very much appreciated as the picturesque presentation vividly brought into focus the issues at stake. The participants however felt the programme was “too packed” and did not allow adequate time for inter-personal discussions and networking.

The relatively rapid nature of implementations of two items in the post-workshop action plans permits the assertion that the workshop has had some positive impacts on cross-sectoral collaboration in the sub-region. The Ministry of Health in the Republic of Benin, in partnership with the Ministry of Agriculture organized a Stakeholders workshop (October 30th – Nov. 2nd 2007) aimed at developing a national strategy against food insecurity, malnutrition and diet related chronic diseases. Also, in response to the workshop recommendations for regional advocacy activities, the West African Health Organization (WAHO) extended an invitation to the Director General of Bioversity International, to address the 8th Assembly of Health ministers which took place Nov. 8 & 9th 2007 at Bissau, Guinea Bissau. Although reports from these meetings are not yet available, these early implementations of recommended post-workshop action plans are very encouraging.

Full details of the evaluation are to be found in Annex 5.



ANNEXES

Annex 1 : Key Policy Documents for Further Reading

2nd international workshop on Food-based approaches for a healthy nutrition in West Africa Proceedings: The role of food technologists and nutritionists. Ouagadougou, Burkina Faso, 2003. Available at: <http://www.mpl.ird.fr/fn2ouaga/>

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Annex 3: Workshop Agenda



Partnerships for Mobilizing the Diversity in Traditional Food Systems to Ensure Adequate Nutrition and Health in ECOWAS Member States

a Regional Policy Advocacy Workshop

Commission UEMOA

Rue Agostino Neto, Ouagadougou, Burkina Faso

5-6 Sept 2007



Purpose	This workshop is born from the growing recognition worldwide that for people to have good Nutrition and Health, the Agricultural and Health Sectors need to sit down together and develop a common policy. The participants hail from all professional backgrounds and have been chosen as key people capable of making a difference in addressing malnutrition in the ECOWAS area.	
Aim	By the end of the two days, we aim to have analysed current strengths and weaknesses in current cross-sectoral collaborations, and to have developed strategy objectives for the ECOWAS region and an action plan for achieving them	
Day 1	5 September 2007	5 September 2007
0830-0930	Welcome and opening addresses	<p>Mr Ismaïl K. Binguitcha-Faré Commissioner for Rural Development, Natural Resources and the Environment West African Economic and Monetary Union (WAEMU)</p> <p>Dr Johanna Austin-Benjamin, Director Primary Health Care and Disease Control West African Health Organisation (WAHO)</p> <p>Dr Jérôme Kasongo Food security analyst, emergency relief operations Food and Agriculture Organisation (FAO)</p>
0930-1000	Key note: Agricultural Biodiversity for better nutrition and health in West Africa: Global imperatives and opportunities	Dr Emile Frison Director General Bioversity International
1000-1030	Coffee	
1030-1100	Workshop background, objectives and expected outcomes	Dr Ismael Thiam Nutrition and Child Survival Officer WAHO
1100-1200	West African Indigenous and Traditional Foods – Frontline Resources Against Malnutrition and Diet Related Chronic Diseases	Dr Francisca Smith Honorary Research Fellow Nutrition Bioversity International
1200-1230	Food Security and Sustainable Livelihoods: a pre-requisite for improving Nutrition and reaching the MDGs	Dr Florence Egal Nutrition and Consumer Protection Division, Food and Agriculture Organisation (FAO)
1230-1400	Lunch	
1400-1430	Update on research programmes and activities (agronomic and processing) on traditional foods	Dr Tidiane Guiro University Cheikh Anta Diop, Dakar, Senegal
1430-1500	A review of food and nutrition related agriculture and health policies of ECOWAS member states – the role of advocacy in effecting policy changes.	Dr Raymond Vodouhe Bioversity International



1500-1530	Coffee	
1530-1630	Agriculture – Health Linkages	Dr Marie T. Ruel Food Consumption and Nutrition Division International Food Policy Research Institute (IFPRI)
1630-1730	Wrap up of Day one	Dr Pablo Eyzaguirre Bioversity International
1900-	Welcome Cocktail	Hotel Soritel
Day 2 Thursday 6 September 2007 6 September 2007		
0830-0900	Working together to fight all forms of malnutrition	Dr Florence Egal on behalf of the Standing Committee for Nutrition (SCN)
0900-1500	Working Group Sessions (3 groups in parallel)	
0900-1030	Part One: Analysis of agriculture/health sector collaboration, its strengths, weaknesses, opportunities and possible threats (SWOT analysis)	
1030-1100	Coffee	
1100-1230	Part Two: Development of objectives for a regional advocacy strategy	
1230-1330	Lunch	
1330-1500	Part Three: Development of action plans for the implementation of the advocacy strategy within ECOWAS member states	
1500-1530	Coffee	
1530-1600	Feedback from group A and questions	Group A spokesperson
1600-1630	Feedback from group B and questions	Group B spokesperson
1630-1700	Feedback from group C and questions	Group C spokesperson
1700-1730	Wrap up comments	Dr Pablo Eyzaguirre Bioversity International
1730-1800	Closing ceremony	Dr Raymond Vodouhe Bioversity International

WAHO and Bioversity would like to thank the Workshop Sponsors:





Annex 4: Workshop Template

Working Group Sessions

Part 1: Analysis of Agriculture/Health sector collaborations, its strengths, weaknesses, opportunities and possible threats (SWOT)

In spite of the increasing awareness among national, regional and international organizations of the need for collaborative partnerships in the development of sustainable and durable solutions to the food and nutrition problems facing resource poor populations in developing countries, there seem to be inadequate understanding of the inter-relationships between the health and agriculture sectors and the modus operandi of such collaborative partnerships.

As a first step in identifying effective partnerships, this session is designed to enable participants analyse existing national partnerships, their strengths, weaknesses, factors that threaten to such partnerships as well as the opportunities they present.

Issues to address

- Describe the nature of any collaborative arrangements between the health, agriculture, education, and the private sectors in your countries
- Using the template below, examine the factors that in your opinion affect such collaboration.

Strengths	Weaknesses	Threats	Opportunities

Part 2: Development of action plans for the implementation of advocacy strategy within ECOWAS member states

Using the SWOT analysis from Session 1, develop an implementation plan for advocacy within ECOWAS member states

What are the key activities involved in the implementation of the plan?

Indicate resources that would be required for the implementation of such plan.

Part 3: Identify issues to be addressed through advocacy at the regional level

A major bottleneck to achieving inter-sectoral collaboration is the lack of perception and understanding on the part of policy makers on how to effect such collaboration. While the agriculture sector is concerned with maximization of agricultural production, the health sector is pre-occupied with providing health services as well as preventing and treating illnesses. Policy and decision makers have yet to look beyond the traditional targets set by their sectoral strategies. They need to identify their strengths and weaknesses as well as those of related sectors and institutions (research, farmers and consumer organizations) and acknowledge the comparative advantage of these other sectors whose collaborative inputs would lead to more measurable nutrition and health outcomes in target populations.

With this background, develop a regional advocacy strategy for the ECOWAS region that would strengthen collaboration between sectors.

You may want to consider such issues as:

- Should advocacy at regional level be done by International partner organizations?
- What institutions/organizations should be the target for advocacy at regional level?
- Who should implement such advocacy strategies?



Annex 5: Evaluation

Other Aspects of Workshop

Participants enjoyed the cocktail that was sponsored by the Director General of Bioversity International – Dr Emile Frison. Some participants said they liked the traditional drinks. One participant indicated that the conference hall was very comfortable. Most of the participants enjoyed all the activities but there was a complaint on the lunch and the transportation. For any follow-up workshop, participants suggested that time should be allocated for an excursion to the local market and farms, there should be recapping of previous day's sessions and provision should be made for a Portuguese translator.

Participants were also asked to rate different elements of the organisation of the forum from 5 (excellent) to 1 (poor). The table below presents the results of this rating.

