



PROCEEDINGS

**Technical consultation
Food, Agriculture and Cities: challenges and way forward**

Rome, Italy 24-25 September 2009

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Technical Consultation

Food, Agriculture and Cities: challenges and way forward

RUAF Foundation

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FOREWORD

On behalf of the FAO-Food for Cities Initiative, I would like to thank all participants for their active role during the consultation, their interest to share experiences and the common will to bring ongoing issues in the discussions. Presenters and contributors are also acknowledged for sharing their material. Special recognition goes to RUAF Foundation for its professional, technical and organizational support to the meeting.

Mr. Alexander Mueller, Assistant Director-General of the Natural Resources Department of the FAO, has introduced the workshop. A couple of weeks ahead the World Food Summit, he stressed the importance of dealing with the food and agriculture issues in and for the cities in order to respond to the need of the people and to bring social stability. The ongoing crisis and the existence of hot spots of urbanization make it a priority. Considering that already made solutions do not exist, Mr. Alexander Mueller asked the participants of the workshop to identify and to propose new ways of dealing with this strategic policy.

During the workshop, the different sessions showed the wide range of experiences and expertise build during the last decade either in nutrition, urban agriculture, water and natural resources management, land use planning or crisis responses. From this global picture emerged the need to have local integrated approaches. This concept now needs to be worked out.

I thank again all participants for their dedication to making this event a success and congratulate them on the results obtained. The FAO-Food for Cities Initiative commits itself to continuing paving the way forward, with its different partners, to integrate “food, agriculture and cities” on the agendas of local and national governments, FAO member states and other organizations.

Paul Munro-Faure,

Chief of the FAO NRLA unit

and Chair-person of Food for the cities multi-disciplinary initiative

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ACRONYMS

CIRAD: Centre de Coopération International en Recherche Agronomique pour le Développement

CGIAR: Consultative Group for International Agricultural Research

CSO: Civil Society Organisation

FAO: Food and Agriculture Organisation of the United Nations

FAO-AGNP: Nutrition and Consumers Protection Service of FAO

FAO-AGPC: Crop and Grassland Service of the FAO

FAO-ESAF: Household-level analysis of poverty and food security team of FAO

FAO-FOMC: Forest Conservation Service of the FAO

FAO-LEGN: Development Law Service - Legal Office of the FAO

FAO-NRLA: Land Tenure and Management Unit of the FAO

FAO-NRLW: Water Development and Management Unit of the FAO

FAO-TCER: Rehabilitation and Humanitarian Policies Unit of the FAO

FAO-TCEO: Emergency Operations Service of the FAO

FCIT: Food for the Cities multi-disciplinary group of the FAO

GTZ: Gesellschaft für Technische Zusammenarbeit (Technical Cooperation Agency, Germany)

IASC: Inter Agency Standing Committee

IPES: Promoción del Desarrollo Sostenible (Promotion of Sustainable Development, Perú)

IWMI: International Water Management Institute

NGO: Non-Governmental Organisation

RUAF: International network of Resource centres on Urban Agriculture and Food security

UNCHR: United Nations High Commissioner for Refugees

UPA: Urban and Peri-urban Agriculture

WFP: World Food Programme

INTRODUCTION

As cities expand, so do the food needs of urban areas, with a particular need for the poorest families. Changes in lifestyles have further contributed to increased urban malnutrition and chronic diet related diseases. The situation is particularly difficult in the present context of volatile food prices, since urban consumers are almost exclusively dependent on food purchases and the poorest people are the most affected. In occasion of the FAO 136th Council, new estimates published by FAO reported that “World hunger is projected to reach a historic high in 2009, with 1 020 million people going hungry every day (...) the urban poor will probably face the most severe problems in coping with the global recession, because lower export demand and reduced foreign direct investment are more likely to hit urban jobs harder. But rural areas will not be spared. Millions of urban migrants will have to return to the countryside, forcing the rural poor to share the burden in many cases”.

FAO established in 2000 the Food for the Cities (FCIT) multi-disciplinary initiative (www.fao.org/fcit) which deals with a variety of technical themes related to urban development and food security: from production to supply; from nutrition to sanitation; as well as natural resource management for environmentally sustainable cities. Units involved cut across departments (Agriculture; Economic and Social; Forestry; Natural Resources; Technical Cooperation, particularly with Decentralized Cooperation Program, and Emergencies), Regional/sub-regional offices such as Regional Office for Africa, Regional Office for Latin America and the Caribbean, and out-posted officers (e.g. Kenya). Some of its main objectives are: i) to make member countries, municipal authorities and relevant institutions aware of the need to protect and improve urban and peri-urban food security especially of poor households; ii) to make available technical guidance and capacity building tools to improve the safety, effectiveness and sustainability of urban and peri-urban food and agricultural production and post-production systems with special attention to improving livelihoods and increasing food availability, safety and accessibility; iii) to provide policy guidance at the municipal and other levels to improve the efficiency of the urban food system as an integral component of the overall food supply and distribution system, taking into account the need to enhance rural/urban linkages; iv) to promote the protection and improvement of the urban and peri-urban environment while reducing urban food insecurity.

