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10

OPTIMIZING TREES AND FORESTS FOR HEALTHY CITIES

Developing guidelines for decision and policy makers

Meeting proceedings

**New Delhi, India
7 March 2012**



INTERNATIONAL MEETING

OPTIMIZING TREES AND FORESTS FOR HEALTHY CITIES

Developing guidelines for decision and policy makers

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New Delhi, India

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Edited by

Manoj Dabas

Executive Director

Center for Urban Green Spaces

Aravali Foundation for Education, New Delhi, India

Coordinated and supervised by

Michelle Gauthier

Forestry Officer

Forest Assessment, Management and Conservation Division

Food and Agriculture Organization of the United Nations, Rome, Italy

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For further information, please contact:

Simone Borelli
Forestry Officer
Forest Assessment, Management and Conservation Division
FAO Forestry Department
Viale delle Terme di Caracalla
00153 Rome, Italy
E-mail: simone.borelli@fao.org
Website: www.fao.org/forestry

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PREFACE

In human history, urbanization has emerged as the most significant reason for migrating. More than 50 percent of global population lives presently in cities, and the developing world is now urbanizing at an unprecedented pace. United Nations (UN) figures indicate that only 31 percent of population of the developing world was living in cities in 1991, however, this proportion is expected to swell to 67 percent by 2025. This increasing concentration of human population in cities is fundamentally changing the way humans interact with nature and utilize natural resources. High population density in cities, and the consequent increase in resource consumption, results in significant environmental, economic and urban planning challenges.

Urban and peri-urban forestry (UPF) have significant potential for enhancing the environmental sustainability, economic viability and overall liveability of urban settlements, thus leading to a better life quality for urban dwellers. As cities expand and land values escalate, returning urban and peri-urban forests and trees to their rightful place in urban land use planning priorities is a major challenge. There is an urgent need to develop a strong and broad-based constituency of stakeholders in support to UPF. To ensure durability, this support has to be based on interests and objectives convergence. Nowhere are these challenges greater than in the Asia-Pacific region, which is experiencing high rates of population growth coupled with the world's strongest economic growth for the last decades.

Since January 2011, the Food and Agriculture Organization of the United Nations (FAO) has been spearheading the initiative for the production of “Guidelines for Policy and Decision Making: Promoting Urban and Peri-urban Forestry”. These guidelines are being prepared at the global and regional levels through a consultative process. The primary audiences for this document are policy and decision makers holding an authority positions and a strategic influence in city administration, civil society, business or politics.

As a first step in the guidelines development process, and in order to deliberate upon regional issues and challenges relevant to UPF, FAO invited experts from various parts of the Asia-Pacific region to New Delhi (India). Coming from different disciplines and having different professional backgrounds, these experts represented a wide cross section of key influencers in UPF policy and decision making.

Apart from generating useful insights and inputs for the “Guidelines for Policy and Decision Making: Promoting Urban and Peri-urban Forestry”, the meeting also paved the way for a sustained and structured dialogue on UPF in the Asia-Pacific region. It is hoped that the dialogue initiated by FAO at New Delhi will result in the emergence of new networks and institutional collaborations that will help urban and peri-urban forests and trees achieve their potential and ensure healthy and sustainable urban habitats across the Asia-Pacific region.

ACKNOWLEDGEMENTS

The organizers thank all the participants for their dedication and commitment in supporting the preparation and the realization of the International Meeting on UPF entitled “Optimizing Trees and Forests for Healthy Cities: Developing Guidelines for Decision and Policy Makers”. The meeting benefited from the valuable participation of 97 representatives from different regions, and from both institutional and professional areas. Participants showed interest and professionalism, allowing discussions on the subject and the related issues from different points of view. Important results have been achieved and this meeting helped pave the way towards a stronger collaboration and cooperation on the UPF topic.

Special thanks to Dr P. J. Dilip Kumar (Director General of Forests and Special Secretary of MoEF, Government of India) and Dr Peter Kenmore (FAO Representative in India) for their valued participation and comprehensive inputs to the deliberations.

Sincere thanks to Dr Vinay Luthra (Karnataka Forest Department [KFD]), Mr James Ogilvie (Scotland Forestry Commission [SFC]), Mr Paul V. Chamnier (Thailand Environment Institute [TEI]), Mr Luu Duc Hai (Viet Nam Urban Planning and Development Association), Ms Thushari Kariyavasam (Urban Development Authority [UDA], Sri Lanka), Dr Noor Azlin Yahya (Forest Research Institute [FRIM], Malaysia) and Ms Alu Dorotan (Metro Manila Development Authority [MMDA], Philippines) for having shared their material and experiences.

Special recognition goes to the Organizing Committee of the 1st Biennial International Congress on Urban Green Spaces (CUGS2012) for having readily agreed to integrate the meeting with the framework and schedule of the CUGS2012, so paving the way for a robust participation of a wide variety of relevant stakeholders.

Finally, thanks to the staff of the CUGS at the AFE, New Delhi (India), for its professional, technical and organizational support, allowing a smooth conduction of the meeting.

ACRONYMS

AFE	Aravali Foundation for Education
CBD	Convention on Biological Diversity
COFO	Committee on Forestry (FAO)
COP	Conference of the Parties
CSGN	Central Scotland Green Network
CSR	Corporate Social Responsibility
CUGE	Centre for Urban Greenery and Ecology (Singapore)
CUGS	Centre for Urban Green Spaces
CUGS2012	Biennial International Congress on Urban Green Spaces-2012
EFUF	European Forum on Urban Forestry
FAO	Food and Agriculture Organization of the United Nations
FOM	Forestry Assessment, Management and Conservation Division
FRIM	Forest Research Institute Malaysia
ICLEI	International Council for Local Environmental Initiatives
ICRAF	World Agroforestry Centre
IUCN	International Union for Conservation of Nature
IUFRO	International Union of Forest Research Organizations
KFD	Karnataka Forest Department
LACFC	Latin America and Caribbean Forestry Commission
MDG	Millennium Development Goal
MMDA	Metro Manila Development Authority (Philippines)
MoEF	Ministry of Environment and Forests, Government of India
NAFC	North American Forest Commission
NGO	Non-Governmental Organization
NGP	National Greening Programme (Philippines)
NCT	National Capital Territory
PPP	Public Private Partnership
SFC	Scotland Forestry Commission (United Kingdom)
SROI	Social Return On Investment
TEI	Thailand Environment Institute
UDA	Urban Development Authority (Sri Lanka)
UNCSD	United Nations Conference on Sustainable Development
UN	United Nations
UN-Habitat	United Nations Human Settlements Programme
UNFF	United Nations Forum on Forests
UPF	Urban and Peri-urban Forestry
WIAT	Wood In and Around Towns

EXECUTIVE SUMMARY

The Food and Agriculture Organization of the United Nations (FAO) promotes the role of urban and peri-urban forestry (UPF) in improving environments and livelihoods for vulnerable populations within and around cities. Trees and forests are an essential part of the urban environment: they mitigate risks of floods and landslides and they provide healthy environments and functioning ecosystems, thus contributing to build vibrant cities. In addition, forests in urban and peri-urban areas provide employment opportunities, property improvement and fuelwood supplies, contributing to more sustainable and healthy communities.

In line with its mandate, the FAO Forestry Department and its Forest Assessment, Management and Conservation Division (FOM) promote the optimum integration of trees and forests within and around cities under the theme “Forest and Trees for Healthy Cities: Improving Livelihood and Environment for All”. On 7 March 2012, in New Delhi (India), FAO organized a one-day international meeting on UPF entitled “Optimizing Trees and Forests for Healthy Cities: Developing Guidelines for Decision and Policy Makers”. The meeting was held within the framework of the International Congress on Urban Green Spaces (5–7 March 2012), co-organized by the Center for Urban Green Spaces (CUGS), Aravali Foundation for Education (AFE), New Delhi (India), and the Department of Environment, Government of National Capital Territory (NCT) of Delhi, in association with the Ministry of Environment and Forests (MoEF), Government of India.

The main objective of this meeting was to invite delegates to give their inputs on the regional draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry”, in order to support its finalization. The meeting also aimed to achieve a better understanding of the overall institutional, policy and networking framework on UPF; to develop strategic advice to raise the profile of forests and trees on the national, regional and global urban agendas; and to define strategic opportunities for implementing adaptable and efficient UPF programmes in the Asia-Pacific region.

The meeting convened more than 90 experts coming from agencies and institutions based in India and other countries within and outside the region. Representatives from FAO and other United Nations (UN) agencies, local authorities and municipalities, non-governmental organizations (NGOs), universities and research centres, private sector and bilateral agencies, and governmental organizations took part to the workshop.