Table 1: Ratings of different organisational aspects of the forum

Category	Respondents (n)	Percentage (%)				
		5	4	3	2	1
Pre-workshop publicity	17	23	41	23	11	0
Communication	16	12	43	37	6	0
Media	20	10	20	45	10	5
Printed programs	17	23	35	29	6	6
Information pack	19	21	52	26	0	0
Welcome	20	20	50	25	5	0
Workshop content	18	27	55	11	5	0
Special events	15	13	46	20	20	0
Content/variety	6	16	33	16	33	0
Cocktail	18	50	38	11	0	0
Accommodation	19	26	42	31	0	0
Translation	19	21	52	10	10	0
Interpretation	18	33	50	16	0	0
Transportation	19	10	31	36	21	0



WAHO/BIOVERSITY Workshop Evaluation Questionnaire

Please tick the appropriate box.

Focal Point [] **Country delegate** [] **Local delegate** [] **Partner** []

General Comments

1. What is your overall evaluation of the workshop?
.....
2. What are 2 things you liked most about the workshop
.....
3. What are 2 things you liked least about the workshop?
.....
4. What were you hoping to accomplish by attending the workshop?
.....
5. In what way did the workshop meet or fail your expectation?
.....

Technical Update Sessions

1. Which did you enjoy the most and why?
.....
2. Which did you enjoy the least and why?
.....

Group work sessions

1. What are your observations about the group work sessions?
.....
2. What suggestions do you have for improvement of such sessions?
.....
3. What areas of discussions were not covered by the working group terms of reference?
.....

Workshop ratings. Please rate the forum in the following areas (5=excellent) and include helpful comments


Category	Rating				
	5	4	3	2	1
Communication	o	o	o	o	o
Media	o	o	o	o	o
Printed programs	o	o	o	o	o
Information pack	o	o	o	o	o
Registration	o	o	o	o	o
Welcome	o	o	o	o	o
Workshop content	o	o	o	o	o
Lunch and coffee break	o	o	o	o	o
Cocktail	o	o	o	o	o
Accommodation	o	o	o	o	o
Translation	o	o	o	o	o
Interpretation	o	o	o	o	o
Transportation	o	o	o	o	o

Thank you for taking part in our post workshop evaluation



Annex 6: Presentations


1. Dr Emile Frison, Bioversity International: Keynote Address



Agricultural Biodiversity for better Nutrition and Health in West Africa.
Global Imperatives and Opportunities


Emile Frison
 Director General
Bioversity International

Ouagadougou September 2007



Millennium Goal 1 Assessment of Progress (2)

- Of 143 countries, only 34 (24%) on track to achieve the hunger target (including Benin and the Gambia)
- Nutritional Status has actually been deteriorating in Niger, Burkina Faso, Guinea, Mali, Senegal and Togo
- Reflected in Chennai Platform for Action (April 2005)




Millennium Goal 1

- **To eradicate extreme poverty and hunger**

Two targets are to halve between 1990 and 2015

- The proportion of people whose income is less than \$1 a day
- The proportion of people who suffer from hunger



2006 Nutrition comes to the Fore


Preventing Chronic Diseases: A Vital Investment. (WHO, 2006)

The Standing Committee on Nutrition of the UN System (SCN) in *Tackling the Double Burden of Malnutrition: a Global Agenda* (SCN News #33, 2006)

Convention on Biological Diversity in the 8th Conference of the Parties *Cross-cutting Initiative on Biodiversity for Food and Nutrition* (CBD/COP8, 2006)

Nutrition Stakeholder Consultation Bioversity, 2006

And...



Millennium Goal 1 Assessment of Progress (1)

- Generally, focus has always been on the income poverty target
- Most countries are on track to meet it



World Bank Report 2006
Repositioning Nutrition as Central to Development: A Strategy for Large Scale Action

estimates lost national income due to diet-related chronic diseases (heart disease, stroke and diabetes) over the next ten years for key developing countries

E. g. \$7.6 billion for Nigeria

Investing in Nutrition saves billions in health costs, improves productivity, reduces poverty, improves education.

How can we shape that investment and link it to development?



A Growing Consensus in all Sectors

Agricultural biodiversity can improve nutrition and health through diverse diets, based on traditional and locally adapted species
 Need for many disciplines, many approaches
 Challenge: link food security, good nutrition, health, long term sustainability and agricultural policy and practices



Dietary Simplification (1)



- Energy from Fats and Oils Senegal
 - 1963: 8%
 - 1998: 20%
- Cheapest food: energy-rich but nutrient-poor



Why Agricultural Biodiversity?

Loss of agricultural biodiversity leads to loss of options for diets
 ↓
 Loss of options for diets leads to loss of dietary diversity
 ↓
 Loss of dietary diversity contributes to dietary simplification and the "nutrition transition" associated with non-communicable diseases and with the double burden of malnutrition



Dietary Simplification (2)



- Reduced access to traditional and indigenous foods
 - Focus on major staples
 - "Backward"
- Affecting poorest people most



Double burden of malnutrition:

- Hidden hunger: missing micronutrients
 - At least 2 billion worldwide
 - Mostly women and children
- Diseases of "affluence"
 - Type2 diabetes, obesity, heart disease, cancers



Benefits of Diversity

Prospective cohort study in USA with 42,254 women:

- Number of different foods eaten is inversely correlated with mortality and chronic diseases
- Diversity is also positively correlated with longevity



Diversity of Diet Kenya

Involving 154 infants 12-36 months:

- Dietary diversity strongly and consistently correlated with anthropometric status.
- Inclusion of a variety of foods in the diets of children in the 1-3 year age group is very important



Kenya

Partnered with Family Concern (NGO) and Uchumi Supermarkets

- Traditional leafy vegetables
- Seed supply and agronomy
- Training for cleaner, high-quality produce
- Leaflets to educate shoppers
- Sales increase 1100% in two years



Diversity of Diet Mali

Including 77 children, 13-58 months:

- Food Variety (no. of food items) and Dietary diversity (no. of food groups) positively correlated with nutritional adequacy
- 15 items or 5 groups minimum for adequate nutrition



Evidence nutrition

- Millet significantly lower glycaemic index
- Amaranth grain reduces glycaemic index and has higher minerals and vitamins
- African leafy vegetables more nutritious than "exotics"



Promoting Diversity of Diet

- Diverse diet protects
- Indigenous varieties offer nutritional advantages
- Promote local agricultural biodiversity for improved diets and health



African leafy vegetables (1)

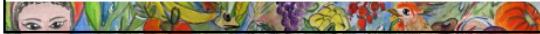
Per 100 gm	Amaranth (leaf)	Cleome	Nightshade	Cabbage
Iron mg	8.9	6.0	1.0	0.7
Calcium mg	410	288	442	47
β carotene ug	5716	10452	3660	100





Diversity in Nutrient Quality within Crops

- What about differences between varieties?
 - Rice: Iron x 9; Zinc x 7; Thiamine x 15; Niacin x 5; Riboflavin x 36
 - Pumpkin: some varieties contain almost no carotenes, others up to 100 mg/gm



Opportunities

- Traditional models still prevalent
- Policy makers have an opportunity to tap the potential contributions of agricultural biodiversity to improve nutrition
- Increased collaboration between Agriculture and Health



Benefits of a Traditional and Diverse Diet

- Based on better use of local diversity
- Building on people's own culture and resources
- More cost-effective
- Prevention better than cure
- Other interventions are more effective: vaccinations, food supplementation, etc.



Conclusion

West Africa has a head start.

