Workshop on Bridging the Gap between Forestry and Health Sectors in Ethiopia

Summary

Appropriate institutions were approached to delegate experts who would work with CIFOR in making the workshop more informative and relevant to actors in Ethiopia. The group of experts helped CIFOR determine what needs to be discussed during the workshop and who should be invited. The meeting brought together 35 participants from government ministries and institutes, donor agencies, NGOs, and the media. Six presentations that describe on-going efforts to promoting the contribution of forests to human health were made, followed by sub-group discussion sessions. These presentations described the current status of natural forests and efforts to reduce deforestation and conserve biodiversity hotspot forest, the forest-human health link, the importance of traditional medicine in Ethiopia, and activities undertaken to identify and test the efficacy of these medicine, and the technical and legal challenges in documenting and using local technical knowledge. The sub-groups spelt out the key messages, progress made so far, challenges faced and the way forward to enhance the forest-health link in Ethiopia. The fact that the national health policy recognizes and encourages the development of traditional medicine, and the government has implemented a major project on the conservation and sustainable use of medicinal plants in Ethiopia were recognized by participants as important steps while technical and legal difficulties in developing traditional medicine and practical difficulties as to how to further refine and practically implement relevant policies were identified as major limitations. Besides, workshop participants pointed out issues for higher level consultations as key messages for global players. Participants suggested that the recommendations of the workshop participants be considered to in the formulation of the second phase of the Conservation and Sustainable Utilization of Medicinal Plants in Ethiopia. Participants also suggested that the proceedings along with synthesis of the workshop be compiled and distributed to national actors. Regarding media briefs, it was recommended that the working group drafts and submits a communiqué to the media that acknowledges efforts and points at way forward to enhance the contribution of forests to health.

PART I. Initiation and Conduct of the Workshop

1.1 Preparatory work

Initially a 7-person ad-hoc committee of experts representing relevant national institutions was established. The institutions represented were the Ministry of Agriculture and Rural Development, the Ministry of Health, the Traditional Medicines Department of the Ethiopian Health and Nutrition Research Institute, the Medicinal Plants Genetic Resource Department of the Institute of Biodiversity Conservation, the Department of Biology of Addis Ababa University, Wondo Genet College of Forestry and Natural Resources, and the Coffee Forest Forum.

Two meetings were conducted. The first one was to establish the committee, and to discuss and agree on the objectives of the forests and health workshop. It was decided that presentations be made to inform participants about the importance of the forest-health links and what is being done in Ethiopia. This would then be followed by and group discussions to identify challenges and propose the way forward. It was decided that the proceedings of this be published and made available to higher level policy makers in the Ministry of Health and those in the Ministry of Agriculture and Rural Development. The ad-hoc committee recommended that first the experts of forestry and public health must come together and attempt to forge links and bridge their own gap and agree on what needs to be done jointly before organizing a big workshop. Accordingly people were identified to prepare the presentations. Presenters were to focus on the history and current status, what is being done, challenges and ways forward.
including messages for global actors. The second rather informal meeting of the ad-hoc committee was conducted to quickly review presentations and approve the workshop schedule (see Annex 1).

It was agreed that the Workshop will be held from October 2 to 3, 2007. Invitation letter was issued to governmental offices, NGOs, donor communities, UN agencies, the media and even to private individuals with track record of work on TM. Just a week before the planned dates, we were told by UNICEF that due to re-scheduled meeting with donors all higher officials of the Ministry of Health at Federal and Regional levels will be going outside Addis during the first week of October. Thus we had to reschedule the dates to October 17 and 18.

1.2 The Workshop

The workshop was conducted on October 17, 2007, followed by the ad-hoc committee meeting on the 18th on what to do next. Most of the invited people showed up. But the donor community showed lowest turn out. 35 people attended the meeting. As expected, the number of attendants from the health sector was lower than anticipated. After a welcoming address by myself, the meeting on October 17 was officially opened by representative of the Ministry Department Head within the Ministry of Agriculture and Rural Development. The advisor to the Minister of Health and the program advisor of the Canadian CIDA (representing donors) made key note remarks.

