



Food and Agriculture
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United Nations

TREES CONNECTING PEOPLE IN ACTION TOGETHER

**“Developing guidelines for decision and policy makers:
trees and forests for healthy cities”**

Meeting proceedings

**Glasgow, United Kingdom
30 - 31 May 2011**



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FOREWORD

In 2008, for the first time in history, the global population shifted from being predominantly rural to being mainly urban and this trend is set to continue. Addressing the needs of urban dwellers is therefore crucial to achieve the Millennium Development Goals (MDGs), particularly MDG 1 “Eradicate extreme hunger and poverty” and MDG 7 “Ensure environmental sustainability”. The impact of extreme landscape degradation and those related to climate change has increasingly affected urban areas in terms of floods, droughts, landslides and extreme winds. This has raised the attention of all societies on the need to improve land management and optimize tree cover for more resilient and sustainable cities.

Urban and Peri-urban Forestry (UPF) can contribute to address a range of international challenges including climate change mitigation and adaptation, food supply, health and well-being, jobs and income generation, biodiversity conservation, watershed management and disaster risk prevention (e.g. floods, landslides, droughts, extreme winds and weather events). Urban trees provide ecosystem services such as carbon sequestration and stormwater mitigation and also provide public benefits that through adaptive management can address present and future urban needs.

However, the strategic economic, social and environmental role of trees and forests for cities is not widely recognized. Existing forests in both cities and their surroundings suffer consequences of neglect, climate change, unsustainable exploitation, land claims in dispute for urban development and a lack of investment. A main cause of weakness for UPF is the poor institutional framework in some regions and the historical absence of an organization acting as a catalyst at the international level. Instances of good practice are normally the result of individual initiatives at the country or city level. Good practices are infrequently shared and there is a lack of dialogue among professional sectors, communities and institutions. It is important that the forest sector, cities and countries devise ways to raise the status of UPFs, increase knowledge of what represents good practices and provide access to robust policy tools that help urban planners make informed policy decisions about urban forestry management.

To raise awareness and improve UPF practice at all levels requires a strong commitment from policy makers and decision takers. Information needs to be tailored to their needs, highlighting evidence, principles and key strategic actions that optimize the benefits of UPF. In particular these stakeholders require planning tools and assistance to guide long term investment decisions. In response to this need, the Forestry Department of the Food and Agriculture Organization of the United Nations (FAO) has initiated an international effort leading to the preparation of “Voluntary Guidelines for Policy and Decision Making promoting Urban and Peri-urban Forestry” to be published in 2014.

In this context, the FAO invited experts and institutions to participate to an inception workshop held in Glasgow (United Kingdom) in May 2011. The main objectives of this event were to: (i) initiate a consultative and participatory process for the development of the Guidelines (involving national, regional and international institutions); (ii) provide guidance to the Guidelines’ development process; and, (iii) facilitate collaboration for the preparation of the Guidelines. Practitioners, policy and decision makers, scientists and civil society representatives, involved at local, national and international levels came from municipalities and decentralized authorities, government and civil society, and from forestry, agriculture, landscape and energy sectors.

ACKNOWLEDGEMENTS

The Assessment, Monitoring and Conservation Division of the Forestry Department of FAO would like to thank all participants for their dedication in the preparation of and participation to the FAO international workshop “Developing guidelines for decision and policy makers: trees and forests for healthy cities”. The strong commitment of each of them was key to the success of the workshop.

More than 25 experts, from governmental and non-governmental organizations (NGOs), universities, research centres, private sector and FAO, coming from 15 countries participated to the two days event and their commitment was essential to identify priority actions. Sincere gratitude is owed to the presenters, who shared their knowledge and expertise.

Appreciation is also expressed to the Forestry Commission Scotland for its warm hospitality and invaluable assistance in supporting the event with administrative and financial resources.

Thanks are also extended to the FAO team in the Forestry Department , particularly to Michelle Gauthier (Forestry Officer) and Marie Lapointe (junior professional), for their support. Thanks also to Mr Clive Davis (international UPF consultant) for his assistance in the preparatory phases of the workshop and in the writing of these proceedings.

ACRONYMS

AFE	Aravali Foundation for Education
ASEAN	Association of Southeast Asian Nations
BRIC	Brazil, Russia, India and China
CBO	Community Based Organisation
CIRAD	Agricultural Research for Development
COFO	Committee on Forestry
COMIFAC	Central African Forests Commission
CUGS	Center for Urban Green Space
EFUF	European Forum on Urban Forestry
FAO	Food and Agriculture Organization of the United Nations
FCS	Forestry Commission Scotland
FLACMA	Federation of Latin American Cities, Municipalities and Associations
FOMC	Forest Conservation Service
FRA	Forest Resource Assessments
FRIM	Forest Research Institute Malaysia
HCEFLCD	High Commission for Waters, Forests and Combating Desertification
ICLEI	Local Governments for Sustainability
INIFAP	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias
ISA	International Society of Arboriculture
IUFRO	International Union of Forest Research Organizations
MDGs	Millennium Development Goals
MPAP	Multi-stakeholder Policy formulation and Action Planning
MSF	Multi Service Forum
NFMA	National Forest Monitoring and Assessment
NFP	National Forest Programmes
NGO	Non-governmental Organization
RUAF	Resource Centres on Urban Agriculture and Food Security
SAARC	South Asian Association for Regional Cooperation
UCLG	United Cities and Local Governments
UN-HABITAT	United Nations Human Settlements Programme
UN-REDD	United Nations' collaborative initiative on Reducing Emissions from Deforestation and forest Degradation
UNRI	Urban Natural Resources Institute
UPA	Urban and Peri-urban Agriculture
UPAF	Urban and Peri-urban Forestry and Agriculture
UPF	Urban and Peri-urban Forestry
UPFG	Urban and Peri-urban Forestry and Greening
USDA	United States Department of Agriculture Forest Service
WIAT	Woods In and Around Towns
WISDOM	Woodfuel Integrated Supply/Demand

EXECUTIVE SUMMARY

On 30 and 31 May 2011 FAO held an international workshop entitled “Developing guidelines for decision and policy makers: Trees and forests for healthy cities” in collaboration with Forestry Commission Scotland (FCS) and Glasgow City Council. This event was a key step in a consultative and participatory process leading towards the preparation of “Voluntary Guidelines for Policy and Decision Making promoting Urban and Peri-urban Forestry”. Experts and institutions interested in participating in the guidelines development process were invited to this meeting, which attracted 29 people from 15 countries from various regions, as well as the United Nations Human Settlements Programme (UN-HABITAT).

A total of eight workshop sessions, followed by the extraordinary meeting “Regional Mobilization Session for Urban Forestry Guidelines Development: How to implement key recommendations of the FAO Workshop (30-31 May 2011)” took place. An annotated table of contents for the Guidelines and a Concept Note were the key source documents for the workshop.

Presentations on international and regional institutions to cities and countries allowed the participants to draw information related to the thematic and geographical development of the guidelines. The need for facts and figures demonstrating the benefits and convincing policy makers to promote trees and forests as a key element for sustainable city development was stressed. Participants drew out key messages for UPF promotion among the target audience of decision makers and their advisers.

The workshop participants agreed that further information should be gathered in support of the UPF Guidelines development process and that an international glossary of UPF related terms would aid inter-geographical, disciplinary and sectoral understanding and dialogue. It was also agreed that the development of the Guidelines should be accompanied by a communication strategy. Regional mobilization was also considered important. A series of recommendations emerged, including:

- 1) The need for the Guidelines to address cities of various sizes in different regional contexts;
- 2) emphasizing the key role of land in private ownership;
- 3) The use of the term “themes” instead of “guidelines”;
- 4) The need of targeting policy and decision makers, and their advisers;
- 5) The need to have strategic communication programmes;
- 6) The need of producing an international glossary of UPF terms;
- 7) That the term “forestry” may not be the most appropriate one in urban and multisectoral settings; “green infrastructure” might be better;
- 8) That a regional platform for communication is needed;
- 9) That a virtual network for UPF practitioners could be coordinated through FAO; and
- 10) That international meetings such as this one are important to bring actors together and accelerate the process of accomplishments.

Fifteen themes emerged from the discussions are to be carried forward into the production of the draft Guidelines, based on three overarching clusters:

- 1) Governance, planning and accountability;
- 2) Good practices of natural resources management for economic, ecological and health benefits from UPF; and
- 3) Delivery support mechanisms.

INTRODUCTION

FAO, in collaboration with FCS and Glasgow City Council, held the international workshop “Developing guidelines for decision and policy makers: Trees and forests for healthy cities”. Within FAO, the workshop was organized by the Forest Conservation Service (FOMC), in collaboration with other Forestry Department units and the multidisciplinary initiative on urban issues “Food for Cities”.

The two-day workshop took place in Glasgow, United Kingdom, from 30 to 31 May 2011. There was also an extraordinary session on 2 June 2011. The workshop was followed by the 14th Annual Conference of the European Forum on Urban Forestry (EFUF), organized by FCS in the same city (1–4 June 2011).

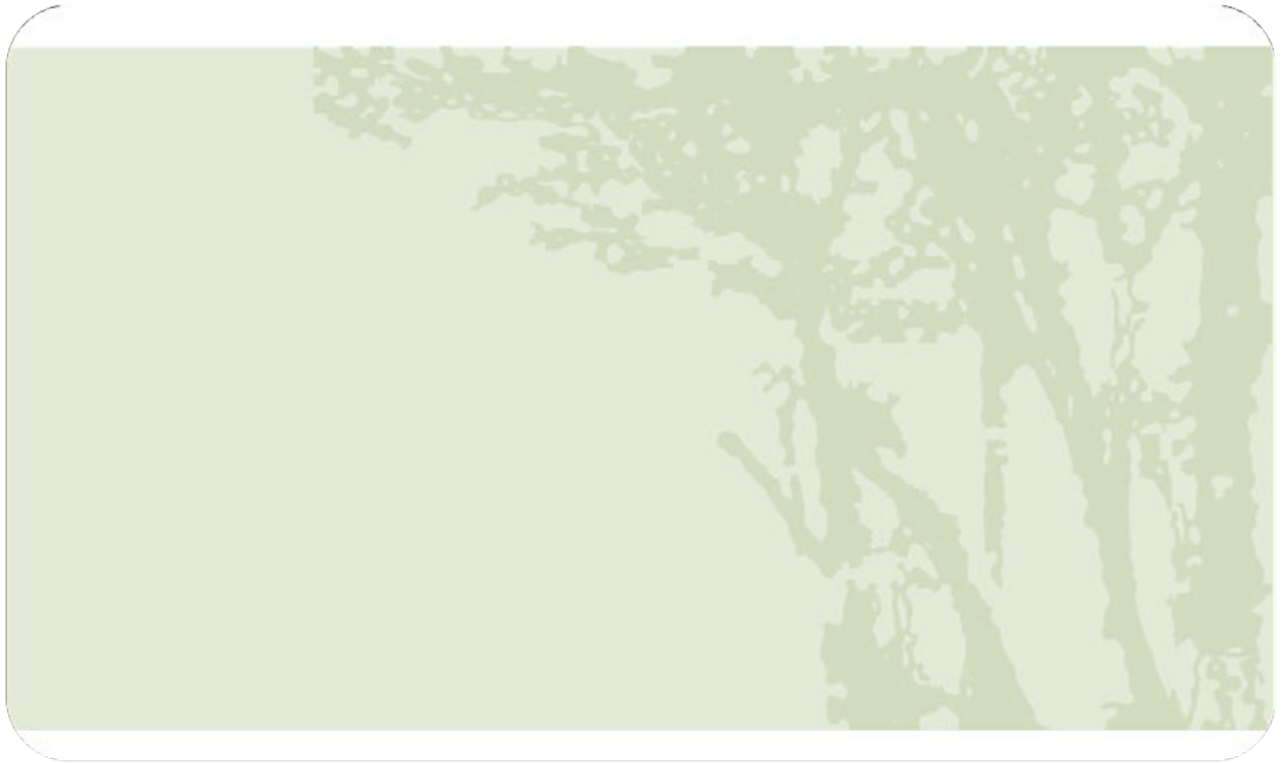
There were 29 participants from 15 countries representing institutions such as the International Union of Forest Research Organizations (IUFRO), the Resource Centre on Urban Agriculture and Food Security (RUAF), the Agricultural Research for Development (CIRAD) and from city administrations of Porto Alegre (Brazil), Bogotá (Colombia), Philadelphia (United States), and New Delhi (India).

The aim of the workshop was to support the development of the “Voluntary Guidelines for Policy and Decision Makers promoting Urban and Peri-urban Forestry” that will be published in 2014. This inception workshop is a key step in a consultative and participatory process inviting national, regional and international institutions to provide guidance, collaborate in the preparation, and promote local participation and ownership of the guidelines. In fact, this workshop followed other FAO international meetings on UPF in Bogotá (2008) and Rome (2009) where the need to develop Guidelines was clearly stated.

The methodology proposed to develop the Guidelines as a tool for improving UPF practice consists of three components:

- 1) Communication/outreach strategy (raising awareness, seeking inputs from countries and regions, and facilitating the validation of the Guidelines);
- 2) Formulation of the Guidelines (based on a participatory approach); and
- 3) Resource mobilization (including participation by institutions, cities and countries with the aim of promoting the use of the Guidelines and putting in place regional networks of stakeholders).

The goal of the Guidelines with a shared vision for food security and poverty alleviation is in line with FAO’s mandate and the “Forest and Trees for Healthy Cities: Improving Livelihoods and Environment for All” concept.