Agricultural Biodiversity is available and still used in food systems

But

It must be protected, enhanced and made an integral part of nutrition, health and development strategies



Policy Challenge

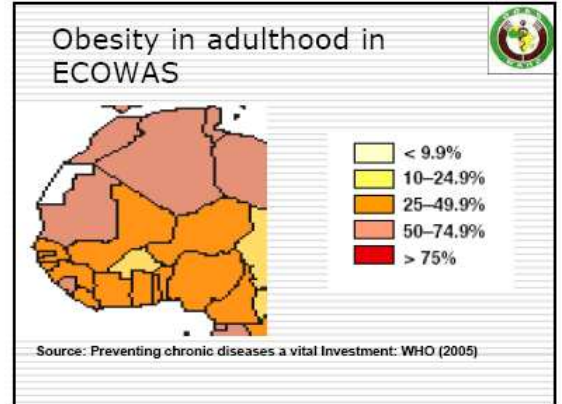
- There is a cheap, available, local resource but it is often not fully exploited because Health Policy and Agricultural Policy generally operate independently.



2. Dr Ismael Thiam, WAHO

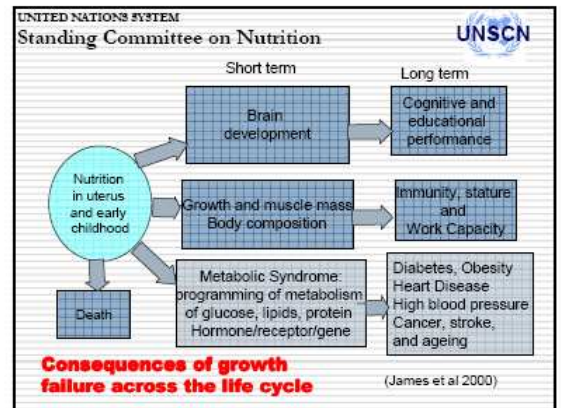
Partnerships for Mobilizing the Diversity in Traditional Food Systems to Ensure Adequate Nutrition and Health in ECOWAS Member States
Ouaga SEPTEMBER 5 & 6 2007

Thiam Ismael
Nutrition & Child Survival officer
WAHO

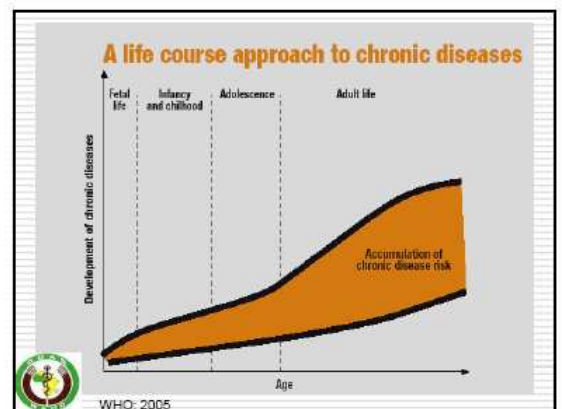


Background


Paradox of Nutrition situation in West Africa



PAYS	Retard de Croiss. (2)	% Perte PIB (4)	Rang Mortalité <5ans (2)	Rang IDH (3)	Taux de Goûte % (4)	# décès CVA < 5 (4)	IPH-1 (Rang/103 pays) (1)
Burkina	37	2	8	175	17	20 000	102
Côte d'Ivoire	25	1.4	23	136	23	8 000	93
Guinée, B	30	1.5	10	172	17	1 750	93
Mali	38	2.7	7	174	42	24 000	101
Niger	20	0.8	2	177	20	26 000	103
Nigeria	40	1.7	13	158	8	82 000	75
Sierra L	34	1.4	1	176	16	13 250	98





UNITED NATIONS SYSTEM
Standing Committee on Nutrition 

The nutrition transition and the paradoxical double burden of malnutrition


The Nutrition Transition is occurring in countries together the processes of economic development, industrialization and increasing urbanization

- Increasingly countries no longer just have undernutrition as a problem, they also have overnutrition, and this is the double burden of malnutrition.
- The paradox is that as countries develop economically these two types of malnutrition increasingly co-exist, first in the same country (more in urban than rural), but then increasingly in the same community and eventually even in the same household.
- Having overweight parents (typically mothers more than fathers) and underweight children in the same household, seems to deny that food availability or access is part of the problem.

R. Schrimpton (Mindelo, Sep, 19-2006)


Expected Outcomes

- Collaboration is initiated between policy and decision makers in agriculture, health/nutrition sectors.
- Mechanisms for cross-sectoral collaboration are defined.
- Constraints to collaboration, including policy constraints, between the sectors for the promotion of food related preventive measures against malnutrition and diet related chronic diseases are identified and solutions proposed.
- A cross-sectoral working group (coalition of workshop participants) established to develop and ensure sustainability of collaborative activities
- A joint strategy and action plan for advocating positive changes in dietary patterns of population groups in West Africa developed.
- Current legal instruments hindering the production, processing availability, access and consumption of local and traditional foods that help to prevent malnutrition and diet related chronic diseases, as well as possible policy and legal gaps identified and solutions proposed.



CONTEXT: WAHO & BIoiversity

- Under nutrition: Structural
- Over Nutrition: raising
- Demographic growth & Poverty/PP
- Globalization: Open Markets & Marketing
- Few Actions: on Prevention & Mitigation




Challenges

- Too many
 - Policy "Papers" (PRSPS/Banjul 2002)
 - Declarations
 - Strategies
 - MDGs
- Partnership & Coordination
 - Optimize resources
 - Comparative advantages
- Technocratic approach and Communities Neglected
- Underlying causes of Malnutrition: Macro and Micro economic measures, distribution of the "Wealth of Nations" /A. Smith: Ideologic Position **Policy Implicationsh**



Objectives

- Understand the potential role of local and traditional foods in the prevention of micronutrient deficiencies and diet related chronic diseases.
- Explore the development of action-oriented collaboration between sectors through a strategic analysis(SWOT) within the current collaborative arrangement between agriculture and health sectors.
- Carry out strategic direction for an advocacy strategy to build and strengthen collaboration between health, agriculture, and the private sector, for significant improvements in nutrition and health programmes.
- Identify and propose options to accommodate existing legal frameworks within the newly developed cross-sectoral strategy for the prevention of micronutrient deficiencies and diet related chronic diseases.
- Develop action plans for implementation within the 15 ECOWAS.



Challenges

- Need of Paradigm Change
 - Consumption of Market oriented foods vs
 - Consumption of Available
 - Culturally acceptable, affordable, Biologically useful
- Need of Policy change to
 - Support Traditional Foods systems: Sensitization & marketing
 - Support Research
 - Strengthen Public Private Civil Society partnership
 - Policy Harmonization "Market Oriented in ECOWAS" customs, taxation, tariffs, QAC...





3. Dr Francisca Smith, Bioversity International

Bioversity International

WEST AFRICAN INDIGENOUS & TRADITIONAL FOODS – FRONTLINE RESOURCES AGAINST MICRONUTRIENT DEFICIENCIES AND RISKS OF DIET RELATED CHRONIC DISEASES

Ifyironwa Francisca Smith
Bioversity International

Bioversity International

Transitioning Into Quick Fix Simplified Meals

Bioversity International

Introduction

- Available health statistics reveal West Africa's immense health problems associated with micronutrient deficiencies
- Decline in agricultural production, household food insecurity, lack of diversity in diets complicate existing malnutrition, and contribute to increased risks of obesity and diet related chronic diseases
- Foods from West Africa's traditional food systems ensure diversity in family diets
- There is now a growing consensus to employ indigenous & traditional foods of the sub-region in strategies against malnutrition and diet related chronic diseases

Bioversity International

A Truly Simplified Meal

Bioversity International

A Diversified Meal of Yam, Mixed Vegetables, Spice, Fish, and Palm oil

Bioversity International

The Value of Dietary Diversity

- A diverse and balanced diet provides nutrients in combinations ideal to sustain and promote health.
- Dietary energy needs can be met without diversity but micronutrient needs **cannot** be met without diversity
- "A diverse and balanced diet provides an intrinsic buffer against the uncertainties of change, and remains the preferred choice for human health" [Johns & Sthapit 2004]
- Non-nutrient phytochemicals found in legumes, fruits, vegetables, sauce condiments and spices protect health & lower risks of chronic diseases