Then the following papers were presented and discussed.

- **The Forestry-health link: an over view.** Br Dr Mulugeta Lemenih of Wondo Genet College of Forestry and Natural Resources
- **Biodiversity and health.** By Dr Feyera Senbeta of the Ethiopian Coffee Forest Forum
- **Diversity and conservation status of medicinal plants in Ethiopia.** By Mr Belachew Wassihun of the Institute of Biodiversity Conservation.
- **Economic significance of TM, developmental efforts and policy governing traditional medicine.** By Mr Kelbessa Urga of the Ethiopian Nutrition and Health Research Institute
- **The Conservation and Sustainable Utilization of Medicinal Plants (SUMP Project) – Lessons Learnt.** By Dr Fassil Kebeew of the Institute of Biodiversity Conservation.
- **Activities of the Forestry Research Centre on Forests and health – emphasis on constraints.** By Dr Deribe Gurmu of the Forestry Research Center of the Ethiopian Agricultural Research Institute.

Much of the afternoon was use to stimulate group discussion. Participants were divided into three groups and asked to discuss on the following issues.

- **The key messages?**
  - What is that we learnt?
  - What are the challenges and opportunities for forests and health?

- **Prevailing knowledge gaps in forests and human health**
  - institutional gaps,
  - policy loopholes, and
  - formal regulations that impede or facilitate the role of TM in public health care

- **Issues for research, development, and policy and their priorities**
  - Areas that require research (according to their order of importance)
  - Aspects that require policy advocacy (according to their order of importance their priority)
  - Development intervention options (according to their order of priority)
The way forward (who should do what in 2008?)
- The role of major national actors? And which one should lead our efforts?
- How would they network and communicate?
- What role should international research centers like CIFOR play?

Each of the three groups were asked to elect a chairperson to facilitate the discussions and a rapporteur to document and report the findings of the group. The reports of the groups were presented and discussed during the plenary session. (See Annex for the reports of the three groups). The workshop was concluded by a closing remark of the Director of the Forestry Research Directorate of the Ethiopian Institute of Agricultural Research.

On October 18 the ad-hoc committee met and discussed the findings of the group discussions and on the way forward. It was recommended that the papers of the presentations be reviewed to incorporate comments and suggestions raised during the discussions sessions. Then, the proceeding be bound and distributed to key institutions, with a synthesis of the major findings at the forefront. Regarding media coverage, it was decided that a communiqué be prepared and be seen by particularly by the Ministry of Health before sending it to the media. The following section briefly presents the findings of the workshop. Detailed report will be produced shortly.

**PART II  Brief Account of Workshop Findings**

2.1 Importance

The roles and importance of forests in sustaining the physical, mental and social well-being of humanity is tremendous. This is evident in Ethiopia where 84% of the population is rural and poor with very limited access to health services as 77% of rural families still need to travel more than 20 kilometers to get to a hospital (PASDEP, 2005) resulting in high infant mortality (80 per 1 000 live births) and child malnutrition (38% of children under five). Most of Ethiopia’s over 80 million heads of livestock also depend on forests for grazing and browsing, and 90% of livestock are treated with traditional medicine obtained from the wild. Forests have also cultural and spiritual values in Ethiopia. There are several sacred trees in the cultures of several societies including in Ethiopia.