FAO *Food for the Cities* is actively involved in inter-agency and inter-institutional collaboration on urban-related food and agriculture issues with a variety of UN, government and NGO/CSO partners. In 2006, FAO and UN-HABITAT signed a Memorandum of Understanding with a special focus on rural-urban linkages and land tenure issues and organised networking events at recent World Urban Fora. Other partners include the RUAF Foundation (www.ruaf.org), IDRC (www.idrc.ca) and the World Bank, as well as CIRAD, IWMI, IPES, the CGIAR initiative on Urban Harvest and a variety of NGO partners operating in emergency contexts.

Given the present challenges (rapid urbanisation, food price and economic and financial crises, climate change, water, energy, emergencies...) there is a clear need to expand and consolidate the network of institutions involved in food and agriculture activities related to cities, share information and identify next steps. It was for this reason that the FAO-Food for Cities Initiative, in collaboration with RUAF Foundation, organized a Technical Consultation on “Food, Agriculture and the Cities” from 24-25 September in Rome, Italy in order to take stock on where FAO is regarding this issue and where the priorities stands. A background paper for the meeting was prepared by the RUAF Foundation providing an overview of research data regarding the specific thematic of the contributions urban and peri-agriculture can make to major urban challenges like poverty, food insecurity, water scarcity and climate change, and outlining recommended policies and actions at city, national and international level to support the development of safe and sustainable urban agriculture and urban food systems (a copy of the document can be downloaded from: <http://www.ruaf.org/node/2135>).

The Technical Consultation was attended by 32 representatives from FAO, other United Nations agencies, international networks, NGOs, universities and research centres, bilateral agencies and local governments (See Annex 1 for the list of participants). The meeting specifically aimed to discuss key cross-cutting issues in various areas related to food security, urban agriculture, water, emergencies, land use planning and urban development, share information on ongoing programmes and initiatives, guide FAO in mainstreaming relevant issues in its support to member states at global, regional and local levels, partnership with relevant organization (particularly NGOs) and agree on possible partnerships and joint

activities for the next biennium. This report summarizes the discussions held at the meeting and their main outcomes.

1. THE MEETING

1.1. *Official opening*

The meeting was officially opened by **Alexander Müller, Assistant Director-General of the Natural Resources Department of the FAO**. Mr. Müller welcomed all participants and stressed the importance of the meeting. The outcomes of this Technical Consultation will be linked to key upcoming events, such as the High-Level Meeting on How to Feed the World in 2050 (12-13 October 2009) and the World Food Summit (16-18 November 2009), where heads of State and Governments will discuss the future role of agriculture and food in feeding the world in 2050 and fight against hunger. The place of food, agriculture and cities will be very important in this context, but is not yet sufficiently known.

Mr. Müller posted three questions for debate in his intervention,

1. What are the global drivers for food and agriculture?
2. What have we learnt about the high food prices and food riots in 22 countries in the past year?
3. What should we do to feed the world by 2050?

and provided the following inputs:

Global drivers for food and agriculture

By 2050, the world will have witnessed an increase in population growth to 9.5 billion inhabitants. The major part of this growth is projected to take place in developing and urban areas. For example, China will witness a 35-70% rise in urban population. Therefore food production in cities will have to play an important role.

The food crisis

The increase in food prices has eroded the purchasing power of consumers. Hundreds of millions of people were affected. The high food prices made the phenomenon of urban (and peri-urban) food insecurity very visible, particularly in the media and to the politicians, and resulted in social insecurity and instability in cities. The negative impacts of climate change will further affect urban areas. This brings us to the main question of "How can urban food production help promote urban food security and bring about social stability?"

What should be done?

All over the world, we will find "hot spots of urbanisation", where this variety of problems will come together. We need a global rise of food production and we will need a clear analysis of what the contribution of urban food production could be to solving these problems. We will need to create awareness both inside FAO, as well as among other agencies, that food production is an important tool and solution. And we do need a network of committed people and organisations to propose new ways of dealing with it. The Technical Consultation is challenged to make further steps in such discussion.

Henk de Zeeuw, Director of the RUAF Foundation, congratulated FAO for organizing this consultation and underlined the importance of putting urban food security and urban agriculture higher on the agenda of city and national governments. The recent food and economic crisis have made decision-makers aware of the growing problem of urban poverty and urban food insecurity. The urbanization process in many developing countries goes closely together with increasing urban poverty and growing food insecurity and malnutrition especially of the urban poor. Such challenges are urgent and need an

adequate response from city and national authorities and international support organisations. Urban policies need to incorporate food security considerations and become stronger focused on building cities that are more resilient against crisis. Urban and peri-urban agriculture will have to be made a key element in urban food security strategies and urban poverty reduction strategies. Urban and peri-urban agriculture not only play an important role in enhancing food security and nutrition of the urban poor, but also in stimulating local economic development, productive recycling of wastes, water management, and maintaining open green spaces. It has to be dealt with at city level, within a coherent planning framework. It will be important to promote sustainable urban food systems and review urban-rural linkages.