Bioversity international

Simplified Diets and Dietary Habits Increase Risks of Poor Health Conditions such as:

- Obesity
- Diabetes
- Cardiovascular diseases
- Osteoporosis
- Some cancers
- Neurodegenerative disorders
- Dental Caries

Bioversity international

Why the Interest in Indigenous & Traditional Foods

- They are locally available, well adapted to local production environments
- Economically, they are relatively more accessible to local populations
- They are culturally more appropriate and acceptable
- They are rich dietary sources of micronutrients and health protecting anti-oxidants
- They will greatly compliment and increase the efficacy of other strategies against infant, child and adult malnutrition, and diet related chronic diseases

Bioversity international

Rise in obesity in urban women

From Mendez et al, Am J Clin Nutr 2005; 81:714-721

Country/Year	% Underweight	% Overweight
Malawi (2001)	~65	~5
Kenya (2002)	~60	~5
Uganda (2001)	~55	~5
Tanzania (2001)	~50	~5
Kenya (2005)	~45	~10
Kenya (2002)	~40	~15
Kenya (2001)	~35	~20
Kenya (2000)	~30	~25
Kenya (1999)	~25	~30
Kenya (1998)	~20	~35
Kenya (1997)	~15	~40
Kenya (1996)	~10	~45
Kenya (1995)	~5	~50
Kenya (1994)	~5	~55
Kenya (1993)	~5	~60
Kenya (1992)	~5	~65
Kenya (1991)	~5	~70
Kenya (1990)	~5	~75
Kenya (1989)	~5	~80
Kenya (1988)	~5	~85
Kenya (1987)	~5	~90
Kenya (1986)	~5	~95
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Kenya (1904)	~5	~100
Kenya (1903)	~5	~100
Kenya (1902)	~5	~100
Kenya (1901)	~5	~100
Kenya (1900)	~5	~100

Bioversity international

ROOTS, TUBERS AND STARCHY FRUITS – SUPPLIERS OF DIETARY ENERGY, BETA CAROTENE, ANTIOXIDANTS, FOLIC ACID (Early season yams), MAGNESIUM (Coco-yams)

Bioversity international

Rise in obesity in rural women

From Mendez et al, Am J Clin Nutr 2006; 81:714-721

Country/Year	% Underweight	% Overweight
Malawi (2001)	~65	~5
Kenya (2002)	~60	~5
Uganda (2001)	~55	~5
Tanzania (2001)	~50	~5
Kenya (2005)	~45	~10
Kenya (2002)	~40	~15
Kenya (2001)	~35	~20
Kenya (2000)	~30	~25
Kenya (1999)	~25	~30
Kenya (1998)	~20	~35
Kenya (1997)	~15	~40
Kenya (1996)	~10	~45
Kenya (1995)	~5	~50
Kenya (1994)	~5	~55
Kenya (1993)	~5	~60
Kenya (1992)	~5	~65
Kenya (1991)	~5	~70
Kenya (1990)	~5	~75
Kenya (1989)	~5	~80
Kenya (1988)	~5	~85
Kenya (1987)	~5	~90
Kenya (1986)	~5	~95
Kenya (1985)	~5	~100
Kenya (1984)	~5	~100
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Kenya (1913)	~5	~100
Kenya (1912)	~5	~100
Kenya (1911)	~5	~100
Kenya (1910)	~5	~100
Kenya (1909)	~5	~100
Kenya (1908)	~5	~100
Kenya (1907)	~5	~100
Kenya (1906)	~5	~100
Kenya (1905)	~5	~100
Kenya (1904)	~5	~100
Kenya (1903)	~5	~100
Kenya (1902)	~5	~100
Kenya (1901)	~5	~100
Kenya (1900)	~5	~100

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INDIGENOUS CEREALS - PROVIDES ENERGY, PROTEINS, MINERALS & VITAMINS (Micronutrients), ANTI-OXIDANTS, LOW GLYCEMIC INDEX (Fonio, Millet)



Indigenous Cereals Contribute Micronutrients to Daily Diets

Mineral Concentrations of Some Indigenous African Cereals
Raw and Processed (mg/100g dry product)

Foods	Copper	Iron	Zinc	Calcium	Magnesium
Whole Sorghum	0.31	3.45	2.10	17.02	141.20
Sorghum Flour	0.25	4.65	2.46	13.96	75.90
Araw (Processed Sorghum)	0.25	4.04	2.06	19.39	96.79
Whole Millet	0.42	2.71	2.10	22.09	112.06
Millet Couscous	0.60	3.42	2.75	24.75	114.05
Sandak (Processed Millet)	0.25	3.02	2.30	14.16	70.73
Hungry Rice (Roho)	0.42	3.30	2.11	18.95	90.00
Dihuluka Acha	0.37	2.60	1.82	12.70	62.34

Smith J.F. et al. SCN News #33, 2008

OIL SEEDS, NUTS & FRUITS – SOURCES OF FOOD OIL, DIETARY ENERGY, PROTEIN, PRO-VITAMIN A CAROTENOIDS

GRAIN LEGUMES – MAJOR SUPPLIERS OF PROTEINS, ENERGY, MINERALS & VITAMINS (Micronutrients), AND ANTI-OXIDANTS

SAUCE THICKENERS, FOOD CONDIMENTS AND SPICES – SUPPLIERS OF PROTEINS, MINERALS (Iron, Zinc, Calcium, Magnesium), ENERGY, ANTI-OXIDANTS, ASCORBIC ACID

Indigenous Legumes also Enhance Dietary Diversity

MINERAL CONCENTRATION OF SOME INDIGENOUS AFRICAN PULSES (mg/100g Dry Product)

Sample	Copper	Iron	Zinc	Calcium	Magnesium
Cowpea (maroon eyed)	0.55	4.10	3.31	95.25	141.89
Cowpea (black eyed)	0.70	4.68	2.23	78.73	103.02
Rice Bean	0.75	5.77	2.60	130.51	146.55
Brown Bean	0.59	3.50	2.84	95.25	120.07
Bambara G.Nut (Red Variety)	0.50	2.14	2.33	49.02	155.50
Bambara G.Nut (White Variety)	0.49	2.10	2.01	28.24	148.10

Smith J.F. et al. SCN News #33, 2008

SPICES – RICH SOURCES OF MINERALS, ANTI-OXIDANTS, INSULIN MEDIATING PHYTOCHEMICALS



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Indigenous Sauce Condiments & Spices Provide Diversity & Nutrients

MINERAL CONTENT OF SOME INDIGENOUS AFRICAN SAUCE CONDIMENTS (mg/100g Dry Product)

Foods	Copper	Iron	Zinc	Calcium	Magnesium
Baddul	1.01	4.21	2.06	486.38	314.84
BE (Bambara nut)	1.63	3.87	5.18	875.88	248.33
Zabne	0.81	3.50	5.16	267.32	178.56
Kapok (Cela guineensis)	0.84	6.41	1.77	1028.15	588.86
Egusi (Cucumerbitaceae)	1.77	5.51	4.11	87.88	380.7

Source: E. et al. Food & Nutrition Bulletin 27 (1) 2006

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A Comparative View of Nutrient Profiles of Some Introduced and Indigenous Fruits of West Africa

Fruit	Energy (kcal)	Protein (%)	Carbohydrate (%)	Calcium (mg/100g)	Iron (mg/100g)	B-carotene (µg/100g)	Ascorbic Acid (mg/100g)
Local Orange (Citrus sp.)	45	0.6	10.5	28.0	-	75.0	46.0
Orange (Citrus sp.)	55	-	8.0	21.0	0.4	250.0	55.0
Banana (Musa sapientum)	88	1.3	29.6	9.0	1.4	123.0	9.0
Apple (Malus domestica)	52	0.5	14.2	24.0	0.3	10.0*	17.0
Mango (Mangifera indica)	100*	0.3	12.0	36.0	1.1	180*	40.0
Guava (Psidium guajava)	47	1.0	25.0	71.5	0.3	100*	18.0