Part 1. Sessions

SESSION 1

WORKSHOP OPENING AND INTRODUCTION OF PARTICIPANTS

Workshop opening

Opening presentation from the Forestry Commission Scotland, United Kingdom, by James Ogilvie, Forestry Commission Scotland

Mr Ogilvie, representing FCS, welcomed participants to the workshop. His opening presentation highlighted the role and the results of the activity of the FCS, an organization funded by the Scottish Government, whose mission is to protect and expand Scotland's forests and woodlands and increase their value to society and the environment. FCS, serving as part of the Scottish Government's Environment and Forestry directorate, is strongly committed to advise on implementing forestry policy and managing the national forest estate. It supports ministers, develops and delivers policies, regulates and supports forestry sector, and manages national forest estate.

Mr Ogilvie underlined that although 81 percent of Scotland's population lives in urban areas, only 9 percent of urban areas are covered by forests. Forty-three percent of the 17 percent of forested land in Scotland is owned by FCS. Thanks to good management, the forest sector provides jobs for 30 000 people, both in forest management and in wood-processing, haulage, etc. Timber production is growing and will increase from 6.5 million m³ to 10 million m³ in 2015. The industry is worth over USD 170 million per year at forest gate and 1.02 billion USD per year at factory gate. In the forest sector, USD 1.7 billion was invested over the last decade and USD 60 million per year was provided for non-state forestry in grant aid.

FCS is also responsible for the Scottish urban forestry programme *Woods In and Around Towns* (WIAT), a programme focuses on improving quality of life in cities and towns. Since the launch of WIAT in 2005, FCS has made major investments in this programme. From 2005 to 2011 more than USD 82 million were spent; 1 400 ha of new woodland were created; more than 4 000 ha of land was acquired by FCS to support the delivery; 610 000 more people gained access to local woodland; the WIAT Challenge Fund Applications resulted in over 150 projects; 400 km of footpaths were created or upgraded. The next phase of the WIAT (2011-2014) has evolved to include a stronger emphasis on the role of urban woods in delivering environmental and economic benefits, such as helping to adapt to and mitigate the impacts of climate change, and create better places for business to locate and people to live.

Round table of self-introduction of the participants

Participant presented themselves, their background and interests in participating to the workshop.

Background of the Guidelines development, including FAO actions in Urban and Peri-urban Forestry. FAO, Urbanization and Forestry, by Michelle Gauthier and Clive Davies, FAO

Ms Gauthier introduced the Guidelines development process and the work of FAO in UPF. FAO's mandate is for a *World without hunger*. To achieve this end, FAO puts information within reach, shares policy expertise, provides a platform for nations and brings knowledge to the field.

Over the last two decades, the world population slowly switched from rural to urban. In 2050, 70 percent of the world population will live in cities. This means a rise of three billion people in urban areas, mainly in less developed countries, and consequently, the needs of vulnerable urban families will need to be met.

Urbanization processes often cause chronic degradation of natural resources. The consequent loss of forests and tree cover and the impacts of climate change and extreme events exacerbate the difficulties faced by cities and particularly by the urban poor. They lead to degraded watersheds and consequently increase flood and landslide risks. City dwellers can also face humanitarian crises such as natural disasters, conflicts and wars. When the right to food is not fulfilled social instability grows. Thus countries urgently need to provide solutions. The Millennium Development Goals and the World Food Summit's goals will not be achieved if appropriate attention is not given to cities and rural-urban linkages.

An increasing number of countries are requesting FAO's support to address urban related problems that can be aggravated by various demographic or financial crisis, soaring food prices, disasters and climate change. Regarding urban issues, the "Food for the Cities" multi-disciplinary initiative brings together various FAO departments and decentralized offices to address the challenges of food and nutrition security in an urbanizing world, particularly for the poorest households. It promotes a food system approach centred on cities, including the management of natural resources with strengthened urban-rural linkages.

FAO's UPF program answers country needs by offering support on good practices, resources mobilization, networking, knowledge sharing and policy development in various socio-economic, ecological, political environments. UPF has no geographical or administrative limits and aims at linking rural and urban worlds, as well as building a "Tree Security Net for Urban Food Security and Livelihood Improvement. The priorities for action are centred around: developing tools for decision-making and planning through the UPF Guidelines; mobilizing resources; developing local practices; and, promoting merging agendas by greening the urban agenda and by urbanizing the green agenda.

There are many examples of FAO actions in regards to UPF, such as:

- Urban Forestry Strategy and Action Plan (Bangui, RCA; Niger; N'Djamena in Chad; Brazzaville in Congo);
- Regional Forestry Outlook in West and Central Asia;
- Woodfuel Integrated Supply/Demand. Overview Mapping (WISDOM) for cities;
- Desertification and Green Belts (e.g. Green belt of Nouakchott, Great Green Wall of Sahara);
- Climate change adaptation, UN-REDD (United Nations' collaborative initiative on Reducing Emissions from Deforestation and forest Degradation), carbon market voluntary mechanisms;
- Landscape restoration and territorial development;
- Voluntary guidelines (e.g. Planted Forests, Fire, Drylands, Right to Food, Land Tenure);
- Mountain Partnership and Watershed Management;
- Forest Resource Assessments (FRA) – Thematic study on Trees Outside Forest;
- National Forest Monitoring and Assessment (NFMA);
- National Forest Programmes (NFP).

There are two main sources of information from FAO websites: the Forestry Department UPF homepage (<http://www.fao.org/forestry/urbanforestry/en/>) and the "Food for the Cities" multidisciplinary initiative (<http://www.fao.org/fcit/en/>). Publications are available online on these webpages.

Ms Gauthier reviewed international and national events related to UPF which have taken place in the past, demonstrating that UPF issues are increasingly recognized worldwide. Another developing trend that should be strengthened is the merging of the forestry, agriculture, food security and urban agendas.

The UPF Guidelines development will take advantage of the momentum created by the International Year of Forests 2011. There will be opportunities to involve the regions through the cycle of FAO Regional Forestry Commissions from October 2011 to May 2012. The aim of this inception workshop is to start a consultative and participatory process inviting national, regional and international institutions to participate in the Guidelines development process, by providing guidance, collaborating in the preparation of the Guidelines, and promoting their ownership. The Guidelines are targeted at policy and decision makers and will be voluntary and international. The development process should be participatory, inclusive and promote networking and knowledge building at national and international levels. The Guidelines should be validated with countries, adapted to regions and result in institutional building.

Presentation of the workshop objectives and provisional agenda, by James Ogilvie, Forestry Commission Scotland

Mr Ogilvie presented the workshop objectives and provisional agenda (Appendix II).

Approval of the workshop agenda

The provisional agenda was approved with modifications by the participants (Appendix II). The main changes occurred in Sessions 1 and 6. In Session 1, as speakers Mr Sène and Mr Nizeyimana could not attend the workshop, Mr Benavides and Mr Hammoudi gave presentations respectively on UPF in Latin America and in Morocco. In Session 6, due to the presence of fewer participants than expected, there were four Regional Working Groups instead of six.

Mr Rechden was designated as the Rapporteur of the workshop at EFUF opening on the 1 June 2011 and Mr Ogilvie closed the session.

SESSION 2

INTERNATIONAL AND REGIONAL INSTITUTIONS TO CITIES AND COUNTRIES

PRESENTATIONS

- **“For a better urban future”, by Andrew Rudd, UN-HABITAT**

Mr Rudd recalled that UN-HABITAT is the United Nations agency for human settlements. It is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. Every two years they publish the well-known report on human settlements “State of the world cities”.

Mr Rudd presented the urban advantage and used the term “*synekism*” to refer the stimulus that arises from having many people concentrated in an area. In fact, three quintessential traits of cities are their density, their diversity and the opportunities they provide in terms of increasing quality of life through income generation.

He also provided some definitions. For example, emerging cities are fast growing compared to the rest of the Region. They are of intermediate size (500 000 to 1 million people) and are part of a larger urban corridor. They have a cross-border and transboundary influence and their growth is usually neither well known nor documented. The phenomenon of emerging cities is found around the globe. At the 2010 Shanghai Expo, UN-HABITAT presented a photographic exhibit of five emerging cities: Johor Bahru, Malaysia; Tetouan, Morocco; Uberlândia, Brazil; Onitsha, Nigeria; and, Hunchun, China. A city-region can be defined as an area in which intensive economic activity takes place, with no clearly defined boundaries. Usually one large city is involved, but it may be polycentric. The boundaries of a city-region often do not correspond closely to those of the local government. Mr Rudd presented figures showing the positive correlation between development of city-regions and environmental footprint.

Mr. Rudd went on to indicate that seven possible strategies have been identified for achieving sustainable urban development. Together they form an operational framework for cities to plan a transition towards a green economy.

- Embrace land mosaic patterns that provide for large green patches and more sustainable urban development.
- Promote compact cities and planned extension of urban areas. Compact cities allow for the preservation of bigger patches of natural space, while providing for connection between urbanized areas. They also allow for agglomeration economics.
- Balance strategic facilities with diversified local economic opportunities.. Over-specialization should be avoided and diversification should be promoted.
- Expand network infrastructure while getting the most out of existing networks.
- Construct greener built environments that use water and energy efficiently through regulatory approaches and incentive-based strategies.
- Protect valuable ecosystem services and biodiversity hotspots while increasing resilience to some natural disasters.

- Promote clusters of green industries and green jobs which can result in equitable urban growth with lower carbon, energy and resource intensity and economic development and increased well-being which are not at the expense of the environment.

He also indicated that Urban Poverty Reduction is often forgotten in the green agenda. Jobs should be created in new, possibly more labour-intensive sectors. It is important to involve the urban poor into decision making and supporting social entrepreneurship.

In closing, Mr Rudd introduced his vision of the way forward:

- Strategic spatial planning should be key element in UPF;
- Governance and capacity are challenges to be faced; and
- Quantitative data is needed to be politically convincing.

- **“Forestry in Brazil – Case study: Urban Forest in Porto Alegre”, by Eduardo Rechden, INOVAPOA, Porto Alegre Municipality**

The presentation of Mr Rechden consisted of two distinct parts. The first part introduced forestry in Brazil while the second part focused on how forestry is managed in the city of Porto Alegre.

The massive tropical forests in South America deliver important environmental services. In the case of Brazil, over 50 percent of the territory is still covered by forests; however, agriculture, mining and urbanization are major threats to its forests. More than 80 percent of the country’s population lives in cities, the majority of which concentrated along the coasts. Mr Rechden underlined the fact that the world’s biggest urban forest, Floresta da Tijuca (close to 4 000 ha) is in Rio de Janeiro. For almost 400 years, the region’s economy has been based on the extraction of natural resources, among which the coastal forests. Brazil is also one of the world’s main agriculture exporters.

Environmental protection is driven by state agencies as well as NGOs. Brazil’s Forest Code, dating from 1934, was reformed in 1965. Its upcoming modifications aim at reconciling the divergent needs of environmentalists and agriculture, becoming in some respects less stringent for the agricultural sector. The main changes to the code have been approved by the Federal Chamber of Deputies and are awaiting senate and presidency approval.

Porto Alegre was built at the northern end of a large coastal lagoon (formed by five big rivers) and its vegetation is characterized by elements from the Atlantic Forest and the Pampas. It is divided into five conservation units managed by the city or the state administration. These conservation units are managed to preserve, restore, recover and maintain biodiversity and protect natural resources. Ecological corridors serve this purpose, as the “Green tunnels”, green corridors which functions as a pathway for the avian fauna and help mitigate the heat island effect. The city also has a roadside planting programme according to which one tree must be planted for each of the 1.4 million inhabitants, leading to 10 000 new trees being planted every year.

Porto Alegre has created a green tax for private property. Natural forest areas in private properties are not taxed as long as the owners commit to keeping them. On the other hand, entrepreneurs must compensate environmentally the impact from construction.

Mr Rechden also presented Metropolis (<http://www.metropolis.org/>), the World Association of the Major Metropolises (Barcelona, Spain), the leading international organization that gathers cities and metropolitan regions with more than a million inhabitants. The 10th Metropolis World Congress “Cities in Transition” will be hosted in Porto Alegre from the 23rd to 26th of November 2011.

- **“IUFRO research group 6.07.00: Urban Forestry”, by Cecil Konijnendijk, IUFRO**

Mr Konijnendijk’s presentation focused on the IUFRO, more specifically on its Urban Forestry group, the activities realized from 2006 to 2010, future plans and hot research topics highlighting the European view.

IUFRO (based in Vienna, Austria) is a non-profit, non-governmental international network of forest scientists, which promotes global cooperation in forest-related research and enhances the understanding of the ecological, economic and social aspects of forests and trees. The vision of IUFRO is centred around science-based management, conservation and sustainable development of the world’s forest resources for the benefit of present and future generations. It unites more than 15 000 scientists, who cooperate in IUFRO on a voluntary basis, in almost 700 Member Organizations located in over 110 countries.

IUFRO’s Division 6 focuses on social aspects of forests and forestry and aims at:

- Developing urban forestry as an area of scientific attention;
- Improving networking;
- Promoting multi- and interdisciplinary research; and
- Enhancing the exchange of information and experiences.

David Nowak (United States) has been appointed as coordinator for IUFRO from 2011 to 2015, supported by three deputy coordinators: Sreetheran Maruthaveeran (Malaysia), Francisco Escobedo (United States) and Cecil Konijnendijk (Denmark).

Mr Konijnendijk presented IUFRO’s urban forestry activities from 2006 to 2010, among which: conferences and seminars; publications; development of standards for urban forest information (with International Society of Arboriculture, ISA); diffusion of an e-newsletter (in collaboration with the Urban Natural Resources Institute, UNRI); networking and partnerships.

Examples of conferences held between 2005 and 2010 include five editions of the EFUF: Florence, Italy; Gelsenkirchen, Germany; Hämeenlinna, Finland; Arnhem, Netherlands; and, Tulln, Austria. Furthermore, IUFRO has been co-hosting conferences in Beijing (China), Chengdu (China), Copenhagen (Denmark), Jerusalem (Israel), Kuching (Malaysia), and Yoshkar-Ola (Russia). The topics ranged from afforestation to recreation, from landscape ecology to science-practice collaboration.

