

COHAB 2 Second International Conference on Health and Biodiversity

Galway, Ireland, 25th to 28th February 2008

Guidance for participants:

Workshop 2: Food resources, Diet and Nutrition

Updated: January 2008

1. Background

Agricultural biodiversity includes the entire variety of living things associated with agriculture, including the plant and animal species used for food, and the other organisms, habitats and ecosystems which support food production. The Millennium Ecosystem Assessment has outlined the important functions of biodiversity, which, through the provision of ecosystem goods and services, support all human life and our development, including the provision and safeguarding of vital food resources. In addition, detailed research (such as the work of the U.N. Food and Agriculture Organisation, the Consultative Group on International Agricultural Research and others) has clearly established that food production systems that conserve and encourage biodiversity often produce higher yields, and support crops which are naturally more resistant to climatic extremes and diseases than strict monocultures in intensively farmed landscapes. In some areas, food resources based on native species and wild food types, also have higher nutritional value, are more robust, and are more important to people's livelihoods and well-being, than non-indigenous foods. Utilising and enhancing biodiversity, particularly in the development of native breeds, can have significant benefits for local economies and rural livelihoods.

Agricultural biodiversity is likely to become increasingly important for food security as the effects of climate change become more pronounced and widespread. Climate change presents particular threats to food production systems and to animal and plant health, through impacts on weather patterns, soil quality, pollinators, the availability of clean water, and the occurrence and distribution of pest species and infectious diseases. Enhancing the diversity of food crops, and ensuring the success of measures to conserve unmanaged agricultural biodiversity, can not only provide real economic and social benefits in the short term, but can also help the agricultural sector adapt to climate change and protect crop and livestock health in the longer term.

The report from the first COHAB conference in 2005 states:

"In devising and implementing national development strategies and agriculture policies, governments should ensure that the genetic and species diversity of agricultural produce is preserved and improved, that the ecosystems which support food production are conserved, and that the importance of dietary diversity based on crop and livestock varieties is explained and promoted to producers and consumers."

In the light of the U.N. Millennium Development Goals and the growing threat of climate change, agricultural biodiversity and natural food resources take on an even greater importance for all communities. This workshop on "Food resources, Diet and Nutrition" aims to synthesise current thinking on the role of biodiversity in feeding the world's growing population and addressing issues of nutrition, dietary health and livelihood security; and also to explore mechanisms for increasing collaboration between the health, agriculture and biodiversity sectors on this issue.

2. Workshop format and organisation

This workshop will be chaired by the Food and Agriculture Organisation of the United Nations, representing a multi-lateral forum for education and experience-sharing on agricultural policy and food resource management; and Bioversity International, one of the leading authorities on agricultural biodiversity, representing a global network which conducts research and promotes action on sustainable food production.

3. Themes

The central theme of WORKSHOP 2 is **“meeting nutrition security and poverty challenges with biodiversity.”** (“nutrition security” had previously been stated as “food security”; this has been changed in recognition of the fact that nutrition security encompasses both the availability of food resources and the issue of nutrient sufficiency and dietary health.)

The workshop will discuss how biodiversity, including managed and unmanaged agricultural biodiversity, can enhance the production and security of food supplies, and look at the roles of the agriculture, fisheries management, human health, development and nature conservation sectors in achieving sustainable food production and nutrition security in the face of global change.

Each of the parallel workshops at COHAB 2 is tasked with addressing three key cross-cutting problems. These are as follows:

- (i) **Systemic approaches to health and development** – building, communicating and reinforcing the conceptual framework on health and biodiversity linkages.

(How can the ecosystem approach to human health and development be mainstreamed into policy and decision making processes relating to agriculture and food production? What barriers exist to the development of a common understanding of the concept of “healthy ecosystems = healthy people”, and how can such barriers be overcome? In the context of Workshop 2, how can theoretical conflicts between the separate goals of conserving biodiversity and producing high agricultural yields, be addressed? What examples can be highlighted of successful partnerships between the agriculture, health and nature conservation communities? Is the International Treaty for Plant Genetic Resources for Food and Agriculture, which is in harmony with the U.N. Convention on Biological Diversity, being implemented successfully, and how can the health and biodiversity sectors be engaged to better support its objectives? Is the health sector sufficiently aware of the value of diversity in diets? Is the agricultural community sufficiently aware of the role of biological diversity in providing the ecosystem services upon which food production depends? Is the biodiversity sector fully aware of the links between ecosystem integrity and food resource sustainability? How can the issue of food resources be related to / considered in protected areas management (e.g. for wetlands, woodlands, grasslands or marine habitats)? How can the role of natural food resources in diets be enhanced? What can be learned from the experience of indigenous communities? How can the dietary health of indigenous peoples be enhanced? Can donor countries do more to promote and support an ecosystem approach to food production and harvesting? What lessons can be drawn from past experience? What case studies of multi-disciplinary approaches can be highlighted? What research gaps must be addressed?)

