



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

CO₂ 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 agroforestryTheme 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 agroforestryTheme 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