



BIODIVERSITY FOR FOOD AND NUTRITION IN BRAZIL

The Biodiversity for Food and Nutrition Project—officially the *Mainstreaming Biodiversity Conservation and Sustainable Use for Improved Human Nutrition and Well-being* project, or *BFN project*, is a multi-country initiative with an ambitious goal to mainstream biodiversity conservation to improve nutrition in four countries: Kenya, Sri Lanka, Turkey, and Brazil. In Brazil, the BFN project is just one of many initiatives within a national strategy to eradicate hunger and extreme poverty, specifically by mainstreaming biodiversity into national food and livelihood efforts. The project is influencing the national policy landscape, both by filling critical data gaps through an online portal which will streamline national data on Brazilian biodiversity and ecosystems, and through strong partnerships.

THE CONTEXT

In 2003, the current president of Brazil, Luiz Inácio Lula da Silva, launched *Fome Zero*, a national cross-sectoral strategy with the goal of eradicating hunger and extreme poverty in Brazil. The underlying assumption of *Fome Zero* was that poverty reduction, food security, and support for small-scale agriculture were intimately connected. A number of initiatives were launched or strengthened under this program to increase access to food for the poorest Brazilians and to support small-scale and family farmers as a strategy to strengthen domestic markets and promote sustainable development. Although sustainable development often includes the promotion of local agrobiodiversity, such as traditional crops and wild species, as an important *environmental* consideration, it does not always consider the protection and promotion of these foods with nutrition potential, as a *human health and well-being* issue.

THE PROJECT

In 2012, the Global Environment Facility (GEF), the world's largest public funder of international environmental projects, launched a new project called *Mainstreaming Biodiversity Conservation and Sustainable Use for Improved Human Nutrition and Well-being*, or the **BFN project**, which operates in Kenya, Sri Lanka, Turkey, and Brazil. Coordinated by Bioversity International and co-implemented by FAO and the United Nations Environment Program (UNEP), the project has several key objectives. In Brazil, the BFN project tries to mainstream biodiversity conservation and sustainable use for improved nutrition into national food and livelihood security strategies formed or strengthened

under *Fome Zero*. Part of the program's strategy is improving the enabling environment for biodiversity for food and nutrition in Brazil. The logical first step was to strengthen the evidence and knowledge base for the nutritional value of native biodiversity.

Filling information gaps

There was no need to start from scratch in Brazil. The national *Plants for the Future* initiative, an ongoing project of the Brazilian Ministry of Environment was already established to identify and document native species with economic potential. As part of the BFN project, four federal universities and the National Institute of Amazonian Research (INPA) are carrying out nutritional composition analysis of 70 edible plant species previously identified as underutilized by *Plants for the Future*. The analysis compiles data already available in scientific literature (using a methodology developed by FAO/INFOODS) with data from laboratory analysis on underutilized plants that fill previously identified data gaps.

By early 2016, the information will be available on a national information portal as part of the Information System on Brazilian Biodiversity (SiBBr). The SiBBr will bring together information on Brazilian biodiversity and ecosystems currently scattered across databases in various government agencies and other sources. In close consultation with the BFN project team in Brazil, UNEP's World Conservation Monitoring Centre is developing the technological platform for the BFN database, which will be hosted by the Ministry of Science, Technology and Innovation (MCTI).

Why is data so important to policymakers?

Policymakers need evidence to justify and support new public policies, programs, and initiatives.

The BFN Nutritional Composition Database will provide important evidence for the inclusion of nutritious species in public policies and programs focused on food and nutritional security and the promotion of healthy and diversified diets. It will also provide evidence for programs linking biodiversity conservation to income generation.

The BFN project in Brazil has identified four existing public policies that could benefit from data on the nutritional value of native biodiversity. They include:

- Food Acquisition Program (PAA)
- National School Meals Program (PNAE)
- National Food and Nutrition Policy (PNAN)
- Minimum Price Guarantee Policy for Biodiversity Products (PGPM-Bio)

Each of these policies contains entry-points for potentially improving nutrition or livelihoods with links to native biodiversity. For example, in 2009, the PNAE decreed that at least 30% of the food purchased through its program must be bought directly from family farmers. At the same time, the PAA procurement process pays 30% more for organic and agroecological food.

Herein lies an opportunity...

With reliable data on local and regional biodiversity, policymakers can demonstrate the value of these species as a source of work and income for family farmers, peasants, and traditional communities.