Source: Odeh M.A. Plant Foods for Human Nutrition 2004, 19: 25-31
 Fardouzi & Thomas V. Acta Horticulturae, 2010, 531: 245-249
 Ighodaro et al. Plant Foods for Human Nutrition 2001, 41: 161-174
 WGA* Values not available



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INDIGENOUS FRUITS – RICH SOURCES OF ASCORBIC ACID, ESSENTIAL FATTY ACIDS & PROTEIN (Safou & Baobab), MINERALS (Calcium, Iron, Magnesium),

Bioversity International

INDIGENOUS FRUIT AND LEAF VEGETABLES – SUPPLIERS OF ASCORBIC ACID, MICRONUTRIENTS (Minerals & Vitamins), ANTI-OXIDANTS

Bioversity International

INDIGENOUS FRUITS – DIETARY SOURCES OF ASCORBIC ACID, PROTEIN, CALCIUM, HYPOGLYCEMIC COMPOUNDS (Detar, Marula)

Bioversity International

Indigenous Vegetables do also Supply Beta Carotene to Local Diets

Potential Contribution of Green Leafy Vegetables to Daily Requirements of Vitamin A

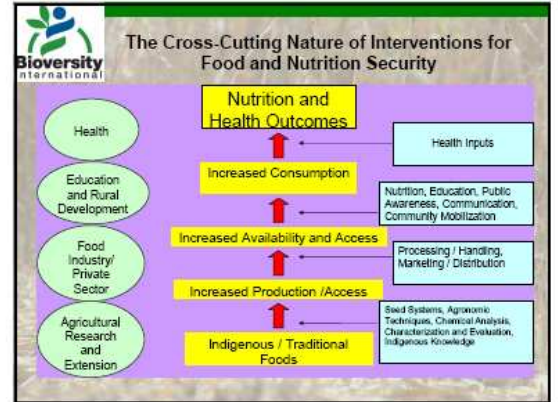
Green Leaves	In vivo assessment of beta-carotene per portion (µg)		Contribution to daily Vitamin A requirements (%)†	
	WUSA (4)	WUSA (6)	WUSA (4)	WUSA (6)
Amaranth (Amaranthus sp.)	360	703	45	88
Cowpea (Vigna unguiculata)	419	1792	52	224
Sweet Potato (Ipomoea batatas)	166	867	21	108
Pumpkin (Cucurbita sp.)	429	1607	54	203

Adapted from: Malaisse et al (2004) Plant Foods for Human Nutrition 52: 1-9



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DRIED INDIGENOUS LEAFY VEGETABLES – RICH SOURCES OF MINERALS (Calcium, Iron, Magnesium), ANTI-OXIDANTS, ANTI-DIARRHEAL COMPOUNDS (Ziziphos mauritana)



Bioversity international

DRIED INDIGENOUS LEAFY VEGETABLES SUPPLY SIGNIFICANT AMOUNTS OF MINERALS TO DAILY DIETS

Mineral Concentrations of Some Dried Indigenous Leafy Vegetables (mg/100g)

Leafy Vegetable	Calcium	Iron	Zinc	Magnesium
Adansonia digitata (Baobab)	147.0	9.8	0.17	42.3
Hibiscus sabdariffa (Bissap)	124.0	11.9	0.73	78.7
Amaranthus viridis (Spinach)	164.0	8.8	0.80	126
Ceratotibeca sesamoides (Zama –local name)	84.5	12.4	0.28	35.7
Moringa oleifera (Moringa)	144.0	3.7	0.23	38.5

Sources: Sena, DJ et al. Plant Foods for Human Nutrition 52, 1998.
Smith, GC et al. Inten. J. Food Science & Nutrition 47, 1996.

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Consommez des Produits Locaux

With all the diversity of indigenous food resources I have presented, I believe I can convincingly say "nous devons consommer des produits locaux."

Bioversity international


FAO/WHO EXPERT CONSULTATION RECOMMENDED DIETARY INTAKES OF VITAMINS AND MINERALS (mg/day)

Age Group	Iron (Bioavailability of 7%)	Zinc (Low bioavailability)	Calcium (Average Usual Intake)
Children (1-10)	12.5 - 17.8	8.4 - 11.3	500 - 700
Males (11-Adult)	27 - 31		
Females (11-Adult)	35 - 38		
Adolescents (15-18)		15.5 - 19.2	1300
Adult Females (19 - Menopausal)		9.8	1020
Adult Males (19 - 65+)		14.0	1200
Lactating (17 - 21 months)	30.0	19.0 - 14.4	1050

Source: Human Vitamin and Mineral Requirements. Report of a Joint FAO/WHO Expert Consultation, Bangkok Thailand, Rome 2002.



4. Dr Florence Egal, UN Food and Agriculture Organisation (FAO)



Food Security and Sustainable Livelihoods: a pre-requisite for improving Nutrition and reaching the MDGs

Florence Egal
Nutrition and Consumer Protection Division

As a result...

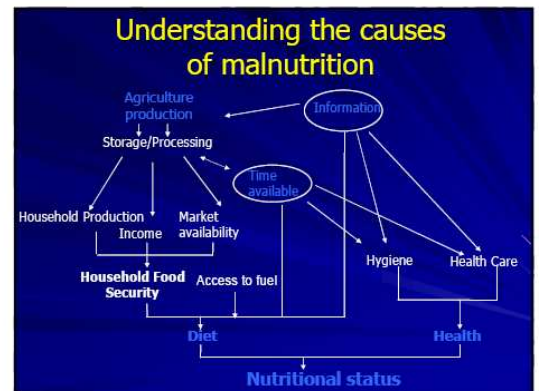
- A vicious circle:
 - Malnutrition
 - Poverty
 - Degradation of natural resources
- ...which requires an integrated approach
 - Improved diets
 - Sustainable livelihoods
 - Food security
 - Sustainable management of natural resources

Malnutrition in West Africa: Why?

- Main determinants: demographic, economical, ecological (closely interlinked)
 - population pressure and migration
 - unsustainable food and agriculture policies (including access to natural resources and food imports)
 - increased monetisation of the economy, globalisation, structural adjustment
 - urbanisation
 - natural disasters, conflict, HIV/AIDS
- Changes in lifestyles and diets (including decline of traditional foods, changes in household resources allocation)

Sustainable Livelihoods approaches: key principles

- pro-poor
- participatory (communities and local institutions)
- holistic/integrated
- dynamic
- micro-macro linkages
- sustainable natural resources management





Agriculture: all technical areas have a role to play

- Plant production
 - staple food: cereals, tubers
 - pulses
 - oils, groundnuts
 - leafy vegetables, other vegetables; fruit
- Animal production (small livestock, dairy products)
- Trees and forests: fuelwood, hunting and gathering
- Fisheries: coastal, riverine, aquaculture

Improving targeting and M&E: the example of Burkina Faso

Integration food security and nutrition indicators in agriculture information systems

- Anthropometric indicators
 - W/H and MUAC for children
 - BMI of mothers
- Integration of new tools
 - ✦ Household Food Insecurity Access Scale (HFIA5)
 - ✦ Individual Dietary Diversity (IDD) Score
- Enhancement of Early Warning System (collaboration MoA and MoH with support from IRD, EU and French cooperation)

From farm to fork: food processing and preparation

- Improve shelf-life, quality and safety and diversity of available foods
- Improve traditional complementary feeding practices
- Generate income and strengthen livelihoods of food insecure households
- Improve supply of local markets
- Save time and labour

Biodiversity for food and nutrition: selecting interventions

- ≠ varieties have different nutrient contents
 - ≠ varieties have different cooking requirements
 - Local varieties can be essential to local livelihoods (in particular for poor people)
- ➔ Nutrition criteria should be used in selection of agriculture interventions (including cultivar promotion):
- nutrient content
 - cooking time
 - contribution to livelihoods

Food and agriculture for health and nutrition

- Make the best of local resources for balanced diets at different seasons
- Retrieve traditional knowledge
- Target the most at-risk households and communities
- Understand household constraints and strategies
- Build on existing experience

Biodiversity for food and nutrition: a dual approach

- Systematic integration of biodiversity into nutrition (intake surveys, food composition tables and databases, general conferences)
- Systematic integration of nutrition into biodiversity activities (e.g. rice-based aquatic ecosystems)



Biodiversity for food and nutrition: the Brazilia recommandations (2005)

Mainstream conservation and sustainable use of biodiversity into agendas and programmes related to nutrition, agriculture, and poverty reduction.

