



# WORLD CONGRESS ON AGROFORESTRY

DELHI – 2014

## WORLD CONGRESS ON AGROFORESTRY 2014 Trees for life: Accelerating the impacts of agroforestry

### Programme

(as at 16:30, 8 February 2014)

See announcement boards for further amendments

#### Monday 10 February 2014

0800–0900

Buses transport participants to Vigyan Bhawan

#### South Asia Day

Vigyan Bhawan, Maulana Azad Road, New Delhi

#### Inauguration

0900–1030

Registration at Vigyan Bhawan Annex

1030–1130

Coffee and tea served at Vigyan Bhawan Atrium, courtesy of the Indian Tourist Development Corporation

1130–1145

All participants seated in Vigyan Bhawan Plenary Hall

1200–1330

Opening ceremony

**Inaugural address** by Shri **Pranab Mukherjee**, Honourable President of India

#### Panel of dignitaries

Shri **Sharad Pawar**, Honourable Minister of Agriculture and Food Processing Industries

Dr **M. Veerappa Moily**, Honourable Minister of Environment and Forest

Shri **Ashish Bahuguna**, Secretary of Agriculture

Dr **S Ayyappan**, Secretary of the Department of Agricultural Research and Education and the Director General of the Indian Council of Agricultural Research

Dr **Anthony J. Simons**, Director General of the World Agroforestry Centre

#### Krishi Karman award ceremony

Honouring farmers from Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Haryana, Jharkhand, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Odisha, Punjab, Tripura, Uttar Pradesh, West Bengal

## Youth awards

1330–1430

Lunch – courtesy of the Indian Tourist Development Corporation

## Plenary 1

Venue: **Vigyan Bhawan Plenary Hall**

1430–1435

ICAR song

1435–1440

Introduction of keynote speaker and panelists

Dr **S Ayyappan**, Secretary of the Department of Agricultural Research and Education and the Director General of the Indian Council of Agricultural Research

1445–1515

Keynote address

Dr **M S Swaminathan**, Emeritus Chairman and Chief Mentor of the MS Swaminathan Research Foundation

1515–1535

Panel discussions

Dr **Dina Nath Tiwari**, Founder and Head of Utthan, Centre for Sustainable Development and Poverty Alleviation

Dr **R S Paroda**, Chairman, Trust for Advancement of Agricultural Sciences and Executive Secretary, Asia Pacific Association of Agricultural Research Institutes

Prof **H P M Gunasena**, Chairman, Coconut Research Institute, Lunuwila, Sri Lanka

Dr **Rita Sharma**, Secretary, National Advisory Council, Government of India

1535-1545

**National Agroforestry Policy: a brief overview**

1545–1550

Wrap up

Dr **M S Swaminathan**, Emeritus Chairman and Chief Mentor of the MS Swaminathan Research Foundation

## Breakout sessions

1550–1720

Breakout session 1

**Theme: Agroforestry systems, income and environmental benefits**

Theme leader: **P K R Nair**

### 1.1 Policy on agroforestry and tree-based farming systems

Coordinator: Rajinder Prasad

Venue: **Plenary Hall**

Chairs: **J S Samra** and **K B Thampi**

Agroforestry research in Indonesia: where to go for the next two decades

**Dede Rohadi**

Mediating factors of agroforestry changes in Vietnam: implications for agroforestry development

**Hoa Thi Nguyen**

The role of agroforestry in newly allotted forest lands in tribal Odisha

**Kamla Khanal**

CAFNET – first effort in India to value ecosystem services from coffee-based agroforestry systems

**Cheppudira Kushalappa**

Agroforestry systems in China - a proposed classification for Chinese tropical agroforestry

**Xiao Guo**

Trees on private lands: a regulatory impact analysis in select states in India

**Chetan Agarwal**

### 1.2 Agroforestry for rural employment and income generation

Coordinator: SP Ahlawat

Venue: **Hall 4**

Chairs: **A K Singh** and **B Mohan Kumar**

Tree-borne oil seed crops – a step towards building energy security in rural India

**Balakrishna Gowda**

*Santalum yasi* Seem. a vital agroforestry species for rural employment and livelihoods development in Fiji

**Saurindra Narayan Goswami**

Implementation of agroforestry for poverty alleviation and livelihood improvement in the state of Tripura, India

**Avinash M Kanfode**

Role of agroforestry in poverty alleviation at Ghatail Upazilla of the Tangail District, Bangladesh

**Md Wasiul Islam**

Ensuring integrated timber and non-timber forest product marketing for improving rural livelihoods: lessons learnt from Indonesia