After these welcome addresses, **Paul Munro-Faure, Chief NRLA and Chairman of the Food for Cities Initiative**, thanked again all the participants for joining this meeting. He also thanked Mr. Henk de Zeeuw and Mrs. Marielle Dubbeling for their support in the preparation of the workshop. He presented the objectives and agenda of the meeting, which were adopted by all participants. (Agenda in Annex 2).

1.2. Session 1: Urban food security and nutrition

Florence Egal, FAO-AGNP, opened and chaired this session. She outlined the concept of urban food security, to include both food supply and distribution systems to cities as well as food production, processing and marketing in cities.

Luca Tasciotti, FAO-ESAF, started to ask participants "Why is urban agriculture important? In 2050, there will be 53 cities of over 5 million inhabitants, each requiring 6000 tons of food to be imported every day. Urban agriculture can provide an extra source of food and income for households engaged in it. Existing quantitative literature is still limited, but a study implemented in 15 countries where data are available showed that in 12 out of 15 countries, urban agriculture involves 10 to 70 % households, principally engaging the poorest households. The study also concludes that households involved in urban agriculture benefit from better nutrition, in terms of greater dietary diversity, the number of food items consumed, the amount of per capita daily calories consumed, and the amount of fruits, vegetables, dairy produce and local staple foods consumed.

Pablo Eyzaguirre, Biodiversity International, presented conclusions from the study on "Nutrition and Indigenous Vegetables in Urban and Peri-urban Agriculture in Kenya". The study found that malnutrition is due to (a) insufficient calories and proteins, (b) simplification of diets and poor quality of diets and (c) cultural erosion of food habits. The current global food system is characterised by high inputs, westernisation of cuisine, long distance transports, consumption of inexpensive staples and cheap animal feeds (more animal protein). Small-scale agriculture and urban agriculture are neglected. As a result, the poor are much more likely to develop chronic diet-related diseases than the wealthy. There is a need to increase the consumption of fruits and vegetables and build again on Africa's rich tradition of vegetable production and consumption. Vegetables are generally less available in urban and peri-urban areas and difficult to purchase by poor households.

More emphasis on local/regional food sources would result in shorter, more equitable and more transparent market chains and lower energy use (less transport, cool storage, packaging). Indigenous vegetables are a specifically well-adapted choice in urban and peri-urban agriculture systems as they are generally less demanding (low-input, less susceptible to pests and diseases, lower water needs) and culturally appreciated. Production in urban and peri-urban areas should be increased, along with improved seed production in areas of origin and training in agricultural practices, health and safety.

Joyce Luma, World Food Programme, underlined that urban food security is dwindling. Urban and peri-urban agriculture production will form important safety nets. WFP is collaborating with IASC and FAO to enhance urban food security and nutrition.

Discussion

Participants debated that urban food security requires a reliable year-round supply of nutritious and safe food. Urban consumers generally rely on purchased foods, mainly from rural areas or imported into the country. Many urban poor have since long practised urban and peri-urban agriculture (UPA) as a survival and livelihood strategy. Urban households involved in UPA are generally more food secure and benefit from a better and more diverse diet. UPA also increases the availability of fresh, healthy and affordable food, mainly fresh fruits and vegetables, for a larger number of urban consumers. However, support in quality seed provision, processing, market integration and reduction of potential health hazards caused by use of wastewater and agrochemicals, poor food handling and urban pollution is required.

In the past, we equated improving the lives of the urban poor by improving household conditions. This however seems to be a very narrow approach. There is a need to consider new indicators for improving the lives of slum dwellers, including indicators on food, agriculture, nutrition and health. Changes in food habits will also be required.

Globalization and urbanization influence diets of the urban poor, and often in a negative way (increasing problems with overweight due to increasing consumption of fried staples and junk food). Promotion of local production of fresh and nutritious food is also of crucial importance here. Sustainable urban and rural production of healthy food needs to be linked to nutrition education and improved access of the urban poor to food of good nutritional quality at affordable prices.

1.3. Session 2: Urban agriculture

Wilfried Baudoin, FAO-AGPC, introduced and chaired the session. He explained that urban agriculture is one component dealt with in the Food for the Cities Initiative, as it is considered an important strategy for the urban poor.

Gordon Prain, Urban Harvest, presented Urban Harvest, a system-wide program of the CGIAR established in 2000, doing research on agriculture in and around urban areas. Agriculture research has great rates of return. However, there has been decline in international funding to agriculture in the last 10 years, mostly for research. Moreover, there is still a rural bias in agricultural research and development. The international research agenda needs to pay attention to the agricultural livelihoods of people in urban areas. Urbanisation does not just imply the growth of cities, but also the growth of urban poverty, temporary migration, daily commuting, urbanisation of rural areas and multi-locational households. Rural-urban linkages are characterised by a wide variety of ecological and socio-economic exchanges between rural, peri-urban and urban areas. The concept of a “metropolitan region” or “a local food system” is therefore relevant, as it deals with the different shapes and dynamics of urbanisation, the interdependence city and hinterland, and the geographical aspects of development. It is however, not yet used in international agriculture research. Mr. Prain calls for important new areas of research, including:

- local food systems (connecting production, marketing and processing systems) , food security and food safety (with direct relations between consumers and producers);
- Urban eco-system health: multi-functional city greening, adaptation to climate change (e.g. flooding) and regional solid/liquid waste management;
- Policy and institutional dialogue: getting regional thinking into urban planning.