The meeting enabled ideas exchange (among stakeholders) on several aspects of UPF, including decision-making processes, best practices, shared expertise and lessons learned, as well as opportunities for future action. It also supported FAO and the other participating institutions in developing a better understanding of the priorities of their respective work programmes on UPF in the Asia-Pacific region. Participants explored opportunities and methods to improve institutional collaborations and partnerships aimed to develop and implement comprehensive and coherent UPF programmes for the development and maintenance of healthy urban environments and local economies. The meeting also resulted in a strategic advice for raising the profile of forests and trees on national, regional and global urban agendas.

The main results of the meeting were:

- recommendations on the content of the draft of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry” for the Asia-Pacific region;
- specific and general recommendations for FAO, participating institutions, networks and governments on UPF;
- specific recommendations for enhancing UPF in the Asia-Pacific region;
- recommendations for major upcoming international events related to urban issues;
- agreement on the need to develop – through collaboration and partnership – guidelines on municipal decision-making to promote UPF;
- recommended actions in priority areas (see Annex III).

The meeting also set the stage for the creation of a regional (Asia-Pacific region) institutional network aimed at facilitating exchange and sharing informations and experiences on UPF, as well as promoting the collaboration between countries in order to strengthen existing initiatives and develop new projects.

INTRODUCTION

Poverty, human settlements, environment (pollution, water and sanitation), health, land tenure and governance are the main topics usually addressed in national and international forums concerning urban development issues in developing countries. Without systematic integration of tree-based systems and forests in urban and peri-urban environments, cities are unlikely to develop in a sustainable and healthy way. Despite this, in many countries (especially in the developing ones) the role of trees and forests is still not widely recognized, and little importance is given to urban and peri-urban forests and trees systems in urban development programmes.

The Forestry Department of the Food and Agriculture Organization of the United Nations (FAO) carries out, in partnership with the major stakeholders, forestry activities to promote urban and peri-urban forestry (UPF), with special attention to developing countries. One of the main obstacles to the diffusion of UPF in developing countries is related to the lack of expertise and knowledge, as well as the limited information and expertise sharing from developed countries (Europe and North America) and relatively wealthy cities of the developing world. The knowledge, tools and techniques need to be available, as well as adapted and contextualized to specific local context. While many international events convene decision-makers to address issues related to agriculture, infrastructure, water, health and poverty topics, forestry issues and rural-urban linkages still tend to be ignored.

In collaboration with the Center for Urban Green Spaces (CUGS) of New Delhi, FAO organized an International Meeting on “Optimizing trees and forests for healthy cities: Developing guidelines for Decision and policy makers” held in New Delhi on 7 March 2012. The meeting was conducted within the framework of the International Congress on Urban Green Spaces (5–7 March 2012), co-organized by the CUGS and the Department of Environment, Government of National Capital Territory (NCT) of Delhi.

The main objective of the meeting was to invite delegates to give their inputs on the regional draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry”, in order to support its finalization. The meeting also aimed to achieve a better understanding of the overall institutional, policy and networking framework on UPF; to develop strategic advice to raise the profile of forests and trees on the national, regional and global urban agendas; and to define strategic opportunities for implementing adaptable and efficient UPF programmes in the Asia-Pacific region.

The meeting convened more than 90 experts coming from agencies and institutions based in India and other countries within and outside the region. Representatives from FAO and other United Nations agencies, local authorities and municipalities, NGOs, universities and research centres, private sector and bilateral agencies, and governmental organizations took part to the workshop.

The meeting allowed perspective sharing on the different aspects of UPF in the Asia-Pacific region. It also stimulated a productive discussion about the challenges to be addressed in order to promote the UPF approach in this densely populated region. The meeting also deliberated the wide range of possible actions needed to raise the profile of UPF at the policy level: its participatory implementation has been promoted at all other levels, and priorities of intervention have been evaluated.



Part 1. The meeting

THE MEETING

CONTEXT

In 2011, FAO initiated the development of the “Guidelines for Policy and Decision Making promoting Urban and Peri-Urban Forestry”. In order to pave the way for the development of this document, an international workshop (30–31 May 2011) and a regional mobilization meeting (2 June) were held in Glasgow, United Kingdom. Once agreed on the table of contents of the guidelines, the document was proposed to be realized mainly on voluntary-basis, in collaboration with institutions and experts. The key transitional document, developed as a proceeding of the international workshop, entitled “Towards Urban and Peri-Urban Forestry Guidelines – Global version”. This document aimed to inform the international community about the process engaged, and to raise awareness on the 15 priority themes proposed, also inviting experts to take part to the consultative process in progress.

Based on the global version framework, a regional version of the Guidelines has been developed for Maghreb and French-speaking countries of Africa. A regional version for the Asia-Pacific region is currently being developed under the coordination of CUGS, Aravali Foundation for Education (AFE) of New Delhi (India).

ORGANIZERS

FAO and CUGS, in collaboration with the Organizing Committee of the 1st Biennial International Congress on Urban Green Spaces-2012 (CUGS2012), organized a workshop in New Delhi (7 March 2012: 08.30–13.45 hours) in order to convene experts and institutions interested in strengthening the UPF in the Asia-Pacific region and in participating in the development of the guidelines for policy and decision making.

CUGS2012 and the FAO Workshop on UPF

Objectives

The objectives of the CUGS2012 were to:

- promote the exchange of practices and expertise in the field of urban and peri-urban forests and trees management;
- discuss the related issues and constraints;
- brainstorm about possible ways to respond to the challenge of optimizing the role of trees and forests in cities at regional and national levels.

Built upon the CUGS2012 deliberations, as well as on the regional draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry”, the objectives of the FAO Workshop were to:

- specifically discuss ways and tools to build up regional institutional capacity on UPF, with special attention to decision and policy makers’ role;
- improve regional networking;
- call upon experts to voluntarily participate in the preparation of the global UPF Guidelines;

- invite peer review of the regional draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry”; and,
- put in place a mechanism supporting the follow-up of the recommendations of the workshop, including (for instance) the creation of a Working Group on UPF in the Asia-Pacific region involving experts and institutions on voluntary basis.

Participation

The FAO Workshop was attended by 97 persons: 4 from UN agencies; 11 from international organizations; 35 from governmental organizations; 6 from municipal bodies; 30 from universities and research centres (national and international); and 11 from NGOs, civil society and private sector (national and international). The participants came from India (80), United Kingdom (2), Italy (1), Malaysia (3), Philippines (2), Sri Lanka (1), Singapore (1), Thailand (3), Viet Nam (1), Canada (1) and United States of America (2). The list of participants is provided in the Annex I.

Documentation

The documentation provided to support the workshop included:

- an annotated agenda of the workshop;
- a provisional programme of the workshop;
- a draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry” for the Asia-Pacific region;
- a draft of the global version of “Towards Urban and Peri-urban Forestry Guidelines”; and,
- a concept note for the development of the UPF Guidelines.

INTRODUCTION AND PRESENTATIONS

The workshop was co-chaired by Michelle Gauthier (FAO) and Vinay Luthra (Karnataka Forest Department [KFD]), and James Ogilvie (Scotland Forestry Commission [SFC]) was the secretary of the workshop. The opening session was addressed by P. J. Dilip Kumar (Director General of Forests and Special Secretary, Ministry of Environment and Forests [MoEF], Government of India) and Peter Kenmore (FAO Representative at New Delhi). Their statements are summarized below.

P. J. Dilip Kumar, Director General of Forests and Special Secretary, MoEF, Government of India

There are serious challenges to be faced in securing urban green spaces from commercial pressures, especially in countries where economic growth is leading to very high real estate prices. This requires a robust legal framework, a vigilant and empowered executive cadre, and cooperation of all stakeholders including local communities. There are several green cover pockets, like forests, that are essentially leftovers from old land uses. Such areas need a higher level of attention and protection. Green India Mission, formulated by the Government of India, attaches great importance to the protection of such patches of urban green cover not only from encroachments but also from destruction due to dumping of urban waste (organic, as well as construction wastes).

