To mark its tenth anniversary, the RUAF Foundation organised this international event on 19 and 20 May 2011 in cooperation with CAH Almere University of Applied Sciences. The conference took place, in a multi-functional urban farming estate in Almere, the Netherlands, with financial support from the International Development Research Centre, Canada and the Economic Development Bureau of the City of Almere.

The aim of the conference was to share and discuss the results of research, planning and implementation experiences gained in RUAF programmes implemented over the last 10 years. These experiences shed light on the potentials and limitations of urban and periurban agriculture in answering key urban challenges and building city resilience and vitality and to look at future trends and challenges in this field. Several papers presented at the conference are included in this special issue of the *Urban Agriculture Magazine*. The conference brought together policy makers, researchers and practitioners involved with multi-stakeholder policy formulation and strategic planning on urban agriculture and food security, the development of short producer-to-consumer value chains, safe productive reuse of urban wastes and wastewater, the use of urban agriculture in city climate change adaptation and mitigation strategies and the integration of agriculture in the design of residential areas.

The event was attended by 65 participants from over 20 countries, including representatives from provincial and city authorities, farmers’ organisations and NGOs from the South, international development organisations as UN-Habitat, Food and Agriculture Organization (FAO), International Labour Organization (ILO), International Development Research Centre (IDRC), Canada, NGOs, donor organisations from Europe, and universities and research institutes, including University College London and Wageningen University.

**Discussing the state-of-the-art**

The conference was organised in eight sessions spread over two days.

In the first session, Bram Huijsman (Director of International Programmes, Social Sciences Group, Wageningen University and Research Centre, and Chair of the Board of the RUAF Foundation) opened the conference, highlighting that the world’s urban population is quickly growing (to 60 percent of total population by 2030). In the context of volatile food prices, peak oil and climate change, this poses huge challenges in terms of urban poverty, food access and environmental sustainability. Urban and periurban agriculture (UPA) is receiving increasing attention at all levels as one of the strategies to reduce the vulnerability

“At a time when urban agriculture, local food supply, and sustainable urban food systems have become fashionable subjects, we decided to take stock with our partners from around the world of the substantial experience in conducting research, developing policies and implementing solutions on urban agriculture. The challenge of developing inclusive, food-secure and resilient cities is a universal one, so it is particularly important that a network of cities like the one developed around RUAF in the past 10 years shares lessons for everyone to learn and pushes this thinking forward in more cities, including in Europe and North America” RUAF Director: Henk de Zeeuw.
of the urban poor and enhance city resilience. Luc Mougeot (Senior Programme Specialist IDRC, and one of the pioneers of urban agriculture research) reviewed the history of urban agriculture and Henk de Zeeuw (Director RUAF Foundation) reviewed the activities and results of RUAF in the last 10 years.

The second session dealt with multi-stakeholder policy development and action planning (MPAP) on urban agriculture. René van Veenhuizen (Senior Advisor in the ETC-RUAF team) gave an introduction to the MPAP approach as applied in the RUAF “Cities Farming for the Future” programme. Subsequently, the experiences gained with this approach in three cases were presented: in Bulawayo (Zimbabwe) by Job Jika Ndebele (Dep. Director of Engineering Services and Town Planning, Bulawayo), in Belo Horizonte (Brazil) by Flávio M. L. Duffles (Municipal Secretary for Food Security of Belo Horizonte), and in Western Province (Sri Lanka) by Uddy Gammanpila (Minister of Agriculture of Western Province).

The third session focused on participatory innovation in small-scale urban farming, processing and marketing. Marielle Dubbeling (Senior advisor in the ETC-RUAF team) presented the methodology applied in the RUAF “From Seed to Table” Programme. A selection of three cases was presented: Bridget Impey (Manager of Harvest of Hope) presented the Abalimi Bezekhaya experiences gained in setting up a fast developing organic vegetable box marketing scheme, sourcing from and offering services to groups of urban farmers in Cape Town townships in South Africa; Xiaoding Zan (Manager of the Huairou Vegetables Cooperative) presented (by video) her cooperative’s business of producing and marketing mushrooms at the outskirts of Beijing and Anaam M.F.Sakarneha (Chair of the Iraq al Amir women’s cooperative society), presented their work of green onions value chain development in Amman, Jordan.