- Food-Based Dietary Guidelines
- Food composition analysis and dietary assessments
- Nutrition education
- Regulatory frameworks and legislation at national and international levels
- National Plans of Action for Nutrition
- National Poverty Reduction Strategy Papers
- Right to Food
- Food security projects and programmes, including: household food security projects, school-based programmes, home gardens
- Emergency response and preparedness

... in partnership with other sectors

- Systematic linkages with the social sector:
 - Health centres (including Nutrition Rehabilitation Units)
 - Schools
 - Social affairs
- At all levels:
 - community
 - local FSNL strategies
 - national

Biodiversity and food security: an example from Mali

- Empower local communities to manage their natural resources (including management of threatened animal resources)
- Revise land use policy
- Review forest policy and legal framework
- Improved water-resource managements
- Management of local knowledge
(FAO-Netherlands Partnership Programme, Bioversity Int.)

A key contribution to achieving the Millennium Development Goals

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

Alleviating malnutrition: the role of the food and agriculture sector

- Realise the right to food
- Ensure year-round food availability at local level: quantity, diversity and safety
- Improve complementary foods practices
- Revisit policies
 - to promote food security
 - to protect diets of vulnerable people
- Regulate publicity and develop appropriate education and communication strategies



5. Dr Amadou Tidiane Guiro, Université Cheikh Anta Diop, Dakar, Senegal

Biodiversity International OOAS WAHO

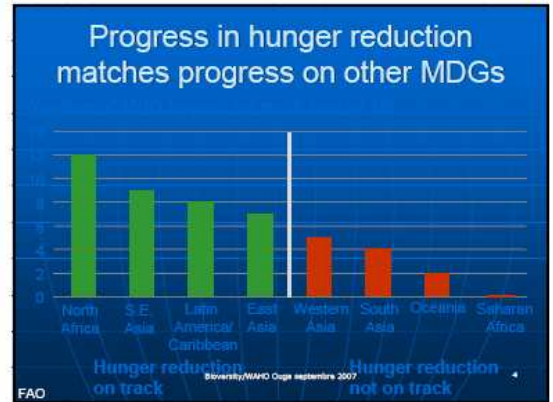
Partenariat pour la mobilisation de la diversité des filières
Alimentaires traditionnelles pour une meilleure alimentation et santé
au sein des pays membres de la CEDEAO
Ouagadougou, Burkina Faso, 5-8 Septembre 2007

Mise à jour sur les programmes de recherche et activités liés aux aliments traditionnels

Revue sommaire de la littérature

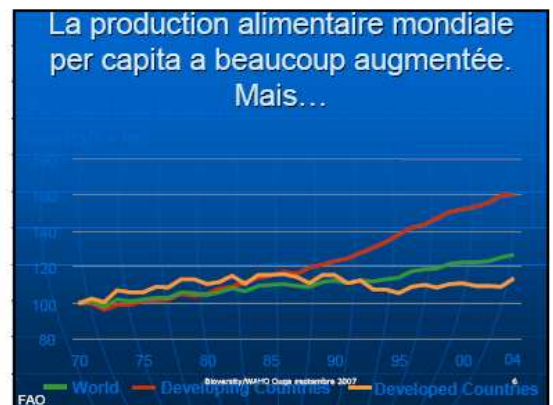
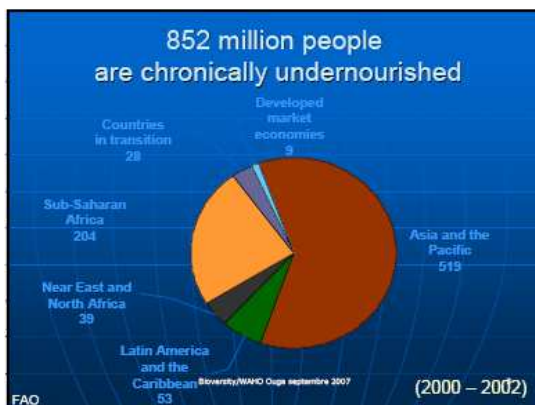
Pr Amadou Tidiane GUIRO
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Biodiversity/WAHO Ouaga septembre 2007 1



La situation nutritionnelle ne s'améliore pas en Afrique subsaharienne

Biodiversity/WAHO Ouaga septembre 2007 2





6. Dr Raymond Vodouhe, Bioversity International, West and Central Africa

Analyse des politiques et stratégies agricoles visant l'alimentation et la nutrition en Afrique de l'Ouest

Dr Raymond S. Vodouhe

Bioversity International
Bureau pour l'Afrique de l'Ouest et du Centre, Cotonou, Bénin

Pays Africains et sécurité alimentaire

- Les Pays Africains rencontrent de sérieux problèmes de sécurité alimentaire que partout ailleurs dans le monde.
- Sur 44 pays ayant des problèmes d'insécurité alimentaire sévère dans le monde, 30 sont en Afrique
- Si les choses demeurent en l'état, le nombre de personnes connaissant des problèmes de malnutrition chronique en Afrique au Sud du Sahara atteindra 300 millions d'ici 2010.

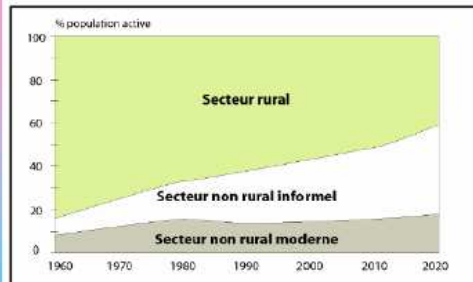
Source: FAO 1996

Quelques généralités et constats

- L'Agriculture est la base du Développement de l'Afrique
- Elle contribue pour environ 35% au PNB des Pays du Continent
- Elle fournit 40% des produits d'exportation et 70% des emplois
- Elle demeure la principale source de satisfaction des besoins vitaux (Nourriture, habitat, santé etc) des populations.

- Au niveau Mondial: il y a eu 30% plus de nourriture par personne au cours des 4 dernières décades
- En Afrique: il y a 7% moins de nourriture par personne dans la même période: Des milliers de personnes sont au seuil de la sous-alimentation

Répartition de la population active en Afrique de l'Ouest



Source : CSAO / OCDE (1998)

% de la population avec <1 \$/j

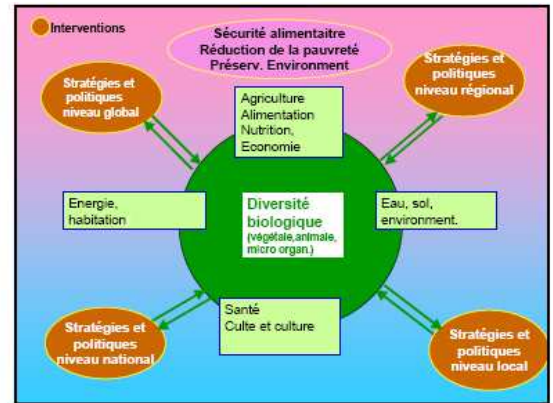
	1990	2002
Pays en Développement	27.8	19.4
Afrique du Nord & Moyen Orient	2.2	2.4
Afrique au Sud du Sahara	44.6	44.0
Amérique Latine & Caraïbes	11.3	8.9
Asie du Sud	39.4	31.2



Sous-alimentation en Afrique de l'Ouest

	1990-92	2000-02
Nbre total de pers. Sous alimentées	44.8	42.9
% personnes sous ali.	23	17
Ratio actuel et données de réf. de pers. s.a. par rapport cible OMD		0.7
Ratio actuel et données de réf. de pers. s.a. par rapport cible Sommet mondial sur l'alimentation		1.0

Source: SICIAV 2005



- Pendant ce temps la riche diversité biologique de la Région est confrontée à des menaces d'érosion faute de mesures appropriées pour sa valorisation et son utilisation judicieuse pour la satisfaction des besoins des populations
- La Région est réputée pour le rythme plus élevé que partout au Monde de la perte de ses ressources.

