



COMMITTEE ON FORESTRY

TWENTY-THIRD SESSION

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FOLLOW-UP TO THE SECOND INTERNATIONAL CONFERENCE ON NUTRITION

Executive Summary

In November 2014, by adopting the Rome Declaration and the Framework for Action at the ICN2, world leaders renewed their commitments to establish and implement policies aimed at eradicating malnutrition in all its form and transforming the food system to make nutritious diets available to all. Forest products can directly contribute to meeting nutritional requirements of populations, by providing staple foods, protein and micronutrient rich food sources. Woodfuel from forests contribute significantly as source of energy for food processing and water sterilization. Additionally, forest products can be an important safety net for vulnerable households especially during hungry seasons when food is in short supply. FAO has embarked on a number of activities to support member countries to enhance the contribution of forest products to food security and nutrition.

I. BACKGROUND TO THE SECOND INTERNATIONAL CONFERENCE ON NUTRITION (ICN2)

1. The Second International Conference on Nutrition (ICN2), co-hosted by FAO and the World Health Organization (WHO), was held from 19 to 21 November 2014 at FAO Headquarters in Rome, Italy. A high-level political event, ICN2 was the first global intergovernmental forum devoted to addressing the world's nutrition problems in the 21st century.

2. ICN2 was convened to: (i) review progress made since the 1992 International Conference on Nutrition, respond to new challenges and opportunities, and identify policy options for improving nutrition; (ii) bring food, agriculture, health and other sectors together and align relevant sectoral policies in a way which leads to improvement in nutrition in a sustainable manner; (iii) propose adaptable policy options and institutional frameworks that can adequately address major nutrition challenges in the foreseeable future; (iv) encourage greater political and policy coherence, alignment,

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coordination and cooperation among food, agriculture, health and other sectors; (v) mobilize the political will and resources to improve nutrition; and (vi) identify priorities for international cooperation on nutrition in the near and medium terms.

3. A total of 2200 participants, including 164 Members countries of FAO and WHO, intergovernmental organizations, as well as parliamentarians, civil society and private sector organizations attended the Conference. High level participants included 85 Ministers and special guests.

4. The Conference adopted the Rome Declaration on Nutrition (<http://www.fao.org/3/a-ml542e.pdf>) and its companion Framework for Action (<http://www.fao.org/3/a-mm215e.pdf>). World leaders thereby renewed their commitment to establish and implement policies aimed at eradicating malnutrition and transforming food systems to make nutritious diets available to all.

5. On 1 April 2016, the UN General Assembly adopted Resolution 70/259 proclaiming the United Nations Decade of Action on Nutrition (2016-2025). The Resolution mandates FAO and WHO to co-lead the implementation of the Decade in collaboration with relevant institutions, mechanisms, platforms, partners and stakeholders. The Resolution also calls for active support to the Decade by governments, international and regional organizations, civil society, the private sector and academia, including through voluntary contributions.

II. RELEVANCE OF ICN2 OUTCOME DOCUMENTS TO THE COMMITTEE ON FORESTRY

6. The current global nutrition situation is characterized by high prevalence of undernourishment (795 million affected, FAO 2015), widespread micronutrient deficiencies and rising prevalence of overweight and obesity affecting 1.9 billion people. About two billion people or nearly 30 percent of the world's population suffer from one or more forms of micronutrient deficiencies. By 2030 global decline in productivity resulting from chronic diseases is estimated at US\$35 trillion (Nugent, 2011)¹. In Africa and Asia, poor nutrition alone will contribute 11 percent loss in gross national product yearly (Horton and Steckel, 2011)².

7. As described in further details in Section III of this paper, forest products can contribute to meeting the nutritional requirements of a significant portion of rural populations, especially by providing fuel wood for cooking, forest foods as staple foods that contribute to food energy intake and provide protein and micronutrient-rich foods, subsequently contributing to healthy diets. Therefore, both the Rome Declaration and the Framework for Action are highly relevant for forestry and the Committee on Forestry (COFO).