- (ii) **The use of strategic assessments** – ensuring that health-biodiversity relationships are appropriately considered and monitored in the design and development of plans, programmes and policies on health, social welfare and economic development.

(Once a common understanding of the linkages is achieved, how can biodiversity, food production and human health considerations be addressed holistically? What lessons can be learnt from experience with Strategic Environmental Assessments, Health Impact Assessments, economic Cost Benefit studies, and Root Causes analysis? What specific lessons should be drawn from the Millennium Ecosystem Assessment (MA)? How can the MA framework be applied to agricultural and food production systems? How should agricultural biodiversity and traditional knowledge be factored into health or environmental impact assessments? Can Strategic Environmental Assessments of agricultural policies or strategies be utilised to support human health? What are the major health factors for consideration under cost-benefit studies of local agri-environment subsidy schemes? Are there common cross-cutting indicators that can be used? What are the roles and responsibilities of various sectors in maintaining plant and animal genetic resources for food and agriculture? Are there specific practical approaches that have succeeded in enhancing cross-sectoral collaboration?)

- (iii) **Climate change** – accounting for the potential impacts of climate change on ecosystem services in the context of each workshop theme.

(Considering that Climate Change is likely to be a major complicating factor for these holistic approaches, and the potential risks to biodiversity conservation and public health protection which it presents, what are the key threats to ecosystem services which need to be addressed? What are the greatest threats to food production, and how can biodiversity be better enhanced to ensure future security? What threats to food resources, nutrition security and agricultural biodiversity must be addressed by policy makers, and how can biodiversity conservation help? Can specific solutions be devised from traditional knowledge and indigenous food resources? In the face of increased risks to community health and natural resources, how can agricultural biodiversity play a meaningful role in adapting to climate change? What practical strategies have been identified, or adopted, to date?)

Other possible general points for consideration during the workshop might include:

- The role of dietary diversity in promoting human health.
- The value of biodiversity to crop health (e.g. protecting against pests and diseases, and resistance to effects of extreme weather events).
- Social and economic aspects of biodiversity.
- Roles and responsibilities in maintaining agricultural / fisheries ecosystems.

4. Links with other workshops

There is a great deal of overlap between the theme of this workshop and the other two workshops: **WORKSHOP 1: Disaster Relief and Emergency Response**, and **WORKSHOP 3: Emerging Infectious Diseases**. The participants in each workshop are tasked with identifying key cross-cutting issues (e.g. food resource security linking Workshops 1 and 2; avian influenza linking Workshops 2 and 3, etc) which should be highlighted in the conference report. A team of rapporteurs will move between workshops on both days, rotating between morning and afternoon sessions, to facilitate cross-linking between the discussions.

The final day of the conference (Thursday 28th February) will include a review of the workshop discussions, with presentations of preliminary reports.

5. Workshop Reports

It is intended that the reports from the workshops will outline current knowledge and practice in each discussion area, with examples of experience and best practice from around the world, and recommendations for further research, collaboration and action.

The reports will be prepared by the COHAB Initiative Secretariat in partnership with the workshop chairs. It is expected that the reports will be published in March or April 2008, and will be presented for discussion at subsequent multilateral meetings and international conferences on biodiversity, climate change, health and development.

Tentative timetable for COHAB 2 Workshops:

Tuesday 26th February – **Morning Session** – “*Building cross-sector understanding*”

08.50 – 9.10	Morning coffee
9.10 – 9.20	Welcome
9.20 – 9.35	Overview of workshop themes and format
9.35 – 10.05	Keynote address
10.05 – 10.50	Discussion OR presentation
10.50 – 11.10	<i>Refreshments</i>
11.10 – 12.00	Working Groups Part 1
12.00 – 12.30	Discussion OR presentation
12.30 – 14.30	<i>Lunch and Side events</i>

Tuesday 26th February – **Afternoon Session** – “*Strategic Assessments*”

14.30 – 15.00	Overview and Discussion
15.00 – 15.50	Discussion OR presentation
15.50 – 16.10	<i>Refreshments</i>
16.10 – 17.00	Group discussions Part 2
17.00 – 17.30	Discussion OR presentation
17.30	CLOSE

Tentative timetable for COHAB 2 Workshops (continued):

 Wednesday 27th February – **Morning Session – “Climate Change”**

08.50 – 9.10	Morning coffee
9.10 – 9.20	Welcome
9.20 – 9.35	Overview of workshop themes and format
9.35 – 10.05	Keynote address
10.05 – 10.50	Discussion OR presentation
10.50 – 11.10	<i>Refreshments</i>
11.10 – 12.00	Working Groups Part 1
12.00 – 12.30	Discussion OR presentation
12.30 – 14.30	<i>Lunch and Side events</i>

 Wednesday 27th February – **Afternoon Session – preparation of report**

14.30 – 15.30	Review of workshop discussions
15.30 – 15.50	Discussion OR presentation
15.50 – 16.10	<i>Refreshments</i>
16.10 – 17.30	Agreement of report content
17.30	CLOSE