Stratégies de Lutte contre l'Insécurité Alimentaire en AO

- Création d'Ensembles régionaux de coopération
- Elaboration et mise en oeuvre de politiques et stratégies régionales,
- Développement ou renfort des politiques et stratégies nationales

Que Faire face à une telle Situation?

Création d'Ensembles Régionaux de Coopération

- Création d'institutions régionales d'intégration économique et/ou politique: CEDEAO, UEMOA, MRU, Conseil de l'Entente etc
- Création d'institutions de coopération scientifique: ADRAO, CILSS, OCLALAV etc.
- Création d'institutions d'aménagement régional: OMVS, OMVG, CBLT, ABN etc.



Elaboration et mise en oeuvre de politiques et stratégies régionales,

- Niveau continental:
 - PRSA
 - PDDAA
- Niveau Afrique de l'Ouest:
 - Politique Agricole de l'UEMOA
 - Politique Agricole de la CEDEAO: ECOWAP
 - Cadre Stratégique de Sécurité Alimentaire du CILSS

Objectifs et groupes cibles visés

- Les politiques agricoles nationales et régionales mettent un accent tout particulier sur l'auto-suffisance, la sécurité ou la souveraineté alimentaire des pays,
- La production en quantité suffisante des denrées de grandes consommations se trouve généralement au coeur de toutes les préoccupations reléguant parfois au second plan les problèmes de qualité (Nutrition et équilibre alimentaire); toutefois quelques exceptions
- La production et la sensibilisation sur les bienfaits pour la santé des cultures locales très riches en divers éléments nutritifs (Légumes feuilles traditionnelles, le fonio, les fruits etc.) ne sont pas souvent prises en compte,

Développement ou renforcement des politiques et stratégies nationales

- Elaboration des Lettres de Politique de Développement de l'Agriculture ou consolidation des Politiques existantes
- Conduite des réformes nécessaires pour la mise en oeuvre des politiques nationales et régionales
- Appui au Secteur agricole et aux initiatives visant l'amélioration de la souveraineté alimentaire et de la nutrition (Banque de céréales, politiques semencières, appui à la petite irrigation etc.)

Objectifs et groupes cibles visés (Suite)

- La satisfaction des besoins immédiats domine et la nécessité de développement des produits compétitifs est soit absente ou très faiblement prise en compte.
- Les groupes vulnérables (Enfants, Femmes, Personnes âgées etc.) et les régions à risque ou affectées par des fléaux naturels ou des crises sociales sont à juste titre visés. Toutefois les problèmes de malnutrition s'observent de nos jours dans tous les milieux.

Quelques éléments d'appréciation des stratégies et politiques régionales

- Objectifs et groupes cibles visés
- Niveaux d'implication des Acteurs
- Types d'appuis préconisés
- Organisation des Echanges
- Engagement politique

Niveaux d'Implication des différents acteurs

- Si dans le passé l'approche dirigiste dominait (Top-down), des efforts sont faits de plus en plus pour impliquer les acteurs organisés dans la conception et la mise en oeuvre des politiques au niveau national, régional et international: Les rôles de plus en plus croissants joués par les Organisations Paysannes dans ce cadre sont à saluer (ROPPA).
- Toutefois ces implications s'effectuent à des niveaux variables et la prise en compte des préoccupations des uns et des autres n'est pas souvent optimale
- La répartition des rôles et des responsabilités des différents acteurs pose parfois des problèmes (faibles capacités, reconnaissance insuffisante des organisations etc.)



Soutien aux innovations

- Les axes et domaines d'intervention prioritaires souvent identifiés restent trop collés aux modes de travail comme d'habitude: les initiatives de diversification de production sont peu agressives et les innovations sont peu soutenues
- Les connaissances endogènes et le génie caché des communautés locales ne sont pas suffisamment valorisées et promues
- La riche biodiversité locale (végétale, animale et micro organismes) n'est pas exploitée de façon adéquate pour l'alimentation et la santé des populations et pour créer de nouvelles sources de revenus pour ces populations.
- Le soutien des Chefs d'Etats et de Gouvernements à la diffusion et la promotion des variétés de riz NERICA est un exemple à saluer. Il serait souhaitable que la promotion de certaines de nos cultures aujourd'hui négligées puissent un jour bénéficier d'un soutien similaire.

Engagement Politique

- Convaincus que leurs Etats sont confrontés aux memes types de problèmes, les Gouvernements des pays de l'Afrique de l'Ouest sont très favorables à toutes initiatives régionales visant à sortir la sous-région du marasme économique et de l'état de sous-alimentation chronique,
- La sous région s'est par conséquent dotée dès l'avènement des indépendances des Etats de nombreuses organisations et initiatives d'intégration régionale.

Réformes institutionnelles et engagements internationaux

- Les dispositions nationales en vue de traduire en actes concrets les engagements régionaux et internationaux tardent à venir:
 - Financement du secteur rural à hauteur de 10% du Budget National Déclaration de Maputo & Sirte)
 - Croissance annuelle de 6% du secteur agricole (PDDAA :OMD, réduction de moitié la pauvreté et la faim d'ici 2015)
 - Faible ou absence de soutien à la Recherche Agricole en vue de la rendre plus compétitive (dotation de moyens matériels, humains et financiers conséquents)
 - Absence de forum institutionnalisés de dialogues et de concertations entre les différents acteurs (producteurs agricoles, nutritionnistes et personnel de la santé) en vue d'une meilleure valorisation des ressources locales dans la lutte contre la malnutrition.

Engagement politique (suite)

- Malheureusement les engagements très clairement annoncés dans les DECLATIONS au PLUS HAUT NIVEAU des Etats ne sont pas souvent suivis d'actions concrètes en vue de leurs mise en oeuvre effective:
 - Retard ou absence de paiement des contributions des pays aux initiatives régionales
 - Absence ou retard dans les réformes institutionnelles conformes aux engagements régionaux et internationaux,
- N. B: Les concours de l'extérieur continuent d'être la principale source de financement de beaucoup d'initiatives régionales.

Echanges intra et inter pays

- L'enclavement des zones de production et le faible niveau des technologies post récoltes (transformations, conservation) des produits agricoles continuent de pénaliser fortement les efforts de production des communautés à la base,
- Les initiatives prises dans le cadre de la libre circulation des personnes et des biens au sein de l'UEMOA et de la CEDEAO offrent des opportunités fort intéressantes, mais leur mise en oeuvre n'est pas totalement effective,
- Les concertations et harmonisations des politiques au niveau régional en vue de création de synergies et de complémentarités entre zones et pays demeurent peu fructueuses d'où la concentration des investissements sur les memes secteurs/produits,
- La concurrence des importations des produits agricoles subventionnés par les pays industrialisés ou à très faible coûts de production (riz, viande, lait, coton etc.) constituent une véritable préoccupation des Etats qui s'organisent pour la défense de leurs producteurs dans les négociations internationales.