Between 80% and 90% of the Ethiopian population uses traditional medicine for primary health care. For instance, *Salvadora perisca* is well-known for its sticks that are widely used as toothbrush in many parts of the country. Due its diverse agro-ecological zones, the country is well endowed with wealth of medicinal plants. So far about 1000 species of medicinal plants have been documented. These are used in the traditional health care system to treat some 300 diseases (different sorts of physical disorders including mental health). The associated indigenous knowledge and the cultural diversity of TM use and conservation is also diverse. Mander et al. (2006) reported that every year some 56,000 tons of medicinal plants is used by about 48 million Ethiopians, and the total contribution of TM to the GDP in 2005 was estimated at Birr 2 billion (~ 220 million USD) while the estimated value of traded raw medicinal plants in the same year was 47 million USD, about 42% of the total expenditure on modern medicines during the same year.

Forest foods complement daily intakes and in some cases could play safety net roles in times of difficulties. In southern Ethiopia, the consumption of wild food plants seems to have been increased over recent due to increased frequency of droughts and floods. Of the estimated 6000 – 7000 higher plant species, about 8-10% (480-600 species) are believed to provide edible products. Commonly consumed wild food plants in Ethiopia include: *Amorphaflatus gallaensis, Arisaema spp., Caralluma sprengeri, Sterculia africana, Dobera glabra, Portulaca quadrijolia, Maerua angolensis, Balanites spp., Opunata ficus-indica, Sporobolus indicus, Guizota scabra, Bidens pachylomaus; Solanum nigrum, Syzygium*
Some tree species play both food and also medicinal roles. In the lowland areas of the Ethiopian Rift Valley region, *B. rotundifolia* is one of such multi-purpose tree species (Photo 1). Its fruits including the kernels are edible. Locals indicated that a 25 kg of fruit harvestable from an average tree can sustain a family for a month. The leaves are browsed by camels and goats. Besides, the leaves and the seeds are used to treat malaria and tuberculosis while the roots are used for treating stomach-aches.

Most of forest foods and the TM (plants and animals) and the bulk of fire and construction wood is obtained from forests and woodlands. Thus, deforestation not only reduces availability of these forest products but also affects climate, agricultural productivity, and hydrological cycle. The resulting low quantity and quality of water is associated with poor hygiene standards and increased incidences of water-borne diseases. In some areas farmers use Moringa tree branches to serve as water cleansing agents besides its use as food and also medicine.

Women and children in particular suffer from deforestation. As availability of fuel wood declines, cooking becomes difficult or inadequate. This leads to consuming raw or improperly cooked meals with less desirable impact on health. Women would also use poor quality biomass (e.g. cow dung and plastics in Ethiopia) with unpleasant smell and even hazardous smoke. Most dangerously, girls/women are exposed to harassment and sexual abuse while collecting firewood from state forests and plantations protected by forest guards. These sexual abuses constitute serious concern as they are causes for HIV/AIDS and other STD infections and unwanted pregnancy. In other cases, women and children have to travel long distance to collect firewood from open access forest and woodlands. Travelling long distances to collect and transport heavy wood loads harms their physical condition causing serious bending, grooving and back-aches. Travelling long distances also means less time for recreation resulting in mental stress. It also means less time for children, particularly girls, to go to schools.

**Photo 1.** *B. rotundifolia* species around homestead (left) and its fruit (right) in Afar, Ethiopia.

**Photo 2.** Wood from the forest is major source of energy rural households of Ethiopia.
2.2 Relevant Policies and Strategies

The Ministry of Health believes that Ethiopia today has policies and strategies that are supportive of the conservation, development and use of TM. The challenge however is in their implementation. The National Health Policy, the National Drug Policy and the Ethiopian Science and Technology Policy are the major policies governing the development and utilization of traditional medicine in Ethiopia: The National Health Policy has a provision to integrate traditional medicine with modern medicine by facilitating traditional practices and identifying beneficial and harmful aspects through research.

The Ethiopian Health and Nutrition Research Institute formulated a 5-year (2004-2008) strategic plan to study and effectively integrate traditional medicine with the national health care system. The strategic plan envisages to develop a regulatory framework for traditional medicine and its practitioners, and to conduct researches on TM. Similarly, the Biodiversity Conservation and Development Strategy and Action Plan recognizes medicinal plants as important components of the natural heritage of Ethiopia.