**Muktasam Abdurrahman**

Yamunanagar – a model of a symbiotic relationship between farmers and wood-based industries

**Raj Kumar Sapra**

### 1.3 Land reclamation: biodrainage and salinity control

Coordinator: Rajbir Singh

Venue: **Hall 5**

Chairs: **Gurbachan Singh** and **J C Dagar**

Biodrainage: an ecofriendly agroforestry technique for controlling waterlogging, livelihood security and carbon sequestration

**Jagdish Dagar**

Rehabilitation of degraded sodic land through agroforestry and monoculture plantations

**Kripal Singh**

Biodrainage as successful models for combating water logging in canal commands – some case studies

**Rajbir Singh**

Cultivation of intercrops inside biodrainage (*Eucalyptus camaldulensis*) vegetation under a waterlogged ecosystem in Odish

**Somnath Roy Chowdhury**

Biodrainage for salinity control: myth or reality for the Indian monsoonal climate

**P S Minhas**

Potential of tree plantations for wastewater disposal: Long term use in *Eucalyptus*

**R K Yadav**

### 1.4 Drylands and agroforestry

Coordinator: AK Handa

Venue: **Hall 6**

Chairs: **V N Sharda** and **B Venkateswarlu**

Design and development of agroforestry systems in low rainfall regions of India for combating climate change

**Murari Mohan Roy**

Improving productivity of common grazing resources in hot arid region of India through participatory pasture development

**Arun Misra**

Livelihood diversification through agroforestry in semi-arid regions of India

**Prasad JVNS**

Cultivating resilient landscapes - opportunities for restoring degraded and vulnerable lands with agroforestry systems

**Matilda Palm**

Bamboo-based agroforestry for livelihood security and environmental protection in semi-arid regions of India

**Sudhir P Ahlawat**

Beyond the project cycle: *ex-post* assessment of agroforestry adoption and management in semi-arid Karnataka

**James Brockington**

1720–1750

Tea/coffee break – Book release: details in daily announcement

1750–1920

**Breakout session 2**

**Theme: Climate change, multifunctionality, livestock and fish systems**

Theme leader: **Giashudin Miah**

### **2.1 Agroforestry for climate change mitigation and adaptation**

Coordinator: Ram Newaj

Venue: **Plenary Hall**

Chair: **B M S Rathore**

Below-ground carbon stocks of 21-year-old *Grevillea robusta* stands in the humid tropics of Kerala

**Samritika Thakur**

Climate change and agroforestry management in Sri Lanka: adverse impacts, adaptation strategies and policy implications

**Mangala Premakumara De Zoysa**

Yield, carbon density and climate change impact on bagras (*Eucalyptus deglupta* Blume) in corn-based hedgerow intercropping

**Richmund Palma**

CO<sub>2</sub> sequestration estimation for the litsea-cassava agroforestry model in the Central Highlands of Vietnam

**Bao Huy**

Assessment of carbon stocks and fractions under agroforestry plantation in the hilly ecosystems of northeast India

**Ramesh Thangavel**

Greenhouse gas mitigation in a landscape perspective - a case study from semi-arid regions of India

**Prasad V N S Jasti**

### **2.2 Tropical home gardens: multifunctionality and benefits**

Coordinator: Shyam Viswanath

Venue: **Hall 4**

Chair: **P K R Nair**

Carbon stock and tree diversity of dry-zone homegardens in southern Sri Lanka

**Eskil Mattsson**

The multiple drivers of homegarden decline in Kerala, India

**Thomas Arcadius Fox**

Floral and avifaunal composition, richness and diversity of traditional agroforestry homegardens on the Konkan coast of Maha

**Kumarsukhadeo Prakash Gadekar**

The potential of palms in Southeast Asian agroforestry systems and home gardens

**Anders Sánchez Barfod**

REDD+ benefits to encourage good practices outside forest lands: a case study in Vietnam

**Hoan Trong Do**

Homegarden agroforestry for socioeconomic, ecological and environmental sustainability in Sri Lanka

**DKNG Pushpakumara**

Quest for an appropriate bamboo species in tropical homegardens - can *Dendrocalamus stocksii* (Munro) fit the bill?