Key publications include a special issue of *Arboriculture and Urban Forestry* on “Assessing Urban Forest Structure: Introduction” with David Nowak as guest editor. Proceedings were produced for the EFUF “Urban forestry: Working together for green city values” (Arnhem 2009), and for the Urban Forestry Conference “Lessons for Sustainable Development” (Kuching, Malaysia, 17 - 19 November 2009). In 2006, an article on “Defining urban forestry – A comparative perspective of North America and Europe” (by Konijnendijk, Ricard, Kenney, and Randrup) was published in *Urban Forestry & Urban Greening*.

Mr Konijnendijk introduced the Urban Forestry Data Standards Initiative, a collaboration between the ISA and IUFRO, aimed to develop an international set of data collection and reporting standards that can be used in the discipline of urban forestry. A draft document is now available on the web (<http://www.unri.org/standards/>).

As for future plans, new publications (such as a special section in *Urban Forestry & Urban Greening*) and international events are foreseen. Among these events, the 14th EFUF (Glasgow, United Kingdom, 1-4 June 2011) will focus on the theme of “green network”. In the next three years, EFUF will be hosted subsequently in Germany (Leipzig, 8-12 May 2012); in Italy (Milan, 2013); and in

Switzerland (Lausanne, 2014). Furthermore, IUFRO will contribute to the Forests and People conference held in Austria (May 2012).

Actual research themes from a European perspective include:

- Urban forests and climate change;
 - Links between urban forests and human health;
 - Ecosystem services and green infrastructure;
 - Assessment and quantification of benefits;
 - Urban forests and city competitiveness; and
 - Urban forest governance.
- **“Urban agriculture and forestry for resilient cities”, by Henk de Zeeuw, RUAF Foundation**

The presentation of Mr de Zeeuw focused on the Multi-stakeholder Policy formulation and Action Planning (MPAP) process that the Resource Centres on Urban Agriculture and Food Security (RUAF) Foundation has elaborated, as well as on the role of urban and peri-urban agriculture and forestry in climate change adaptation and mitigation.

Mr de Zeeuw first defined urban agriculture as the growing of plants and the raising of animals within and around cities. Contrarily to rural agriculture, it is integrated into the urban economic and ecological system. It is embedded in and is interacting with the urban ecosystem. About 70 to 90 percent of the vegetables eaten in a city come from less than 20 km away and 40 to 50 percent of the meat consumed comes from less than 30 km away. However, the legal status of urban agriculture is unclear.

Mr de Zeeuw introduced the RUAF Foundation (Netherlands), a non-profit organization working in 20 cities around the world, now celebrating its tenth anniversary. RUAF is an international network of eight resource centres on urban agriculture and food security (one international advisory organization, three regional NGOs, two regional offices of an international research organization and two university institutes). More information can be found at <http://www.ruaf.org/>.

RUAF has developed the MPAP concept to bring together all major stakeholders in a process of joint situation analysis, visioning, identifying strategies, action planning, implementing and monitoring. The MPAP should:

- Engage decision-makers from the beginning of such processes;
- Increase awareness and political support;
- Involve the urban poor in the planning and enhancing the social acceptability of the decision-making process;
- Improve the quality of policies and projects through dialogue between different perspectives and sets of knowledge;
- Develop partnerships and mobilizes locally available resources;
- Promote local ownership and commitment; and
- Lead to integration of Urban and Peri-urban Agriculture (UPA) in urban policies and planning, its upscaling and its institutionalisation.

Mr de Zeeuw listed some of the main actions required for the development of a MPAP:

- Inventorying the different stakeholders in UPA and analysing their role, their mandate, their interests in the topic, their activities and the available resources;
- Signing a cooperation agreement between key organizations;
- Establishing a local MPAP team trained and guided by the local RUAF coordinator;

- Conducting exploratory surveys and mapping of UPA in the city;
- Building political awareness and institutional commitment through policy briefs and seminars;
- Establishing a multi-stakeholder forum on UPA including NGOs, Community Based Organisations (CBOs), other civil organizations and private actors;
- Strategic planning on UPA involving the MPAP team and the multi-stakeholder forum to discuss proposals and take decisions different steps;
- Stimulating action and keeping participants motivated during the strategic planning process with pilot projects; and
- Formalizing a joint planning work resulting in a city strategic agenda on UPA to be forwarded to the municipal council or to one of the council committees for discussion and approval.

Having a City Strategic Agenda on UPA does not automatically lead to change. The vision and strategies identified by the multi-stakeholder forum need to be operationalized and implemented requiring a design of specific projects and their inclusion in the institutional budgets and a formulation or a reformulation of existing policies, laws, norms and regulations.

The formalisation and operationalisation of the City Strategic Agenda often is a long process that needs continuous attention and encouragement. Partners in the MPAP team tend to return to their normal duties once the City Strategic Plan is on the table, but the proof of the success of the approach is in its operationalisation and its institutionalisation into local policies, budgets, programmes and land use planning. In various cities this was done successfully, in others the process slowed down and in one or two cases stopped altogether. Periodic meetings of the multi-stakeholder forum are needed to coordinate implementation and monitor progress and results.

To encourage learning from practice, novel monitoring methods were introduced (e.g. process documentation and outcome mapping) and the impacts of the pilot projects were monitored through a local university.

Mr de Zeeuw presented the main lessons RUAF has learned in developing MPAP:

- The need for trust and joint responsibility;
- The importance of an open membership, but also for the maintenance of a core group and thematic working groups;
- The need for clear roles and responsibilities;
- The importance to put in place adequate facilitation mechanisms that focus on capacity development and sustainability;
- The need for good links with decision makers (avoiding to become associated with a specific political group);
- The key role of enhancing the visibility of results and the involvement of media;
- The priority need for integrating the Strategic Plan into the budgets and programmes of the members of the Multi Service Forum (MSF);
- The need of agreeing on monitoring mechanisms and apply them; and
- The monitoring and evaluation process through for instance the bi-annually updating of the City Strategic Agenda on UPA.

The second part of Mr de Zeeuw's presentation focused on the role of Urban and Peri-urban Agriculture and Forestry (UPAF) in climate change adaptation and mitigation in cities.

The urban poor are at greatest risk of the impacts associated to climate change because they have a low capacity to cope with the effects of climate change. In fact, urban population in developing countries is growing fast and 50 to 60 percent of urban population lives in slums which often are located in areas that are prone to floods or landslides. There are also indirect effects because 50-

90 percent of the income of poor urban households is spent on food and climate change has effects on the production in the hinterland combined with more frequent breakdowns in transport of food to cities due to floods and storms.

Therefore, agriculture and forestry in cities can reduce the vulnerability of the urban poor by:

- Enhancing their coping capacity through a reduced incidence and impacts of floods and landslides;
- Increasing their access to nutritious food;
- Providing a diversified income opportunities and “green jobs”;
- Creating a safety net when disturbances in food supply; and
- Enhancing community building and acts as a source of innovation and learning.

UPAF reduces the impacts of higher rainfall and can keep low lying zones free from construction so that floods have less impact, storm water runoff is reduced, and excess water is infiltrated and stored in the green open spaces. By applying forestry on steep slopes, building on risk prone slopes is prevented and landslides are reduced. The heat island effect is also reduced by providing shade and enhancing evapo-transpiration. Urban agriculture and forestry contribute to the reduction of urban energy use and greenhouse gas emissions by producing fresh food close to the city (hence less energy is used for transport, cooling, storage, packaging). It enables productive reuse of organic waste which will reduce methane emissions from landfills and reduce energy use in production of fertilizers. The reuse of urban wastewater in UPAF will free freshwater for higher value uses and reduce emissions from wastewater treatment. Mr de Zeeuw gave examples of cities which have included UPAF in the planning for their climate change mitigation and adaptation strategy: Toronto (Canada), Amman (Jordan) and Freetown (Liberia).

RUAF’s approach to climate change adaptation links up with major climate change programmes (e.g. UN-HABITAT and World Bank). Together they select cities that are developing a city climate change strategy and are interested to include an urban agriculture and forestry component. RUAF assists city teams in the identification of most vulnerable areas where UPAF could make a difference and assist them in integration of urban agriculture and forestry in land use zonification and slum upgrading plans. RUAF makes available models and “best practices” for different types of Urban Agriculture and Forestry, for example in productive parks, green roofs, aquaculture in flood plains, agroforestry on steep slopes, low space technologies in slum areas. RUAF offers training for trainers. They support design and implementation of demonstration projects by local actors and facilitate learning through practice. They develop indicators and tools to monitor the adaptation and mitigation impacts and co-benefits of UPAF activities. RUAF has a long standing history of collaboration with FAO on UPA, including with the “Food for the Cities” interdisciplinary initiative.

PLENARY DISCUSSION

The plenary discussion allowed participants to highlight the following points:

- A way to involve politicians is to stress UPAF’s potential to address challenges faced by cities;
- adaptive management was underlined as an important tool because of the need to learn from processes and experiences in complex systems.
- RUAF’s presentation underlined the importance of having an inclusive multi-stakeholders approach.
- Furthermore, a strategic agenda should be implemented with formalized commitments and then operationalized. A periodical evaluation and follow-up of the process is even more necessary in a context of rapid changes like in urban environments.

- There is a need for capacity building, taking into account the that institutions are generally weak in the domains related to UPF.
- The UPF Guidelines must be easily browsed to meet the needs of a diversity of regional contexts and sizes of cities. Still common grounds must be extracted from this diversity. There is a need for more evidence about the social benefits that urban forests and trees offer. Furthermore, the quality and reliability of data needs to be insured.
- Networks such as UN-HABITAT, the Local Governments for Sustainability (ICLEI) and Metropolis are excellent to reach local authorities. Building and maintaining dialogue among actors, disciplines and networks needs meetings such as the present workshop, on a more regular basis and responding to an agenda.

SESSION 3

GUIDELINES FOR POLICY AND DECISION MAKERS: EXPERIENCES FROM CITIES AND COUNTRIES

- **“Management of urban woodlands”, by Germán Tovar Corzo, Colombia**

Mr Tovar Corzo highlighted that the rapid population growth in urban areas in Latin America over the recent decades was mainly due to the mass exodus of rural populations in search of better life options, thus leading to an unplanned growth of cities. Recently, Colombia has initiated important urban infrastructures works in order to solve this issue and improve the quality of life in its major cities. The development of an integrated transport system and the construction of public facilities have been the engines of other change in cities (including the planning and management of urban forests), aimed at integrating and harmonizing environmental components that reflect a balance between nature and urban environment.

The starting point of these strategic changes is the Land Use Planning, with zoning areas for coherent and sustainable development. Urban planning and urban forest inventories allow to define urban Forestry Master Plans, with their management tools (e.g. technical manuals, local implementation plans).

Mr Tovar Corzo emphasized that the coordination between national and local regulations can be difficult. There are various laws in Colombia which apply to Urban and Peri-urban Forestry. The Environment Authority of Bogotá was created in 1990. There was subsequently a decree concerning urban afforestation in 2003. In 2007, a manual of urban forestry was adopted through a resolution from the Environment Secretariat.

Urban tree management in the city of Bogotá has become particularly important because it has been greatly affected by the district urban renovation and also because it poses high risk due to the poor physical and sanitary conditions of most of the trees, which result in many and frequent accidents for falling of branches or the tree itself.

Since 1998, Bogotá has established an institutional, legal and technical framework for the management of the urban tree cover in order to ensure higher survival rates in appropriate conditions and facilitate coexistence with the grey infrastructure (buildings, roads, etc.). A first step in this process has been a tree assessment. Bogotá developed various tools for UPF such as the Urban forestry master plan (*Plan maestro de silvicultura urbana*), the Guide of urban forestry of Bogotá (*Manual de silvicultura urbana para Bogotá - guías técnicas*), the Information system for the management of urban trees (*Sistemas de información para la gestión del árbol urbano*), and the Local plans for urban reforestation (*Planes locales de arborización urbana*).

More than 300 people implemented the urban tree survey for more than 540 days (an average of 4 320 hours per person). The urban tree survey had 43 variables of geopositioning, species identification, forest mensuration, physical state, health state. The results showed that in public areas, there are 1 066 463 trees in Bogotá for 6 763 325 inhabitants which means an average of 0.16 tree per person. It represents 2.5 percent of the surface of this zone. Forty eight percent of the trees are native species and fifty two percent exotic. About thirty nine percent were considered healthy and more than ten percent in a bad or critic condition. From 1998 to 2007, USD 16 million (coming from various sources) were invested for the management of urban woodlands. It employed 200 professionals and 800 operators.

In several countries in Latin America there is a similar trend towards recognition of the environmental benefits obtained from trees in urban areas. Trees are increasingly considered as an essential component of the infrastructure of cities to generate goods and services. Cities such as Mexico City (Mexico), Curitiba (Brazil), Rio de Janeiro (Brazil), Buenos Aires (Argentina), and Santiago (Chile) have shown signs of dynamism in the sense of creating administrative structures and lines of investment in urban tree management, mainly to reduce the effects of air pollution and the heat island.

- **“Latin American Countries”**, by Héctor M. Benavides Meza, Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP), México

Mr Benavides Meza underlined the different ecological conditions found in Latin America. These can be clustered into three major types: semiarid and arid, tropical (dry and humid) and temperate; this variation can also be found within the same country. In Latin America, sixty percent or more of the population lives in urban environments with high social and economic differences.

Regarding the role of trees and forests in cities, many politicians still have an aesthetic vision of the urban forest benefits. However, the subject is being increasingly addressed at political level, even though the focus is more on the environmental aspects than on the economic support they deserve. We can witness some advances in UPF in cities such as: Buenos Aires, which has inventories of urban trees; Bogotá, which monitors tree health; Mexico City and generally Brazilian Cities, which even has ISA chapter.