There is an urgent need to curb the tendency to privatize urban green areas development under the garb of eco-tourism or eco-development projects based on Public Private Partnership (PPP) models, which often promote civil construction. Forest departments, who often own such lands in urban areas, should refrain from planting these areas very densely as it restricts user groups who interface with these urban green spaces for recreation and other needs. For example, recreational uses usually need a more open forest cover. University campuses across India are examples of this overplanting issue, as dense plantation of trees on campuses makes the landscape oppressive and unhealthy. Poor upkeep of urban green spaces can give rise to feral dog problems which are not only a risk to humans but also a hazard for other urban fauna. There is an enormous opportunity for combining institutional land ownership with habitat conservation in urban areas, and for beefing up the capabilities of city administrations to take up challenges for urban forests and other urban green spaces development. Some of the best “non-forest” tree lands now exist on these institutional areas (industrial estates, institutions or even military establishments). The MoEF of the Government of India recognizes the importance of UPF in improving life quality of an increasing proportion of Indian population. It is committed to promote UPF and to support regional networking for the Asia-Pacific region, thus helping mainstreaming urban and peri-urban forests in the reflections, in the planning processes and in the actions on the ground of the MoEF.

Peter Kenmore, FAO Country Representative, New Delhi, India

Thus far, appreciation and understanding of the impact of urbanization on traditional domains like forestry, fisheries, agriculture etc. has been inadequate in Asian countries. Things are now beginning to improve, as evidenced by the organisation of the CUGS2012 in New Delhi, for example. Traditionally, cities and urban areas were perceived as being in some kind of competition with the hinterland and rural areas. It is now clear that they are all connected. Urban areas depend on products and services provided by surrounding and distant landscapes while they provide numerous services that are essential to keep rural economies going.

Urban forests do not just provide non-timber products but also clean air, clean water and recreational services. The majority of the world's population now lives in urban areas and even India, a country predominantly viewed as rural, will be overwhelmingly urbanized in another 30-40 years.

As we come to grips with the reality of the urbanized world, we must look not just at the technical solutions, but also pay attention to developing robust institutions. These are necessary to address the future needs of dynamic and concentrated places we call “cities”, while taking into account the experiences of traditional forest management and fostering community-based bottom-up approach for planning and management. There are several specific opportunities ahead, like the next Conference of the Parties (COP 11) of the Convention on Biological Diversity (CBD) (Hyderabad, October 2012) which gives the participants of this workshop an opportunity to reach out to a much larger group of institutional stakeholders. FAO in India is committed to follow up on the ideas and action plans coming from the workshop deliberations, not just with the FAO offices but also with all the other partners in the region.

INTRODUCTORY REMARKS

In their introductory remarks, Ms Michelle Gauthier (FAO, Rome) and Mr Manoj Dabas (AFE, New Delhi) recalled the meeting's objectives, programme and expected results. The programme was adopted with a proposal of dividing the discussion session into four questions and three working groups. However, due to time constraints and to the small size of the working groups, the questions were finally discussed in plenary.

Michelle Gauthier, Forestry Officer, FAO

One cannot overemphasize the problems of rising food prices and financial crisis as witnessed over the past few years, as well as their social and political consequences, which need to be addressed at the local government level. Climate change is often not the primary factor responsible for emergencies like floods and landslides. Degradation of natural resources within and around the cities could be the primary factor. There is a need to build cities which are resilient to poverty, food insecurity and climate change, a task that is as daunting as it is complex. In order to achieve Millennium Development Goals (MDG), FAO and several other bilateral and multilateral institutions have been increasingly incorporating urban issues into their priorities. In the last 10 years, FAO has put in place a multi-disciplinary initiative that facilitates the coordination of FAO's activities focused on the urban sector and promotes intersectoral synergy between these activities (e.g. water use and waste water, nutrition, integrated land management, urban food security, livelihood and green economy, agriculture, food processing, land tenure, emergencies). Moreover, as a strategic support from FAO to its member countries, development of guidelines and key tools for consensus building in relevant decision making arenas has been initiated.

Trees and forests within and around cities provide livelihoods, improve urban environment and have special significance for vulnerable groups. Impact of UPF is valued in terms of energy savings (less heating and cooling), fuelwood production (from woodlots and pruning waste recycling), improved human health (stress and noise reduction), nutrition (agroforestry systems production), water access (watershed production and waste water reuse), economic savings (longer longevity and resistance of hybrid green-grey roads infrastructures), increased property values and insurance premium reductions. But if UPF is so beneficial to cities, then why don't we have green well-forested cities? Conflict of interest over land use (e.g. speculation, land tenure insecurity) exacerbated by weak governance and knowledge gap of best practices are main limiting factors. Furthermore, urgencies such as wars, extreme weather events and hunger lead to reduction in commitment of financial resources, pushing trees and forests further down in the hierarchy of political priorities. The task of promoting UPF also has to grapple with the reality that UPF is a complex and inter-disciplinary domain with a variety of institutions and sectors interfacing with each other.

Voluntary guidelines for policy makers are intended to serve as a tool to raise awareness, enhance scope for collaboration, improve quality of governance and facilitate dialogue and negotiation between stakeholders in the context of UPF. It is also foreseen as a planning tool and a means to build vision, strategy and action plans. While the scope of the UPF guidelines that FAO is developing aims at a global audience, it recognizes the need to be factored into geographically specific contexts initiative. It is for this very reason that the development of regional versions of the guidelines has been undertaken.

Manoj Dabas, Executive Director, AFE, New Delhi, India

Urban green spaces do not have to exist merely to support a distinct and unique function. Green areas in urban settings can be used to pursue a multiplicity of objectives through systematic planning and integrated management. Planting Jamun (*Syzhigum cumini*) trees along Delhi's avenues is an example of merging urban food production with landscape aesthetics and comfort. There can indeed be a high level of functional overlap within the UPF domain as well as between UPF and other urban objectives. The aim of the proposed guideline document on UPF is to help policy makers see the high potential of its integration, which needs to be systematic to optimize societal and environmental benefits. It can be expected that this goal will be more achievable with the use of the guidelines in planning and decision making processes, and through the involvement of stakeholders.

Urban and peri-urban forests and trees should be able to fulfil their role in making cities healthy, in improving livelihoods and in increasing the quality and productivity of environment. Communication and education initiatives play an important role in overcoming attitudinal and behavioural barriers. Land-use planning processes need to recognize urban and peri-urban forests as critical green infrastructure, while fostering alliances and partnerships that bring about transformative changes benefiting these forests. Management of urban and peri-urban forests should be an integral part of local governance processes. This is not as common as it may appear. For instance, India's National Forest Policy (1988) document does not have the word "urban" written anywhere in it because the Indian Forest Service do not so far consider urban forests as a key issue that needs attention. This may be risky as more than 50 percent people in the world (and 30 percent in India, i.e. 540 million people) now live in cities and as their first interface with nature is through urban forests. Forestry planning and governance in the Asia-Pacific region need to place great focus on the "urban" environment, with the right support of resources, talent and institutions. The Asia-Pacific region is one of the fastest growing regions of the world, not only economically but also in urbanization. Asian cities have unique characteristics that merit a stratified approach for looking at urban greenery and UPF.

It is in this context that the proposed guidelines, draft already at hand, have been divided into three clusters which have been further divided into 15 sub-themes:

GOVERNANCE AND PLANNING	ECONOMIC, ECOLOGICAL AND HEALTH AND WELLBEING BENEFITS	DELIVERY SUPPORT MECHANISM
Forest and Tree Resource Assessment	Disaster Risk Management and Watershed Management	Resource Mobilization and Investment
Policy and Legal Framework	Water Use and Waste Water Reuse	Communication
Participation and Stakeholder Framework	Nutrition and Food Security	Education, Research and Development
Urban Planning and Urban Design	Human Health and Wellbeing	
Climate Change Adaptation and Mitigation	Landscape, Forest and Tree Resources Management	
Monitoring and Evaluation of Plans and Policies	Product and Services Valuation, Incomes and Jobs	

- The objective of this workshop is to incorporate the technical knowledge and professional insights of regional experts and practitioners into the guidelines. While this is important, it is even more critical to mobilize stakeholder involvement from all regions in order to embed the guidelines in the decision making and planning processes associated with urban planning and development at the regional, country and local levels.
- In this context, conduct of CUGS2012 in New Delhi is, in itself, an important step as it has mobilized the participation of intellectual resources and UPF stakeholders from a very diverse range of professions, institutions and regions under one roof. It is notable that this was the first time it happened in India.

KEY MESSAGES ARISING FROM CITIES AND COUNTRY PERSPECTIVES

After the opening session, selected participants from different countries made brief presentations on the situation of UPF in their region/cities, also discussing issues and challenges to be addressed in the specific context of the Asia-Pacific region.

