

Agriculture in an
Urbanizing Society
Volume One

Agriculture in an Urbanizing Society Volume One:

*Proceedings of the Sixth
AESOP Conference on
Sustainable Food Planning*

“Finding Spaces for Productive Cities”
November 5–7, 2014
Leeuwarden, the Netherlands

Edited by

Rob Roggema

Cambridge
Scholars
Publishing



Agriculture in an Urbanizing Society Volume One: Proceedings
of the Sixth AESOP Conference on Sustainable Food Planning

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This book first published 2016

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

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ISBN (10): 1-4438-9474-5

ISBN (13): 978-1-4438-9474-6

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PREFACE TO VOLUME ONE

The Sixth Annual Conference of the Special Working Group on Sustainable Food Planning of the Association of European Schools of Planning (AESOP) was held at the Post Plaza in Leeuwarden, the Netherlands, November 5–7, 2014. The Conference theme was “Finding Spaces for Productive Cities.” Out of the 128 abstracts received, the Scientific Committee used a blind peer-review process to select sixty-two to be presented as full papers at the Conference, representing a broad range of papers of high quality from academics, policy advisors, and practitioners. The authors worked conscientiously and under time constraints, and thanks are extended to all the reviewers on the Scientific Committee for their contributions and comments, sometimes provided in extremely short timeframes, which helped to improve the papers for presentation.

The papers selected for inclusion in these Proceedings have been slightly revised, edited, and (in some cases) updated for publication in two volumes. Volume One includes twenty-two papers submitted under Tracks 1–3: Urban Design, Spatial Planning, and Governance; the selected papers presented in the Conference under Tracks 4–9 are published in Volume Two.

The delegates to the Conference came from all continents (except Antarctica) and from thirty different countries. The range of subjects, contributing disciplines, places of origin, and the actuality and depth of the presented papers and research make these Proceedings a very good representation of the current state of the art in academic and applied research in urban agriculture and sustainable food systems.

At the end of the Conference, three awards were presented. The Scientific Committee selected the best scientific paper, which was awarded to Anna Maria Orru of Chalmers University in Sweden, for her paper *Extracting Urban Green Potential: Critical Design-Based Use of Digital and Bodily Cartography Methods*, which was presented in Track 9. The award for best oral presentation, chosen by the participants of the Conference, went to Angela Million for her Track 5 presentation of the paper *Roof Water-Farm: Participatory and Multifunctional Infrastructures*

for Urban Neighborhoods, by Angela Million, Grit Bürgow, Anja Steglich, and Wolf Raber.

The third award, for best poster, also chosen by the participants of the Conference, went to Anna Chiara Leardini and Stefano Serventi for their clear poster presentation of *Via Emilia: Infrastructure for Cultural Landscape & Food Heritage*, which is published in this Volume, Part I, Chapter Three.

The Conference included several high-level keynote speeches, which are not included in these Proceedings. After the Opening Addresses by Isabelle Diks, Alderman of the Municipality of Leeuwarden, and Diane Keizer-Mastenbroek, member of the Board of VHL University of Applied Sciences, Conference Chair Rob Roggema made his Opening Remarks. The keynote addresses, all of high quality, were given by Dan Kinkead (Future City Detroit), Guido Santini (FAO), Greg Keeffe (Queen's University, Belfast), and Andre Viljoen (Brighton University, and chair of AESOP's Special Working Group on Sustainable Food Planning).

In addition to eighteen parallel sessions with oral presentations and design labs/workshops, there were two special sessions, one for local governments and organizations, and one for PhD candidates and young professionals.

We would like to thank everyone who contributed to the 6th AESOP Conference on Sustainable Food Planning and made it such a success.

—Dr. Ir. Rob Roggema
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INTRODUCTION TO VOLUME ONE

Part I: Spatial Design

In Part I, Spatial Design, eight contributions are collected. The thematic purpose of this part is to examine practical and innovative design examples and the application of design theory to productive landscapes in sustainable urban, peri-urban, and rural environments.