Remi NonoWomdin, FAO-AGPC, presented the outcomes of the workshop on urban and peri-urban horticulture at the African Horticulture Congress, held in August in Kenya this year. The workshop marks a period of 10 years after FAO received mandate to work on this subject (during the 15th session of Commission on Agriculture). Presentations in the workshop included examples of Kigali (Rwanda), the Democratic Republic of Congo and Nairobi (Kenya) and dealt with issues of land use planning for urban agriculture, risk management linked with waste water use, and nutrition. The workshop recommended the organisation of an international symposium on the state of urban and peri-urban horticulture, to be held in

the last quarter of 2010. A tentative program has been drawn up and participants are invited to support the workshop and participate in its implementation.

Jacky Ganry, CIRAD, advocated the aspect of considering “food, agriculture and cities” as a key challenge of this century and a major issue for agriculture research and development. The goal is to come to sustainable urban agriculture development in developing countries, through technology transfer, diagnosis and action-research. Urban and peri-urban agriculture has an important role to play in continuously growing cities. It contributes, along with the other type of food production, to food supply (self consumption, fresh perishable products), has the advantage of proximity to the market (short marketing chains) and contributes to the local economy and landscape management. However, it has to be better understood to what extent urban agriculture is distinct from rural agriculture: in its social role, economic functions and multi-functionality, and its constraints and opportunities for development. Research should also look at the need for inputs, water and nutrient management, pollution and new production techniques (like greenhouse production). Urban and peri-urban agriculture have an important role to play and this requires that policy makers are better informed on its functions, and that agricultural areas within the cities are maintained.

Different workshops and side events on agricultural research, food security and urban development are planned for the coming year (June 2010, Montpellier; November 2010, Dakar) where urban and peri-urban agriculture should be discussed and Urban Harvest, CIRAD, GlobalHort, FAO, RUAF and others should develop joint strategies to do so.

Discussion

In the plenary discussion also the social value of urban agriculture was mentioned and the role it can play in socially integrating children, elderly people, women and other vulnerable groups. More research is needed to look into the social, economic and political dimensions of urban and peri-urban agriculture. The research agenda should look at various components related to food production, post-harvest activities, food distribution and waste management. We need to advocate for UPA in international debates linking UPA with the need to reduce the foot print of the city, enhance responsible production and consumption and strengthen producer-consumer linkages.

1.4. Session 3: Sustainable water management

This session was **chaired by Gordon Prain, Urban Harvest**.

Jean-Marc Faures, FAO-NRLW, asked to pay attention for the growing scarcity of water and need for improved water management. “By 2025, 1.8 billion people will suffer from absolute water scarcity”, having access to less than 500 cubic metres of water per person per year. Factors affecting supply include climatic variability, climate change and the degradation of water quality, mostly in urban environments (due contamination with municipal and industrial wastes). The drivers for increased demand include population growth, food production, urbanisation and change in diets. Four broad types of measures should be taken to deal with water scarcity:

- Augment supply (rain water harvesting, use of non-conventional water sources: reuse of drainage water, use of treated waste water, water from desalination)
- Preserve quality (public education)
- Increase efficiency (localised irrigation, adoption of best practices)
- Reduce demand.

Liqa Raschid, IWMI-Ghana, highlighted in her presentation that treatment of wastewater should be promoted if possible. However, the reality is that most cities don't have the capacity to do so and that

many urban farmers use non-treated waste water for production. The issue then becomes to reduce the health risk from using this water- by taking adaptive measures in the entire food chain. Education among producers and consumers will become more important, as is increasing the awareness of local authorities and changing their mind-set (“from treatment for disposal to treatment for re-use”). IWMI has produced many guidelines, video- and training materials that can be used for influencing municipal and national policies and regulation.

Arne Panesar, SuSanA (Sustainable sanitation alliance)/GTZ, proposed inputs related to some sanitation concepts for a sustainable city of the future. SuSanA, the sustainable sanitation alliance (www.susana.org), is a working platform promoting integrated sanitation systems, with views to water and nutrient recycling. Nutrients like phosphorous will become a limited resource by about 2030. Reuse of wastewater and decentralized management of wastes (including human excreta) can help recycle these nutrients. The modern cities of the future will have to take into account agricultural production.