Noor Azlin Yahya, FRIM, Kepong, Malaysia

Malaysia today has approximately 60 percent of its population living in cities and towns, compared to only thirty five percent in the 1980s. Twenty-five percent of the total population of Malaysia live in the Klang Valley alone. In Malaysia, the local governments' focus on urban green spaces is not uniform. While some local authorities, like the Putrajaya Corporation, have a very good planning and management regime for urban green spaces, there are others that have not been so successful in maintaining their urban green spaces. There is a general rule saying that ten percent of the land should be used as an open space for recreation, ecological balance and allied objectives, but this rule is compromised by fragmentation of the land into smaller scattered lots. According to the Forest Research Institute Malaysia (FRIM), there is a need to consolidate and/or interconnect green spaces in order to give them a critical mass that would better involve local administrations' commitment to their management and upkeep. Malaysia recognizes the important role of awareness raising in the long-term commitments of policy makers, government officials and civil society, required to ensure a better future for urban and peri-urban forests and, as a consequence, a better future for Malaysia's urban population.

The Forestry Department in Malaysia has been expanding its role and thus increases its involvement in the management of community forests and urban forests, enlarging their traditional mandate, which is focusing solely on natural forests.

Alu Dorotan, MMDA, Manila, Philippines

The Metropolitan Manila Development Authority (MMDA) exercises regulatory and supervisory authority over the delivery of services within Metropolitan Manila, which includes traffic and transport management, solid waste disposal management and flood control. Metropolitan Manila, also known as Metro Manila, has a resident population of almost 12 million, which accounts for 13 percent of the total population of the Philippines. In addition, around 2 million people (workers and students from the neighbouring provinces) move in and out of Metro Manila every day. This impressive amount of population generates urban pollution that represents a major issue for MMDA. As a country, Philippines spend 23 million dollars (US\$) every year on the treatment of respiratory disorders caused by high levels of air pollution. In order to solve this rather alarming situation, MMDA has taken a serious initiative aimed at re-greening Metro Manila with the following specific objectives:

- Improve the environment and revitalize the ecosystems in response to urbanization;
- Promote sustainability in built-up areas;
- Raise environmental awareness amongst developers, designers and builders during planning and implementation stages;
- Mitigate flooding caused by soil erosion in watersheds; and,

- Improve water quality in rivers and provide irrigation for farmed lands.

MMDA's strategy has been to develop a streetscape revitalization plan (greening and beautification) to address specific issues related to public safety and aesthetic appeal, unifying and enhancing visual and spatial experience of both drivers and pedestrians. MMDA has also partnered with the Department of Environment and Natural Resources (DENR) to implement the National Greening Programme (NGP) in Metro Manila. NGP seeks to plant 1.5 billion seedlings in 1.5 million hectares of public land nationwide within six years. NGP encourages participation of private sector, civil society and NGOs in its implementation. MMDA is also forging partnerships that can help maintain the green cover once created, since poor survival rates of planted saplings is also a significant problem.

James Ogilvie, Planning and Social Policy Advisor, SFC, United Kingdom

The SFC's vision of forestry development in Scotland gives emphasis to sustainable development, social inclusion and civil society engagement. Within its overall mandate, SFC gives a prime position to urban green spaces. This is recognition of the fact that forestry can contribute to about 13 out of the 15 headline indicators for "quality of life", as defined by United Kingdom's Indicators of Sustainable Development.

Wood In and Around Towns (WIAT) programme is a major initiative of SFC, with a budget of GBP 50 million¹. WIAT seeks to:

- create new urban woodlands;
- bring neglected woodlands under active management; and,
- achieve the above objectives in active collaboration with beneficiary communities. It is now well understood that urban green spaces contribute significantly to a better quality of urban life.

In its first six years, the WIAT programme has allowed more than 600 000 people to gain access to local woodlands. It has also brought more than 11 000 ha of woodlands under active management while also creating 1 400 ha of new woodlands. The Social Return on Investment (SROI) of WIAT programme has been estimated to 600 percent.

Central Scotland Green Network (CSGN, centralscotlandgreennetwork.org) is perhaps the largest landscape improvement project in Europe. CSGN seeks to improve landscape and environmental conditions over an area of 10 000 km² in Central Scotland, where lives a large proportion of the Scottish population.

Thushari Kariyawasam, UDA, Sri Lanka

Sri Lanka is in a rapid development process since it overcame an internal conflict situation. In fact, the country is now emerging as an attractive destination for business investments as well as tourism, although the challenge Sri Lanka facing today is to further enhance its appeal as a business and leisure destination. Urban planning and landscape architecture that preserves cultural and historical identity and ecological integrity has an important role in the efforts required to achieve this goal.

¹ GBP 50 000 000 is equivalent to US\$ 78 730 000 (GBP to US\$ exchange rate on February 2012: 1.5746).

Urban green spaces not only attract investment and tourism but also vastly improve the life quality of the resident population. As Urban Development Authority (UDA) of Sri Lanka recognizes this fact, it is putting efforts to make Sri Lankan cities more pleasant by creating more green/open spaces. The Independence Square project in Colombo is a good example of this important thrust of UDA.

Preservation of waterfronts and wetlands is another important priority. Commercial developments near waterfronts and seafronts limit access, both visual and physical, to the waterfront for the general public. UDA has taken steps to make these public spaces accessible in order to enable a larger section of the population to benefit from urban natural landscapes.

Paul V. Chamnier, Senior Director, TEI, Bangkok, Thailand

Recent floods in Bangkok, which have killed more than 700 people, have highlighted the need for a radical change in the way Thailand looks at its land use planning, its waterways management and its green landscapes. If we ignore these key dimensions and focus on cosmetic changes or spend time in fighting symptoms instead of causes (such as raising the walls along the industrial zone), then we will only pave the way for bigger disasters in the future. One of the main reasons for the recent floods was the steady replacement of the natural green cover in watersheds with monocultural crops and built-up areas (housing and industrial infrastructures).

Thailand Environment Institute (TEI) recognizes that UPF is required not only for the local urban environment but also for providing food and livelihoods to the urban poor. A lot of the knowledge gained from community forestry programmes in rural areas can be adopted in urban areas as well.

PLENARY DISCUSSION

The plenary session was chaired by Mr Vinay Luthra, Additional Principal Chief Conservator of Forests, Government of Karnataka (India). He invited the participants to take part to an open discussion focusing on the following questions:

- What are the main expectations of the citizens from trees and forests in their cities?
- What are the legal, political and governance factors that hinder these expectations from being fulfilled, acting as a bottleneck?
- What are the main obstacles or arguments against trees and forests in urban environment that need to be addressed?
- How to enhance the financial and human resources that are available for the development of UPF?

The discussion involved the participation and contribution of a large number of participants. A summary of the session facilitated by James Ogilvie is reported in Annex V.

In conclusion to the plenary discussion, the participants presented their views on the “way forward” (see the following section “Conclusions and Recommendation”).

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The workshop acknowledged that:

- The robust and broad-based participation of stakeholders in CUGS2012 points towards a stronger recognition of UPF as a willing approach to ensure efficiency and liveability of urban human settlements.
- UPF means different things to different stakeholders. The multidisciplinary nature of this topic calls for a regular and continuous consultation between the different groups of stakeholders. Organizing a UPF meeting in the framework of the Biennial International Congress on Urban Green Spaces would help to set up a regular calendar for discussion about UPF in the Asia-Pacific region.
- More UPF initiatives, involving as many countries as possible, are strongly needed in the region. At present, only Malaysia and India organize National Conferences on UPF.
- There is an urgent need to create a mechanism for regular consultations and experience sharing on issues related to UPF, which could address the topic not only at local but also at regional scales.

RECOMMENDATIONS

The workshop agreed on:

- Putting in place a Working Group on UPF for the Asia-Pacific region. The group should be composed of 10 to 15 persons selected with the aim of involving different aspects of UPF, in terms of institutions, disciplines and geographical regions. The list of the people who volunteered to participate in the working group can be found in Annex I. The group would be lead jointly by FAO (Michelle Gauthier) and the CUGS of the AFE, India (Manoj Dabas).
- Submitting the regional draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry” for peer review comments and inputs. In this process, the document should not only be shared with the workshop participants, but also with other institutions and countries in the region.
- Pursuing the development of the UPF guidelines and their validation to subsequently promote their adoption through the organization of UPF side-events in important events, such as: (i) the Committee on Forestry (COFO) (Rome, Italy, 24-28 September 2012); (ii) the COP of CBD (Hyderabad, India, 8-19 October 2012); and, (iii) the World Congress on Agroforestry (New Delhi, India, 2014).
- Considering organizing other regional events aimed to promote capacity building and interdisciplinary and sectoral networking.
- Taking lessons learned from other policy or delivery forms, such as the UPF Working Group of International Union of Forest Research Organizations (IUFRO) and the European Forum on Urban Forestry (EFUF).