The fourth session looked at safe, productive reuse of urban wastes and wastewater in urban agriculture. Pay Drechsel (Theme Leader Water Quality, Health and Environment of the International Water Management Institute, Sri Lanka) introduced the topic; Julio Moscoso (Senior Consultant Wastewater and Sanitation, IPES) presented (by video) experiences in Lima with evidence-based policy development related to multi-functional reuse of urban wastewater; and Olofunke Cofie (Volta Basin Leader for the Challenge Programme on Water and Food of the CGIAR, Ouagadougou, Burkina Faso) talked about advances in the recovery of municipal waste resources for improved productivity in urban agriculture, with examples from Accra, Ghana. She also presented results of a recent review conducted by IWMI and commissioned by the Bill & Melinda Gates Foundation.

The fifth session showcased recent research regarding the socio-economic impacts and financing of urban and peri-urban agriculture. Mark Redwood, MSc (Programme Leader Climate Change and Water, International Development Research Centre) introduced the topic and mentioned a recent study by ODI that sought to quantify the economic impacts of UPA in the form of: (a) expenditure substitution,
(b) income through marketing, (c) income through labour and (d) price impacts that benefit urban consumers. Henk de Zeeuw (Director, RUAF Foundation) presented the results of a recent study by RUAF for IDRC and UN-HABITAT on the effects of the 2007/8 financial crisis on food security and the livelihoods of the urban poor in five cities (Colombo, Rosario, Bogota, Kitwe and Accra). Gordon Prain (Senior Researcher, CIP) presented the early results of a RUAF study for the World Bank on the socio-economic impacts of urban agriculture in four cities (Lima, Accra, Nairobi and Bangalore). Yves Cabannes (Chair of the Development Planning Unit of the University College London) presented the RUAF study on financing of small-scale urban/periurban agriculture based on case studies in 18 RUAF partner cities and also introduced the concept of a global funding facility for UPA, to ensure its survival and the fulfilment of its potential.

The sixth session explored the contributions of urban agriculture to building city resilience. Introductory presentations were given by Gaston Remmers (Chair Eco-effective Entrepreneurship in Urban Environments, CAH Almere), who discussed some key concepts and an evolutionary approach to the development of vital and sustainable cities, and Marielle Dubbeling (Senior Advisor, ETC-RUAF team), who discussed the potential and limitations of urban agriculture in enhancing cities’ resilience against the effects of climate change. Subsequently a number of cases were presented:

- Jan-Eelco Jansma (Senior Researcher Applied Plant Research, Wageningen University and Research Centre) presented the design principles and processes applied in the development of the plans for Agromere (a new residential area of Almere), which integrated agriculture in city design.
- Laura Bracalenti (Professor, Faculty of Architecture, Planning and Design of the National University of Rosario and member of the Technical Support Team of the Urban Agriculture Programme of Rosario, Argentina) presented the participatory development of productive green spaces in Rosario as a strategy for slum and livelihood improvement.
- Gunther Merzthal (Coordinator of the Urban Agriculture Programme, IPES, Peru) presented the participatory design and implementation of multi-functional urban agriculture in Bogota, Colombia, and Lima, Peru.
- Ming Liu (Director, Agricultural Committee Minhang District, Shanghai, China) presented the multi-stakeholder development of recreational agriculture in Minhang District, Shanghai.

Looking ahead

In the final two sessions the emphasis was on discussing new challenges and future priorities for urban agriculture research, policy development and implementation.