Mr Benavides Meza thinks that the Guidelines addressed to local municipalities or governments could be very useful for Latin American cities. In general, there are limited sharing of experiences and solutions among cities even the problems are common.

- **“Urban forestry and greening in India”**, by Manoj Dabas, Center for Urban Green Space (CUGS) of Aravali Foundation for Education (AFE), India

In 2000, 48 percent of the world population lived in cities. However, more than half of India are still rural. In 2001, there were less than 28 percent of the population living in urban areas. However, like everywhere else, urban populations are growing. There was low industrialisation in India until the 1990s. At the same time, the interest for urban planning grew. A heritage of the English colonization is the green areas found in cities.

UPF is needed to reconnect cities with nature. UPF could also help new urban settlers to develop a feeling of belonging to cities. Mr Dabas recommended talking about “green spaces” rather than “Urban Forestry”, because in India, forestry is considered to belong to foresters, which sectorally restricts the view on this domain. In India, in fact, UPF is not mentioned in forestry policies and there is no training of the management of green urban spaces. As everywhere else, the promotion of UPF in India would require the support of politicians. However, the local governments basically operate on their own.

The CUGS is being launched at the AFE as the first Indian institution dedicated to urban forestry and greening. It is committed to:

- Promoting a higher appreciation of the role of urban green spaces among urban planners, policy makers and citizens;
- Working with urban civic agencies to optimize the flow of tangible and intangible benefits of urban green spaces that can be enjoyed by proximate communities;

- Collecting, analyzing and disseminating useful information about technical, managerial and social aspects of urban green spaces. It held its first conference on urban biodiversity in February 2010.
- **“Strategy of the High Commission for Waters, Forests and Combating Desertification (HCEFLCD) for the conservation and the valorisation of Urban and Peri-urban Forests”, by Abdelaziz Hammoudi, HCEFLCD, Morocco**

Mr Hammoudi talked about the state of UPF in Morocco, where UPF is still an emerging issue.

There are 154 urban and peri-urban forests in Morocco which contribute to the well-being of 15 million urban dwellers. These forests are used more and more by urban dwellers looking for a connection with nature. Woodlands become incorporated in urban zones but are not always considered in the urban development schemes. However, this is opportunity to showcase and measure sustainable urban development.

The strategy of the High Commission for Waters, Forests and Combating Desertification (HCEFLCD) is to: meet the expectations of the public and at the same time ensure the durability and identity of Urban and Peri-urban Forests; preserve these forests changes that could have an impact on their functions, balance and natural landscapes; raise the awareness of the public, of future generations and of local actors about the conservation of urban and peri-urban forests.

The planning of projects to welcome visitors to urban and peri-urban forests include restoration efforts and a management which aims at respecting the capacity of the natural environment to receive visitors.

Mr Hammoudi mentioned some of the realizations of the HCEFLCD, which include the elaboration of a database on urban and peri-urban forests as well as the elaboration and implementation of regional plans for the Urban and Peri-urban Forests (*Schémas Directeurs régionaux des Forêts Urbaines et Périurbaines*).

From 2009 to 2011, USD 8.5 million were invested in projects of restoration and in planning new public facilities for visitors. These forests represent 15 600 ha in 31 cities of Morocco. The projects include 35 partners coming from the local communities and 22 signed partnership conventions. Also over 1600 ha of land were reforested in five years.

Continuing training of professionals from the forest sector is very important. For example, there is a network for continuing education in urban and peri-urban forests, and capacity building through some training alternatives. The “Guide on urban and peri-urban forests” of Morocco has just been published in 2010.

A communication strategy was implemented to raise public awareness about the conservation of urban and peri-urban forests. In 2009-2011, 6 650 children have gone on field trips in urban and peri-urban forests.

A study related to the definition and implementation of an institutional framework to manage partnerships in Urban and Peri-urban Forests at the country level is well advanced; its fourth and last phase “implementation of the reform” is in process. This partnership based strategy will be key to anticipate the needs of the Moroccan society regarding urban and peri-urban forests in a sustainable management framework.

- **“Guidelines for Policy and Decision Makers: the USA Experience and Practice in Promoting Urban and Peri-Urban Forestry”**, by James Kielbaso (Michigan State University), Sarah Low (City of Philadelphia Parks & Recreation), Phillip Rodbell (United States Department of Agriculture Forest Service [USDA] Forest Service), Charles Wade (C.S. Mott Community College), Les Werner (University of Wisconsin-Stevens Point)

Mr Kielbaso and Mr Wade talked about constraints and opportunities related to UPF in the United States, recommending both ways to motivate the policy makers and some key guidelines.

The main constraints that must be overcome are the fluctuation of political support; the limitations of municipal authority; the dominance of private ownership; the shortage of quality nursery trees; the anti-tree public sentiment; and the insufficient funding. To overcome these constraints, public awareness and engagement is paramount, and urban forestry needs to be considered as an art and science requiring trained professionals to sustain the benefits that trees provide.

The key messages proposed to address to policy makers are:

- Access to green space and trees makes people happy – Improves quality of life;
- Trees connect people positively to government; and
- Trees are a cost efficient investment.

However, motivations regarding UPF vary from stakeholder to stakeholder. Citizen motivation regarding UPF include:

- Beauty and shade – Improving quality of life;
- Property value and energy savings;
- Community pride and public recognition; and
- Being part of something.

On the other hand, the private sector has a different set of motivations, such as:

- Demonstrating social responsibility;
- Creating a “green image”;
- Seeing tangible results;
- Contributing to community improvement; and
- Gaining public recognition and prestige.

Finally, the political motivations include:

- Meeting citizen wants and demands;
- Winning votes by improving quality of life;
- Ensuring equitable access to “green” (public health benefits);
- Demonstrating cost effective solution to real problems; and
- Leaving a legacy.

Therefore, the most compelling facts for policy are that:

- “Green Cities” attract people and business (economic development);
- People pay more to live/shop in green places;
- Tree shade saves lives by cooling cities;
- Tree shade extends the life of pavements;
- Green spaces and trees slow storm water; and
- Trees create jobs and products that sell.

On the other hand, the most compelling data for policy include:

- Urban tree canopy percentages and comparisons with other cities;
- Inequity of tree canopy by neighbourhood; and
- Calculated value and benefits of trees (e.g. i-Tree).

Policy and decision makers need information from comprehensive inventories and assessments to set goals for urban forest health and canopy coverage across public and private ownerships. Tree protection laws and ordinances must be established along with funding for inspections and enforcement. Land use planning and design regulations need to be based on natural systems to sustain benefits that existing and future “green infrastructure” can provide to growing urban populations. The community of practitioners in the United States has found that positive and consistent messaging focused on the benefits of trees to public health and community well-being, including development of a shared vision for a “greener” future, is the best way forward to advancing UPF.

Mr Kielbaso and Mr Wade concluded by key recommendations to policy and policy makers:

- Hire professional managers and arborists;
- Inventory and assess tree canopy;
- Set goals to plant and manage urban forests;
- Establish tree protection laws and fund inspection and enforcement;
- Incorporate an ecosystem (green infrastructure) approach to land use planning and design regulations;
- Engage and educate public/private/political sectors;
- Focus on communicating the benefits of urban forests; and
- Consider all lands, rather than just public lands.

“Urban forest Governance: what is it?”, by Anna Lawrence, Social and Economic Research Group, Centre for Human and Ecological Sciences, United Kingdom

In the context of global shifts in forest governance, UPF represents an area of considerable progress. We have presented an overview of issues within a framework for institutions, stakeholders, processes and knowledge needed to achieve good urban forest governance. Throughout, we have discussed ‘urban forest governance’, but this term also includes the peri-urban trees and woodlands which are so important to urban populations. We have shown how this area of governance relies on a particularly diverse body of legislation and policy – diverse across sectors, and diverse across scales. This diversity brings the need for partnership, and proactive adaptive management approaches. Partnership is well developed in UPF; adaptive management is not yet well demonstrated.

A central tenet of UPF is the need for public participation. UPF is already more socially inclusive than other types of natural resource management, and has been underpinned by the emergence of new types of institutions and networks to accommodate the organizational complexity. The close connection between urban populations and the trees that improves or impedes their lifestyles, enhances interest in participation, and provides a promising base for citizen science.

There are continuing challenges. Urban forests often ‘fall between two stools’ when it comes to legislation and policy because of the diversity of resources (large woods, smaller woods, trees, parks) and ownership structures. In many cases, there are nocomprehensive policies for urban forests, but rather a patchwork of segmented policies, different spheres of interests and competition between different municipal bodies. The information base for planning and

management is often weak. Furthermore, conflicts over urban forests (and their use) have intensified and urban demands are rapidly changing.

These challenges need to be addressed at the most appropriate governance level and scale. Indeed, investing in communication, involving stakeholders and awareness raising at the local level should be a priority as this will result in increased public and political support for UPF, which will ease working to solve other problems related to the field of UPF.

A common thread across all of these governance components is the need for integration – between sectors; between urban and rural planning; between cities and countries. There are many innovative examples of policies, projects and grant schemes across Europe, and consolidation of the experience and evidence is necessary to provide a stronger basis for UPF in the future.

Our overview here suggests a wide variety of experience and innovation across Europe, with a need to take account of diversity of governance structures, and at the same time valuable opportunities for learning. In particular we draw attention to the following:

- With current levels of evidence, it is challenging to make generalisations. More comparative information is needed on what modes of UPF governance exist – and how they work (Bentsen *et al.*, 2010);
- These in turn rest on the legal base for UPF. There is a need for a comprehensive overview of existing and potential tools;
- It is important to gain a clearer idea of appropriate scale for urban forest policy;
- There is a need for evaluation of funding mechanisms for UPF including income generation from benefits; and
- More attention should be given to the urban-rural interface, informed by thinking across a traditional ‘planning divide’.

Ms Lawrence also gave a presentation on Urban Forest governance based on a briefing paper for the European Commission workshop on UPF in January 2011 prepared with Mr Johnston, Mr Konijnendijk and Mr De Vreese.

Governance includes institutions, organizations/stakeholders, knowledge and processes involved in making policy and management decisions. The legal structure include laws, policies and regulations. The overlap and fragmentation rather than integration across sectors and scales of policies may limit the impact of policies on Urban Forestry.

It is important to understand the planning systems to understand constraints and opportunities for UPF. While the traditional approach is passive, technical, regulative and rigid, a strategic approach needs to be coordinated, process-oriented, socially-inclusive and connected.

There are many different issues to consider. For example, tenure can be public or private and it has a strong historical legacy. When taken into account in land use planning, zoning and regulations of urban development can secure land for UPF.

The type of stakeholder, including local governments, professionals, NGOs and community organizations, varies between and within countries. There is also a lack of standardisation because often it is the central government that determines the laws but implementation occurs at the local level.

Another important factor is a good knowledge of the resources to be managed. In general, there is a lack of baseline information which is often collected only for specific projects. Data collected used to be mostly biophysical but in recent years increasing attention has been given to socioeconomic

aspects. Data comes from multiple information sources and is targeted at a variety of audiences. In this respect, citizen Science is an area of participatory monitoring which has been expanding. As an example, the Green Network has used Opportunity Mapping as a planning tool.

Ms Lawrence underlined the fact that processes must include partnerships, participation and engagement and gave the example of the management of Mersey Forest that was carried out through a partnership of seven local authorities, public agencies, business and civil society organizations. Engagement and participation can occur through consultation, partnership, participatory planning, education, etc. In UPF, negotiation and conflict management are important because stakeholders have different views on trees, land and money.

Risk management is another central issue in UPF because trees can be viewed as a liability rather than an asset. In fact, insurance claims related to damage caused by trees are soaring. In order to prevent some claims, trees can be cut because they could be dangerous. Nevertheless, new tools are being built for the valuation of trees in order to capture the overall value of the resource.

In view of the diversity associated with UPF in terms of legislations, policies, sectors, scales and actors and the related risk and uncertainty there is a need for integration through adaptive management. Adaptive management integrates monitoring and action, cross-sector learning and science-policy integration. However, it is often advocated but seldom implemented.

Summarising it can be concluded that:

- Local governments have a central role to play;
- There is a lack of integration across sectors, policies, professions, scales;
- There is a need more learning and standardisation;
- Innovative monitoring, evaluation, citizen science, science-policy should be connected;
- Issues related to power and participation are of paramount importance;
- There is a need for more adaptive management.

PLENARY DISCUSSION

Various interventions pointed to the fact that there is a need for a common terminology. Therefore, a common glossary should be built. There was a discussion around the term UPF because UPF is one tool to develop green spaces and green networks. Besides, UPF is not only a forestry issue. It was suggested that “infrastructure”, “green spaces” or “ecosystem services” could be better terms than “forestry”. Then, the vocabulary used in the western world might not be attractive to decision makers in developing countries. The latter usually want to know how UPF relates to their development priorities. It might be better to talk about ecosystem services. It appears clearly that better marketing of UPF is the key to reach the right audience.

Various elements were mentioned in relation to the differences between regions and how they should be dealt with in the Guidelines. For one thing, there is regional variation in the approaches to UPF for example in the United States, there is a tree approach based on cover whereas in India, it is centred on green spaces, hence the importance of having a wide understanding of UPF. Consideration should be given to the various levels of government because UPF can be under the responsibility of different authorities depending on the country and even on the city in a same country. In developing countries, there is a need for capacity building, to “educate the educators”. Different incorrect beliefs and paradigms regarding UPF need to be addressed.

There was a general conclusion about the fact that that UPF must be addressed as a process rather than considered as a product.

SESSION 4

REVIEW OF THE DRAFT ANNOTATED OUTLINE OF THE GUIDELINES: OBJECTIVES, PROCESS, CONTENT AND FORMAT

Mr Kielbaso chaired the fourth session which focused on the draft outline of the Guidelines, the objectives, the process, the content and the format.

