Protecting biodiversity in production landscapes

A guide to working with agribusiness supply chains towards conserving biodiversity

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Foreword

The ever increasing world population is placing great strains on biodiversity and the ecosystem services that support the production of agricultural commodities needed to meet current global demand. Problems arising from the continued degradation of ecosystem services are already apparent with commodity prices rising dramatically and food shortages becoming common in many countries. While climate change is partially responsible, much of the blame can be placed on the continued use of unsustainable farming practices that have reduced farm yields in many developing countries. The reduced production is a two edged sword; not only does it lead to food shortages but it also negatively affects social and economic development in the effected countries – all factors that have a major impact on the rural poor.

The FAO and the World Bank have forecast that food production will need to double by 2050 to meet the demands of a greatly expanded population. Current public and private initiatives to improve production methods and performance are making some progress but the often fragmented approaches taken have not set a pace that will allow this enormous target to be met. It is essential that governments, farmers, agribusiness corporations and other stakeholders fully coordinate their efforts if sustainable agricultural production practices are to become a driving factor for achieving food security and national social and economic growth.

The UNDP, as the lead UN Agency for poverty reduction and provision of support to developing nations, can help to coordinate the diverse interests of the various stakeholders and assist governments in developing effective programs to implement biodiversity friendly and sustainable agricultural production. The UNDP has a proven track record in biodiversity conservation and rural development projects involving both public and private funding. Over the last 10 years, the UNDP has participated in over 200 private sector and foundation partnerships. In partnership with the Global Environment Facility (GEF), the UNDP Ecosystems and Biodiversity (EBD) programme currently supports biodiversity management initiatives in over 120 countries around the world. The GEF global portfolio has a cumulative value of more than USD 2 billion in GEF financing and public private co- financing. With offices in 166 countries, the UNDP is in a unique position to work with governments and agribusiness stakeholders to develop a fully coordinated approach to protecting biodiversity and implementing fully sustainable agriculture.

Recognizing the urgent need to accelerate the change to fully sustainable agricultural production, the UNDP established the Green Commodities Facility (GCF) in 2009. Its mission is to work with governments, local producers, and national and global marketing companies to mainstream sustainability of the production and sale of agricultural commodities. The GCF was established to manage a global portfolio of country level commodity development programmes to institutionalize methods for protecting natural resources. It also assists with scaling-up production to meet increasing demand and boost local economic development. GCF projects are largely carried out in-country to ensure that the strategies being developed and implemented fully reflect national requirements.

This publication provides an outline of the problems associated with unsustainable agricultural practices and presents recommendations for accelerating the change to fully sustainable and biodiversity friendly agriculture. It is hoped the suggested changes will be thought provoking. Readers requiring further information, or those considering the need for assistance to help launch new sustainability and trade improvement initiatives, are urged to contact the Green Commodities Facility via the nearest UNDP country office.

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Yannick Glemarec, Executive Coordinator, UNDP-GEF and Director Environmental Finance

Executive Summary

Biodiversity is being lost at a rate that will have significant economic and social implications around the world if this deterioration is allowed to continue unabated. Much of this loss may be attributed to the need to produce more food supplies for an ever-increasing world population.

Most of the world's food production is sold to national or international buying companies rather than to the end consumer. Many of these companies sell the raw produce onwards to processing companies or wholesalers, thus forming a chain of companies involved in getting the produce from the farm to the consumer.

Supply chain operations have major impacts on both biodiversity and national economies. Businesses are by far the largest contributor to biodiversity loss due to the scale of production required to meet the demands of national and international supply chains. There is an urgent need for governments, producers and other stakeholders to work closely to develop market-based mechanisms and establish policy and legislative environments that provide incentives for farmers to adopt fully sustainable practices.

This publication examines the impacts of agricultural supply chain activities on biodiversity and ecosystems and provides recommendations for the conservation policies that are needed to preserve this vital resource. It is intended to provide government policy-makers with guidelines for developing strategies for involving agricultural supply chains in the drive for biodiversity protection and the implementation of sustainable development. The publication may also interest those in the private sector, community groups and NGOs interested in implementing fully sustainable agricultural production.

Chapter One explores the main causes of biodiversity loss and discusses the economic and social impacts that may occur if the losses are allowed to continue. It discusses the relationship between the operation of supply chains and biodiversity and ecosystem services.

Chapter Two explains how supply chains operate and examines agricultural supply chain activities that affect biodiversity and degrade the resilience of ecosystem services. This discussion is followed by a review of the impact of widely used farming practices and recommendations for adopting farming techniques needed to implement sustainable production. The chapter also addresses the importance of maintaining genetic stocks, and how the introduction of internationally recognized product standards can help the transition to more biodiversity-friendly farming practices.

Chapter Three focuses on the role of government and the importance of supply chain policies that protect biodiversity and ensure the long-term sustainability of agricultural production.

Chapter Four considers the implications of markets and money; the main factors driving supply chain operations to participate in sustainable development initiatives. The chapter demonstrates that markets and money are playing an increasingly important role in conservation as consumers become aware of the need to protect the environment and place demands on suppliers to meet improved production standards.

Case studies and examples have been used throughout to illustrate many of the points raised in the report.

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Acronyms and abbreviations

Acronym	Meaning
AAUs	Assigned Amount Units
BCtA	Business Call to Action
CAMBio	Central American Markets for Biodiversity
CBD	United Nations Convention on Biological Diversity
CDCF	Community Development Carbon Fund
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
CERUs	Certified Emission Reduction Units
CITES	United Nations Convention on the International Trade of Endangered Species
ERUs	Emission Reduction Units
EU	European Union
EU ETS	European Union Emissions Trading Scheme
FAO	Food and Agriculture Organization
FCPF	World Bank's Forest Carbon Partnership Facility
FLO	Fair Trade Labeling Organizations International
GCF	UNDP Global Commodities Facility
GEF	Global Environment Facility
GHGs	Greenhouse gases