2.3 Constraints and challenges of promoting forest for human health

The following were identified as factors limiting the contribution of forests to health:

- Lack of dependable data on forests and deforestation and also on the dependence on forest and woodlands of people for food and medicine
- Deforestation, the extent and impact of which is yet to be quantified scientifically;
- inadequate and variable data on importance and use of TM in particular and of forests and health in general;
- unregulated use of TM from forests and woodlands;
- botany and ecology of TM plants are not well known;
- limited experience in growing medicinal plants in cultivated areas and around home gardens (92% of the plant materials are still collected from the wild);
- lack of clear guidelines for harvesting; storage, drying and grading to facilitate value addition and marketing;
- technical and capacity related limitations in value addition (dosage, efficacy, processing…..) and marketing of TM;
- market and product specific problems resulting in inefficient, imperfect, informal and opportunistic marketing activities;
- underdevelopment of the domestic and export market system for TM;
- lack of clearly defined IPR and difficulties in recognizing and protecting TM knowledge has been limiting access to (sharing), proper documentation and subsequent use of it;
- attitudinal challenges, especially those who consider TM as backward; and
- lack of coordination amongst various stakeholders (e.g. the different ministries, Federal and Regional Government, research and conservation institutions, NGOs, International Networks,..).

2.4 Progress Made

The following key aspects were recognized by the workshop participants as important steps that enhance the forest-health link

- The 1994 Forest Proclamation designated 58 biodiversity hot spot forests as National Forest Protection Priority Areas. These forests are being protected by the state for their biodiversity
values. Recently efforts are being made to engage communities in the management and use of these forests in a sustainable way. The 2007 Forest Proclamation is also a new development.

- The National Health Policy recognizes and encourages the development of traditional medicine though how to translate this into practice remains a challenge.
- The government has implemented a major project on the conservation and sustainable use of medicinal plants in Ethiopia. This project has played major role in testing the efficacy of some of the traditionally used medicinal plants for treating human and livestock diseases. It is also the foundation for clarifying issues related to intellectual property rights.

### 2.5 What needs to be done?

In light of the constraints indicated above the following recommendations were made:

- Study dependence on forest of people (especially the poor and marginalized) for food and medicine/health to generate data on contribution of forests to human well-being.
- Conduct targeted collections and promote in-situ and ex-situ conservation and sustainable use of medicinal plants.
- Encourage domestication and cultivation of medicinal plants.
- Improve understanding capacity in relation to international processes and conventions (bioprospecting, IPR, TRIPs, CBD, etc.)
- Support research on botany and ecology of TM.
- Encourage ethnobotanical researches on medicinal plants to survey the use and to document local technical knowledge of indigenous people.
- Build on the already initiated national database of medicinal plants of Ethiopia.
- Improve coordination, and networking and sharing of information and knowledge.
- Study and establish market systems and links, both domestic and international.
- Enhance public awareness (e.g. through the education system) on the importance of TM.

### 2.6 Key messages for global actors

Participants pointed out the following key messages for global actors.

- Forests will continue to be important for the health of many.
- They host plants and animals with potential for new cures and hence for investment.
- We all should be responsible to sustainably manage (conserve and use) these resources.
- Donors should support research on forests and health and networking and information sharing amongst actors at different levels.
- It is important to building the capacity of local institutions to better understand and enhance the contribution of forests to human health in general and in documenting, testing and utilizing traditional medicine.
- Assistance in the form of upgrading the legal system (particularly in terms of ownership rights) to allow different institutions to work together in a collaborative and complementary ways (e.g. those who own traditional knowledge, those involved in protecting the plant material, those who do research on efficacy of these medicines, those who make policies, etc.), and to effectively protect the intellectual property rights of traditional medicine practitioners and countries and to ensure that they benefit from sharing these resources.