**Syam Viswanath**

**2.3 Tree fodder and animal nutrition**

Coordinator: OP Chaturvedi

Venue: **Hall 5**

Chairs: **Punjab Singh** and **P S Pathak**

Sustainable fodder production strategy through utilization of wastelands in hills

**Jaideep Kumar Bisht**

Nutritional value and mineral profile of forest foliages in the temperate SubHimalayas

**Biswanath Sahoo**

Fodder production through agroforestry: a boon for profitable sheep and goat farming

**Bandeswaran Chinnaondi**

Development of suitable silvipasture models for meeting the fodder requirements in Tamil Nadu

**Divya M P**

Growth and yield of agricultural crops intercropped under three multipurpose trees in Mizoram, northeast India

**P C Vanlalhlun**

Traditional agroforestry systems for the rural development in the hills of Garhwal Himalaya, India

**Arvind Bijalwan**

**Evening programme**

1920–1930

Buses depart from Vigyan Bhawan to Ashok Hotel

1930–2015

Cultural programme, Ashok Hotel

2015–2200

Cocktail followed by Inaugural Dinner, Ashok Hotel

2200

Buses depart from Ashok Hotel to various hotels

**Tuesday 11 February 2014**

0700–0900

Buses transport participant from hotels to venue Kempinski Ambience hotel, Shahdara

**Plenary 2: The role of business in accelerating the impacts of agroforestry**

Venue: **Plenary Hall**

0900–0910

Welcome remarks and introduction of Chair, keynote speaker and panelists

**Anthony Simons**, Director General, World Agroforestry Centre

0910–0930

Keynote address

**Howard Shapiro**, Chief Agricultural Officer, Mars Inc.

0930–1025

Plenary keynotes and panel discussion

### **The role of business in accelerating the impacts of agroforestry**

**RB Singh**

Shri **Krishna Byre Gowda**, Minister of Agriculture, Karnataka

**Howard Shapiro**, Chief Agricultural Officer, Mars Inc.

**Bernard Giraud**, President, Livelihoods Venture, Danone

**Tristan Lecomte**, Founder and Chief Executive Officer, Pur Project and Ashoka Fellow

1025–1030

Wrap up

**Anthony Simons**, Director General, World Agroforestry Centre

1030–1100

Tea/coffee break – Book release: J. C. Dagar, A. K. Singh, and A. Arunachalam (eds). 2013. Agroforestry Systems in India: Livelihood Security & Ecosystem Services. Advances in Agroforestry 10, Springer

### **Breakout sessions**

1100–1230

Breakout session 3

#### **The business of agroforestry: applying science**

Theme leader: Roger Leakey

#### **3.1 The viability of trees as crops: agroforestry, pulp and wood-based enterprises, cocoa and coffee**

Coordinator: Joyce Kasyoki

Venue: **Emerald room**

Chair: **Zac Tchoundjeu**

Agroforestry for food and wood security: an industry experience in India

**H D Kulkarni**

Highest wood production by poplar (*Populus deltoides*) clones under agroforestry systems in Punjab State, India - a case study

**Mohammed Haque**

Small farm diversification strategies by coffee farmers around Mount Kenya in Kenya

**Sammy Carsan**

Cacao agroforestry system - improving productivity and profitability of smallholder cacao in Sulawesi

**Janudianto**

Cocoa agroforestry systems vs. monocultures under conventional and organic management - results from tropical Bolivia

**Christian Andres**

#### **3.2 Biofuels: using trees as a sustainable energy resource**

Coordinator: Liz Kariuki, Babita Bohra

Venue: **Turquoise room**

Chair: **Navin Sharma**

A tool for more sustainable fuel use? Carbon finance for cookstoves in India

**Olivia Freeman**

Alley coppice: an innovative agroforestry system that combines timber and energy wood production

**C Dupraz**

A novel model for mangrove agroforestry to provide livelihoods and biofuel feedstock

**Robert W Riley Jr** (Via webex)

Trees as a global source of energy: from fuelwood and charcoal to pyrolysis-driven electricity generation and biofuels

**Philip Dobie**

Agroforestry - a promising option for tree-borne oil seed production

**P Kumar**

### **3.3 Improving nutrition through agroforestry: the business case**

Coordinator: Ake Mamo

Venue: **Coral room**

Chairs: **Ramni Jamnadass**

Potential of fruit trees in the drylands of Sub-Saharan Africa for food and nutrition security and income generation

**Katja Kehlenbeck**

Indigenous trees incubators in agroecological zones in Kenya for the commercialization of nutritional foods

**Anja Oussoren**

Wildlife, a forgotten resource of agroforestry and shifting cultivation landscapes

**Robert Nasi**

The effect of tree cover on child nutrition in Indonesia: examining the relationship between tree cover consumption of micronutrient-rich foods

**Amy Ickowitz**

Moringa - a vegetable tree for improved nutrition, health and income of smallholder farmers

**A W Ebert**

### **3.4 Building livelihoods on tree products**

Coordinator: Verah Otiende

Venue: **Sapphire room**

Chairs: **Ram Prasad** and **K D Singh**

Short-rotation coppice agroforestry for charcoal small business in Papua New Guinea