“Guidelines: Content and development process?”, by Clive Davies and Michelle Gauthier, Food and Agriculture Organization of the United Nations, FAO

Mr Davies presented the outline of the Guidelines and asked for feedback on content, context and the best way to contribute to their development.

The introduction to the Guidelines would include information on: context; urban development, poverty alleviation, food security and well-being; UPF; why develop Guidelines; audience and users; how to use the Guidelines. The Guidelines will include knowledge (including case studies, facts & figures), opportunities, and constraints.

Mr Davies then presented the draft of Guidelines which contains the following themes:

- Urban Planning
- Governance
- Climate Change
- Disaster risk management and watershed management
- Water and Waste Water Reuse
- Food and Nutrition Security
- Health and Well-being
- Landscape, Forest and Tree Resources Management
- Product and Services Valuation, Incomes and Jobs
- Research and Development, Education and Awareness Rising
- Resources Mobilization, Investment and Partnership

The process envisioned to develop the Guidelines was also discussed. There will be an information gathering phase. The regional mobilization is important to create regional adaptation and ownership of the Guidelines. The process will be validated through a peer review group, an expert meeting, etc. There should be a communication strategy to promote the Guidelines. It is important to link the process with the International Year of the Forest 2011. Because the 3rd of October is the World Habitat Day, October has been dedicated to Urban Forestry. For example, there could be a declaration signed by mayors to promote UPF.

By-products could also be produced by the Guidelines development process. These include:

- Series of thematic fact sheets;
- Source book on city, country and institution profiles (see Annexes III and IV);
- Collection of case studies; and, (iv) annotated bibliography.

PLENARY DISCUSSION

It is important to have a consistency of approach throughout the document. The purpose that the Guidelines must achieve should be clear. “Do all Guidelines have the same goal or are they a summary of the evidence about the benefits?” One way to clarify this issue is to put action words in front of each Guideline.

There was a discussion about the level of application of the Guidelines: Are they going to be about public space only? It can be difficult or impossible to legislate for private property in many instances. But it was recommended to have a holistic approach which also includes private land. On private land, incentives can be used to promote UPF. Then it was suggested that the scale the Guidelines addressed should be agglomerations or city-regions.

The proposed modifications to the 15 Guidelines were the following:

- One Guideline could be about “Marketing and communication” considering the paramount importance of the topic. There is a need to sell what are the benefits. Advocacy should be a priority.
- “Inventories and assessment” could be another Guideline. In fact, there are very few national level inventories. Knowing the state of the resource is essential to manage it properly.
- “Incentives” could be another Guideline. Without this Guideline it might only apply to the public sector. There were examples from Bogotá and Porto Alegre where trees cut on private properties have to be compensated. There was another example from Philadelphia where there is a water bill which increases with the size of impervious surface on a property. If trees are treated as a commodity, then regulations can be enforced on private property.
- There was a proposal that Guideline 9 “Product and services valuation, incomes and jobs” should be crossed with all other Guidelines.
- Biodiversity and the nature of the trees used are important. At the same time, it is hard to predict which species will be the better adapted species in the context of climate change.

SESSION 5

REVIEW OF THE DRAFT ANNOTATED OUTLINE OF THE GUIDELINES UNDERTAKEN IN WORKING GROUPS

The goal of this session was to review the draft outline of the Guidelines. The working groups were then divided as follows:

WORKING GROUP A

- *Urban planning (Guideline 1)*
- *Governance (Guideline 2)*
- *Research, Education and Awareness Raising (Guideline 10)*

Facilitator: Anna Lawrence

Rapporteur: Alan Simson

Participants: Manoj Dabas, Rik De Vreese, Michelle Gauthier, Abdelaziz Hammoudi, Sarah Low, Eduardo Rechden, Giovanni Sanesi, Alan Simson, Andrej Verlic, Charles Wade

WORKING GROUP B

- *Climate change (Guideline 3)*
- *Disaster Risk Management and Watershed Management (Guideline 4)*
- *Water and Waste Water reuse (Guideline 5)*

Facilitator : Les Werner

Rapporteur: Henk de Zeeuw

Participants: Marie Lapointe, Andrew Rudd, Les P. Werner, Henk de Zeeuw

WORKING GROUP C

- *Food and Nutrition Security (Guideline 6)*
- *Health and Well-being (Guideline 7)*

Facilitator: Fabio Salbitano

Rapporteur: Cecil C. Konijnendijk

Participants: Matilda Annerstedt, Clive Davies, Cecil C. Konijnendijk, James Ogilvie, Fabio Salbitano

WORKING GROUP D

- *Landscape, Tree and forest Resources Management (Guideline 8)*
- *Valuation of products and services, Jobs and Incomes (Guideline 9)*
- *Resources mobilization, Investments and Partnership (Guideline 11)*

Facilitator: Renate Spaeth and Nerys Jones

Rapporteur: Nerys Jones

Participants: Hector M. Benavides-Meza, Keith Jones, Nerys Jones, J. James Kielbaso, Gilles Mille, Renate Spaeth, German Tovar Corzo

The participants were asked to focus especially on the following questions:

- Are there gaps in the table of contents of the guidelines?
- What are the main keywords and topics?
- How to motivate decision makers?
- Identify sources of information which could be relevant

WORKING GROUP A

Urban planning (Guideline 1); Governance (Guideline 2); Research, Education and Awareness Raising (Guideline 10)

The working group A identified the following gaps in the Guidelines:

- There should be a process section for the Guidelines outlining the way in which Guidelines will be implemented;
- It should include a flow chart that illustrates the relationship between different Guidelines to explain how everything fits together;
- Each guideline should also include an element of monitoring and evaluation to let decision makers know the progress they are making;
- One of the monitoring approaches should be Citizen Science;
- Incentives are crucial and should be included in each Guideline;
- It could also be considered to add delivery mechanisms for each Guideline;
- There should be an introduction to each topic including a general statement of value to demonstrate the value of trees and urban forests.

It is crucial to include delivery mechanisms either as a part of the guideline or to use case studies to illustrate the process. In fact, decision makers need to understand how to turn the plan into action. Taking into account its importance, there could be a Guideline of delivery mechanisms which could include:

- The needs should be assessed depending on regional context;
- The right tools need to be defined (e.g. grants, tax incentives, regulations, campaigns, awareness raising, advisory services);
- It is important to develop the right marketing strategy;
- Evaluation of the process is important to create a feedback loop.

In the Guideline on Urban Planning (Guideline 1), the following gaps were identified:

GIS and other tools should be mentioned as an important tool;

Citizen Science is important for monitoring and evaluation and should be included in the Resources assessment Guideline;

- Urban design and Ecosystem services are key elements;
- Planning needs to be culturally specified;
- For reversing priorities, trees should be considered first in planning before gray infrastructures;
- Land tenure and legal aspects could be moved to this Guideline;
- Legal aspect and issues are in Guidelines 1 and 2 but could be a separate Guideline.

Group A asked the following question: “is Guideline 2 on Governance about governance or stakeholder participation and engagement?”. The title could be reconsidered. At any rate, stakeholders need to be identified and understood. The agenda should be set and UPF should be getting on other agendas as well. It is important to establish a vision or visions. For this purpose, the Guidelines should include a Mission statement and Identification of values, incentives and motivations. Making connections inter- and trans-disciplinary is very important. It is important to use the right language depending on context. There is a need to adapt the "jargon" for local conditions. The issues of Power, Authority and Gender are of paramount importance. Communication and Awareness should be included in Guideline 2 and not only in Guideline 10.

For Guideline 10 on Research and development, education and awareness raising, Group A mentioned that it is important to use urban forests as an education tool for urban dwellers to connect with nature. However, it is also important to educate them about the urban forest. Urban foresters should also be trained properly to develop people skills. Finally, the questions of ““Could the elements about engagement and participation be moved to Guideline 2?”” was asked.

WORKING GROUP B

Climate change (Guideline 3); Disaster Risk Management and Watershed Management (Guideline 4); Water and Waste Water reuse (Guideline 5)

Working group B started by discussing the various benefits of UPF related to climate change (Guideline 3). They were divided into two sections:

- The effects and how to adapt;
- How UPF contributes to adaptation.

First of all, about mitigation and how to adapt to climate change, the following benefits of UPF were mentioned:

- Trees provide a cooling effect which reduces heat islands and implies a reduced consumption of air conditioning which in turn saves energy;
- Trees contribute directly to CO₂ sequestration;
- There can be a reuse of waste products in UPF which means less fertilizers will be needed;
- Food or fuel wood close to cities means less transport and thus saves energy.

In terms of adaptation, UPF can constitute a buffer to shocks because it can help prevent erosion and landslides. UPF can contribute to adaptation in selecting species according to tolerance to temperatures, water needs and carbon sequestration capacity. Trees' tolerance to pests and diseases need also to be considered. Finally, there is a need for green corridors or networks to help species migrations in a changing environment. Finally, these benefits result in an increased capacity of the urban poor to adapt to climate change with UPFA.

About Guideline 4 on disaster risk management, watershed management, it is important to realize that disasters do not know administrative boundaries. Consequently, a regional watershed approach is needed. Also, prevention is more cost effective than emergency response and systems are more resilient when UPF is included because:

- canopy intercepts radiations and rainfall;
- there is more infiltration and thus slower runoff;
- water sources are protected;
- erosion and landslide are reduced;
- effects on population, infrastructure and biodiversity are reduced.

There is a need for adequate planning to prevent inappropriate proximities. For example, some land should be kept free from construction (e.g. under power lines, in flood plains, on steep slopes, on earthquake zone). UPF can also be used to reclaim brownfields and landfills in and around cities.

Regarding water and waste water reuse (Guideline 5), Group B discussed some of the benefits of UPF. These include:

- UPF reduces volumes of runoffs;
- It helps reduce contaminants deposited elsewhere;
- It is possible to use woods for bio-treatment.

They also wondered about the relevance to have water in a separate Guideline and whether to merge it with Guideline 4 as there might be some overlap between Guidelines 4 and 5.

In order to motivate decision makers, it is important to:

- focus on arguments and facts related to urban key priorities and challenges (rather than foresters concerns);
- answer key doubts and common questions;
- provide clear practical real life models, cases and cost benefit figures;
- emphasize the fact that UPF is a readily and cost effective technique.

Finally, concerning data collection, it was proposed that the UPF guidelines development team should propose and share a draft bibliography to which interested people could add their sources.

WORKING GROUP C

Food and Nutrition Security (Guideline 6); Health and Well-being (Guideline 7)

Group C proposed that the definition of UPF should be broader. The Guidelines should crossreference existing Guidelines in order to avoid repetitions.

Then the general structure of the Guidelines was discussed. They proposed the following changes:

1. “Themes” with action words should be what was currently called “Guidelines”
2. “Guidelines” would be what was called the “Sub-guidelines” in the draft.
3. About the structure, the Introduction should include background information and facts; and
4. Opportunities and constraints need to appear clearly.

Regarding the table of contents, they proposed the addition of new Themes:

- “Legal framework and land tenure”, including forest law for conservation.
- “Urban design” including design for health and retrofitting versus new.
- “Learning” including environmental education.

Group C also proposed new subjects than can be included into the current proposed Guidelines:

- Agroforestry (Guideline 6)
- Social cohesion (Guideline 7)
- Access (proximity) (Guideline 7)
- Health impact assessment (Guideline 7)
- Innovations, technical advices (e.g. wood stoves) (Guideline 6)
- Indoor, outdoor air quality (air pollution caused by wood, charcoal burning) (Guideline 6-7)
- Tourism (Guideline 7)
- Healthy equity (Guideline 7)
- Healthy food (Guideline 6)
- Traditional medicine (Guideline 6)
- Quality of green spaces (Guideline 7-8)
- Allotments/Community gardens/Orchards(Guideline 6)
- The impact of green on health can be addressed through institutional collaboration. These can be positive impacts (e.g. stress reduction, thermal comfort) but also negative (e.g. allergies).

WORKING GROUP D

Landscape, Tree and forest Resources Management (Guideline 8); Valuation of products and services, Jobs and Incomes (Guideline 9); Resources mobilization, Investments and Partnership (Guideline 11)

Group D also mentioned the importance of using action words in the Guidelines. They proposed a shorter main document with reference to other documents to give more information. Then they talked about the vision on what the Guidelines are trying to achieve, e.g. the Guidelines want to achieve sustainable cities.

The Guidelines need to be addressed at the country level to market them. They need also to be communicated at the city level. It is crucial to sell the services and benefits provided by UPF. These are environmental (water management, air quality, erosion control, habitat for biodiversity), social (e.g. health and well-being, culture) and economic (e.g. food, fuel, property value). They mentioned that “one size does not fit all” meaning that there is a high variation among countries. Each city needs to be able to decide which services and elements are critical to them.

It is important to build local partnerships. Information can be shared through twinning or matching between cities and/or mentorship. Assessment of the resources is important through physical inventories. But they also included the social (NGOs, government structures, community groups) and economic resources. Finally, there need to be a planning for delivery. There should be a holistic approach integrating web-based resources to complement the Guidelines.

PLENARY DISCUSSION

In plenary discussion, it was suggested that web-based tools could be a more interactive way to present the Guidelines. It is easier to navigate and to make links to other topics. Users could enter the process in their own way. Another application of Web resource could be a checklist to guide users. For example, with a suite of problems that the users give to the program, an evaluation is made of specific situations. In this way, the Guidelines would really answer the needs of the user at whatever level they are at from a specific scale; e.g. a non-green city needs to be convinced that trees are good; while a city which already has a green infrastructure may have some specific problems. The Guidelines should be stratified according to size, population size and resources so that they easily meet the needs of the readers. There could also be short films to introduce the Guidelines.

There is a need to share information about UPF. Twinning could be a good way to share information between cities. There could also be matching of specialists, for example, foresters with planners and the north with the south to facilitate the information sharing. Finally, respecting different cultures and values is a key aspect to keep in mind when producing the Guidelines.