8. In particular, the Framework for Action (FfA) provides a set of voluntary policy options and strategies, in the form of 60 recommended actions, to guide the implementation of the wide-ranging commitments enshrined in the Rome Declaration on Nutrition. The recommendations that are relevant for forestry can be broadly grouped into three clusters as follows:

- a) Creating an enabling environment for effective action (recommendations 1, 3).
- b) Increasing actions for sustainable food systems promoting healthy diets (recommendations 8, 9).
- c) Enhancing nutrition education and information to build capacities (recommendations 19).

¹ Rachel Nugent, *Bringing Agriculture to the Table* (Chicago: The Chicago Council on Global Affairs, 2011).

² Sue Horton and Richard H. Steckel, *Global Economic Losses Attributable to Malnutrition 1900 – 2000 and Projections to 2050*, Assessment Paper, Copenhagen Consensus on Human Challenges (New York: Copenhagen Consensus Center, 2011), <http://www.copenhagenconsensus.com/sites/default/files/malnutrition.pdf>

III. CONTRIBUTION OF FOREST PRODUCTS TO NUTRITION

Forest products and their contribution to nutrition and diets

9. Forests occupy one-third of the earth's land area. It is estimated that nearly one-third of the global population depend on forest goods and services for the provision of food, wood fuel, building materials, medicines, employment and cash income. Plants and animals found in forests play an important role in the diets of millions of people, providing protein, vitamins and minerals. Income derived from forests products and services supports better access to food and nutrition not only by those who earn forest income but by spreading in the wider rural community through consumption and investment links.

10. Cooking is a main way to ensure proper nutrient absorption and globally, 2.4 billion people make use of woodfuel for cooking. This alone makes forests a main contributor to household nutrition worldwide. Woodfuel represents over 50 percent of the total world's wood production and its sustainable management and efficient use therefore deserve special attention.

11. Woodfuel is equally important for boiling and sterilizing water. About 765 million (10.9 percent of global population) use wood energy to sterilize their water via boiling. Boiling water with woodfuel is often the only available means that forest-dependent communities have to obtain safe drinking water and water for food processing. Woodfuel is also used in food preservation processes - traditional smoking and drying of food by many households - extending the supply of food resources during non-productive periods. It should be pointed out that, if not used properly, woodfuel can cause negative health impacts due to smoke pollution. However, improved stove systems can alleviate this risk. If sustainably produced and efficiently utilized, woodfuel is likely to remain the most affordable source of energy for cooking, water sterilization and food smoking/drying for a considerable share of the world population in the medium term future as for many rural populations, other sources of energy are not readily accessible at large scale. However, given the current prevalence of unsustainable and often illegal production of woodfuel, decisive government action is needed to improve woodfuel governance.

12. Forest's role in the maintenance of biodiversity as "gene pool" for food crops helps to secure the diversity needed to promote adequate quality of diets. In this regard, FAO's Commission on Genetic Resources for Food and Agriculture has developed *Voluntary Guidelines for mainstreaming biodiversity into policies, programmes and national and regional plans of Action on Nutrition*³ (FAO 2015). The Guidelines emphasize that "appropriate use of biodiversity for food and agriculture - including the wide range of different varieties, cultivars and breeds of plants, and animals, as well as wild, neglected and underutilized species - in nutrition and agriculture programmes is a key means of addressing malnutrition in all its forms".

13. Forest fruits are rich sources of minerals and vitamins while seeds and nuts harvested in the forest add calories, oil and protein to diets. Edible roots and tubers serve as carbohydrate sources, while mushrooms are a source of important nutrients including selenium, potassium, and vitamins. Wild leaves (either fresh or dried) are among the most widely consumed forest products. They serve as a rich source of protein and micronutrients including vitamin A, calcium and iron, which are commonly deficient in the diets of nutritionally vulnerable communities. For instance, the leaves of the moringa tree (*Moringa oleifera*) provide high content of vitamins B, vitamin C, pro-vitamin A as beta-carotene, vitamin K, manganese, and protein. They also contain phenolics and flavonoids

³ *Voluntary Guidelines for mainstreaming biodiversity into policies, programmes and national and regional plans of Action on Nutrition* (<http://www.fao.org/3/a-i5248e.pdf>)

which provide antioxidant, anticarcinogenic, immunomodulatory, antidiabetic, antiatherogenic, and hepatoprotective properties. Five grams of the leaf powder can meet 80 percent of the vitamin A intake requirement of children under the age of three.