**Ian Nuberg**

Timber production and poverty: management strategy of smallholder timber farmers in West Java, Indonesia

**Mohamad Siarudin**

Agroforestry option for improving livelihood and environment: case study from eastern Indonesia

**Suyanto**

Promotion of teak under an agroforestry system for enhancing rural livelihood

**Pramod Shukla**

Socioeconomic factors influencing position of women in fruits and vegetables value chains in the Coast region, Tanzania

**Martha Swamila**

### **3.5 Public-private partnerships: adding value to develop markets for producers**

Coordinator: Lilian Gatubu

Venue: **Ruby room**

Chair: **Patrick Worms**

Public-private partnerships on tree domestication for sustainable agroforestry and business innovations: *Allanblackia* spp.

**Daniel A. Ofori**

Conservation and sustainable agriculture project in Bajo Mira and Fronterra territory, Colombia

**Karla Canavan**

Cooperation or capture? The politics of private partnerships for sustainable coffee agroforestry

**Arshiya Bose**

How agroindustries influence cocoa growers' cropping practices in Cameroon?

**Sarah Langrand**

The business of agroforestry: opportunities and challenges for commercial investment in agroforestry-based ventures

**Sagun Saxena****3.6 Valuing the environmental services of trees in the landscape**

Coordinators: Naomi Kanyugo and Lydia Wafula

Venue: **Jade room**Chairs: **Meine Van Noordwijk, Beria Leimona and Terry Sunderland**

Valuing the environmental services of trees in the landscape: an introduction

**Beria Leimona**

Synergies and trade-offs amongst multiple functions of trees in agricultural landscapes

**Shem Kuyah**

Quantification and valuation of ecosystem services of temperate tree-based intercropping systems in Quebec, Canada

**Alain Olivier**

The French green and blue corridors implementation process: challenges for agroforestry

**Sylvie Guillerme**

Can payments for ecosystem services steer sustainable management of forest patches in an agricultural landscape?

**Nasta Babirye**

Forest conservation policy and motivational crowding: experimental evidence from Tanzania

**Brent Swallow**

1230–1400

Lunch - **Launch of the World Agroforestry Centre book 'Trees for Life'**

1400–1530

Breakout session 4

**Theme: Sustaining development through agroforestry**Theme leader: **Fergus Sinclair****4.1 Meeting development challenges with integrated approaches**

Coordinator: Liz Kariuki

Venue: **Emerald room**Chairs: **D N Tewari and K G Saxena**

Inclusive green economy, sustainable development and agroforestry with special reference to the South

**Maharaj Krishen Muthoo**

Agroforestry research in India: experience of 100 years with a focus on an organized national programme

**Shiv Kumar Dhyani**

Assessment of trees outside forests for Yamunagar and Panchkula district of Haryana state through High Spatial Resolution Remote Sensing Data

**Girish Pujar**

Assessing aboveground biomass carbon stock of miombo woodlands and (its) controlling factors in southern Africa

**Lulseged Tamene**

Participatory agroforestry development and sloping land user group in DPR Korea

**Jun He (TBC)**

Spice market value chains and implications for development in the east Usambaras, Tanzania

**Renee Bullock (TBC)****4.2 The gender dimensions of applying agroforestry innovation**

Coordinator: Joyce Kasyoki

Venue: **Turquoise room**Chair: **Delia Catacutan**

Gender matters in agroforestry in dry and degraded lands? An analysis from tribal India

**Purabi Bose**

Gender, sheep and trees in Zan Coulibaly, Mali: methodological approaches



**Jean Bonneville**

From rubber agroforestry to oil palm plantations in Sumatra, Indonesia: shifting gender roles

**Ratna Akiefnawati**

Gender equity in payments for environmental services: analysis of pilot projects in Asia and Africa

**Mamta Vardhan**

Agricultural (in)justices: investigating feminization of agriculture and its implications to food security in Nepal

**Sujata Tamang**

Mother Earth: women's role in cacao agroforestry decision process in coastal Ecuador

**Trent Duane Blare****4.3 Adapting to climate change**

Coordinator: Verah Otiende

Venue: **Coral room**

Chairs: **Cheikh Mbow** and **Todd Rosenstock**

Choosing suitable agroforestry species, varieties and seed sources for future climates with ensemble approaches

**Roeland Kindt**

In search of dynamic linkages between agroforestry and ecosystem-based adaptation: a case study of the Mid Hills of Nepal

**Racchya Shah**

Livelihood improvement of farming communities vulnerable to land degradation and climate change