SESSION 6

THE WAY FORWARD – PEOPLE AND RESOURCES MOBILIZATION FOR UPF GUIDELINES AND THE INTERNATIONAL YEAR OF FORESTS

The main highlights of each working groups were as follows:

WORKING GROUP ON ASIA AND PACIFIC

Rapporteur: Manoj Dabas

Participants: Manoj Dabas, Clive Davies, Keith Jones, Sukh Dev Singh, Les P. Werner

The working group on Asia pointed out the necessity to have a continuity of the current team. There should be one regional leader or facilitator acting as a focal point. An online community needs to be developed to share information through social networks. There could also be a face to face meeting of selected experts which is more efficient than online exchanges. It is crucial to educate professionals, thus, an online network of professionals could be created. In October for the International Year of Forests, a symposium could be organized to highlight UPF and communicate the draft of Guidelines.

Then the question about the use of the term “voluntary” in the Guideline title was raised. It could constitute a disincentive to their use. At any rate, the Guidelines need to be accompanied by an executive summary appealing to decision makers. There need to be paper and PDF version of the document. The international Glossary could be put online on the FAO UPF km website. The Guidelines need to be available in all United Nations languages. Country and city profiles would be interesting. Baseline studies need to be performed to identify the existing resources (City Green Assets Profile). But how will the quality of the data be verified? The profiles could include Green capitals and city twinning.

- There are three sub regions in Asia which would be used to network and reach countries:
- The South Asian represented by the South Asian Association for Regional Cooperation (SAARC); the Association of Southeast Asian Nations (ASEAN) including the Forest Research Institute Malaysia (FRIM); and
- Middle East block which has done great efforts to fight water shortage.

In each sub-region, three or four prominent partner cities could be identified (e.g. Dubai, Singapore, New Delhi in India, Kuala Lumpur in Malaysia, Colombo in Sri Lanka, and Guangzhou in China). Then Champion NGOs and agencies in each city could be identified or even individuals. Regional resource mobilisation needs to be a joint effort with FAO, with FAO backstopping the efforts and providing seed money. Possible regional donors include governments, ministries, departments, national institutes, agencies interested in urban affairs, corporate donors.

WORKING GROUP ON AFRICA AND NEAR & MIDDLE EAST

Rapporteur: Renate Spaeth

Participants: Abdelaziz Hammoudi, Elizabeth Hannah, Gilles Mille, James Ogilvie, Fabio Salbitano, Renate Spaeth

The working group on Africa discussed the importance to consider the different needs of North, Sub-Saharan, South, East and West Africa. Historically, there have been long established cities in

the North and there are new fast growing cities in the Sub-Saharan and South-African zones. These regions have different needs and expectations. But, differences need to be incorporated in common vision for Africa. The Guidelines should include cultural issues because it is important to understand who to talk to (e.g. “is it a matriarchal society?”). It is essential to devise a way to sell services tailored to local situations.

Then, there is a need to assess current situation (where, who, how). It is important to also assess different types of resources: land, economic, human, availability of information, country contribution, International Year of Forests. The tenure situation represents opportunities but also constraints. Governance needs to be included in the description of the current situation to understand who has the power and how to reach them.

It was agreed that there is a need for capacity building in institutions, technical staff and local communities. And for this, examples of pilot projects should be shared. The correlation of successful UPF with health and well-being of cities needs to be emphasized. The case studies need to be communicated to a wide audience. For example, there should be UPF ambassadors. Also tools and resources should be developed to facilitate participation and people empowerment.

Finally, some events or places in Africa were mentioned as opportunities to promote UPF: the International Year of the Forests 2011 and the FAO regional meeting in Benin in 2012; the potential role of Morocco as Northern Africa focal point; the Central African Forests Commission (COMIFAC) and the Congo Basin Facility in Central and West Africa; the South Africa collaboration; some African local events (e.g. “Environmental Day”, 5th of June, Morocco). It should be verified if there are opportunities for events before UN-HABITAT(Kenya).

WORKING GROUP ON LATIN AMERICA AND NORTH AMERICA

Rapporteur: Sarah Low

Participants: Héctor M. Benavides-Meza, Rik De Vreese, Nerys Jones, J. James Kielbaso, Marie Lapointe, Sarah Low, Eduardo N. Rechden, Giovanni Sanesi, German Tovar Corzo

It is important to keep in mind that there are many cultural and geographical differences between countries. However, some of the problems between cities are similar throughout the Latin American countries. For example, one major concern in Latin America is the lack of financial resources. Governments need to promote and encourage improvement of the urban forest. For example, in Colombia, you need to pass a law to get funding. Mayors decide how to spend money according to what the laws dictate. Another shared concern is the rapid turnover of politicians which means that the benefits of UPF need to be sold again and again to new administrations.

Even if the problems are common between countries, the solutions are rarely shared. Thus, a Latin American network is needed. However, Brazil might feel more closely related to BRIC countries (Brazil, Russia, India and China) than to Latin America countries. At any rate, to establish the network, it is necessary to identify the people who are actually involved by using for example lists of participants at different UPF events. It is also possible to identify university faculties involved in UPF and contact their students. The personal contacts of the participants of this working group could also be shared. It is also possible to use international relationships to build network (i.e. opportunities with Italy, Spain, and Portugal) and World Health Organization’s Healthy Cities. NGOs can also have important roles in Latin America to promote UPF (e.g. the success of wood certification development) and need to be included. This network would be important to share ideas, experiences to build a support system.

To convince decision makers to invest in UPF, it is important to explain why trees should be preserved and planted. It is possible to use the urban heat island effect and its impact on human

health to illustrate the need to maintain or increase tree canopy. These issues are really important for future planning. Another type of incentives was seen in Dominican Republic, where a mayor was elected following a green campaign. The mayor was then motivated to implement it. Indeed, it is important to keep in mind how strongly citizens who can influence decision makers. Also, it is essential to protect the existing resources and not just plant new trees. Then it is important to link urban forestry to job creation. Finally, in Brazil, benchmarking has worked. Curitiba is an example of a success story that has inspired other cities. Of course, although the success stories must be mentioned, the potential problems associated to UPF need to also be tackled.

The next steps include:

- The development of a list of contacts to build the network mentioned above;
- A Skype meeting with key contacts;
- A conference or webinar with a larger group.

It is essential to devise ways to offer proper training to UPF practitioners. For the International Year of Forests, a way should be devised to take advantage of the momentum and create network and talk about UPF. Other upcoming events are also important forums to discuss the Guidelines: a UPF forum in Santiago (Chile) in August 2011; Metropolis in Porto Alegre (Brazil) in October 2011; Conference in Porto Alegre for Brazilian cities in October 2011; FAO Regional Forestry Commission in Asuncion (Paraguay) in March 2012. It is important to include UPF on other agendas as well. It was proposed that Porto Alegre could be one of the cities to adapt and implement to Guidelines and encourage the use of Guidelines elsewhere. In conclusion, Guidelines could be really useful in Latin America but they need to be marketed properly.

GLOBAL WORKING GROUP

Rapporteur: Alan Simson

Participants: Henk de Zeeuw, Michelle Gauthier, Cecil C. Konijnendijk, Andrew Rudd, Alan Simson, Andrej Verlic, Charles A. Wade

The Global working group discussed the fact that FAO should provide overall coordination and support for the Guidelines. It confirmed the need encourage responsibilities from regional groups to ensure leadership and commitment. Champion cities need to be identified and involved in the process.

About the Guidelines themselves, there need to be an executive summary of the document. By-products should include a Glossary of terms related to UPF. Online information should be made available on the Guidelines such as case studies, city profiles, etc. It is important to consider a large spectrum of information. At the same time it is essential not to replicate existing work but instead to cite it in the Guidelines.

Finally, UPF needs to be promoted in higher agendas to include it where it is not usually on the agenda.

SESSION 7

THE WAY FORWARD – DEFINING A COLLABORATIVE PROGRAMME OF WORK AND AGREEING OF ROLES AND RESPONSIBILITIES

The way forward concerning the definition of a collaborative programme of work and the roles and responsibilities of the actors was discussed.

It was agreed that there should be continuity of the team present at the meeting and of those invited participants who were not able to come (e.g. email, skype meetings). A follow-up meeting could take place back-to-back with EFUF 2012.

A first step will be to revise the table of contents before participants agree on the roles and responsibilities. It was agreed that regional collaboration in the process is essential.

SESSION 8

WORKSHOP CLOSURE

Mr Rudd invited the organizers to make the final comments of the workshop. The way forward was discussed.

Finally, the organizers thanked the participants and co-organizers for their contribution to the process of development of the Guidelines.

The workshop was closed at 18:00 hours.

EXTRAORDINARY SESSION (2nd JUNE 2011)

REGIONAL MOBILIZATION SESSION FOR URBAN FORESTRY GUIDELINES DEVELOPMENT

Participants: Manoj Dabas, Clive Davies, Michelle Gauthier, Abdelaziz Hammoudi, Sarah Low, Gilles Mille and Sukh Dev Singh

The **objective** of this session was to develop operational details to follow-up on the recommendations of the workshop at regional level.

The Regional Groups were requested to consider, for instance, the following **expected results**, as needed:

- Terms of references for workshops and other activities;
- Provisional concept notes (for projects, workshops, information gathering);
- Programme of work; and
- Action plan for resources mobilisation.

Participants invited were supposed to be experts from various regions. However, due to the absence of participants from some regions (e.g. Africa, West and Central Asia), it was decided to hold the discussion in plenary.

First, the meeting clarified the stakeholders and audience of the guidelines. They are essentially stakeholders representing

- Opinion makers (including: media, soft power, leading academics, community organisers);
- Policy makers;
- Decision takers;
- Institutions;
- Policy advisors;
- Influencers.

They can come, *inter alia*, from the following sectors: Agriculture; Health (Departments of health and public health); Urban (Departments of town and country planning); Forestry; City (Mayors and Chief Executives department and administration); Department of green spaces; Energy; Water; Finance; Environment; Research and Education; Social services; Civil Engineers; and Architects and, the Army.

The Guidelines should be addressed to small, medium and large towns and cities, but especially target cities that are growing fast but are currently small or medium sized and lack professional skills. Detroit (United States) is an example of a city under renovation. Finally, the Guidelines must cover public and private land.

Regarding the event for October 2011 to promote UPF in the framework on the International Year of Forests, if possible, it is proposed to consider a seminar with video conference on the 3rd October involving UN-HABITAT, mayors of Europe, North America and Oceania. It will also include Spain, Germany, Italy (Rome and other Italian cities), United Kingdom (London), France (Montpellier), United States (Philadelphia, Melbourne), Africa (Rabat in Morocco, Kigali in Rwanda, Senegal [Mr. Sène]), Asia (e.g. New Delhi in India), Latin America (through the Federation of Latin American

Cities, Municipalities and Associations [FLACMA] and probably also including Mexico City in Mexico and Porto Alegre in Brazil, and the Assistant Director General of the Forestry department and Natural resources department at FAO. The mayors could then sign a Declaration which would have the following characteristics:

- The title should be short and with maximum impact.
- The declaration should be no more than one page with challenges and solutions.
- Mayors from the following cities or countries could be approached: New Delhi, Rome, Rabat, Spain and Italy.
- A specialist in policy issues should be contracted to the final version.

The Declaration could have the following structure:

- A headline including a subtitle: "Forest and trees for healthy cities, improving livelihoods, well-being and environment for all".
- The title could include these expressions: "Urban Releaf", "Green cities for all".
- There should be a statement of values and declaration with the following stages:

Stage 1: We recognise or we acknowledge that...

Stage 2: We believe that...

Stage 3: We will...

The regional adaptation of the Guidelines should be issued after the international Guidelines. Finding resources and devising ways to promote mobilisation are key elements of the regional participation. The FAO Regional Forestry Commissions are important opportunities for regional consultation.

The Asian region can be divided to three blocks: ASEAN, SAARC, Central and Western Asia. Champion agencies in ASEAN and SAARC include Delhi Parks and Gardens Society, AFE, FRIM, and the Chinese Academy of Forestry. In the SAARC block, a symposium could be organized to discuss the Guidelines ideally in October in India in New Delhi, Hyderabad and/or Bangalore. The ideas could then be shared with FRIM. They could identify a Mayor to join the conference proposed on the 3rd October, 2011. It was suggested that FAO should provide seed money to help initiate the regional process and approach donors.

Africa is considered in four sub-regions: North Africa and Near East (lead by Morocco), South and East Africa (English speaking), Central Africa (French speaking) and West Africa. The group will approach donors with the Concept Note. The COMIFAC, for instance, would be an important partner to have on board and maybe to create an event with to promote the development of the Guidelines.

In North America, Philip Rodbell could be the regional facilitator. It was noted that there will be the Eco-city Summit on 23-26 of August 2011 in Montreal (Canada) which constitutes an opportunity to promote Guidelines to a North American audience. The UNRI, ISA and Society of American Foresters Conference are important organizations to involve.

For Latin America, the first step would be to create a network involving also universities and institutions of United States and Canada which are involved in Latin America. There will be a world conference of the Society of ecological restoration in Mexico on 21-25 August, 2011 which could be an interesting opportunity for networking. A webinar was proposed to bring the actors together at low cost.

In Europe, there will be EFUF 2012 which will be held in Leipzig.