- Promoting the inclusion of UPF related issues in the local agendas of urban planners and developers in the Asia-Pacific region. To achieve this, inclusive and focused side-events should be organized in parallel of major events. Targeted outreach materials (such as newsletters and interactive websites) should also be produced and circulated.
- Considering to develop (as a first action for resources mobilization): (i) an assessment of the needs highlighted by urban planners and developers; (ii) a list of key institutions interested in participating to the working group; and, (iii) a concept note and projects supporting networking, communication and training intended for planners, developers and policy makers at the regional level.



Part 2. Annexes



ANNEX I

PROPOSAL FOR A WORKING GROUP ON UPF FOR THE ASIA-PACIFIC REGION

Proposal

Set up a regional UPF Working Group for the Asia-Pacific region.

Mandate

Coordinate the UPF information gathering and exchange in the Asia-Pacific region, and make this information available to the policy and decision makers.

Tasks for 2012–2013

- Prepare, through a consultative process, the Working Group mandate, and set up the modalities for collaborative work.
- Develop collaborative arrangements (with institutions having common outreach mandates) for the preparation of communication materials aimed at promoting a better understanding of UPF among the different groups of stakeholders.
- Facilitate and support regional networking among researchers, practitioners, and decision and policy makers.
- Attend events relevant to UPF and encourage others to participate in order to: (i) green the urban agendas; (ii) urbanize the forestry agendas; and, (iii) link policy formulation with research on respective agendas (See Annex II for a list of the upcoming UPF related international events).
- Prepare a work programme on UPF for the Working Group (biennium 2012–2013).
- Continually explore opportunities to mobilize resources in support to UPF in the Asia-Pacific region, and assist in mobilizing institutional and financial resources for the implementation of the biennial work plan.
- Keep partners informed of the activities and results from the regional UPF Working Group.

List of volunteer members:

- *Michelle Gauthier* (Coordination), FAO, Rome, Italy
- *Manoj Dabas* (Coordination), AFE, New Delhi, India
- *Noor Azlin Yahya*, FRIM, Kepong, Malaysia
- *Alu Dorotan*, MMDA, Manila, Philippines
- *Luu Duc Hai*, Vice Chairman, Viet Nam Urban Planning and Development Association, Viet Nam
- *Thushari Kariyawasam*, UDA, Sri Lanka
- *Paul V. Chamnier*, Senior Director, TEI, Bangkok, Thailand
- *Trudy Maria Tertilt*, Centre for Urban Greenery and Ecology (CUGE), Singapore
- *Subhash Chandra*, Deputy Inspector General of Forests, Government of India, India
- *Deep Narain Pandey*, Member Secretary, Rajasthan Pollution Control Board, Jaipur, India
- *Fook Yee Wong*, Former Director, Country and Marine Parks Department, Government of Hong Kong, Hong Kong (China)
- *P. Jagdish*, Chief Conservator of Forests, Tamil Nadu Forest Department, Chennai, India
- *Prodyut Bhattacharya*, Dean, University School of Environmental Management, Guru Gobind Singh Indraprastha University, New Delhi, India
- *James Ogilvie*, Planning and Social Policy Advisor, SFC, United Kingdom
- *Padam Prakash Bhojvaid*, Director, Forest Research Institute, Dehradun, India
- *Wang Cheng*, Chinese Academy of Forests, Beijing, China
- *Shashi Kant*, Professor of Forest Economics, Faculty of Forestry, University of Toronto, Ontario, Canada
- *Harish Belwal*, Chartered Financial Analyst, Springfield, New Jersey, United States of America

ANNEX II

CALENDAR OF EVENTS

Selected international events related to urban and forestry issues:

- ✓ 5-7 March 2012: 1st Biennial Congress on Urban Green Spaces (CUGS2012), AFE and Government of NCT Delhi (New Delhi, India).
- ✓ 5-9 March 2012: 27th Session of the Latin America and Caribbean Forestry Commission (LACFC), FAO (Asunción, Paraguay).
- ✓ 8-9 May 2012: 26th Session of the North American Forest Commission (NAFC), FAO (Québec, Canada).
- ✓ 8-12 May 2012: 15th EFUF “Urban Forests – Ecosystem Services and Sustainable Management”, EFUF – IUFRO (Leipzig, Germany). Also held: FAO workshop for Mediterranean countries; 1st meeting of the UPF Working Group of the Silva Mediterranea Committee.
- ✓ 12-15 May 2012: Resilient Cities 2012 – 3rd World Congress on Cities and Adaptation to Climate Change, International Council for Local Environmental Initiatives (ICLEI) (Bonn, Germany).
- ✓ 22-24 May 2012: Conference “Forest for People”, IUFRO (Alpbach, Tyrol, Austria).
- ✓ 30 May-2 June 2012: World Congress 2012, ICLEI (Belo Horizonte, Brazil).
- ✓ 4-6 June 2012: Rio+20 Global Town Hall, ICLEI (Rio de Janeiro, Brazil).
- ✓ 20-22 June 2012: Rio+20, The United Nations Conference on Sustainable Development (UNCSD) (Rio de Janeiro, Brazil).
- ✓ 1-7 September 2012: 6th World Urban Forum “The Urban Future”, United Nations Human Settlements Programme (UN-Habitat) (Naples, Italy).
- ✓ 6-15 September 2012: International Union for Conservation of Nature (IUCN) World Conservation Congress 2012, International Convention Centre (Jeju [Cheju-Do], Republic of Korea).
- ✓ 24-28 September 2012: 21st Session of the COFO, FAO (Rome, Italy).
- ✓ 1 October 2012: World Habitat Day, UN-Habitat.
- ✓ 8-19 October 2012: COP of the CBD (Hyderabad, Andhra Pradesh, India).

- ✓ 5-12 November 2012: Biannual IUFRO Forest Landscape Ecology Conference “Sustaining Humans and Forests in Changing Landscapes: Forests, Society and Global Change”, IUFRO (Concepción, Chile).
- ✓ 9-18 April 2013: 10th Session of the United Nation Forum on Forests (UNFF). Items on “Benefits of forests and trees to urban communities” (Istanbul, Turkey).
- ✓ May 2013: 16th EFUF–IUFRO – University of Florence and University of Bari (Milan, Italy).
- ✓ 2014: 3rd World Congress of Agroforestry, World Agroforestry Centre (ICRAF) (New Delhi, India).

ANNEX III

SUMMARY OF DISCUSSIONS IN PLENARY

1. What are the main expectations of citizens from trees and forests in the city?

GOVERNANCE AND PLANNING	GOOD PRACTICES – ECONOMICS, ECOLOGICAL, HEALTH & WELL BEING	DELIVERY SUPPORT MECHANISM?
If poverty alleviation and food production is an FAO priority then food production should be a priority for urban green spaces.	Native plants are more robust in dealing with seasonal environmental stresses specific to a region. Importance of native plant species should be duly recognized in fine tuning species selection for UPF projects.	A robust and comprehensive legal framework (including plant, animal, environmental and ecological aspects) is essential for long-term survival of forests in urban and peri-urban areas.
Species selection in UPF programme should be aimed at maximizing the benefits for society (comfort, fruit, shade, biodiversity conservation, disaster mitigation, etc.).	Species selection for planting in residential areas should recognize and take into account potential health hazards posed by specific species (e.g. heavy pollinating species can exacerbate asthma).	Tree planting alongside roads in urban areas should be done leaving a buffer to allow future road widening, if required, without affecting the roadside planting.
Regulatory framework should allow/facilitate UPF on unused/abandoned plots of land (regardless of size).	Species selection should be site/objective specific. For instance, planting alongside roads should comprise species primarily known for their ability to absorb pollutants than other miscellaneous attributes.	Ready and easy access to areas under UPF for recreation is critical to generate local community support for the broader cause of enhancement and long-term sustainability of these areas.
Need to develop clear and legally enforceable benchmarks for portion of land area to be committed to UPF under various settings of urban development/redevelopment.	Although large areas are often more biodiverse than the small ones, interconnecting small patches of urban forests can enhance their biodiversity values as a whole.	Species selection should take into account varying requirements of various socio-economic groups. For example, fuelwood species would benefit poor communities more than richer ones.