**Sarath Premalal Nissanka**

Agroforestry, a viable strategy for climate change mitigation and livelihood

**Sumit Chakravarty**

Carbon sequestration and emission reduction through tree- and energy-based interventions for mitigating climate change

**Dibakar Mahanta**

Agroforestry interventions through carbon finance – a viable option in mitigation of climate change

**Amol Vasishth****4.4 Bridging science and development**

Coordinators: Anne Kuria and Babita Bohra

Venue: **Sapphire room**

Chairs: **Daniel Callo-Concha** and **Anna Schwachula**

ZEF experience and track bridging science and development: agroforestry examples

**Christian Borgemeister**

Scaling-up the science to create an EverGreen Agriculture in African countries

**Joerg Lohmann**

Agroforestry systems as components of agroecological transition processes in eastern Amazonia and associated public policy - emphasis on the state of Pará, Brazil

**Tatiana Deane de Abreu Sá**

Exploring the incentives for on-farm adoption of agroforestry in degraded cropping areas in Uzbekistan

**Asia Khamzina**

Farmer to farmer interpersonal communication in agroforestry innovation dissemination in Sulawesi, Indonesia

**Endri Martini**

Fodder tree technology: extension and adoption challenges in northern Malawi

**Greg Toth**

Conservation and livelihood impacts of an agroforestry system: a case study of the Kavrepalanchok district of Nepal

**Bishnu Hari Pandit****4.5 Increasing food production through trees on farms**

Coordinator: Ake Mamo

Venue: **Ruby room**

Chair: **Fergus Sinclair**

Farmer motivations and participatory trial design for enhancing food security through developing farm tree resources in Ethiopia

**Abayneh Derero**

Introducing trees on sloping land to improve livelihoods in northwest Vietnam

**La Nguyen**

Edible, multi-purpose Australian acacias for agroforestry farming systems in Africa's drylands

**Peter Cunningham**

Revitalizing African agriculture from the ground up: a case study of soil fertility, fertilizer subsidy and agroforestry

**Viola Glenn**

(Recorded presentation) The value of local knowledge about tree management in designing agroforestry interventions to improve food security

**Anne Kuria**

Prospects for integrating trees in crop fields: a synthesis across India

**David Harris**

#### **4.6 Building development abilities through education and capacity development**

Coordinator: Lilian Gatubu

Venue: **Jade room**

Chairs: **Mehmood Hassan** (TBC) and **A Yaye**

The master tree grower and peer group mentoring programmes: building farmer and community capacity

**Rowan Reid**

Integrating knowledge management and ICT4D in capacity building for agroforestry and natural resource management

**Kiringai Kamau**

Two decades of agroforestry training, education and research at Université Laval, Québec, Canada

**Damase Khasa**

Reforming curricula for agribusiness education and training in Africa: the ANAFE focus for the incoming years

**Sebastian Chakeredza**

Experiential learning practices in Nigerian's tertiary agricultural education institutions

**Marie Louise Tientcheu Avana**

1530–1600

Tea/coffee break – Book launch: Atangana *et al.*, Tropical Agroforestry 2014, Springer

1600–1700

#### **Poster session 1**

Venue: **see map**

All posters covering breakout sessions 1, 2 and 3 will be displayed. Poster presenters will stand by their posters, present a brief description of their work and respond to questions.

#### **Concurrent event**

**Business Hard Talk on agroforestry, moderated by Tony Gourlay**

Venue: **Kempinski Gardens**

1715

Buses leave Kempinski Hotel to other hotels

#### **Wednesday 12 February 2014**

0700–0900

Buses transport participants from hotels to Kempinski Ambience, Shahdara

## Plenary 3: Scientific breakthroughs and innovations

Venue: **Plenary Hall**

0900–0905

Welcome remarks and introduction of keynote speaker and panelists

**Dr Ben Chikamai**, Director of Kenya Forest Research Institute

### Keynote addresses

0905–0920

Title: Innovations in agroforestry research to meet wide challenges: the cases of climate change and food sovereignty

**Dr Tatiana Deane de Abreu Sá**, agrometeorologist and plant ecophysiologicalist, Embrapa

0920–0935

Title: Agroforestries of the future: what science do we need?