Discussion

The plenary discussion called for integrated management of the watershed in which a city is located, taking into considerations both upstream and downstream effects of urban water management (or the lack of it). There is also a need to promote ecological agricultural production to protect water sources from being polluted. Choice of nutrition patterns and crop selection might be guided by the crops water input-nutrient output ratio. However, water efficiency should also be enhanced by promoting localised and drip irrigation systems. Since scarcity of and competition for fresh water will increase and certain nutrients will get scarce, the safe reuse of urban waste water and organic wastes will gain further in importance.

1.5. Session 4: Land use planning

This session was **chaired by Paul Munro-Faure**

Wilfried Baudoin, FAO-AGPC, started his presentation by saying that the number one constraint to sustainable development of urban and peri-urban agriculture is the lack of secure tenure of land. Urban land use planning is essential and needs to legitimise urban agriculture as an accepted urban land use. This is well-illustrated by the city of Kigali (Rwanda) where urban agriculture was integrated in the city’s Master Plan, by:

- identifying areas suitable for urban agriculture with help of GIS inserting the reserved agricultural areas in the city development plan,
- and formalising a decree for their protection.

The integration in the Master Plan needed to be backed up by a facilitating legal framework, and an active enforcement of such a law, to ensure that agricultural land is preserved over a longer period of time. The role and support of the Mayor was crucial to this effect.

Margret Vidar, FAO-LEGN, complemented this last statement by presenting examples of enabling legal frameworks for urban and peri-urban agriculture. Though urban agriculture is often not mentioned, it can be linked to international law and specifically:

- right to non-discrimination
- right to food, to housing
- right to participate
- right to property.

Several international Declarations have been produced on urban agriculture, the Declaration of Dakar, The Hyderabad Declaration, The Quito Declaration (2002). National legislation and environmental laws

(conservation, soil, pollution...), planning laws (national, municipal) and Municipal regulations (e.g. permissions and restrictions regarding public and private land use) impinge on urban agriculture. Awareness and policy formulation needs to take place at both national and municipal level. Changes in national legislation may be required as the authority over urban land use may lie with national governments, and national legislation may hinder or facilitate actions at municipal level. Finally, in some cities, mainly in North America, food councils have been established and food charters have been elaborated which have been adopted by municipal bodies after consultation (see for example the food charter of Toronto). Such food charters and food policy councils can provide useful models for developing countries.

Michelle Gauthier, FAO-FOMC, presented an approach to regional planning for greener cities. The cities of Brazzaville (Congo) and Beijing (China) integrate forestry and agro-forestry in their urban planning systems, not only for landscape purposes or food production, but also for environmental protection, to mitigate the impacts of climate change and to improve urban water management. Trees and forests in the city need to be an important component of city's land use planning. Green areas in the city may become a recipient for carbon-credits in the near future.

Andrea Calori, URGENCI Network and Milan Polytechnic University, closed this session with his presentation on the management of land use in peri-urban areas around Milan, where will be held the Universal Exhibition Milano 2015 "Feeding the planet, energy for life". New food production in Milan is driven by "local" markets" and consumer demand for a better balance between city and country side, high-quality open and green spaces, new producer-consumer linkages and environmental and food biodiversity. The new Agricultural Park for Milan has tried to include these elements after consultation with community groups, designers and planners. Involvement of agricultural, social and economic disciplines was important in this process.

1.6. Wrap-up of the first day

The objective of this first day of the Technical Consultation was to look at different areas of work that all impinge upon urban food security. **Marielle Dubbeling, ETC Urban Agriculture/RUAF** recalled the rich variety of presentations during the day and highlighted three outcomes achieved so far:

- Important questions guiding the further research and development agenda have been identified:
 - o To what extent has urban agriculture been an effective mitigation strategy to food and economic crisis?
 - o To what extent can urban agriculture, and specifically urban forestry, be a recipient for carbon credits?
 - o What laws and regulations at national and municipal level are available / needed for development of safe and sustainable urban agriculture?

- Some first recommendations have been outlined:
 - o The need to integrate food and agriculture related indicators in monitoring improvements of the lives of slum-dwellers (MDG 7)
 - o The need to develop educational materials for producers, consumers and local authorities,
 - o The need to integrate urban and peri-urban agriculture in city and regional planning.

- And areas for collaboration were identified:

- Collaboration in cities where various organisations are active,
- Up-scaling municipal experiences to national level with help of international organizations,
- Collaborating in events at international level

1.7. Session 5: Cities and crises

Jeff Tschirley, FAO-TCER, opened and **chaired this session** of the second day of the Consultation and spoke about how urban issues, food and emergency are linked. For example, in Pakistan, more than 1 million people are displaced, many of them seeking refuge in camps or urban areas. Feeding these people is in important concern of FAO, WFP, UNICEF and UNCHR. A lot of budget is spent on seeds, inputs and livestock to help maintain agricultural livelihoods in crisis situations. However, this is never thought through from an urban context, where refugees are more difficult to identify and cannot be isolated from their (often also poor and marginalized) urban surrounding.

