



Plants of the Past, or Crops for the Future?



Ehsan Dulloo Danny Hunter, Teresa Borelli, Eliot Gee Bioversity International 28-30 August 2018



Outline

The BFN Project

- Methodology
- Contributions to GSPC, SDGs

Mainstreaming Biodiversity

Hunger and Malnutrition

Ex. Kenyan Schools

Resilient Livelihoods

Ex. Hela Bojun

Sustainable Food Systems

Ex. Turkish surveys

Conclusion

Looking Ahead: Recommendations







What is the Biodiversity for Food and Nutrition Initiative?



- Funded by the Global Environmental Facility (GEF), led by 4 countries with support from Bioversity International, FAO and UN Environment
- CBD Cross-Cutting Initiative
- Biodiversity conservation through use
- Exploring the potential of nutrient-rich, underutilized crops



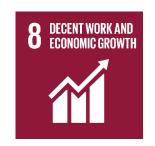
Contributions to the 2030 Agenda on Sustainable Development

- Natural edible biodiversity- both wild and cultivated- is **accessible**, **affordable**, and **acceptable** in many areas that struggle with malnutrition, environmental, and livelihood challenges.
- Researching and mainstreaming nutritious crops into policies and markets helps producers, consumers, and ecosystems.
- Harnessing this agrobiodiversity will be critical in our efforts to address the SDGs & GSPC Targets, especially in uniting human and environmental health.













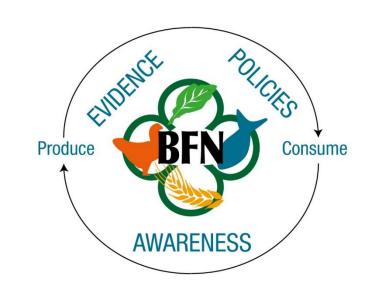


BFN Methodology

- The BFN Project uses a multi-level, cross-sectoral approach:
 - Provide Evidence: nutrition analysis, crop databases, traditional knowledge
 - Influence Policy: public health, agriculture, conservation, procurement
 - Raise Awareness: education, recipe books, food festivals, farmer training

A context-based strategy means working closely with local partners

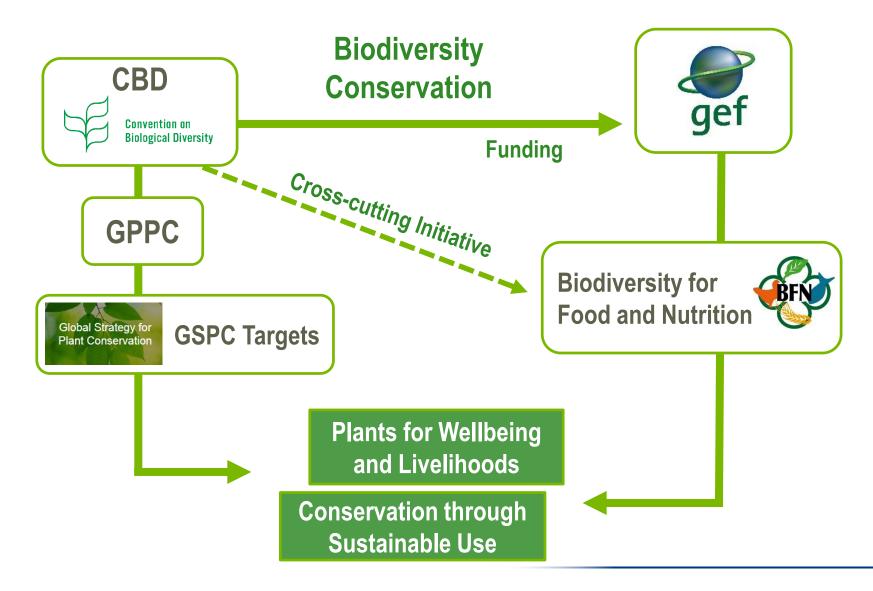






Sri Lankan rice varieties, credit: S. Landersz

Contributions to GSPC Objectives





Mainstreaming Biodiversity

GSPC Target 16: strengthen institutions and partnerships

- NBSAPs (National Biodiversity Strategy and Action Plans)
- Key example of how BFN made sure biodiversity will be integrated into many levels' and sectors' activities
- Reporting national progress to CBD (evaluation + monitoring)
- NBSAP revisions, i.e. in Brazil
- Achieving wider recognition of biodiversity at international level





Fight Hunger and Malnutrition

GSPC Target 3: sharing research

- Research crops with micro-nutrients that combat Triple Burden of Malnutrition, increase dietary diversity
- Advocate for policy and procurement programmes that connect local farmers and produce to student meals
 - (reaches 41.5M children in Brazil)