Similarly, they can also demonstrate the health and well-being benefits to consumers who are educated on the benefits of a diversified diet that includes native, nutritious species.

A number of institutions in Brazil – Ministry of the Environment, Ministry for Agrarian Development, Ministry of Social Development and Fight Against Hunger, Ministry of Health, Ministry of Agriculture, Livestock and Food Supply, the National Supply Company and the National Fund for Education Development of the Ministry of Education – are working together, with this increased knowledge, to design programs that achieve these multiple goals.

Strengthening partnerships

The second important way this initiative supports an enabling environment is through its partnerships. For example, the universities participating in the food composition activities also host Collaboration Centers on Food and Nutrition (CECANEs), linked

to the National School Feeding Programme (PNAE), which is coordinated by the National Fund for Education Development of the Ministry of Education. These CECANEs provide research and technical backstopping to those involved with delivering the national school meals program, which feeds over 40 million children on a daily basis. The partnership is likely to favor the inclusion of biodiversity in school meals.

The BFN Project has collaborated with partners implementing a range of additional support activities, where native biodiversity for food and nutrition is promoted. Some examples include school gardens ('Educating with School Gardens and Gastronomy') and school nutrition education (PNAN 'Health in Schools' program), plus the publication of books and materials showcasing local biodiversity, foods and recipes (e.g. new edition of Brazilian Regional Foods, see below) and alliances with high profile chefs and restaurants in the running of gastronomic workshops, food fairs and awareness campaigns. An online course to promote the mainstreaming of biodiversity for food and nutrition is under development. All of this helps provide a platform and enabling environment to further promote the mainstreaming of biodiversity into relevant public policies and institutions, as well as supporting the new Brazil Dietary Guidelines which are more focused on food and whole of diets, local food culture and environmental sustainability.

EMERGING OUTCOMES

Many changes in behaviors and attitudes are already evident within the partner ministries and federal institutions of the BFN Project. More materials emphasize the strategic role biodiversity can play, along with other approaches, in contributing to food and nutritional security and in promoting more conservation and sustainable use. For example, the new edition of the book *Brazilian Regional Foods*, launched by the Ministry of Health in March 2015, included a chapter on "Biodiversity for Food and Nutrition" for the first time.¹ This book includes many recipes and nutritional information of regional foods, several of them using native fruits and non-conventional vegetables.

The Reference Document for the 5th National Conference on Food and Nutrition Security (CNSAN) held on November 3-6, 2015, incorporates, for the first time, biodiversity as one of the main aspects related to food and nutrition security. CNSAN, held every four years, is where guidelines and priorities for food and nutrition security actions are set and communicated to the National Food and Nutrition Security Council (CONSEA) to inform policy making. The 2015 Policy Letter, the main outcome from the annual conference, had several recommendations related to the sustainable use of biodiversity to achieve food sovereignty. Some recommendations focused especially on expanding public

¹ Chapter in *Brazilian Regional Foods* - http://189.28.128.100/dab/docs/portal-dab/publicacoes/livro_alimentos_regionais_brasileiros.pdf

policies and actions to guarantee self-sufficiency to family farmers through agroecological practices and promotion of biodiversity, such as creation of organic seed banks and promotion of market chains for nonconventional vegetables and native fruits. The BFN team has had ongoing interactions with CONSEA and organized an event during the 2015 CNSAN to raise awareness about the importance of biodiversity for food and nutrition.

Biodiversity for food and nutrition was included in Brazil's National Biodiversity Strategy and Action Plan (NBSAP) currently being revised, which represents a world first in such extensive mainstreaming of biodiversity for food and nutrition. NBSAPs are a country's foremost national policy instrument for the implementation of the CBD's Strategic Plan for Biodiversity (C – 2020) and promoting the mainstreaming of biodiversity. Furthermore, in 2015, biodiversity for food and nutrition was also included in Brazil's 5th National Report to the CBD with specific references to the many partnerships that have been established or strengthened through the BFN project. The report also highlights the important role food consumption analysis has in promoting biodiversity conservation and sustainable use of underutilized and regional foods.

CONCLUSION

The examples in this note showcase the important role that the BFN project has had in promoting evidence and its use for decisionmaking in Brazil. Furthermore, the emerging outcomes highlight how important partnerships can be for building momentum and leveraging existing institutions to strengthen food and nutrition.



Credit: Ministry of Environment (MMA) - João Vital Souto

REFERENCES

Biodiversity for Food and Nutrition Project website:
<http://www.b4fn.org/>

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