Florence Egal, FAO focal point for the IASC Task force, then talked about how emergency is a main field of action for FAO. FAO is member of the Inter-Agencies Standing Committee Task Force chaired by UN-HABITAT on meeting humanitarian challenges in urban areas. Emergency organizations work both in cities as well as in rural areas (refugee camps). Humanitarian actors wanted to work on new way of working in the cities. There should be a shift from merely looking at shelter, to also look at food and agriculture. NGOs and the UN community should work together on this. A strategy paper is being developed by the IASC to further discuss this issue and propose possible lines of action. The IASC among others stresses that much more emphasis should be given to enhancing local food production and building more resilient cities to reduce vulnerability to food and economic crisis. The IASC also asks for more attention to enhancing food production by refugees and strengthening their income earning capacity rather than just distributing food aid.

Sylvie Wabbes Candotti, FAO TCEO, spoke on her turn about a concrete example of a FAO supported emergency response in urban and peri-urban areas in Port-au-Prince, Haiti, where 70 % of the population lives in townships. FAO is supporting vegetable growing and poultry production in these areas, by providing technical assistance. Difficulties encountered include security problems, lack of space, denigration of agriculture activities. The programme is on introducing the concept of "self-help" (shifting the mind-set of people from receiving support to helping themselves) and enhancing the sustainability of the activities (saving parts of the harvest/income for investing in the next growing cycle). Cooperation with local NGOs can help to make the operation more sustainable, as can promotion of more commercial activities (production of compost, producing vegetables for the market instead of selling low-cost imported products) next to production for home consumption. Nutrition and access to water should be important attention points.

Michelle Gauthier, FAO FOMC, argued that integrated watershed management should be an important component for disaster prevention and mitigation. Maintaining tree covers are for example important to combat erosion, enhance water infiltration, and for sustainable water and natural resource management. Urban forestry furthermore helps to improve air quality, reduces urban warming, and enhances urban biodiversity, while providing fuel, food and reducing urban poverty.

Discussion

The plenary debated that many refugees and Internally Displaced Persons that go to the city never return to their rural homes. If this observation is correct it seems to be crucial that emergency assistance from an early moment onwards includes a development component and especially local food production related activities. Some cropping systems and technologies allow for a first harvest within a very short period of time. It was concluded that disaster risk management and preparedness should look at both

rural and urban contexts. FAO should help move from humanitarian to development assistance, integrating food production as an element in food-aid and emergency assistance from the start. FAO has a lot of expertise that could be built upon, while collaboration with NGOs will be key, to help scale up initiatives.

1.8. Session 6: Institutional issues in urban areas

This session was chaired by Gordon Prain, Urban Harvest

Marielle, Dubbeling, ETC Urban Agriculture/RUAF, presented RUAF's experiences with municipal policy making on urban agriculture. RUAF Foundation, the international network of Resource centres on Urban Agriculture and Food security is active in 20 cities in 17 countries. RUAF developed two programmes, the Cities Farming for the Future Programme, promoting multi-stakeholder policy making and action planning on urban agriculture and the "From Seed to Table" programme, that focuses at strengthening of urban agriculture value chains and urban producer organisations. Local and national governments support urban agriculture for purposes of food security and poverty alleviation (creating a more inclusive city), local economic development (productive city) and/or improved environmental management (creating a healthier city). Examples from Bulawayo (Zimbabwe) and Rosario (Argentina) were presented which show how cities have included urban agriculture in their annual budget and city development plans, helped improve the livelihood conditions of urban farmers and promoted income and employment creation at city level (also through small scale agro-industries). There is however still need for further awareness raising and policy lobbying, especially at the national level in order to enhance national support for municipal initiatives regarding zoning of land for urban agriculture and provision of financial and technical support to urban producers.

Paola Castelgrande, FAO Decentralized Cooperation Programme, presented FAO's city-to-city cooperation programme, pioneered by Italy, and now supported by Spain, France and Belgium. Successfully established city partnerships include the following:

- Milan – Dakar (Senegal)
- Rome – Kigali (Rwanda)
- Veneto Region – city of Teresina (Brazil)

The programme is very result oriented, and characterised by high delivery rates due to direct involvement of local authorities, multi-level partnerships and increased ownerships. She calls for strengthening of the programme by identifying complementary sources of funding, promoting national/local partnerships and showcasing best examples in the upcoming Milan Expo 2015 "Feeding the planet, energy for life".

Arthur Getz Escudero, HEIFER International, presented North-American examples of local food systems and urban-rural linkages for food security and vibrant markets and real weaknesses. Public procurement, for school lunches for example, can be an important driver to stimulate local food supply. Consumer interest to "know your farmer, know your food" is another driving force. The city of New York (USA) provides an interesting example of how new local food policies are brought forward and put into practice. He presented an example of how to have a better awareness and commitment of local authorities.

1.9. Session 7: Way forward and inter-institutional collaboration

This session was co-chaired by Julien Custot, FAO, and Henk de Zeeuw, ETC RUAF

In this final session, two working groups were formed to discuss:

- a. What are the key messages and recommendations regarding the topic of urban food security that we want to be presented at the World Summit on Food Security (and other events) to key actors that define the policy agenda?