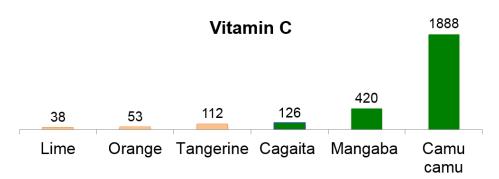
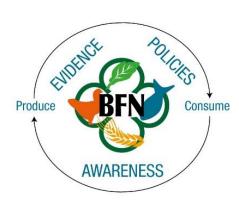


Figure 3 – Content of vitamin C (mg/100 g edible portion) in fruits commonly consumed⁵ (orange) and underutilized fruits native from Brazil (green)





GSPC Target 14: education and awareness

Case Study: Kenya

- Busia County (~30% undernourished)
- Home-Grown School Feeding
 - Farmers trained to supply healthy produce directly to school canteens
- Kenya's first Biodiversity
 Conservation Policy (endorsed 2018)
 - link between nutrition and agriculture
 - BFN united a range of ministries and public stakeholders to draft the policy



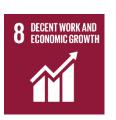
Mandala Garden at Mundika Special School for the Deaf, credit: A.Manjella

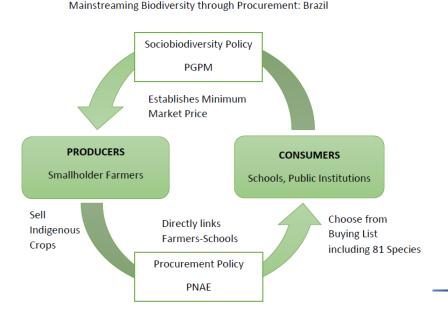


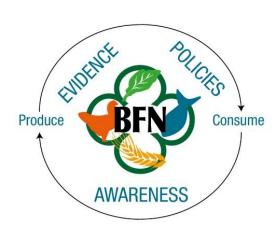
Build Resilient Livelihoods

- Fair pricing policies (Brazil) to increase market opportunities for smallholder farmers
- Empower women, youth, and disenfranchised groups to feed themselves and generate income











GSPC Target 13: use local plant knowledge for sustainable livelihoods

Case Study: Sri Lanka

- Hela Bojun Traditional Food Businesses are run by women entrepreneurs
- By cooking and selling indigenous produce, the women support their households, feed their community, and generate tourism





Colombo Food Festival, credit: D.Hunter



Ensure a Sustainable Food System

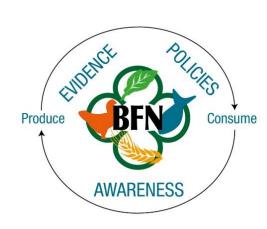
GSPC Target 9: conserve genetic biodiversity

- Identify locally-adapted crops that resist drought, pests, and climate change.
- Produce data that facilitates prioritization of crops
 - 195 species' information added to FAO/INFOODS











Case Study: Turkey

- Regional market surveys selected Golden Thistle, Einkorn Wheat, and Foxtail Lily as wild edible plants that could be domesticated
- Alaçatı Herb Festival educates thousands of people each year on benefits and methods of using edible biodiversity
- Education initiatives train students to find jobs in the green sector

GSPC Target 12: sustainable wild harvesting



Alaçatı Herb Festival, credit: D.Hunter



Summary: Contributions to SDGs

SHORT TERM LONG TERM

Indigenous food in diets

On-farm conservation Nutritious and diversified diets

> Traditional knowledge conserved

Improved livelihoods

Conservation of traditional knowledge

Safety-net to poor families

Linking farmers to markets

Increased production and income

Stimulation of local economies

Opportunity to generate organized demand

Social development

Food system diversity in policies and education

Biodiversity conservation across sectors

Increased awareness and research support

Knowledge sharing

Improved attendance, cognition and education

Reduced gender gap

Improving public health and strengthening economy

Increase in national GDPs

Healthcare savings

Healthy and productive populations

Broad-based economic arowth



CBD targets



biodiversity

Reduction of biodiversity

Climate change adaptation

Better control of pests and

Reduction of soil erosion

Reduced pollution

loss

diseases

Senefits over time











































Summary: Contributions to GSPC / CBD

BFN has contributed to each objective, with actions that:

- Document plant diversity
- Implement conservation
- Sustainably and equitably use diversity
- Promote education and awareness, sustainable livelihoods
- Build capacity and public engagement



Looking Ahead: Recommendations

 More focus on the value of food biodiversity and its role in food systems

Increased collaboration between related initiatives:
 GSPC and Cross-Cutting Initiative / BFN, with ongoing work on biodiversity and human health.

Promoting sustainable production and consumption.





Thank you

www.b4fn.org







Ehsan Dulloo e.dulloo@cgiar.org

Danny Hunter d.hunter@cigar.org

Teresa Borelli t.borelli@cigar.org

Eliot Gee e.gee@cigar.org















www.bioversityinternational.org/subscribe @BioversityInt