**Dr Kate Schreckenberg**, Coordinator, Centre for Underutilized Crops, University of Southampton, Southampton, UK

0935–1000

Panel discussion

**P K R Nair**, Distinguished Professor and Director of Center for Subtropical Agroforestry

**Eduardo Somarriba**, Distinguished Scientist at CATIE

**Eduardo Rojas**, Assistant Director General Forestry, UN Food and Agriculture Organization, Italy

**H A J Gunathilake**, Director, Coconut Research Institute, Sri Lanka

1000–1020

Plenary comments

1020–1030

Wrap up

**Dr Kate Schreckenberg** and **Dr Tatiana Deane de Abreu Sá**

1030–1100

Tea/coffee break – Book launch: P. K. R. Nair and V. D. Nair. 2014. Scientific Writing and Communication in Agriculture and Natural Resources. Springer

### Breakout sessions

1100–1230

Breakout session 5

**Theme: Applying science to the future of agroforestry**

Theme leader: **Eduardo Somarriba**

#### 5.1 Humid multi-strata systems

Coordinators: Naomi Kanyugo and Lydia Wafula

Venue: **Emerald room**

Chairs: **Eduardo Somarriba** and **P Vaast**

Strong spatial variability of light use efficiency in a coffee agroforestry system, highlighted by 3D light and gas exchange model

**Fabien Charbonnier**

Invent a new model for cocoa smallholders: agroforestry, a credible alternative to face an uncertain future

**Bruno Rapidel**

Linking local ecological knowledge to plant functional traits in coffee and cocoa agroforestry systems in Costa Rica

**Jenny Ordonez**

Understanding farmers: using role-playing games to explore futures of landscape management in the Western Ghats, India

**Claude Garcia**

Impacts of a coffee agroforestry system on socioeconomic performance of the upper Sekampung watershed in Sumatra, Indonesia

**Bustanul Arifin**

Coffee and climate change: the importance of systems thinking

**Laurence Jassogne****5.2 New tools and paradigms**

Coordinator: Joyce Kasyoki

Venue: **Turquoise room**

Chair: **Tor Gunnar Vagen**

New technologies to old problems: online role-playing games, farmers and coffee agroforestry in the Western Ghats

**Jenu Kalla**

Agroforestry systems risk/revenue balance: an investor's point of view.

**Clement Chenost**

The end of the sun/shade dichotomy in agroforestry systems: mapping of plant light budgets in multistrata heterogeneous plots

**Fabien Charbonnier**

Using ground-penetrating radar in agroforestry systems: quantification of tree root distribution and biomass

**Kira A Borden**

The talking toolkit for facilitating farmer groups on the role of trees for adaptation

**Elisabeth Simelton**

Combining a numerical model with farmer participation for the design of sustainable and practical agroforestry systems

**Bruno Rapidel****5.3 Biodiversity and agroforested habitats**

Coordinator: Ake Mamo

Venue: **Coral room**

Chairs: **Edmundo Barrios**

Tree-soil interactions and the provision of soil-mediated ecosystem services

**Edmundo Barrios**

Shade, litter, nematodes, earthworms, termites and companion trees in coffee agroforestry in relation to climate resilience

**Kurniatun Hairiah**

Impact of rubber tree plantations on soil functional biodiversity and soil organic carbon

**Alain Daniel Brauman**

The role of coffee agroforestry in the conservation of forest tree diversity and community composition

**Vivian Valencia**

Effects of local and landscape conditions on insect pollinators in a forest-agricultural landscape of West Java, Indonesia

**Dendi Muhamad**

The effects of shade, altitude and landscape composition on coffee pests in East Africa

**Mattias Jonsson****5.4 Agroforestry of dry and degraded lands**

Coordinator: Liz Kariuki

Venue: **Sapphire room**

Chairs: **C R Babu, K S Rao and Jan De Leeuw**

The Spinal: a sustainable productive alternative for the interior dryland development of the Chilean Central Mediterranean area?

**Alejandro Lucero**

Trees and resilience in dryland agroforestry systems in eastern African

**Jan De Leeuw**

Agroforestry for rehabilitation of degraded lands and poor quality waters: livelihood security and mitigating climate change

**Jagdish Chander Dagar**

Using species distribution models to select climate change-resistant species for ecological restoration of bowé in West

**Elie Antoine Padonou**

Arbuscular mycorrhizal association and growth response of *Faidherbia albida* (Del.) A. Chev. as influenced by land use type

**Mengisteab Hailemariam**

Physiological response of switchgrass for bioenergy alley cropping in soils of varying depths in central Missouri

**Sougata Bardhan****5.5 Temperate agroforestry**

Coordinator: Lilian Gatubu

Venue: **Ruby room**

Chairs: **Shibu Jose, S Raju, A Mason and Paul Burgess**

Temperate agroforestry in the 21st century: a North American perspective

**Shibu Jose**

Evaluating nitrogen transfer from the Caragana shelterbelt and its effects on yield and nutrition of forage crops

**Anthony Kimaro**

Effects of silvopastoral practices on intensively managed quality timber plantations in Spain

**Gerardo Moreno**

Environmental and biological interactions on productivity of silvopastoral system with *Pinus contorta* Dougl. ex. Loud.