- b. What are concrete actions that can be developed at local and national level?

Working group results were discussed in plenary and included the following:

Key messages

By 2050, the world population will increase from 6.5 billion to 9.5 billion. This population growth is expected to take place in developing countries and urban areas. Countries like China and India for example will witness a 35-70% rise in their urban population. Feeding this urbanized world in 2050 is a major challenge we have to respond to. The place of food and agriculture in cities will become increasingly important, though is as yet not sufficiently acknowledged.

The recent food and financial crisis have made the problem of urban food insecurity very visible. Hundreds of millions of people were concerned. The purchasing power of urban households, mostly all net consumers, had been eroded. Social unrest has predominantly hit urban and peri-urban areas. The negative impacts of climate change will further affect these urban areas. Food security and social stability are intrinsically linked. **Food production in and around cities through urban and peri-urban agriculture will have to play an important role in responding to these challenges.**

This also requires that **urban-rural linkages need to be reassessed / redefined**, looking at a dynamic mosaic and continuum of production systems in a broader territorial urban or metropolitan food system linked with urban planning. Urban food supply, production, processing and marketing are interlinked and should mutually strengthen each other. This includes the need for protecting and preserving agricultural land areas and open spaces, promoting sustainable management of land and water resources and productive recycling and safe reuse of waste and wastewater. Food processing and marketing should also be promoted, linked to improving access to healthy and nutritious food.

Similarly, **responses to humanitarian disasters require integrating an urban and development perspective –looking at food and agriculture- from the start of any emergency response project.**

Recommendations

The Technical Consultation identified the following key areas of collaborative work:

From a global perspective

Considering:

- the increase of the urban population with 3 billion people by 2050,
 - that this increase of urban population will mostly take place in the developing countries,,
 - and will increase social instability and urban food insecurity
1. Food production in and around cities will have to play an important role,
 2. Links between urban and rural areas need to be redefined, in order to ensure a continuum or a dynamic mosaic of production systems,
 3. And the concept of urban food systems will need to be redefined taking into account the city and its hinterlands, metropolitan territorial systems and the concept of food miles and food prints.

Possible strategies include:

1. Consolidating the rural-urban linkages in order to sustainably meet the challenges of territorial/urban food security requiring a long term political commitment,
2. Zoning and other strategies protecting agriculture land for production (including green belts, non-built up open/green space),
3. Linking the concept of urban food production to related issues and agendas on sustainable urbanization, climate change, etc. These may include:
 - Livable cities: promoting multifunctional green spaces
 - Humanitarian disasters: integrating a development perspective from the start of an emergency project
 - Food security/ nutrition: emphasizing urban food security
 - Global trends on production and consumption patterns: producer/consumer relations, food safety
 - Poverty alleviation: food production, processing and marketing as an income generating strategy
 - Transport systems: proximity and local food production
 - Sanitation: water use & recycling/solid waste management through urban agriculture
 - Energy/Energy costs/Storage: ecological footprint of the city
 - Climate change: carbon credits through green city zones/ greenbelts;
 - Natural resource management: protecting land for food production
 - Urbanization: integrating food production in slum upgrading strategies
 - Urban & Regional planning: redefining links between urban and rural areas

At local and national level, the following strategies are recommended:

1. **Taking stock of urban food security/agriculture policies, legal frameworks and programmes** that cities and countries around the world have developed or are developing with view to their systematisation and wider dissemination.
2. **Developing guidelines for policy makers at national and city level** regarding urban and peri-urban agriculture, livestock, aquaculture and forestry, as well as regarding urban food systems planning and development.
3. **Assisting local and national governments in the development of policies and programmes on “food, agriculture and cities”**, providing technical assistance, co-funding and increasing international funding for such programmes.
4. **Safeguarding the maintenance of the productive capacity of urban regions for sustained food production**, by assuring that important agricultural areas are taken up in city development and land use plans and are protected, by strengthening integrated management of the urban/peri urban landscape (trees, land, water) and by linking urban and peri-urban agriculture with urban environmental challenges (mitigation of effects of climate change, urban heat island effect, floods; multi-functional land use).

5. **Strengthening urban farming systems**, by strengthening organizations of urban producers, supporting technical innovation and direct marketing and supporting a shift to safer production and marketing systems.

The group also proposes:

- **Promoting uptake of urban food systems related issues in national research programmes**, by enhancing action and policy oriented adapted research, inserting monitoring/learning in all government programmes on urban food security / agriculture and promoting uptake in curricula of Universities.
- **Setting up a high level advisory panel to FAO on urban food systems**, involving main international organisations and related sectoral expertise.

2. MAIN OUTCOMES

The meeting stimulated exchange among a large and diverse group of stakeholders involved in projects, programmes and decision-making processes on “food, agriculture and cities” and related fields. Information was shared on best practices, organizational expertise, lessons learned, effective policies and opportunities for action. One objective of the meeting was to assist FAO in taking stock on where it stands and mainstreaming relevant issues in its work. The consultation came forward with a set of main messages and recommendations to be broadly shared within FAO and among its member states, as well as other partners. It is proposed that for this purpose a 2 pages advocacy paper will be prepared.