UPF should be recognized for its ecological/environmental significance at region/biome level and not only at local level.	Species selection in UPF programme should be aimed at maximizing the benefits for society (comfort, fruit, shade, biodiversity conservation, disaster mitigation, etc.).	Compilation and dissemination of information on UPF status and its benefits need to be entrusted to trained professionals for ensuring that content, style and medium best suits the target audience.
UPF means different things to different stakeholders. Harmonizing aspirations requires cooperation and effective communication. Stakeholder involvement in planning and execution of UPF projects is also essential.		Inventory of UPF resources, done at regular intervals, is critical to assess the efficacy of existing management practices. UPF inventory should be carried out with maximal engagement of local communities and civil society organizations for transparency and stakeholder involvement.
		Capacity building of field staff/volunteers on an ongoing basis is essential for UPF initiatives success. There are several web-based training modules that are available for this, which may need to be customized to meet specific needs and to adapt to geographical contexts.

2. What are the legal, political and governance factors that hinder expectations from being fulfilled?

GOVERNANCE AND PLANNING	GOOD PRACTICES – ECONOMICS, ECOLOGICAL, HEALTH & WELL BEING	DELIVERY SUPPORT MECHANISM
Development of criteria for benchmarking UPF area per capita requirements in the urban planning process.	Enhanced emphasis on development of water harvesting structures in construction codes and building by-laws.	Need to promote usage of waste water for irrigation of areas under UPF.
Political “compulsions” and legal conflicts in “securing” green spaces from being encroached, e.g. conflicts between squatters and green space use in Philippines.	Connectivity between fragmented green patches and water bodies in urban areas (Green and Blue networks).	Land use decentralization is needed to enable physical access.
Strong legal backing, if possible through federal laws, for urban green spaces as is the case with highways or railways.	Conflict management to resolve clash of interests, e.g. the case of the Chennai Metro where for every tree removed, ten need to be planted as compensatory measure.	Long-term planning, such as the master plans for a proactive provision of technical and social infrastructure needed.
Stronger public pressure on political parties to articulate their UPF vision in their electoral manifestos.	Staggered levels of legal protection depending on the type of green space, in order to balance developmental and conservation priorities (e.g. legal distinction between a notified “forest” and “tree cover”, with the former having greater legal protection).	Adapt urban parks and urban forest parks following master planning.

Tree protection laws in urban areas should be designed to act as enabling provisions for encouraging tree planting on private urban land. Unless planted with government support, there should be minimum restriction on removal of trees on private lands.	Use tolls and levies wherever possible to generate resources for tree planting. Rapidly growing green cover gives a unique “identity” to an area leading to enhanced property values which in turn makes green tolls and levies acceptable.	Development of legally enforceable mandatory green spaces requirements and standards in private sector projects for urban development.
Participatory planning should be made integral part of all UPF management plans through suitable processes that are legally mandated.		
India should also have a UPF Mission on the lines of its ambitious Green India Mission.		

3. Main obstacles/argument against trees and forests in urban environments that need to be addressed?

GOVERNANCE AND PLANNING	GOOD PRACTICES – ECONOMICS, ECOLOGICAL, HEALTH & WELL BEING	DELIVERY SUPPORT MECHANISM
People should realize that urban forestry is not a luxury but a necessity	Choice of species is important.	
Criminal/political nexus that hijacks the urban planning agenda from other stakeholders.	Education is important to re-establish the connection between urban life and nature which shall also enhance the adoption of UPF as a way of life.	
How to solve political conflicts of interest?		

4. How to enhance financial and human resources and provide incentives?

GOVERNANCE AND PLANNING	GOOD PRACTICES – ECONOMICS, ECOLOGICAL, HEALTH & WELL BEING	DELIVERY SUPPORT MECHANISM
Bespoke funding (ring fenced) needed.	Engage with schools, involve parents and include UPF within teaching curriculum programmes.	Tie up private landowners with corporate inputs, such as funding, under Corporate Social Responsibility (CSR) principles.
Celebrate success with specific awards and awareness-raising activities (e.g. the Thailand experience).	Push local government to implement legal procedures, city plans and master plans. Robust enforcement is needed, and accountability is important.	Forestry departments should take action to recognize the social benefits of UPF (if not already done).
Use branded campaigns to communicate the urban planting message (e.g. Delhi's "City plants a million trees").	Use market forces to promote urban greenery.	Institutionalize "Compensatory Planting" to more than "offset" any unavoidable destruction of urban tree cover.
Earmark a certain percentage of funding received under existing initiatives, e.g. Greening India matched with partnership funds.	Use complementing issues like "Cities and Climate Change" to highlight the need for higher UPF funding.	Link special occasions with tree planting activity (e.g. "Buy a car and plant a tree" campaign).
	Bring the UPF issue to a higher level with the use of compelling language e.g. emergency, crises, etc.	

ANNEX IV

LIST OF PARTICIPANTS

CANADA

Kant, Shashi

Professor Faculty of Forestry
University of Toronto
27 King's College Circle
Toronto, Ontario – M5S 1A1, Canada
E-mail: shashi.kant@utoronto.ca

INDIA

Adholeya, Alok

Biotechnology and Bioresources Division
The Energy and Resources Institute
Darbari Seth Block, IHC Complex, Lodhi Road
New Delhi – 110003, India
E-mail: aloka@teri.res.in

Agarwal, Sunil

Madhya Pradesh Forest Department
Satpuda Bhavan, 1st Floor
Bhopal, Madhya Pradesh, India
E-mail: apccfdev@mp.gov.in

Akbar, M. J.

Officer on Special Duty
Hyderabad Metropolitan Development Authority
6-3-1-2/1, Tank Bund Road
Hussain Sagar, Hyderabad – 500029,
Andhra Pradesh, India

Arora, J. S.

Former Professor and Head Floriculture
Panjab University Regional Centre
Civil Lines, Ludhiana, Punjab – 141001, India

Baijal, Anil

Former Secretary
Ministry of Urban Development, Govt. of India
Nirman Bhavan
New Delhi – 110002, India
E-mail: anilbaijal@gmail.com

Bandopadhyaya, D. K.

Vice Chancellor
Guru Gobind Singh Indraprastha University
Sector 16 – C, Dwarka
Delhi – 110075, India
E-mail: dkb@ggsipu.ac.in

Bassin, J. K.

Senior Principal Scientist and Head
CSIR-NEERI Delhi Zonal Laboratory
A-93/94, 1st Floor, Naraina Industrial Area, Phase-I
New Delhi – 110028, India
E-mail: jk.bassin@gmail.com

Basu, D. D.

Scientist 'E'
Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar
Delhi – 110032, India
E-mail: ssddb.cpcb@nic.in

Bhattacharya, J.

General Secretary
Resident Welfare Association
CR Park, New Delhi – 110019, India
E-mail: jbhattacharya@airtelmail.in

Bhattacharya, Prodyut

Guru Gobind Singh Indraprastha University
Sector 16 – C, Dwarka
Delhi – 110075, India
E-mail: prodyutbhattacharya@yahoo.com

Bhojvaid, Padam

Chief Conservator for Forests
Haryana Forest Department
Panchkula – 134109, Haryana, India
E-mail: padam57@rediffmail.com

Bhowal, Nilanjan

Principal Architect
Design Consortium
J-1868, First Floor
CR Park, New Delhi – 110019, India
E-mail: nilanjan@descon.in

Bosu, Parthaa

India Representative
Clean Air Network India
1st Floor, Building No.4
Thyagraj Nagar Market
Lodhi Colony, New Delhi – 110003, India
E-mail: paartha.bosu@cai-asia.com

Chakrabarti, Tapan

Former Director National Environment
Engineering Research Institute
Nagapur, India
E-mail: tapan1249@gmail.com

Chand, D. Suresh

Zoological Survey of India
M block
New Alipur, Kolkata – 700053, India

Chandra, Subhash

Deputy Inspector General – Forest policy
Ministry of Environment and Forest, Govt. of India
New Delhi, India
E-mail: subhaash.chandra@gmail.com

Charak, K. S.

Adviser
Department of Biotechnology, Govt. of India
CGO Complex, Lodhi Road
New Delhi – 110003, India
E-mail: charak@dbt.nic.in

Chotani, M. L.

Director
Association of Municipalities and Development
Authorities
7/6, Sirifort Institutional Area
August Kranti Marg, New Delhi – 110049, India
E-mail: mlchotani@yahoo.com.in

Correa, Charles

Charles Correa Associates
9 Mathew Road,
Mumbai – 400004, India
E-mail: cmc@charlescorrea.net

Dabas, Manoj

Executive Director
Aravali Foundation for Education
New Delhi – 110074, India
E-mail: mdabas@aravalifoundation.in

Dandin, S. B.