**Alvaro Sotomayor**

Introducing AGFORWARD – a project to advance agroforestry in Europe

**Paul J. Burgess****5.6 The social science of agroforestry**

Coordinator: Anne Kuria

Venue: **Jade room**

Chairs: **Christine Padoch and Ujjwal Pradhan**

Rural livelihoods, HIV/AIDS and agroforestry interventions: social science methods for addressing complex problems

**Joleen Timko**

The role of informal social networks in agroforestry adoption and management

**Marney E Isaac**

Transforming land and livelihoods: analysis of agricultural land abandonment in the Mid Hills of Nepal

**Krishna Prasad Paudel**

Migrants and land markets in Jambi, Indonesia: the prospect of agroforestry development in peatland

**Gamma Galudra**

Management of Ghana's modified taungya system: challenges and strategies for improvement

**Emmanuel Acheampong**

Understanding diversity of smallholder agroforestry and forestry systems in hilly and mountainous landscapes: regional comparisons in Asia

**Kiran Asher**

Decentralization and forest restoration governance: a comparative study in upland communities of southwest China

**Jun He (TBC)**

1230–1400 Lunch – Book launch: details pending

1400–1530

Breakout sessions 6

**Theme: Sustaining development through agroforestry**Theme leader: **Frank Place****6.1 Policy, governance and international frameworks**

Coordinator: Liz Kariuki

Venue: **Emerald room**Chairs: **Andrew Wardell** and **Frank Place**

Revisiting debates on the role of gender in the governance of trees and forests in the context of climate change

**Bimbika Sijapati Basnett**

Why has community forestry made a limited contribution to agroforestry in Nepal?

**Dil Bahadur Khatri**

Engagement of private sector in REDD+: issues, opportunities and challenges

**Isilda Nhantumbo**

Security beyond the political forest: regulation, formalization and timber production in northern Central Java

**James Thomas Erbaugh****6.2 Ecology and economics of rubber-based agroforestry**

Coordinator: Lilian Gatubu

Venue: **Turquoise room**Chairs: **Georg Cadisch** and **Jianchu Xu**

Factors influencing the adoption of improved rubber agroforestry system by rubber smallholder farmers in Indonesia

**Dudi Iskandar**

Ecosystem services trade-offs and synergies of rubber agroforestry under uncertainty

**Grace Ballestin Villamor**

Rapidly increasing demand for rubber drives plantations into ecological margins and threatens biodiversity

**Antje Ahrends**

The planter's bet. Can family-own rubber farms match global challenges?

**Philippe Thaler**

Measuring the impact of rubber agroforestry – an integrative ecosystem service assessment framework

**Marc Cotter**

Small-scale rubber farming and income risk in Xishuangbanna, China

**Hermann Waibel**

Rubber monoculture or rubber agroforestry: are there implementable policy supports based on results from spatially explicit models?

**Zhuangfang Yi****6.3 The science of scaling up and the trajectory beyond subsistence**

Coordinator: Anne Kuria

Venue: **Coral room**Chairs: **Steve Franzel**

Farmer-to-farmer extension: a viable option to enhance agricultural dissemination? Evidence from Cameroon

**Ann Degrande**

Why volunteer? Insights from farmer to farmer extension in Kenya and Uganda

**Evelyne Kiptot**

Effective rural advisory service approaches for natural resource management practices: The case of the uptake of fodder shrubs in East Africa

**Steve Franzel**

What is the influence of extension methods and approaches on adoption of agroforestry practices in Zambia?

**Gillian Kabwe**

Agricultural research for development: implications for policy, practice and investment

**Philip Dobie****6.4 Landscape approaches**

Coordinator: Joyce Kasyoki

Venue: **Sapphire room**

Chair: **Peter Minang**

Landscape approaches, from concept to action: insights from 191 landscape initiatives in Africa and Latin America

**Philip Dobie**

Environmental services as binding pillars to synergize climate change mitigation and adaptation in rural landscapes

**Lalisa A. Duguma**

Are innovation platforms possible institutions for integrated natural resource management practices at the landscape level?