In a “World Café” session the participants shared ideas and built a consensus around three main questions:
• “What are the key priorities for future work on cities, agriculture and resilience?” Participants mentioned the role of UPA in adaptation to climate change; migration, food self-sufficiency of cities; financial mechanisms; green job creation; urban design; and emphasised the need for information and (continued support to) city platforms.

• “What is missing to address these priorities?” Participants mentioned the need for a systems approach in UPA studies; more articles in peer-reviewed journals; more funds and proper branding of (different systems/ functions of) UPA; better incentives for entrepreneurs to invest in UPA; continued capacity building; and the need to convince governments to see UPA as being integrated in city development.

• “What opportunities are available for cooperation with RUAF and/or each other?” The participants identified local and national policy development; joint learning, sharing and dissemination of good practices; training and education; collaborative research; and the identification and use of urban indicators to assess UPA’s contribution to urban resilience.

The final session of the event was a panel discussion chaired by Yves Cabannes (Chair of DPU at University College London and member of the Board of the RUAF Foundation). Representatives of international organisations were asked to comment on these main themes and the priorities that emerged during the World Café.

Rafael Tuts (Chief Urban Environment and Planning Branch, UN-HABITAT) focused on three points: integration of UPA in small- and medium-sized cities in developing countries; the need to operate and view food and energy flows at city-regional level (50-100 km radius around cities); and the need for collaboration in lobbying policy makers, financing organisations and others, for example by linking UPA to their priorities. As an example of the latter, Mr Tuts announced that the UN-HABITAT Cities & Climate Change programme is planning to embark on joint actions with RUAF network to promote integration of UPA in cities’ climate change adaptation/mitigation strategies and plans. He also discussed the need to look at how the shape and morphology of cities affect both urban agriculture practices and their socio-economic impacts.

Florence Egal (Co-secretary of FAO: “Food for Cities”, FAO) suggested that FAO and RUAF continue to collaborate and seek to link UPA to the following agendas: sustainable diets that are compatible with sustainable environmental management and biodiversity; and disaster risk management. The two organisations also need to ensure that UPA is included in the main programme of the next World Urban Forum 6 (in 2012). Ms Egal also suggested RUAF to push local partners to lobby their country representatives to bring up UPA in FAO governing bodies; and that FAO and RUAF seek decentralisation cooperation at regional level.

Mark Redwood (Programme Officer Climate Change and Water Programme, IDRC) made a plea to focus on further mainstreaming of UPA in national policy making, in city climate change and resilience plans, and in territorial development plans. He challenged RUAF to take up a lead role to make this happen.

Remi Kahane of Global Hort (a global facility for coordinated horticultural research) discussed the important link between rural and urban development; the need to better characterise the various UPA (food) systems; and the environmental services that UPA/H can provide.

Rajendra Paratian (Senior Socio–economist, ILO) expressed the urgent need to further explore the role of UPA in job creation, especially of youth, and he suggested that the (30) ILO instruments addressing agricultural workers be linked to UPA.

In his closing remarks, Yves Cabannes, revisited some key issues from the afternoon discussions, emphasising:
- the need to link to the private sector and banks to gain support for UPA as a business;
- the challenge of rebranding UPA in the context of regional food systems and ongoing debates on climate change using evidence-based data from scientific research, and based on agreed targets and indicators;
- the need for coordination between stakeholders at each level of scale (local up to global) to unfold the potential of urban farming for city vitality;
- the importance of being committed to and focused on the poor and socially excluded;
- the need to develop conceptual models tailored to specific cities (of different sizes, ecosystems, densities, etc.), and
- to continue capacity building, while also training professionals at master’s and PhD levels in UPA/FS.

He recognised the challenge in the near future of maintaining RUAF’s role by sustaining and continuing to finance these efforts. He ended by noting that over the last 10 years about USD 100 million has been spent on UPA, which is very little if put in perspective (compared to the costs of for instance a major infrastructure project in a city). UPA needs more financing and serious investment to fufill its potential, and the proposed RUAF international financing facility for urban agriculture therefore should be high on the agenda.