University of Horticultural Sciences
Navanagar, Bagalkot – 587102, India

Das, Jayant Kumar

Divisional Forest Officer
Forest Department
BBSR, At/PO – Ghatikia
Bhubaneswar, Odisha – 751003, India
E-mail: dfocity@gmail.com

Das, Manab

Associate Fellow, Biotechnology
The Energy and Resources Institute
Darbari Seth Block, IHC Complex, Lodhi Road
New Delhi – 110003, India
E-mail: mdas@teri.res.in

Davis, Alex

Alex Davis Studio
Indi Store 143 Shahpurjat
Opp. Asiad Village, New Delhi – 110049, India
E-mail: alexdavisstudio@gmail.com

Dhote, Meenakshi (Ms)

Professor of Environmental Planning
School of Planning and Architecture
4 - Block – B,
IP Estate, New Delhi – 110002, India
E-mail: meenakshidhote@gmail.com

Dogra, Kuldip S.

Botanical Survey of India
DF Block, Sector 1
Salt Lake City, Kolkata– 700064, India
E-mail: dograks6@yahoo.co.in

Dunhum, John

Environment Officer
U.S. Embassy
Shantipath, Chanakyapuri,
New Delhi – 110021, India
E-mail: dunhamj@state.gov

Elamon, Joy

Intercooperation Social Development India
153/A/4, Sappers Lane, Balamrai
Secunderabad – 500003, Andhra Pradesh, India

Ghosh, Prodipto

Former Secretary
Ministry of Environment and Forest, Govt. of India
CGO Complex, Lodhi Road
New Delhi – 110003, India

Gokhale Beninger, Anita (Ms)

Executive Director and Professor,
Sustainable Development Planning
Centre for Development Studies and Activities
PO Box No. 843
Deccan Gymkhana, Pune – 411004,
Maharashtra, India

Gopalkrishnan, M.

Formerly President, Indian Water Resources
Society
Formerly Secretary General, International
Commission on Irrigation and Drainage
India
E-mail: mgopalakrishnan@hotmail.com

Gupta, N. C.

Guru Gobind Singh Indraprastha University
A Block, Sector 16 – C, Dwarka
New Delhi– 110075, India
E-mail: ncgupta1@gmail.com

Gupta, Shreekant

Professor
Delhi School of Economics and LKY School of
Public Policy
National University of Singapore
India
E-mail: sgupta@econdse.org

Gupta, Y. C.

Head Horticulture
Dr Y. S. Parmar University of Horticulture and
Forestry
Nauni, Solan – 173230, India
E-mail: ycgupta2006@yahoo.co.in

Handoo, Umang (Ms)

Spatial Decisions
B-30
Kailash Colony, New Delhi – 110048, India
E-mail: umang_handoo@yahoo.com

Jagdish, P.

Tamil Nadu Forest Department
Forest office Complex, Cherry Road
Salem – 636007, India
E-mail: jagdishp99@yahoo.com

Jain, Ratna (Ms)

Rajasthan Chief Environment
Rajasthan Pollution Control Board
4, Jhalana Institutional Area
Jhalana Doongri, Jaipur – 302 004,
Rajasthan, India

Jaiswal, Mamta (Ms)

Mayor
Howrah City, West Bengal, India

Jayaseelan, Naini

Member Secretary
National Capital Region Planning Board
Ministry of Urban development, Govt. of India
India Habitat Centre, 4-b, 1st Floor
New Delhi – 110003, India

Jishtu, Vaneet

Forest Research Institute
Indian Council of Forestry Research and Education
New Forest Road
Dehradun – 248006, India
E-mail: jishtu@yahoo.com

Joshi, T. K.

Director
Centre for Occupational and Environmental Health
Ground Floor, B.L. Taneja,
Block Maulana Azad Medical College
New Delhi – 110002, India
E-mail: kantjoshi@gmail.com

Kalia, P.

Head Vegetable Science
Indian Agricultural Research Institute
Pusa, New Delhi – 110012, India
E-mail: pritam.kalia@gmail.com

Kanagasabapathy, N.

Chennai Metropolitan
Development Authority Gandhi Irwin Road
Egmore, Cennai – 600008, India
E-mail: kanagasabapathy@yahoo.in

Khetrpal, Indu (Ms)

Principal
Salwan Public School, Sector 15, Part-II Gurgaon,
Haryana – 122001, India

Khudsar, Faiyaz A.

Biodiversity Parks Programme
Center for Management of Degraded Ecosystems
University of Delhi
New Delhi – 110007, India
E-mail: faiyazwild@gmail.com

Kuhad, R. C.

Department of Microbiology
University of Delhi, South Campus
New Delhi – 110007, India
E-mail: kuhad85@gmail.com

Kumar, Anil

Director
Department of Environment,
Govt. of NCT of Delhi, Delhi Secretariat
IP Estate, New Delhi – 110002, India
E-mail: dr.anilkumardelhi@gmail.com

Kumar, P. J. Dilip

Director General and Special Secretary
Ministry of Environment and Forests
Govt. of India
Nirman Bhawan, C-Wing
New Delhi – 110002, India
E-mail: pjdilip@gmail.com

Lakhchaura, Prakash

Forest Survey of India
Kaulagarh Road, P.O. IPE
Dehradun – 248195, Uttarakhand, India
E-mail: prakash_293@rediffmail.com

Lingaraja, K. M.

Senior Executive Officer
Karnataka State Pollution Control Board
“ParisaraBhavan” 49, 4th and 5th Floor,
Church Street
Bangalore – 560001, Karnataka, India
E-mail: kmlpcb@yahoo.in

Luthra, Vinay

Addl. Principal Chief
Conservator of Forests
Govt. of Karnataka
Aranya Bhawan, Bengaluru, India
E-mail: vinay.luthra@gmail.com

Madalageri, M. B.

Director, Research
University of Horticultural Sciences
Sector # 60
Navanagar, Bagalkot – 587102, Karnataka, India
E-mail: madalagerimb@rediffmail.com

Magudapathy, R.

Chennai Metropolitan Development Authority
Building No. 1, Gandhi Irwin Road
Egmore, Chennai – 600008, Tamil Nadu, India
E-mail: magraj63@gmail.com

Mahla, R. D.

Madhya Pradesh Forest Department
Satpuda Bhavan 1st Floor
Bhopal, Madhya Pradesh, India
E-mail: apccfdev@mp.gov.in

Majumdar, Milli (Ms)

Director
Sustainable Habitat, ADaRSH Division,
The Energy and Resources Institute
Darbari Seth Block, IHC Complex, Lodhi Road
New Delhi – 110003, India

Mitra, Alpana (Ms)

Officer on Special Duty
Rajkot Municipal Corporation
Dhebarbhai Road,
Rajkot, Gujarat, India

Mohapatra, Anil

Zoological Survey of India
M-block
New Alipur, Kolkata – 700053, India
E-mail: anil2k7@gmail.com

Mukherjee, Saumitra

Head
Remote Sensing Applications Laboratory
Jawaharlal Nehru University,
New Delhi, India
E-mail: saumitramukherjee3@gmail.com

Mukherjee, Subhrankar

Society of Appropriate Rural Technology for
Sustainability
India
E-mail: subra@sankalpacmfs.org

Muralidhar, B. S.

Executive Officer
Karnataka State Pollution Control
Board, Parisara Bhavan
Church Street
Bangalore – 560001, India
E-mail: bngcity1@kspcb.gov.in

Murthy, Krishna

Divisional Forest Officer
Visakhapatnam Urban Development Authority
3rd Floor, Udyog Bhavan, Siripuram Jn.
Visakhapatnam – 530003, Andhra Pradesh, India
E-mail: krishnamurthybva_03@yahoo.com

Natesh, S.

Sr. Advisor
Department of Biotechnology Govt. of India
CGO Complex, Lodhi Road,
New Delhi – 110003, India
E-mail: natesh.dbt@nic.in

Ojha, R. K.

Tamil Nadu Forest Department
Villupuram circle, No: 23A
Ranganathan Street
Poonthottam, Villupuram – 605602, India
E-mail: ccfwpsalem@gmail.com

Ojha, U. C.

Head
Pulmonary Medical Department ESI Hospital
Basai Darapur, New Delhi – 110015, India

Pattanaik, Akshya Kumar

Divisional Forest Officer (Wildlife)
Forest and Environment Departments
Govt. of Odisha, BBSR, At/PO
Ghatikia, Bhubaneswar, Odisha – 751003, India
E-mail: akshyapat@gmail.com

Prakash, Jai

Principal
Bhaskaracharya College of Applied Sciences
University of Delhi, Sector 2, Dwarka
New Delhi – 110075, India
E-mail: jprakash48@yahoo.co.in

Ram, Janaki

Head, Floriculture
Indian Agricultural Research Institute
Pusa, New Delhi – 110012, India
E-mail: tolety07@gmail.com

Rawat, J. S.