**Verrah Akinyi Otiende**

The Model Forest landscape approach: innovative territorial governance

**Jean-Claude Njomkap**

Is agroforestry feasible towards conservation in protected areas? An ongoing case study in rural Mexico

**Victor Avila-Akerberg**

### **6.5 Agroforestry, water quality and nutrient export**

Coordinator: Ake Mamo

Venue: **Ruby room**

Chairs: **M R Mosquera Losada** and **Vimala Nair**

Innovative technology for water quality protection in agroforestry systems

**Vimala Nair**

Shade level and tree species composition affect water dynamics in coffee agroforestry systems of the Western Ghats, India

**Philippe Vaast**

Modelling the effects of adopting agroforestry on basin-scale surface runoff and sediment yield in the Philippines

**David Wilson**

Chemical attributes of a silviopastoral system with a legume tree and signal grass in the Brazilian savanna

**Rodrigo Martins Alves de Mendonca**

Restoring riparian vegetation – a promising means to ensure clean water

**Kamal Melvani**

### **6.6 Successful and scalable business models for agroforestry with quantified mitigation and adaptation co-benefits**

Coordinators: Naomi Kanyugo and Lydia Wafula

Venue: **Jade room**

Chair: **Henry Neufeldt**

Agri-businesses reducing climate, water and community risks: landscape approaches in agroforestry systems

**Gabrielle Kissinger**

Potential role of exotic poplar in increasing tree cover as an alternative to forest restoration in India

**Kulvir Singh Bangarwa**

From a demonstration plot to an integrated resource and agricultural tourism centre. The case of MIFACIG, Belo, Cameroon

**Kuh Emmanuel Loah**

1530–1600

Tea/coffee break - Book launch: *Current Opinion in Environmental Sustainability*, Elsevier Scientific

1600–1700

**Poster session 2**

Venue: **see map**

All posters covering breakout sessions 4, 5 and 6 will be displayed. Poster presenters are required to stand by their posters, present their work and respond to participants' questions.

1715

Buses leave Kempinski Hotel to other hotels

#### **Thursday 13 February 2014**

0700–0900

Buses transport participants from hotels to Kempinski Ambience, Shahdara

### **Plenary 4: The integration of science, business and development**

Venue: **Plenary Hall**

0900–0905

Welcome remarks and introduction of keynote speaker and panelists

Dr Christine Padoch: Center for International Forest Research (CIFOR)

0905–0935

#### **Keynote address**

##### **Agroforestry and the Sustainable Development Goals**

Dr **Dennis Garrity**, UNCCD Drylands Ambassador and Former Director General of ICRAF

0935–1000

Panel discussion

**Hans Friedrich**, Director General, International Network for Bamboo and Rattan

**Ranjit Barthakur**, Senior Advisor, Tata Consulting Services, Chairman, GMS and Secretary General, Club of Rome India

**Harkirat Singh Sidhu**, Landscapes Consulting Program Coordinator: India, Rainforest Alliance

1000–1025

Plenary comments

1025–1030

Wrap up

Dr **Dennis Garrity**, UNCCD Drylands Ambassador and Former Director General of ICRAF

1030–1100

Tea/coffee break - Book launch: The Jungle Trees of Central India: a field guide. Pradip Krishen, Penguin.

#### **Closing session: Synthesis**

1100–1105

Summary of outcomes and the way forward

**Anthony Simons**, Director General, World Agroforestry Centre

1105–1145

Syntheses and lessons learned on business, science and development

**Meine van Noordwijk (ICRAF)**, **B. Mohan Kumar (ICAR)** and **Ravi Prabhu (ICRAF)**

1145–1200

Discussions

1200–1205

#### **Valedictory**

Welcome to the Honourable Minister for External Affairs



Dr **S Ayyappan**, Secretary of the Department of Agricultural Research and Education and the Director General of the Indian Council of Agricultural Research

1210–1235

Presentation and discussion of Congress resolutions

1235–1245

Address by the Honourable Minister for External Affairs Shri **Salman Khurshid**

1245–1300

Vote of thanks

**Ravi Prabhu**, World Agroforestry Centre

**Congress ends**

1300–1400

Lunch

## Side events

	Event and venue				
	Sapphire	Jade	Coral	Turquoise	Emerald
14:00 -15:30	International Union of Agroforestry (ICRAF and ICAR)	Agroforestry for biofuels (Navin Sharma, ICRAF)	Capacity development and partnership (Mehmood Hassan and Margaret Kroma, ICRAF)	Poplar agroforestry (International Poplar Commission)	20 years of ASB (Peter Minang, ICRAF)
15:30 -17:00		Transforming cocoa production (Christophe Kouame, ICRAF)	Scenarios of change for agroforestry landscapes: The Western Ghats Sentinel Landscape Initiative (Sanjay Tomar, ATREE etc.)	EverGreen Agriculture Network meeting (Dennis Garrity, ICRAF)	

17:15

Transport of participants from Kempinski to their hotels