Participants explored and defined opportunities for collaboration and partnerships at local, national and international level, starting with with the World Urban Forum V in Rio de Janeiro (March 2010). They decided to put in place an email discussion list to foster further collaborative work.

The meeting calls for promoting sustainable agricultural production in urban and peri-urban areas and developing urban-centered food systems capable of meeting urban consumer demand (with a strong focus on nutrition). These should ensure urban food security, reduce urban poverty and enhance urban resilience. Recommendations at global, local and national level were outlined and all participants pledged their support to their implementation.

ANNEXES

Annex 1 – List of participants

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Annex 2 – agenda of the meeting

Day 1

9.00 - 9.20 - Official opening (Chair, Paul Munro-Faure)

Alexander Müller, FAO NR-ADG

Henk de Zeeuw, RUA Foundation

Background to and purpose of the meeting (FAO Food for the Cities), Paul Munro-Faure

9.20 - 9.40 - Round of introductions

9.45 - 10.45 Urban food security and nutrition (Chair, Florence Egal, FAO-AGNP)¹

- *Urban Agriculture and Nutrition. Empirical Evidence from a Sample of Developing Countries*, Luca Tasciotti, FAO ESAF
- *Improving urban access to indigenous vegetables in east Africa*, Pablo Eyzaguirre, Bioversity International

Plenary Discussion (30 min)

10.45 - 11.15 Coffee break

11.15 - 12.25 Urban agriculture (Chair, Wilfried Baudoin, FAO-AGPC)

- *Urban Harvest: urbanization, urban food security and the international agricultural research agenda*, Gordon Prain Urban Harvest
- *Outcomes of the UPH workshop at the All African Horticulture Congress*, Remi NonoWomdim, FAO AGPC
- *How research is addressing Urban Horticulture for City Supply?: GlobalHort and Cirad implications*, Jacky Ganry, CIRAD

Plenary Discussion (30 min)

12.25 - 13.45 Lunch break

13.45 - 14.45 - Sustainable water management (Chair, Gordon Prain, Urban Harvest)

- *Growing scarcity of water and need for improved water management*, Jean-Marc Faures, FAO-NRLW
- *Reality, drivers and potential of wastewater reuse in urban and peri-urban agriculture*, Liqa Raschid, IWMI-Ghana

¹ Presentations will be max. 10 minute length

- *Sanitation concepts for the city of the future*, Arne Panesar, SuSanA (Sustainable Sanitation Alliance) / GTZ, Eschborn

Plenary Discussion (30 min)

14.45 - 15.15 Coffee break

15.15 - 16.15 - Land use planning (Chair, Paul Munro-Faure, FAO NRLA)

- *UPA in Kigali Master plan*, Wilfried Baudoin, FAO AGPC
- *Enabling legal frameworks for urban and peri-urban agriculture* – Margret Vidar, FAO LEGN
- *Regional planning for greener cities*, Michelle Gauthier, FAO FOMC
- *Changing the land use in peri-urban areas of Milan through new food productions driven by "local" markets*, Andrea Calori, URGENCI Network and Milan Polytechnic

Plenary Discussion (30 min)

16.15-17.00 Wrap up

17.30-20.00 Cocktail (Caracalla room, 8th floor cafeteria)

Day 2

9.00 - 9.15 Opening and agenda for the day (Chair, Paul Munro Faure)

9.15 - 10.25 - Cities and crises (Chair Jeff Tschirley, TCER)

- *Humanitarian challenges in urban areas: towards a joint strategy*, Florence Egal - FAO focal point, IASC Task force
- *FAO emergency response in urban and peri-urban areas: the example of Haiti*, Sylvie Wabbes Candotti, FAO TCEO
- *Integrated Watershed Management for Disasters prevention and mitigation: examples from Brazzaville and Beijing*, Michelle Gauthier, FAO FOMC

Plenary Discussion (30 min)

10.25 - 10.45 Coffee Break

10.45 - 12.00 Institutional issues in urban areas (Chair, Gordon Prain)

- *Municipal policy making on Urban Agriculture*, Marielle Dubbeling, RUAF
- *City-to-city cooperation, FAO Decentralised Cooperation Programme*, Paola Castelgrande

- *Urban Rural Linkages and Emerging Policy Processes & Tools for Local Food System Governance*, Arthur Getz Escudero, HEIFER International

Plenary Discussion (45 min)

12.50 - 14.00 Lunch break

14.00 - 17.30 Way forward and inter- institutional collaboration (*Chair, Henk de Zeeuw*)

3 break out groups and plenary discussion (14.00-17.00 hrs)

Group 1 Urban and peri-urban food systems, key messages (Mexico room)

Group 2 Key areas of work and strategies (ES meeting room B540)

Closure of the Consultation by Paul Munro-Faure