The rise of urban agroforestry systems: a comparative analysis of the United States / Canada and Germany

R. Hübner¹, S. Künstle¹, J. F. Munsell², S. Pauleit¹

¹ Chair for Strategic Landscape Planning and Management, Technical University of Munich, Freising, Germany
² Forest Resources and Environmental Conservation, Virginia Tech, Blacksburg, VA, USA
Activities

Rico Hübner

- Research on systems-science, governance and socio-economics of agroforestry

John Munsell

- Research on structure and function of community food forests

www.agroforst-info.de

DeFAF Deutscher Fachverband für Agroforstwirtschaft

www.appalachianforestfarmers.org

Association for Temperate Agroforestry

www.aftaweb.org
Background

- Agroforestry systems in urban areas like community food forests are on the rise and exist in North America since at least the 1970s and 1990s in Europe.

- Urban agroforestry projects are based on intentionally selecting shrubs and trees to provide food, environmental services, personal recreation, and bioenergy for community members.
Scale & Community

• Agroforestry allows for integrated management from backyards to large farms

• Public space in built environments across North America and Europe support multistory cropping systems (food forests)

• Unlike private farms, these systems are collectively managed and used by community members

• Civic activities are as important as food production

• People build and strengthen community through management
Time & Place

in USA / Canada

in Germany
Evaluation

• Assessment according to six quantitative criteria: 1) accuracy of definition, 2) time existing, 3) information material accessible, 4) media presence, 5) actuality of information, 6) member stats.

• Qualitative descriptors: 7) hierarchy structures, 8) motivation, 9) utilization approach, 10) area farmed, 11) type, and 12) management structures.

• Case study expert interviews according to Roger’s theory of the Diffusion of Innovation, who divides trends according to:

Knowledge → Persuasion → Decision → Implementation → Confirmation
Main results

- **Knowledge**: different but similar concepts, little known in literature, relatively view projects compared to urban farming, US is seen as trend setter from Germany

- **Persuasion / Decision**: wish for independence, integration vs. segregation, (a more) sustainable use of fallow land, healthy food, community building, self-governance

- **Implementation**: trend discontinued, lack of motivation & interest not the reason, cities maintain availability of lots for development

- **Confirmation**: financial, material & workforce support needed, some professional mgmt. necessary, continued member acquisition necc.
Recommendations

Knowledge

Persuasion

Decision

Implementation

Confirmation

Manage doubts & fears, e.g. Strategic Niche Management (SNM)

Provision of framework conditions, expert knowledge & mgmt. advise

Opening up: e.g. Information Nudges

New experiences, positive feedback & prospects

Networks of experiences