



Building Urban Resilience

Assessing Urban and Peri-urban
Agriculture in Addis Ababa, Ethiopia



global change SysTem for Analysis, Research & Training

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Managing Editor: Jon Padgham

Associate Editor/Production Coordinator: Jason Jabbour

Assistant Editor: Katie Dietrich

Copy Editors: Bart Ullstein and Kristie Bates

Layout and Design: Jennifer Odallo and Audrey Ringler

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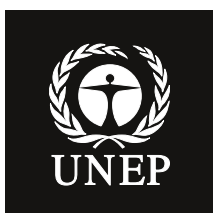
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Building Urban Resilience

Assessing Urban and Peri-urban Agriculture in Addis Ababa, Ethiopia

Demissie Gebremichael, Alemayehu Taye Gebremichael, Azeb Worku,
Muluneh Woldetsadik Abshare, Yirgalem Mahiteme Habtemariam
Girma Balcha and Dereje Gebremichael



Preface

Food production in and around cities is an integral part of the urban fabric in much of the developing world. In these regions, urban and peri-urban agriculture (UPA) plays an important role in diversifying urban diets and providing environmental services in urban and peri-urban areas. As such, there is growing interest in UPA as a strategic component of urban resilience and climate change adaptation planning. However, advocacy for UPA in this capacity is outpacing the body of evidence regarding important stressors and drivers that act on UPA. Such knowledge is especially critical in the developing world where urban areas are experiencing rapid growth and transformation. In these regions, UPA is facing intensifying pressures from urban encroachment, waste disposal, pollution, and climate change that may undermine the sector's long-term viability.

The need to better understand these critical sustainability dimensions provided the impetus for city-level knowledge assessments of UPA, whose main findings are contained in nine underlying assessment reports including this one. The assessed cities were Dakar (Senegal), Tamale (Ghana), Ibadan (Nigeria), Dar es Salaam (Tanzania), Kampala (Uganda), Addis Ababa (Ethiopia), Dhaka (Bangladesh), Kathmandu (Nepal) and Chennai (India). All of the reports and the synthesis report can be found at <http://start.org/programs/upa>. The assessments were conducted in 2012, with initial stakeholder engagement beginning in 2011. The assessments were led by city-based teams, the composition of which varied, with some of the teams being comprised predominately of researchers and other teams comprising of a mix of researchers, city officials and urban NGO representatives.

The assessments seek to better understand the changing nature of UPA systems, and the critical interactions at the land-water-climate nexus that influence resilience of UPA in rapidly growing developing-country cities. The audience for these assessments includes national and city-level policymakers, sectoral experts and city planners, the research community, and non-governmental organizations (NGOs) that interface with urban farmers and other actors within the broader UPA sector.

The UPA assessments are part of a larger project on strengthening understanding of critical links between climate change and development planning in West Africa, East Africa and South Asia. The premise for the project is that progress towards undertaking effective action to address climate change risks in these regions is hindered by low levels of awareness of global climate change, lack of understanding of the findings of the Intergovernmental Panel on Climate Change (IPCC) and other sources of scientific information, lack of location and sector specific knowledge, and the need for strengthening capacities to undertake integrated assessments that support decision making. This multi-year project has been a collaborative effort between the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP), START, the University of Ghana, the University of Dar es Salaam, and the Bangladesh Centre for Advanced Studies (BCAS).



Jon Padgham
Deputy Direct
International START Secretariat



Jacqueline McGlade
Chief Scientist
United Nations Environment Programme

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Acronyms and Abbreviations

AACA	Addis Ababa City Administration
AACBPCD	Addis Ababa City Beautification, Park and Cemetery Development
AACMP	Addis Ababa City Master Plan
AACTIDB	Addis Ababa City Trade and Industry Development Bureau
AAWSSA	Addis Ababa Water Supply and Sewerage Authority
BTI	Bureaus of Trade and Industry
CBCD	City Beautification Agency and Cemetery Development
CBOs	Community-Based Organizations
CMIP5	Coupled Model Intercomparison Project Phase 5
CIP	Climate Information Portal
CPP	Consumer Purchasing Power
CSA	Central Statistical Authority
CSAG	Climate Systems Analysis Group
DPPA	Disaster Prevention and Preparedness Agency
EHNRI	Ethiopian Health and Research Institute
EPA	Environmental Protection Authority
ETB	Ethiopian Birr (currency)
EU URGE	European Union Urban Green Environment
FAO	Food and Agriculture Organization (of the United Nations)
FEACC	Federal Ethics and Anti-Corruption Commission
FEWS-Net	Famine Early Warning Systems Network
FGD	Focus Group Discussion
GCMs	General Circulation Models
GDP	Gross Domestic Product
GHASP	Galveston-Houston Association for Smog Prevention
GTP	Growth and Transformation Plan
IADB	Inter-American Development Bank
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
LADA	Land Administration and Development Authority
MoA	Ministry of Agriculture
MSE	Micro- and Small-Enterprise
NAIC	National Artificial Insemination Centre
NAPA	National Adaptation Programme of Action
NGO	Non-Governmental Organizations
PLWHA	People Living With HIV/AIDS
START	System for Analysis, Research, and Training
UACP	Urban Agriculture Core Process
UNEP	United Nations Environment Programme
UPA	Urban and Peri-urban Agriculture

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Executive summary

This report presents the findings of a knowledge assessment on urban and peri-urban agriculture (UPA) for the city of Addis Ababa, Ethiopia, that was conducted in 2012. It examines the state of UPA in the city through the lens of intensifying urban pressures and increasing climate risks with the objective of identifying how these and other drivers potentially interact to affect the long-term sustainability of UPA, and what response options are needed to address existing and emerging challenges. The assessment is intended to:

- 1) describe the dominant characteristics of urban and peri-urban agriculture, and identify key knowledge gaps in these UPA systems;
- 2) explore the array of stressors that contribute to vulnerability of UPA systems to climatic and other environmental changes; and
- 3) identify critical areas for strengthening policies and institutional capacities that contribute to sustaining the UPA sector within the larger context of resilient cities and food systems.

Urban and peri-urban agriculture contributes to Addis Ababa's food basket, constituting a major source of the city's green vegetables, eggs, poultry and dairy products. The sector also contributes to economic vitality within the urban food system, particularly by providing livelihoods for the urban poor, though the extent to which this group engages in UPA is not well quantified.

Despite the benefits of UPA, the sector faces many pressures stemming from urban encroachment that contributes to the loss of agricultural land and forests, environmental pollution and flooding. Moreover, UPA suffers from a general lack of supportive policies and policy enforcement mechanisms needed to ensure its long-term viability despite the presence of an urban agricultural office within the city government and other measures within the policy arena that are designed to strengthen it.

This assessment examines the major features of urban expansion in Addis Ababa, environmental and climatic issues, policy and socio-economic characteristics, and the role of UPA in urban food production and supply, livelihoods and economic activities. The assessment is intended to reach policy

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