14. Many trees provide more than one source of food. For instance, the Baobab (*Adansonia digitata*) is a multipurpose tropical tree used for its fruits, but also for its leaves, which are widely consumed by populations in African drylands. Baobab contains naturally dehydrated fruit pulp, which contains five times the vitamin C present in oranges (53mg/100g of fruit pulp), as well as vitamins A, B1, B2 and B6. A daily consumption of 10-20 grams of the fruit pulp can fulfil the Vitamin C intake requirement of a child. Baobab leaves are high in calcium, protein and iron.

15. Rodents and larger mammals, insects, birds and their eggs and fish from forests are important dietary constituents of people living in close proximity of forests. In at least 62 countries worldwide, they constitute a minimum of 20 percent of animal protein in rural diets. It is estimated that insects form part of the traditional diets of at least 2 billion people. More than 1 900 species have reportedly been used as food. The value of edible insects goes beyond their nutritional value as, for instance, it is much more environmentally friendly and easy to produce yellow mealworm (*Tenebrio molitor*) protein than to produce beef. Farming edible insects for food and feed puts much less pressure on already limited resources such as land, soils, water and energy.

Forest products as a safety net for vulnerable households

16. Harvesting food from the forest is an important strategy for coping with periods of food insecurity, especially for the rural poor in forested areas. Forest products are frequently available for extended periods, including during the “hungry” or “lean” seasons, thereby providing a source of food and contributing to meeting nutritional requirements when traditional agricultural products are seasonally unavailable, when stocks have run out and when money is in short supply.

17. In the western region of Ghana, non-wood forest products are particularly important for household food security, nutrition and health during the lean season (June-August). Products such as grass-cutters (*Thryonomys swinderianus*), bushmeat, snails, mushrooms, honey and fruits are consumed 5-6 times a week among the low-income households.

18. In West Africa, the beans of the commonly found tree *Parkia biglobosa* are fermented to a nutritious food rich in protein (40 percent of dry matter) and fat (35 percent), which keeps for over a year without refrigeration. As the beans mature in the dry season they provide valuable food in the middle of the traditional “hungry season” before the new crop harvest. Annual production figures are difficult to obtain since they do not enter regular commercial trade. It has, however, been estimated that 200,000 tons of beans are gathered each year in Northern Nigeria alone.

19. In Senegal, certain wild fruits such as *Boscia* spp., which fruit all year round, and *Sclerocarya birrea*, which fruits at the end of the dry season, are most commonly used to meet seasonal shortages of vitamins.

Challenges

20. The multiple benefits of forests for nutrition are at risk. In some regions, forest resources are being seriously depleted, or have been degraded due to over- and unregulated exploitation. Poverty, weak governance, lack of capacity and lack of secure forest tenure for local communities are some of the main causes. Beyond the direct loss of nutritious forest food, dwindling woodfuel supplies (firewood, charcoal) are having an increasingly severe impact on nutrition in rural areas, affecting the quality of foods consumed if shortages result in reduced cooking time and consumption of undercooked food. In addition, agriculture is still the main driver of deforestation. Especially in tropical and low-income countries, forests are being lost due to expansion of agriculture.

21. Forest degradation is a complex issue and requires responses at different levels. Improved land governance combined with institutional and tenure reforms as well as political will are necessary to reduce the currently increasing global rate of forest degradation. These should be accompanied by programmes to restore degraded forest landscapes. Reducing deforestation, which is due to expansion of agricultural areas, requires a comprehensive set of policy measures including integrated land use planning. The land use challenges and opportunities of forests and agriculture are discussed in detail in the *State of the World's Forests 2016*.

