

# Foreword

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## **The second perspective**

Biodiversity underpins ecosystem functioning and is essential to many aspects of our health and well-being, including nutrition. It is also the basis for future advances in food production through improved yields and nutritional quality and provides options for adaptation to climate change.

Globally, both food production and food security have increased over recent decades. This progress has been achieved through agricultural intensification but at significant environmental cost, illustrated by our overuse of land, water and chemicals. Alongside this, we have seen a trend towards a simplification of diets and accompanying nutritional degradation. To meet the challenge of achieving food security and healthy nutrition, we need to focus on ecologically sustainable intensification of farming systems that will also contribute to improved diets. This is a major challenge of our time, but the better management and use of biodiversity offer us solutions. For example, sustaining and restoring soil biodiversity, and thereby soil functions, offer significant opportunities to make better use of land and water in order to grow crops more efficiently. Biodiversity also offers options for crop diversification; including growing more locally appropriate crops and varieties better suited to different and changing conditions and consumer preferences. Another critical asset is the traditional knowledge associated with biodiversity, maintained by farmers and pastoralists.

Agricultural biodiversity was first addressed in a comprehensive manner by the Convention on Biological Diversity (CBD) in 1996. The CBD programme of work on agricultural biodiversity was detailed in 2000, and three related initiatives have since been launched: on soil biodiversity; on pollinators; and on biodiversity for food and nutrition. I welcome the growing international efforts to implement actions to support these policy instruments. Commitments to more sustainable food production and other policies that promote biodiversity-friendly practices will also support the implementation of the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets.

Major shifts in policies and approaches are required to achieve food security in all its dimensions: *availability* of sufficient food, *access* to it by all, good nutritional *quality*, and *stability* of supply. The conservation and sustainable use of

biodiversity is essential to all four dimensions. The growing impacts of climate change will submit food production everywhere to unseen levels of stress and the most cost-effective solution to promote adaptation lies in biodiversity. Successful approaches will be founded on interdisciplinary collaboration and multi-scale partnerships. Consumers are a major driver of food production, so a shift in consumer preferences to choices that are both more sustainable and healthier will be critical.

### **Acknowledgements**

I would like to take this opportunity to congratulate the authors and partner organizations on this milestone publication. Their work offers a comprehensive summary of contemporary information and good practices, identifies gaps in research and provides insight on potential opportunities for a variety of policy options. I look forward to more sustainable management of biodiversity in all ecosystems, but particularly in agricultural ecosystems, where we can truly achieve a healthy partnership between people and the planet.