At the metropolitan level of scale, Oliveira and Morgado (Chapter One) define feasible conceptual frameworks for land use planning as the functional region for the urban agricultural food system. At the same level of scale, Wascher et al. (Chapter Two) develop a metropolitan footprint tool to assess the amount of productive land within reach of urban centers, in order to supply regional food to the metropolitan population. De Vries (Chapter Five) proposes to use urban metabolism as a model to increase sustainable urban food production. Mylonaki et al. (Chapter Six) identify urban agriculture as a way to advance urban quality of life and smart living at the neighborhood level. Focusing on a local level, Grichting et al. (Chapter Four) elaborate local designs of productive urban projects in order to become less dependent on scarce resources, from a governmental and community perspective. Leardini and Serventi (Chapter Three) use a more philosophical approach for taking the cultural heritage of the Via *Æmilia* as the basis for introducing productive landscapes. Holistic thinking, emphasizing education and an open dialogue with locals and farmers, can be found in chapters Seven and Eight: Margaritis and Jauslin (Chapter Seven) upgrade the education of farmers and the attitude of locals in an accessible landscape, managed by agricultural scientists, that is allowed to evolve according to their demands; Buchanan (Chapter Eight) proposes an alternative agricultural model, which rethinks western production methods in a demonstration project that combines farming aspects with education in order to re-establish the relationship between food, farming, and the land. Part I herewith offers a wide range of papers at different scales and written from different perspectives and backgrounds. It combines insights from eastern, western, and southern Europe, Qatar, and New York.

Part II: Urban Planning

In the Urban Planning section of this volume, eight papers are collected. These papers are related to the thematic topics of Part II: land use planning, socioeconomic aspects of planning, planning of urban functions, the city layout, and transportation. Di Donato et al. (Chapter Nine) present an analytical investigation of the relationship between the location of food and the city, within the metropolitan context, connecting it rather with infrastructure than solely with the city as such. Van der Valk (Chapter Sixteen) observes the influence of food production on the changes in patterns of behavior and land use in the metropolitan landscape, and proposes that this be used as an inspiration for future planning. The integration of food in the urban environment is an important theme. Khalilnezhad and Tobias (Chapter Eleven) review agricultural integration in landscape and urban planning in four types: multifunctional, productive, recreational, and participatory agriculture. Food production should rather be integrated into urban areas to increase resilience and the ecological base of the city. Cinà and Di Iacovo (Chapter Fourteen) discuss the integration of food planning in the urban-rural landscape as a combination of governed bottom-up initiatives and participatory planning, while Gao and Zhu (Chapter Fifteen) propose that closed urban food systems can stimulate a new kind of urbanism, combining agricultural technology, urban ecology, and planning participation. Kemper and Weltring (Chapter Ten) present a methodology to identify areas for community gardening/urban gardening, which encourages an easy understanding with landowners for reusing their unproductive sites and properties. Roth et al. (Chapter Twelve) describe the development of a toolkit for urban food production and the collaborative production of food in a regeneration area experiencing economic decline and demographic change. Brabec (Chapter Thirteen) questions other motivations for urban agriculture beyond food production. Many of these papers describe the way of integrating the food issue in the urban agenda and planning. Several methodological approaches and planning propositions describe how the urbanizing areas of our planet could improve the level and the amount of space for food production. The papers originate from a wide range of locations in western and southern Europe, the United States, and China.

Part III: Governance

Governance, Part III, consists of six contributions. The core themes in this section are decision-making processes, stakeholder agreements,

participative planning, and planning as process. Giacchè and Rezende Silva (Chapter Nineteen) discuss the actors, spaces, and governance models for urban agriculture as a tool for sustainable development in developing countries. Hernández (Chapter Twenty-one) describes the role of urban gardens as a contribution to three fundamental aspects of sustainable development: organic and local food, green and permeable space, and social cohesion. Arapgirlioğlu and Altay Baykan (Chapter Twenty) analyze the development of a productive urban green space as a product of effective governance under changing conditions. Kemper and Pölling (Chapter Eighteen) describe the preferential management of (urban) agriculture in an urbanizing trend to uphold the size of urban agriculture food production. Cohen and Ilieva (Chapter Twenty-two) elaborate on how cities shape new evolving food practices, and emphasize their role in food system transitions. Piepgras (Chapter Seventeen) describes the development of a digital tool to support collaborative urban planning. The papers collected in this section illustrate a broad range of governance issues. From the role of actors and institutions, the process of governance, the ways of involving stakeholders, to the development of tools—it is all coming along. The papers represent a broad set of issues and geographical areas, with locations of case studies ranging from North and South America, Turkey, Cameroon, and southern and northern Europe.

PART I

SPATIAL DESIGN

PRACTICAL AND INNOVATIVE DESIGN EXAMPLES,
AND DESIGN THEORY APPLICABLE TO
PRODUCTIVE LANDSCAPES IN SUSTAINABLE URBAN,
PERI-URBAN, AND RURAL ENVIRONMENTS