IUCN – India
20 Anand Lok, 2nd Floor,
New Delhi – 110049, India
E-mail: js.rawat@iucn.org

Reddy, M. Gopinath

Center for Economy and Social Studies
Begumpet, Hyderabad – 500016,
Andhra Pradesh, India
E-mail: mgopinathreddy@gmail.com

Reddy, P. Rajender

Director, Urban Forestry
Hyderabad Metropolitan Development Authority
Buddha Purnima Project # 6-3-1-2/1,
Tank Bund Road, Hussain Sagar Opp: LIC,
Division Post
Hyderabad – 500029, Andhra Pradesh, India

Roy, S. Dam

Senior Scientist
Central Institute of Fisheries Education
Versova, Andheri (W), Mumbai – 400061, India
E-mail: damroy@cife.edu.in

Sabat, B. C.

Senior Scientific Officer
Department of Environment, Govt. of NCT
6th Floor,
Delhi Secretariat,
IP Estate, New Delhi – 110002, India
E-mail: bcsabat@yahoo.com

Sahoo, N.

Gujarat Council of Science City
Science City Rd. Off S. G. Highway
Ahmedabad – 380060, India
E-mail: narottam.sahoo@gmail.com

Sangwan, Kuldip

Divisional Forest Officer (Rohtak)
Haryana Forest Department
Van Bhawan, C – 18, Sector – 6
Panchkula – 134109, Haryana, India
Mob.: (+91) 9 416291167

Sangwan, Parmjeet

Deputy Conservator of Forests
Haryana Forest Department
Panchkula, Haryana, India

Sekaran, M.

Directorate of Town and Country Planning
Govt. of Tamil Nadu Chennai,
Tamil Nadu, India
E-mail: ddcglregion@gmail.com

Selvanayagam, M.

Director
Loyola Institute of Frontier Energy
Loyola College
Chennai – 600034, India
E-mail: selvam.mariadoss@gmail.com

Shah, Jagan

Dean Sushant School of Architecture
Gurgaon – 122003, Haryana, India
E-mail: jaganshah@gmail.com

Sindhu, S. S.

Principal Scientist
Centre for Protected Cultivation Technology
Indian Agricultural research Institute
Pusa, New Delhi – 110012, India
E-mail: sssindhu2003@yahoo.co.in

Singh, Sarnam

Professor
Indian Institute of Remote Sensing
Dehradun – 248001, India
E-mail: sarnam@iirs.gov.in

Singh, T. P.

IUCN – India
20 Anand Lok, 2nd Floor
New Delhi – 110049, India
E-mail: tp.singh@iucn.org

Sinha, Bhaskar

Indian Institute of Forest Management
PO Box 357, Nehru Nagar
Bhopal – 462003, Madhya Pradesh, India
E-mail: bsinha@iifm.ac.in

Sood, Raju

Independent Consultant Clonal Plant Propagation
Kurukshetra, Haryana, India
E-mail: soodraju@yahoo.co.in

Suresh, M. R.

Assistant Conservator of forests
Bangalore Development Authority
T. Chowdaiah Road
Kumarapark West, Bangalore – 560020,
Karnataka, India
E-mail: suresh7756@yahoo.com

Tandon, Vinay

Principal Chief Conservator of Forests,
Himachal Pradesh as Advisor (Forestry, Wildlife
and Natural Resources)
Govt. of Himachal,
Pradesh, India
E-mail: vtandy@gmail.com

Tathagat, Tanmay

Director
Environmental Design Solutions
Vasant Vihar, New Delhi – 110057, India

Vidyadhar, Bonthe

Indian Agricultural Research Institute
Pusa, New Delhi – 110012, India
E-mail: b.vidyadhar@gmail.com

Yadav, Subhash

Deputy Conservator of Forests
Haryana Forest Department
P – I, C – 18, Van Bhawan, Sector – 6
Panchkula, Haryana, India
E-mail: syadavhfs02@yahoo.co.in

ITALY

Sobhana, Rajesh Kumar

University of Padova
Viale dell'Università, 16
Agripolis – 35020, Legnaro, Padova, Italy
E-mail: rskumarifs@gmail.com

MALAYSIA

Azlin Yahya, Noor (Ms)

Forest Research Institute
52109 Kepong, Selangor, Darul Ehsan, Malaysia
E-mail: azlin@frim.gov.my

Mat, Noriah (Ms)

Department of Landscape and Parks
Putrajaya Corporation
Federal Territory of Putrajaya, Malaysia
E-mail: noriahmat@yahoo.com

Yahaya, Asmatt (Ms)

Putrajaya Corporation Malaysia
4 Persiaran Perdana, Presint 3
Federal Territory of Putrajaya, Malaysia
E-mail: asmahyahaya@gmail.com

PHILIPPINES

Agnes M. Mateo, Jocelyn (Ms)

Manila Metropolitan Development Authority
MMDA Building, EDSA corner Orense St.
Guadalupe, Makati City, Philippines
E-mail: oagmp.ppsds@gmail.com

Luwalhati C Dorotan, Maria (Ms)

Manila Metropolitan Development Authority
MMDA Building, EDSA corner Orense St.
Guadalupe, Makati City, Philippines
E-mail: adorotan.mmda@gmail.com

SCOTLAND

Ogilvie, James

Head of Social Policy
Scotland Forestry Commission
Silvan House, 231 Corstorphine Road
Edinburgh – EH12 7AT, Scotland
E-mail: James.Ogilvie@forestry.gsi.gov.uk

SINGAPORE

Maria Tertilt, Trudy (Ms)

Senior Researcher
National Parks Board Headquarters
Singapore
E-mail: Trudy_Tertilt@nparks.gov.sg

SRI LANKA

Kariyawasam, Thushari (Ms)

Architect/Landscape Architect
Environment and Landscape Division
Urban Development Authority
Battaramulla, Sri Lanka
E-mail: kapur.ritika@yahoo.com

THAILAND

Chamnier, Paul V.

Senior Director
Thailand Environment Institute
16/151 Muang Thong Thani, Bond Street
Pak Kret, Bang said, Nonthaburi – 11120, Thailand
E-mail: chamniern@tei.or.th

Perkin, Scott

IUCN – Bangkok
63 Sukhumvit Road Soi 39 (Soi Prompong)
Klongton-Nua, Wattana,
Bangkok – 10110, Thailand
E-mail: James.Ogilvie@forestry.gsi.gov.uk

UNITED KINGDOM

Kapur, Ritika (Ms)

University of Cambridge
Cambridge – CB2 3QZ, United Kingdom
E-mail: kapur.ritika@yahoo.com

Mell, Ian

Department of University of Sheffield
Western Bank
Sheffield – S10 2TN, United Kingdom
E-mail: i.c.mell@sheffield.ac.uk

Ram, S.S.

St Edmund's College
Cambridge – CB3 0BN, United Kingdom
E-mail: ssr29@cam.ac.uk

UNITED STATES OF AMERICA

Handel, Steven

Professor
Department of Ecology, Evolution and Natural
Resources
The State University of New Jersey (Rutgers)
New Jersey, United States of America
E-mail: handel@aesop.rutgers.edu

VIET NAM

Duc Hai, Luu

Vice Chairman
Urban Planning and Development Association,
Viet Nam
E-mail: minhcoure@yahoo.com

INTERNATIONAL ORGANIZATIONS

Gauthier, Michelle (Ms)

Forestry Officer
Forest Conservation Service, FAO
Rome, Italy
E-mail: michelle.gauthier@fao.org

The Center for Urban Green Spaces (CUGS) at the Aravali Foundation for Education (AFE) and the Ministry of Environment and Forests of the Government of India co-hosted the 1st Biennial International Congress on Urban Green Spaces (CUGS2012) from 5 to 7 March 2012 in New Delhi, India. Within the framework of CUGS2012, the Organizing Committee of CUGS2012 and FAO organized an international meeting on Urban and Peri-urban Forestry (UPF) on 7 March 2012. The title of this one-day event was “Optimizing Trees and Forests for Healthy Cities: Developing Guidelines for Decision and Policy Makers”. The meeting convened more than 90 experts and local authority representatives from Asia-Pacific institutions specialized in fields related to UPF, such as forestry, agriculture, urban planning, bioenergy, disaster risk management and community development. The main objective of the meeting was to generate inputs and comments on the Asia-Pacific regional draft version of the document “Towards Guidelines for Policy and Decision making: Promoting Urban and Peri-urban Forestry”. The other objective was to create a structured mechanism to support and facilitate the dialogue and collaboration between regional institutions and to promote UPF in the Asia-Pacific region.

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