In brief, the core group for the development of the Guidelines based on regional participation could include the following persons:

- Asia: Manoj Dabas and Sukh Dev Singh
- North America: Phillip Rodbell and Sarah Low
- Latin America: Hector Benavide
- Near East: Abdelaziz Hammoudi
- rest of Africa: focal points to be defined
- Europe: Giovanni Sanesi

The following activities for follow-up in 2012 were defined:

- The FAO team would send a calendar of upcoming steps.
- A teleconference would be organized to follow-up on the regional participation the 12th of July 2011 (the agenda should be sent out by the 8th of July). The aim of meeting is to understand the programme and agree on the inputs.
- The “Food for the Cities” D-Group could be used to facilitate communications on the follow-up on the workshop.
- The table of contents of the guidelines needs to be revised.
- Donors need to be approached as soon as possible to provide financial support.
- Information to write the Guidelines should be gathered from September to December in 2011.
- It is hoped that the glossary requested by participants to the workshop will be completed by the end of 2011 under the leadership of Giovanni Sanesi.
- The Guidelines could be launched, if possible, at the 21th Session of the Committee on Forestry (COFO) in September 2012.



Part 2. Outcomes and reccomendations

OUTCOMES

The presentations on “International and Regional Institutions to Cities and Countries” provided information on the expertise and interest of international and regional institutions in areas related to sustainable city development, poverty alleviation and UPF from FAO, UN-HABITAT, IUFRO and RUAUF. The presentations on “Guidelines for Policy and Decision Makers – Experiences from cities and countries” allowed those present to:

- draw information related to the thematic and geographical development of the guidelines, including inter alia: lessons learned on strategic measures and innovative approach to leverage key constraints;
- discuss the need for facts and figures demonstrating the benefits and convincing policy makers for putting trees and forests as a key element for sustainable city development;
- discuss the ways and means to make a common vision a reality; and
- draw out key messages to promote UPF for the target audience of decision makers and those advising them.

There was some regret that a number of prospective participants notably from Africa had been unable to attend the workshop because of difficulties in obtaining United Kingdom visas. Despite this, those present felt that the group present had been capable of discussing regional mobilization.

It was acknowledged that the current proposed content for the guidelines was comprehensive but needed to be reorganized in order to distinguish clearly three main categories of guidelines. Furthermore the Guidelines should be accessible to key stakeholders of various categories within policy and decision making, so that the document is a mean to stimulate in dialogue for building a Common Vision for Cities including intersectoral and multidisciplinary dimensions.

It was suggested that a further major meeting could be required to bring on board the decision and policy makers from all regions of the world before the draft guidelines are finalised.

There was acknowledgement that the European Forum on Urban Forestry (EUFU) is an excellent forum to reinforce North-South and decentralized cooperation within the mandate of FAO: Fighting against hunger and contributing to the Millennium Development Goals, and Beyond Rio+20.

The Meeting confirmed its willingness to support the following actions:

- The further information gathering in support of the Guidelines Development, which should include facts and figures that illustrate, demonstrate and convince based on lessons learned, research and valuation of benefits.
- The development of an international glossary of UPF terms.
- The production of a document on the state of the art on UPF in Latin America and Caribbean.
- The finalization of the UPF Guidelines Development Process, aiming at, if possible, their launching during COFO, 24-28 September 2012.
- The Production of a communication strategy and communication products which could include:
 - source book;
 - series of Thematic Fact Sheets;
 - FAO KM webpage;
 - FAO Newsletter;
 - international distribution list;
 - use of the Food for Cities D-group;

- eelectronic documents;
 - and, photo Library.
- The dissemination of information by the meeting participants via their institutions, countries and at international and national events.
- A regional mobilization through inter alia the voluntary facilitators (i.e. Asia and Pacific, Africa and Near & Middle East, Latin America, Europe, North America).
- FAO should update the provisional table of contents for the Guidelines according to the recommendations of the workshop (Appendix V).

RECOMMENDATIONS

The participants of the two-day inception workshop provided advice and recommendations about various aspects of the Guidelines development process.

- 1) The Guidelines must be addressed to a variety of city sized and regional contexts. An interesting scale to work with is the level of agglomerations or city-regions.
- 2) It is important to recognize that, in urban zones, a lot of the land is under private ownership. The Guidelines need to take into account both public and private land in a holistic way. A way to influence UPF on private land is through incentives. Adaptive management is necessary when dealing with complex system such as faced by UPF.
- 3) Different options were proposed for the format of the Guidelines. It was also proposed to use the terminology “Themes” instead of “Guidelines”, as well as “Guideline” for “Sub-guidelines”.
- 4) Updated table of content of the guidelines was proposed (see Annex V). The Guidelines need to cross-reference with other documents for more detailed information. Maybe a web-based resource could also be an interesting format to complement the Guidelines and might be more appealing because of its interactivity and because it is easier to navigate than a book. Furthermore, the Guidelines should be stratified according to size, population size and resources.
- 5) Communication and marketing aspects are crucial to reach a wide audience. For this reason, mayors, especially in developing countries, need to understand from the Guidelines how UPF can help meet their developmental goals. Furthermore, the quality of data is the key to give reliable facts and figures in the Guidelines. There is a need for more evidence about the social benefits that urban forests and trees offer.
- 6) The importance of having a shared terminology for UPF around the globe was pointed out during the workshop. Thus, a common glossary for UPF is needed. Giovanni Sanesi will be in charge of coordinating the development and writing of the glossary which should be made available on the FAO website.
- 7) The term UPF might not be the most appropriate because UPF is one tool to develop green spaces and green networks. Besides, UPF is not only a forestry issue. It was suggested that “infrastructure”, “green spaces” or “ecosystem services” could be better terms than “forestry”.
- 8) Because countries in the same region can share similar problems even if they rarely share solutions, it was recommended to create regional platforms to share information, experience, etc. There should be one facilitator of focal point in each region to help coordinate the efforts.
- 9) Similarly, there could be a virtual network for UPF practitioners. FAO in addition to coordinating the process needs to support regional efforts.
- 10) Meetings such as the Glasgow workshop are important to bring actors together and accomplish a lot of progress in a short time frame. A validation workshop should be held before the final Guidelines are issued.



Part 3. Annexes



ANNEX I

LIST OF PARTICIPANTS

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ANNEX II

AGENDA

FAO International Workshop on Guidelines for Urban Forestry Glasgow, UK

Workshop on Guidelines on Urban Forestry (30 – 31 May 2011)
Feedback to European Forum on Urban Forestry - EFUF 2011 (1st June 2011, 13h30-14h00)
Regional Mobilisation Session (2nd June 2011, 13h30 – 17h30)

Sunday, 29 May 2011, 19h00 – 22h00: Cocktail/Finger buffet in the *Cunningham Room, at the Premier Inn Hotel (George Square), Glasgow*

DAY 1: 30th MAY 2011

Venue: Premier Inn Hotel (*Argyle Street*), Glasgow – (Taxis available to take delegates from Premier Inn (George Square to Argyle Street at 08h30)

Time	Activity
Session 1	Workshop opening and introduction of participants Chairperson/Facilitator : TBC
09.00	Official opening (<i>James Ogilvie, FCS, United Kingdom</i>) (15 min) Opening remarks (<i>Michelle Gauthier, FAO, Italy</i>) (5 min)
09.20	Opening by the Chairperson: Presentation of the workshop objectives and provisional agenda
09.30	Round table self-Introduction by each participant (1 min. each)
10.00	Background of the guidelines development, including FAO actions in Urban and Urban Forestry issues (<i>Michelle Gauthier and Clive Davies, FAO</i>)
10.15	Approval of the workshop agenda
10.30	Coffee break
Session 2	International and Regional Institutions to Cities and Countries Chairperson/Facilitator: TBC
<i>Terms of reference</i>	<i>The presentations will provide information on the expertise and interest of international and regional institutions in area related to sustainable city development, poverty alleviation and urban and peri-urban forestry.</i>
11.00	Introduction to Session 2
11.15	Presentation 1: “UN-HABITAT” (<i>by Andrew Rudd</i>)
11.30	Presentation 2: “Metropolis; UPF in Porto Alegre and Brazil” (<i>by Eduardo Rechden</i>)
11.45	Presentation 3: “IUFRO, Europe and Urban Forestry” (<i>by Cecil Konijnendijk</i>)
12.00	Presentation 4: “RUAUF, urban agriculture and climate change” (<i>by Henk de Zeeuw</i>)

12.15	Plenary discussion
12.40	Conclusions of the Session (Chairperson/Facilitator)
12.50	Logistic remarks
13.00	Lunch
Session 3	Guidelines for Policy and Decision Makers – Experiences from cities and countries Chairperson/Facilitator: TBC
<i>Terms of reference</i>	<i>The presentations will allow to draw information related to the thematic and geographical development of the guidelines, including inter alia: lessons learned on strategic measures and innovative approach to leverage key constraints; facts and figures demonstrating the benefits and convincing policy makers for putting trees and forests a key element for sustainable city development; the ways and means to make a common vision a reality, and; key messages to promote UPF.</i>
14.00	Introduction to the Session 3
14.20	Presentation 5: “Colombia and Latin American countries” (by German Tovar)
14.40	Presentation 6: “India, Asian Cities and Climate Change” (by Manoj Dabas)
15.00	Presentation 7: “The USA experience and practice in promoting UPF” (by J. James Kielbaso and Charles A. Wade)
15.20	Presentation 8: “Urban forest governance: What it is?” (by Anna Lawrence United Kingdom)
15.40	Plenary discussion
15.50	Conclusions of the Session
16.15	Coffee break
Session 4	Review of the draft annotated outline of the Guidelines – objectives, process, content and format (in Plenary) Chairperson/Facilitator: TBC
<i>Terms of reference</i>	<i>The plenary discussion will focus on an agreed and common understanding of the objectives, audience, format, content and themes of the international guidelines, as well as of the general development process and by-products expected.</i>
16.30	Introduction to the Session 4 – “Guidelines proposal” (by Clive Davies)
17.00	Plenary Discussion
17.45	Conclusions of the Session & Organization of the Working Groups for Session 5 and 6
18.00	Closure of the day
19.30	Dinner offered by the Organizers – Arisaig Restaurant

DAY 2: 31st MAY 2011

Venue: The Parish Hall, 266 George Street, Glasgow – 2 minutes walk from Premier Inn (George Square) Hotel

Session 5	Review of the draft outline of the Guidelines – objectives, process, content and format (in Working Groups) Chairperson/Facilitator: TBC
08.30	Introduction to day (by Chairperson)
08.40	Introduction to the Session 5 & 6 – (by Clive Davies and Facilitators)
08.50	Arrangement for Working Groups (Terms of references, composition and reporting)

<p>Terms of reference</p>	<p>The Working Groups will be divided around the following groups of themes of the guidelines: Themes can be divided into four categories:</p> <ul style="list-style-type: none"> - WG A: Urban Planning (G1); Governance (G2); Research, Education and Awareness Rising (G10) (Facilitator: Anne Lawrence) - WG B: Climate Change (G3), Disaster Risk Management and Watershed Management (G4); Water and Waste Water Reuse (G5) (Facilitator: Les Werner) - WG C: Food and Nutrition Security (G6); Health & Wellbeing (G7) (Facilitator: Fabio Salbitano) - WG D: Landscape, Tree and Forest Resources Management (G8); Valuation of products and services, Jobs and Incomes (G9); Resources Mobilization, Investment and Partnership (G11). (Facilitator: Renate Spaeth and Nerys Jones) <p>Each Working Group will provide recommendations on the three questions below.</p> <p>1) The Guidelines: Recommend format, style, content and themes. <u>Supporting materials provided:</u> Draft Guidelines; Table of Content of the Guidelines.</p> <p>2) Thematic Inputs for Developing the Guidelines: (i) Propose information to provide with facts and figures that illustrate, demonstrate and convince based on lessons learned, research and valuation of benefits; (ii) Propose ways and means to gather this information; (iii) Propose by-products as needed (e.g. Source book, Series of Thematic Fact Sheets, FAO and other Webpages) <u>Supporting materials provided:</u> Proposed format for City, Country and Institution Profiles; Proposed format for Thematic Fact Sheets.</p> <p>3) Guideline Process Development: Recommend the ways and means to develop the Guidelines and finalize them by July 2012 through collaborative institutional process. <u>Supporting materials provided:</u> Concept Note; International Calendar of Events; Calendar of the FAO Regional Forestry Commissions; Calendar of the International Year of the Forest.</p> <p>Regional specificities will be highlighted throughout the discussions. Each Working Group will appoint its Rapporteur and its Secretary.</p>
<p>09.00</p>	<p>Four Working Groups (A to D) of about 10 persons will be organized around the four categories of themes above.</p>
<p>11.00</p>	<p>Coffee break</p>
<p>11.15</p>	<p>Report from Working Groups session 5</p>
<p>11.45</p>	<p>Plenary Discussion</p>
<p>12.45</p>	<p>Conclusions & Organization of Working Groups session 6</p>
<p>13.00</p>	<p>Lunch</p>
<p>Session 6</p>	<p>The way forward – People and Resources Mobilisation for UPF Guidelines and the International Year of Forests (IYF) Chairperson/Facilitator: TBC</p>
<p>Terms of reference</p>	<p>The plenary discussion will focus on the process development of the guidelines and the way to take opportunities of major events to promote large participation and awareness rising on UPF in general. The proposed events, activities and elements of discussion are as follows:</p> <ol style="list-style-type: none"> 1) IYF and October 2011 dedicated to UPF 2) Regional Mobilisation and Resources mobilisation 3) International awareness raising and communication strategy for UPF and Guidelines 4) Programme of work towards October 2011 (International Year of Forests) and towards Finalization of Guidelines and By-Products <p><u>Supporting materials provided:</u> Concept Note; International Calendar of Events; Calendar of the FAO Regional Forestry Commissions; Calendar of the International Year of the Forest.</p>

	<i>Each Working Group will appoint its Rapporteur and its Secretary.</i>
14.00	Introduction to the Session 6 (<i>Chairperson</i>)
14.10	<i>The discussion will be held in 6 Regional Working Groups as follows.</i> <ul style="list-style-type: none"> - Working Group 1 : Asia and Pacific (<i>Facilitator WG1</i>) - Working Group 2 : Africa and Near & Middle East (French speaking) (<i>Facilitator WG2</i>) - Working Group 3 : Africa and Near & Middle East (English Speaking) (<i>Facilitator WG3</i>) - Working Group 4 : Latin America, Europe and North America (<i>Facilitator WG4</i>) - Working Group5: Global (<i>Facilitator WG6</i>)
15.30	Reporting from the Working Groups session 6
16.00	Coffee break
Session 7	The way forward – Defining a collaborative Programme of work; Agreeing on Roles and Responsibilities Chairperson/Facilitator: TBC
<i>Terms of reference</i>	<i>The plenary discussion will focus on agreeing on the way forward, arising from the reporting and recommendations from Sessions 5, 6 and 7. What, when, how, who?</i>
16.30	Plenary Discussion
Session 8	Synthesis and Validation Session Chairperson/Facilitator:
17.30	General Synthesis (<i>by Chairperson</i>)
18.00	Closure of the workshop (<i>by Chairperson</i>)

1st JUNE 2011, 13h30-14h00: Feedback to European Forum on Urban Forestry (EFUF 2011)

Venue: *City Chambers, Glasgow City Council*

**Regional Mobilization Session for Urban Forestry Guidelines Development:
How to implement key recommendations of the FAO Workshop (30-31th May 2011)**

Glasgow, United Kingdom

Premier Inn Hotel (George Square)

2nd June 2011 (13h30 – 17h30)

- Agenda –

The **objective** is to develop operational details to follow-up on the recommendations of the workshop at regional level.