IV. ICN2 FOLLOW-UP ACTION IN THE FOREST SECTOR

22. Through its crosscutting Strategic Framework, and building on its experience in supporting sustainable forest management, FAO has implemented a number of activities geared toward supporting member countries in following-up on the recommendations of the ICN2 Framework for Action (FfA). These are described below for each of the three clusters of FfA recommendations that are most relevant for forests.

Creating an enabling environment for effective action (recommendations 1, 3)

23. “*Forests for Food Security and Nutrition*” was a key theme during the XIV World Forestry Congress convened in South Africa in September 2015. The fundamental role of forests for food security and improved livelihoods was highlighted as one of the three key messages of the “*Durban Declaration: 2050 Vision for Forests and Forestry*” and widely disseminated. A special session on wood energy raised attention to the important role of sustainable production and efficient use of woodfuel for food security and nutrition.

24. Furthermore, FAO is disseminating good practices on integrated forest and food security and nutrition policies and is making efforts toward improving data collection, in particular, for woodfuel and forestry income, assist countries to generate the evidence on the contributions of forests to food security and nutrition needed in order to enhance political commitment.

25. The Commission on Genetic Resources for Food and Agriculture, at its 15th Regular Session in 2015, endorsed the “*Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition*”⁴ with the aim of assisting countries to make the best use of biodiversity for food and agriculture, including forest biodiversity, in their nutrition programmes.

26. FAO is supporting countries to enhance their cross-sectoral platforms to enhance the contribution of forests to food security and nutrition. For instance, a national cross-sectoral workshop on forests and food security and nutrition was organized in the Gambia in December 2014, which resulted in a government action to put more forests under sustainable community forest management. A regional cross-sectoral policy dialogue for the Asia-Pacific region took place in China in April 2016 to discuss the nexus between forests, water and food security.

Increasing actions for sustainable food systems promoting healthy diets (recommendations 8, 9)

27. FAO is providing support to the development of national capacities in member countries to enhance the relevance of their forestry policies and programmes in addressing food security and nutrition objectives. This involves the development and field-testing of a cross-sectoral forestry and food security policy-assessment framework. The assessment helps to generate recommendations for informed decision-making.

28. FAO is developing a Guidance Note on “*Towards a Coherent Framework for Addressing Food Security and Nutrition Outcomes in Sectoral Policies*”, which includes a chapter on Forestry to

⁴ <http://www.fao.org/3/a-i5248e.pdf>

assist national policy-makers in sharpening the focus of national forest-relevant policy instruments for improved food security and nutrition outcomes.

29. Furthermore, FAO is supporting cross-sectoral approaches to tackle malnutrition in all its forms. The regional project on “Enhancing the Contribution of Non-wood forest products to food security and nutrition”, implemented with the member countries of the Central African Forest Commission (COMIFAC), strengthens the capacity of local forest communities to process non-wood forest products, to access markets and improve their food security and nutrition.

Enhancing nutrition education and information to build capacities (recommendations 19)

30. FAO is preparing field projects in The Gambia and Zambia to enhance the contribution of forests to food security and nutrition with a focus on smallholders and forest communities. Key approaches include nutrition education designed to promote dietary diversification and consumption of micronutrient-rich foods, including local forest foods.

V. GUIDANCE SOUGHT FROM THE COMMITTEE

31. In view of the importance of forests for nutrition, the Committee may wish to invite countries to:

- mainstream the important role of forests and trees outside forests for food security and nutrition in policies and programmes and across all four dimensions of food security and nutrition;
- take measures to promote the sustainable production of woodfuel as well as the safe use of woodfuel for cooking and water sterilization;
- provide local communities with secure tenure rights to enable sustainable management of forest resources for increased contribution to food security and nutrition.

32. The Committee may wish to invite FAO to support countries:

- in forest tenure reform, the formulation of forest-related policies that integrate food security and nutrition objectives;
- to strengthen the capacity of government institutions and of local communities to integrate food security and nutrition objectives into their sustainable forest management practices.