Perspectives

- **Poursuivre la sensibilisation des Décideurs des Etats à tous les niveaux afin que les initiatives et politiques régionales connaissent des applications effectives**
- **Susciter la création de structures institutionnalisées de concertation et d'échange entre les divers acteurs de lutte contre la famine, la malnutrition et l'insécurité alimentaire (niveau national et régional)**



Perspectives (suite)

- **Œuvrer pour la valorisation et la promotion de la riche diversité biologique locale dans la lutte contre la malnutrition (notamment les espèces négligées)**
- **Créer des cadres favorables aux innovations technologiques et à la valorisation des connaissances et pratiques endogènes efficaces.**

Quelques Publications très intéressantes sur le sujet

1. La souveraineté alimentaire en Afrique de l'Ouest: des principes à la réalité.
Par le Club du Sahel et l'Afrique de l'Ouest (CESAO)
de Roger Blein et Emmanuel Jeudy sous la supervision de Jean Sibiri Zoundi et Léonidas Hitimana
2. Les ruralités en mouvement en Afrique de l'Ouest. Par la FAO et CESAO
3. Problématiques et Stratégies Régionales pour Garantir la Sécurité Alimentaire en Afrique de l'Ouest. Par Achi Atain de Western African Economic Association (WAEA)
4. Nutrition et sécurité alimentaire . Par Kindo Harouna, NUSAPPS, CILSS
5. Publications de Bioversity (Voir site Web Bioversity)
6. Divers rapports de réunion du NEPAD
7. Rapports de WAHO



7. Dr Marie Ruel, International Food Policy Research Institute (IFPRI)

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Agriculture – Health Linkages

Marie T. Ruel
 Food Consumption and Nutrition Division
 International Food Policy Research Institute

HEALTH ↔ AGRICULTURE

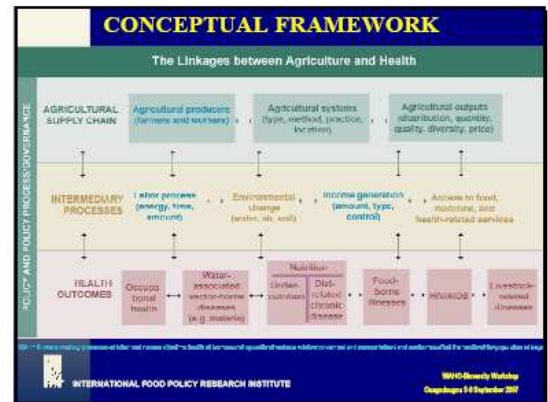
➤ **HEALTH AFFECTS AGRICULTURE**

- Affects ag productivity: poor health – less productivity – less income – less food security – poverty
- Affects market demand for food/ag products

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INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

Why examine the linkages between agriculture and health?



AGRICULTURE ↔ HEALTH

➤ 75% of the poor are dependent on agriculture for their livelihood

➤ Ag: key to economic growth & ↓poverty

➤ **AGRICULTURE AFFECTS HEALTH:**

- Undernutrition: leading cause of child mortality
- Malaria: 4th largest cause of mortality
- HIV/AIDS: 40 million
- Food borne illnesses
- Occupational hazards
- Diet-related chronic diseases

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BI-DIRECTIONALITY OF AGRICULTURE-HEALTH

➤ Actions in one sector affect the other (positively or negatively)

➤ Opportunities for exploiting synergies between the 2 sectors and achieving greater impact on reducing poverty, malnutrition and ill health are often missed

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CHALLENGES & OPPORTUNITIES FOR COLLABORATION

- Emerging health problems related to agriculture and health:
 - Avian flu
 - HIV/AIDS
 - Under and over-nutrition
 - Malaria and irrigation
 - Food safety
- New challenges: globalization, urbanization, Δ demand, longer food chain, changing markets



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CHALLENGES

- Linkages between agriculture & health are dynamic and complex
- Significant institutional challenges (competition vs. collaboration, coordination, integration)
- Insectoral policies: difficult to monitor & evaluate (accountability, \$\$\$)
- Policymakers, practitioners, donors need to be convinced (incentives)



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CGIAR PLATFORM ON AGRICULTURE AND HEALTH

- Building from our expertise in agriculture-nutrition linkages
- Expanding to global health issues
- Exploring new partnerships with health and work on | coordination/collaboration
- Developing conceptual framework
- Documenting successful experiences and challenges (workshops, publications)
- *Strengthening collaboration & coordination through research, working together, taking advantage of synergies to achieve greater impact on the poor*



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8. Dr Florence Egal, United Nations Standing Committee on Nutrition (SCN)

UNITED NATIONS SYSTEM
Standing Committee on Nutrition



UN Standing Committee on Nutrition
Working together
to fight all forms of malnutrition

Florence EGAL
Chair SCN Working Group on Household Food Security


SCN Working Groups

- Breastfeeding and Complementary Feeding
- Capacity Development in Food and Nutrition
- Household Food Security
- Micro-Nutrients
- Nutrition in Emergencies
- Nutrition, Ethics and Human Rights
- Nutrition and HIV/AIDS
- Nutrition of School age Children
- Nutrition through the Life Cycle

Why the SCN?


Set up by ECOSOC in 1977

- To **promote cooperation** among UN agencies and partner organizations **in support of national, regional, and international efforts** to end malnutrition in all of its forms in this generation.
- By:
 - **refining the direction, increasing the scale and strengthening the coherence and impact of actions** against malnutrition world wide,
 - and **raise awareness of nutrition problems and mobilize commitment to solve them** at **global, regional and national levels**




How does the SCN operate?

- Annual Sessions
 - Symposia (first day)
 - Working Groups (9)
 - Business meetings (UN/ bilateral/ NGO)
 - Last session in Rome co-hosted FAO/IFAD/WFP + Bioversity International
 - Next session Hanoi on reduction of stunting
- Advocacy documents and events
 - Report of the Commission on Nutrition Challenges for the 21st Century
 - 5th Report on the World Nutrition Situation
- Has agreed a Strategic Framework and Action Plan 2006-10



How does the SCN operate?

- Secretariat: secretary Roger Shrimpton, Geneva
- Steering Committee
 - Chair plus 8 members
 - Un agencies (WHO, FAO, UNICEF, WFP, WB, UNU/IFAD)
 - Bilateral (Norway/Denmark/Brazil)
 - NGO/CSO
 - Regular meetings (minutes)
- Open to all
- Three constituencies:
 - UN
 - Bilateral partners (includes governments)
 - NGOs



What does it propose to do?

- *SCN Action Plan: 3 objectives*
 - Establish regional and country level mechanisms for strengthening food and nutrition considerations and interventions into PRSPs as well as national development strategies at the country level
 - Establish across all UN agencies, ministerial sectors and development actors a common vision, language and understanding of the causes of hunger and malnutrition
 - Mobilize increased support for all food and nutrition agencies of the UN in the context of realizing the right to safe, nutritionally adequate, available and culturally acceptable food.



UNSCN How does it propose to do it?

- Three Task Forces
- Advocacy, Communication and Partnership Building
 - Assessment, Monitoring and Evaluation
 - Development of Integrated Approaches
- Have met for the first time at this year's annual session

In conclusion

- Forum for harmonisation
- Not implementation
- The SCN is us
- It has gone a long way since 2000
- Its effectiveness will depend on how we use it
- Visit and contribute to www.unsystem.org/scn

UNSCN Why is the SCN important?

- Policy Harmonization is a challenge for any single agency at any level (regional, national and international).
- Nutrition is about the "joining up" of "health", "agriculture", "education" and "social welfare" sectors.
- Nutritional improvement is about "Good Governance" at all levels
- The SCN is even more relevant today because of the UN Reform, CCA and UNDAF processes

SCN and ECHUI

- ECHUI adopted in June 2007 by UNICEF's Executive Board after WFP's
- Discussed at SCN annual session: critical review but endorse goal and agree on key outcomes
- SCN task forces to provide technical advice
- Plan of work to be agreed at the next Partners group meeting
- Sahel likely to be pilot area