It was foreseen to compose Regional Groups expected to develop for instance the following **expected results**, as needed: (i) terms of references for workshops and other activities, (ii) provisional concept note (for projects, workshops, information gathering), (iii) programme of work, and (iv) action plan for resources mobilisation.

However, due to the absence of participants coming from some regions (e.g. Africa, West and Eastern Asia), it was decided to work in plenary, without regional division.

Regional divisions to be considered during the discussions:

1. French-speaking Africa and Near East (Congo, Chad, Morocco, Senegal; West African Economic and Monetary Union [UEMOA], and others) (*Facilitator: TBC*)
2. English-speaking Africa and Middle East (Nigeria, Rwanda and others) (*Facilitator: TBC*)
3. Asia & Pacific (India, Malaysia and others) (*Facilitator: TBC*)
4. Latin America (Brazil, Colombia, Mexico, and others) (*Facilitator: TBC*)
5. Europe and North America (*Facilitator: TBC*)
6. Thematic Working Group as needed (*Facilitator: TBC*)

Programme proposed:

13.30: Brief introduction (*by Chairperson: M. Gauthier, FAO*)

13.45: Plenary discussion

17.30: Conclusion and Closure (*by Chairperson: M. Gauthier, FAO*)

ANNEX III

COUNTRY AND CITIES PROFILES PRO-FORMA

Urban and Peri-urban Forestry - information gathering country and city profiles

Note: The Format proposed for the Country Profile and the City Profiles are the same

Country name or City name	
Urbanization	
Total Population	<i>people (date) (source)</i>
Urban population (<i>date</i>)	<i>percent, people</i>
Expected level of urbanization (2020)	<i>percent, people (Source, date)</i>
Main cities	<i>City 1 (capital) (population), City 2 (population), etc.</i>
Ethnic groups	<i>(source, date)</i>
Population below poverty line	<i>(source, date)</i>
Urban population below poverty line	<i>(source, date)</i>
GDP	
HDI	
Status and trends of urbanization	<i>(source, date)</i>
Urban and Peri-urban Forestry and Greening (UPFG)	
Status and trends	<i>(source, date)</i>
Urban green cover	<i>(source, date) assessment method</i>
Species composition	<i>e.g. broadleaved, coniferous, mixed broadleaved-coniferous, scrub. e.g. Dominant species (>25 percent of total tree cover)</i>
Perceived key benefits and usages of UPFG	<i>(source, date)</i>
Ownership of UPFG	<i>e.g. percent public, percent private, percent NGO, percent other (specify)</i>
Barriers impeding UPFG	<i>(source, date)</i>
Policies, plans and legislation	<i>(source, date) (Conservation, development, planning, etc.)</i>
Annual financial resources dedicated to UPFG	<i>e.g. management budget, development budget (source, date)</i>
Governmental and municipal institutions	<i>(source, date)</i>
Partnerships with institutions, private sector, NGOs, etc.	<i>(source, date)</i>
Non public Stakeholders involved in UPFG	<i>(source, date)</i>
Research and education institutions	<i>(source, date)</i>
Key-actors involved	<i>Contact details (email, telephone, address)</i>

Implementations (Incentives and financial mechanisms)	<i>(source, date)</i>
Mechanisms of participation and information for the public	<i>(source, date)</i>
Civil society initiatives	<i>(source, date)</i>
International support	<i>(source, date)</i>
UPFG Success stories	
Lessons learned in UPFG from challenges encountered	
UPFG Vision/Way forward (20 years)	
References	

ANNEX IV

INSTITUTIONS PROFILES PRO-FORMA

Urban and Peri-urban Forestry - information gathering Institution Profiles

Institution name	
Mandate	<i>Related to Urban and Peri-urban Forestry and Greening</i>
Themes	<i>Related to Urban and Peri-urban Forestry and Greening</i> • • •
Actions	<i>Related to Urban and Peri-urban Forestry and Greening</i> • • •
Contact	<i>Resource person Mailing address Telephone number Email Website</i>

ANNEX V

PROVISIONAL TABLE OF CONTENTS FOLLOWING THE FAO INTERNATIONAL WORKSHOP: “Developing guidelines for decision and policy makers: trees and forests for healthy cities on the topic of guidelines for policy and decision making promoting Urban and Peri-urban Forestry”

Foreword

Acknowledgement

Acronyms & Abbreviations

List of figures, boxes, photos and maps

Summary

INTRODUCTION

- Context
- Urban development, poverty alleviation, food security and well-being
- Urban and Peri-urban Forestry
- Why to develop guidelines
- Audience and users
- How to use the Guidelines

COMMON VISION AND PRINCIPLES

- Statement of international values (Note: Regional and national level)
- Statement of vision (Note: International level)
- Building a vision (Note: Regional and national level)
- Creating alliances and partnerships (Note: from international to national level)
- Breaking resistances and beliefs (Note: those common at international level)
- Building strategy and action plan (Note: international, regional and national level)
- Principles (Note: A list of few principles unifying the themes in term of approach and governance).

GUIDELINES

Note: The Guidelines will be presented under common themes. Each Theme will introduce these categories and will contain: title; sub-title; keywords; key messages illustrating citizen, managers and policy/decision makers motivations; knowledge; opportunities; constraints; sub-guidelines; facts and figure;, checklist for policy and decision makers, terminology, and key references. Each Theme will also be illustrated by facts and figures, as well as one or more case studies set in text boxes, providing examples of good practice. Figures, charts, graphics, photos and other illustrative material will be added as needed. Each Guideline will be briefly defined for clarification of the topic, key references and cross references with related themes where appropriate. Some Guidelines may also be specifically illustrated.

- **Knowledge:** General key expertise and knowledge on the topic; main depository of this knowledge.
- **Opportunities:** Major international frameworks, programmes, actions, networks and other institutional arrangements that may be used as opportunity to implement the good practices related to the specific thematic guideline.

- Constraints: Major constraints and trends that impede the implementation of the good practices related to the specific thematic guideline.

A) Category “Governance, Planning and Accountability”

Theme 1 – Participation and Stakeholder Framework

Guidelines: (a) Multi-agency coordination and partnership; (b) Public engagement; (c) Consultation; (d) Equity, diversity and equality

Theme 2 – Forest and Tree Resources Assessment

Guidelines: (a) Inventory and assessment tools and practices

Theme 3 – Urban Design and Planning

Guidelines: (a) Urban and population dynamic; (b) Urban plans (land-use plans, strategic plans, master plans, development plans); (c) Institutional framework and coordination; (d) Green Infrastructure plans and urban forestry plans; (e) Tree and Forest management systems.

Theme 4 – Policy and Legal Framework (including land tenure)

Guidelines: (a) Policies; (b) Legislation and regulation; (c) Land tenure; (d) Enforcement.

Theme 5 –Climate Change Mitigation and Adaptation

Guidelines: (a) Climate change strategies and plans; (b) Green networks and woodland connectivity; (c) Pest and diseases; (d) Low energy embedded products; (e) Urban Heat Island; (f) Carbon trade market

B) Category “Good practices of natural resources management for economic, ecological and health benefits from UPF”

Theme 6 – Disaster Risk Management and Watershed Management

Guidelines: (a) Emergency response plans (floods and landslides); (b) Watershed management; (c) Natural flood management; (d) Forest fire

Theme 7 – Water and Waste Water Reuse

Guidelines: (a) Storm-water and foul-water; (b) Water waste reuse; (c) Arid lands, irrigation and tree Selection

Theme 8 – Food and Nutrition Security

Guidelines: (a) Tree and forest food products; (b) Tree and forest non-food products (including wood energy); (c) Urban and peri-urban agriculture; (d) Processing and marketing activities; (e) Scales of production

Theme 9 – Human Health & Well-being

Guidelines: (a) Environmental health; (b) Proximity of urban trees, woods and forests to place of residence and work; (c) Physical activity; (d) Community support; (e) Children’s development; (f) Human thermal environment

Theme 10 – Landscape, Forest and Tree Resources Management

Guidelines: (a) Tree species selection; (b) Biodiversity; Forest and tree management practices; (c) Impact assessment (landscape and forest)

Theme 11 – Product and Services Valuation, Incomes and Jobs

Guidelines: (a) Property values; (b) Energy saving product valuation; (c) Deferred street maintenance costs; (d) Commercial benefits – business district enrichment; (e) Ecotourism and Conservation; (f) Small and medium sized enterprises; (g) Tree and forest maintenance employment; (k) Recycling wood residues; (l) Non-market benefits.

C) Category “Delivery support mechanisms”

Theme 12 – Research & Development, Education and Awareness Rising

Guidelines: (a) Knowledge Management; (b) Research, Policy and Development (c) Urban Forestry Action Research; (d) Citizen Science and Participatory Research; (e) Education and training; (f) International knowledge exchange; (g) Communication and awareness rising.

Theme 13 –Resources Mobilization, Investment and Partnership

Guidelines: (a) Human capital; (b) Financial capital; (c) Modalities of partnership for implementation (City twinning, etc.)

Theme 14 –Communication

Guidelines: (a) Communication strategy and implementation; etc.

Theme 15 –Monitoring and Evaluation

Sub-Guidelines: (a) Monitoring and Evaluation systems and tools; etc.

ACTIONS

- City area (States; City Administration and Local Authorities; Research & Development Institutions; Citizen, NGOs and Private Sector, etc.)
- National arena (States; City Association; Citizen, NGOs and Private Sector, etc.)
- International Regional arena (to develop by regions)
- Global arena (UN-Agencies; UN-Conventions; the United Cities and Local Governments [UCLG]; ICLEI; Metropolis; IUFRO; Banks; etc.)

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

ANNEXES

- References
- Check list of strategic questions for decision making
- Definition and Terminology
- List of contributors

Note: Additional publications to be considered

- Series of thematic fact sheets
- Source book on city, country and institution profiles
- Collection of case studies
- Annotated bibliography

ANNEX VI

LIST OF MATERIAL:

PowerPoints presentations

Presentation: “FAO, Urbanization and forestry” (by *Michelle Gauthier*)

Presentation: “The Forestry Commission Scotland” (by *James Ogilvie, Forestry Commission Scotland, United Kingdom*).

Presentation: “UN-HABITAT” (by *Andrew Rudd, UN-HABITAT*)

Presentation: “Guidelines for policy and Decision making promoting urban and peri-urban forestry: report on 1st June 2012 on the main results of the Workshop” (by *Eduardo Rechden, Metropolis/City of Porto Alegre, Brazil*)

Presentation: “IUFRO: Research Group 6.07.00 on Urban Forestry” (by *Cecil Konijnendijk, IUFRO*)

Presentation: “Urban Agriculture and Forestry for Resilient Cities” (by *Henk de Zeeuw, RUAF foundation*)

Presentation: “Manejo del arbolado urbano: elementos de administracion” (by *German Tovar, Secretaría Distrital de Ambiente Profesional Especializado, Bogotá, Colombia*)

Presentation: “Urban Green Spaces: the new connection” (by *Manoj Dabas, Center for Urban Green Spaces, Aravali Foundation For Education, New Delhi, India*)

Presentation: “Guidelines for Policy and Decision Makers: The USA Experience and Practice in promoting Urban and Peri-Urban Forestry” (by *J. James Kielbaso, Michigan State University, United States; Charles A. Wade, C.S. Mott Community College, United States*)

Presentation: “Latin America Countries?” (by *Héctor M. Benavides Meza, INIFAP, Mexico*)

Presentation: “Guidelines: Content and development process” (by *Clive Davies and Michelle Gauthier, FAO*)

Presentation: “Urban forest governance: What it is?” (by *Anna Lawrence, Forest Research, United Kingdom*)

Presentation: “Biodiversity and Urban Greening: Some Experiences from ICLEI and ICLEI Cities” (by *André Mader, ICLEI*)

On the 30th and 31st May 2011, FAO organized, in collaboration with the Forestry Commission Scotland, an international workshop entitled: Developing guidelines for decision and policy makers: trees and forests for healthy cities. The workshop took place in the City of Glasgow, Scotland. The event was attended by 29 persons representing 15 countries. The aim of the workshop was to support the development of International Voluntary Guidelines for Policy and Decision Makers promoting Urban and Peri-urban Forestry (UPF). The workshop was a key step in a consultative and participatory process inviting national, regional and international institutions to provide guidance, collaborate in their preparation, and promote local participation and ownership of the guidelines.

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