HEALTHY AND SAFE FOOD SYSTEMS IN A MEGACITY

São Paulo is the largest metropolitan area in Latin America tackling issues with food production and supply inside the city. On the one hand, the spread of AMR and pathogens through water and food threatens health with implications for animals, humans, and their shared ecosystem. On the other hand, smallholder farmers within and around the city face obstacles accessing the means needed for the production of safe and sufficient food.

In this context, technical assistance can provide the information and resources needed to improve the resilience of the food systems. For this to be realized, researchers and practitioners need to work together providing solutions to complex problems in a connected world using holistic approaches like One Health.

COUNTRY BRIEF

BRAZIL - SAO PAULO

KEYWORDS

Urban and periurban agriculture
Technical Assistance and Rural Extensionism
AMR and food safety
Food Systems

QUICK FACTS & RESULTS

BRAZIL

One source of food contamination in urban agriculture is the irrigation water. Most of the farmers are located in peripheral (peri-) urban areas, marked by marginalization and violence. There are inequalities in the provision of technical assistance between municipalities due to different state capacity levels and governments.

Access to land and water is challenging for many farmers and affect their decision on what and how to cultivate.

RECOMMENDATIONS

• Create awareness and information sources accessible to the urban farmers on the implications of AMR and food safety.
• Establish programs for urban water management for agriculture supported by local authorities.
• Strengthen the equal provision of technical assistance and agricultural extension services across different municipalities and regions.
• Develop tailored communication approaches for agricultural producers with diverse backgrounds.
• Increase the representation and participation of urban and periurban farmer’s organizations in policy decision-making in different sectors.

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SÃO PAULO, BRAZIL

CULTIVATING FOR THE CITY: WHAT MAKES A DIFFERENCE, AND TO WHOM? THE POLICY OF TECHNICAL ASSISTANCE IN SÃO PAULO’S (PERI-)URBAN FARMS

Eliana Lins Morandi

Eliana Lins Morandi is interested in epistemology and methodologies in Applied Social Sciences. She has over 10 years of experience in research on institutional contexts, focusing on territorialized analyses, often using GIS. She usually applies mixed-method approaches, with a focus on political economy, with an emphasis on segregation and inequalities in urban contexts, and previously worked in projects involving racial justice, (peri-)urban agriculture and technical assistance to support it are key in this process, enhancing resilience (both food and cultural) by bridging rural and urban tenure structure, lack of services). This research aims to analyze the role of the national policy of technical assistance (PNATER) in different municipalities of the São Paulo metropolitan region of São Paulo in the resilience of these groups and in the fostering of urban agriculture, with different territorial and institutional contexts.

2. Considering the overall policy framework designed for the rural sector in Brazil, there is a lack of support to (peri-)urban farmers. In municipalities with political will to support urban agriculture, a more robust and innovative public policy implementation is needed. This could be achieved through institutionalized spaces of participation and new national policies being implemented at the national level taking into account the growing number of urban and states.

3. Given that public action by far-reaching and strategic importance of urban agriculture and strategic importance of urban agriculture and technical assistance (including different formats of provision), there might be a revision of the national and current national policy designed for the rural context).

1. Two of the municipalities in the study — São Bernardo do Campo and São José dos Campos — reported the use of PNATER, which is designed for the rural context). There are inequalities in the provision of technical assistance targeting agricultural areas that are not covered by PNATER. Assistance to these farmers could be more effective if it is part of a program of regionalized intervention plans.

2. Many of the obstacles can only be solved through (peri-)urban agriculture and technical assistance, though agreements between municipalities and states).

3. Given that public action by far-reaching and strategic importance of urban agriculture and technical assistance (including different formats of provision), there might be a revision of the national and current national policy designed for the rural context).

4. A national coordination to strengthen urban agriculture policies should be done, however, in a way that guarantees farmers’ continuity and retirement (specifically into the rural sector).

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MAIN INSTITUTIONS

Urban and peri-urban agriculture

Technical assistance and rural extension

Meso-institutions

Environmental justice

Public policy implementation

KEYWORDS

Quick facts & results

São Paulo, Brazil

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BUILDING KNOWLEDGE IN URBAN AGRICULTURE WATER SUPPLY IN SÃO PAULO - THE CONTEXT OF IRRIGATION, FOOD

The World Health Organization estimates that unsafe food causes 600 million cases of foodborne diseases and 420,000 deaths each year. More than half of these disease cases are due to inadequate sanitation, poor hygiene, and unclean water supply/irrigation. The Metropolregion of São Paulo, as one of the world’s largest metropolitan areas with more than 22 million inhabitants, is the urban reference to research concepts and implement solutions. Knowledge of contamination mechanisms in the urban irrigation system and on food will aim to develop evidence-based guidelines as well as specific hygienic recommendations and are essential for global disease prevention.

MANUEL GLASS

SÃO PAULO (BRAZIL)

Manuel completed a three-year vocational training in nursing. After graduating with a bachelor’s degree in physics at the University of Cologne, he took the opportunity to design his master studies to be more interdisciplinary in various fields beyond physics. In addition, he gained further experience abroad at the Department of Nuclear Energy of the Universidade Federal de Pernambuco. To continue pursuing complex and interdisciplinary research questions, he worked at the Research Center Jülich at the Institute of Biological Information Processing & Bioelectronics. Based on this project work he holds a master’s degree in physics. Manuel established a project at the University of Bonn in collaboration with the University in São Paulo and is currently a doctoral researcher in the One Health and Urban Transformation post-graduate program at the Center for Developmental Research.

KEYWORDS

SÃO PAULO, BRAZIL

Urban Agriculture
Antimicrobial Resistance (AMR)
Water Management
Foodborne Diseases
Megacities

QUICK FACTS & RESULTS

1. There are inequalities in the provision of technical assistance to avoid contamination between municipalities due to different state capacity levels and governments’ orientation.

2. Science can weigh the risks of food-borne diseases to a population through risk assessments and epidemiological investigations to help governments and producers respond appropriately with measures and advice. However, how much advice is received and accepted depends on the following factors:

   1. Transparent communication and accountability of responsible sector agencies
   2. The acceptable and understandable level of communication to a lay audience
   3. Different communication approaches due to the diversity of producers
   4. Public funding to develop and maintain irrigation sources.

LIMITATIONS & OPPORTUNITIES

It is worth pointing out that in the field of food and water safety in urban agriculture joint investigation of political-institutional, human health and environmental issues are not usually addressed together, given due to the sectorization of research and professional practice. Therefore, interactions between institutions, stakeholders and researchers usually take a lot of time, caused by their individual focus and professional languages. Thus, even in cases of network collaboration, it is often difficult to establish effective and efficient communication when it comes to impact and application.

RECOMMENDATIONS

Science can weigh the risks of food-borne diseases in a pandemic and to help governments and developmental interventions help maintain irrigation sources integrated appropriately with measures and advice. However, advice depends on the following factors:

1. Transparent communication and accountability of responsible sector agencies
2. The acceptable and understandable level of communication to a lay audience
3. Different communication approaches due to the diversity of producers
4. Public funding to develop and maintain irrigation sources.

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