

Participation Report

on



WORLD CONGRESS ON AGROFORESTRY

DELHI – 2014

Submitted by

JITESH KUMAR
Technical Officer, Forestry
Forest Policy/Forest International Cooperation Division
Ministry of Environment & Forests
Government of India
New Delhi

Acknowledgement

I would like to express my deepest appreciation to the Ministry of Environment & Forests for consideration and sponsoring me and making payment of Rs.8,000/- towards participation fees of World Congress on Agroforestry event and I wish to acknowledge the below mentioned key persons of this Ministry whose motivation and guidelines have made me to participate in the 3rd World Congress on Agroforestry from 10th to 14th February, 2014 at New Delhi.

Shri A.K.Srivastav, Additional Director General of Forests (ADGF)

Shri Anil Sant, Joint Secretary, Joint Secretary (Admin)

Dr. Rekha Pai, Inspector General of Forests, EAP

Shri Subhash Chandra, Deputy Inspector General of Forests, Forest Policy

Shri Priya Ranjan, Asst. Inspector General of Forests, Forest Policy

Shri Vazir Singh, Under Secretary, (US, Admin)

I have been benefited considerably from discussions with officers of Finance Division of this Ministry and officers of P I Section viz. Shri M K Pathak, Section Officer and Shri Manish Srivastava, PI Section throughout process of approval to participation in World Congress on Agroforestry.

Furthermore I would also like to acknowledge with much appreciation for the crucial role of my colleagues Shri Dayanand (RI), Shri ML Karthik (RI) and Shri M Patil (RI) for their companion throughout the Sessions of World Congress on Agroforestry .

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Inaugural Ceremony

Shri. Pranab Mukherjee, Hon'ble President of India inaugurated the 3rd World Congress on Agroforestry (WCA 2014) on 10th February, 2014, at Vigyan Bhavan, New Delhi.

In inaugural address, Hon'ble President traced the importance and role of trees in Indian society since ancient times and importance of agroforestry to produce food, fuel, fibre and also for sustains livelihoods, preventing deforestation, increases bio diversity, protect water resources and check erosion.

Hon'ble President hand over the awards to winners of Essay writing and painting competition organized on theme of WCA-2014 for children.

Shri. Sharad Pawar, Union Minister of Agriculture & Food Processing Industries and Dr. M. Veerappa Moily, Union Minister of Environment & Forests in their speech mentioned the importance of agroforestry for food, fuel, fibre, fruit and timber, employment, resource conservation and optimization of farm productivity and emphasise on the adoption of multidisplinary and integrated land use systems like agroforestry, which are socially acceptable, economic viable and ecologically balanced.

Dr. Anthony J Simons, Director General, World Agroforestry Center and Dr. S.Ayyappan, Secretary, DARE & DG, ICAR elaborated upon the theme of WCA, Tree for Life-Accelerating the Impact of Agro Forestry,

Shri. Ashish Bahuguna, Secretary, Department of Agriculture & Co-operations, Ministry of agriculture, Government of India introduced Krishi Karman Awards for recognized of the meritorious efforts of the States in Food Grain production.

Hon'ble President of India conferred Krishi Karman Awards to representatives of the State & progressive farmers for the year 2012-13.

Dr Alok Kumar Sikka, Deputy General (NRM), ICAR proposed vote of thanks to all guests and around 1200 participants and about 500 foreign participants which includes policy makers, researchers, students, Politicians, NGO's, youths and media persons.

Introduction

Agriculture, for decades, had been associated with the production of basic food crops. Agriculture and farming were synonymous so long as farming was not commercialized. But as the process of economic development accelerated, many more other occupations allied to farming came to be recognized as a part of agriculture.

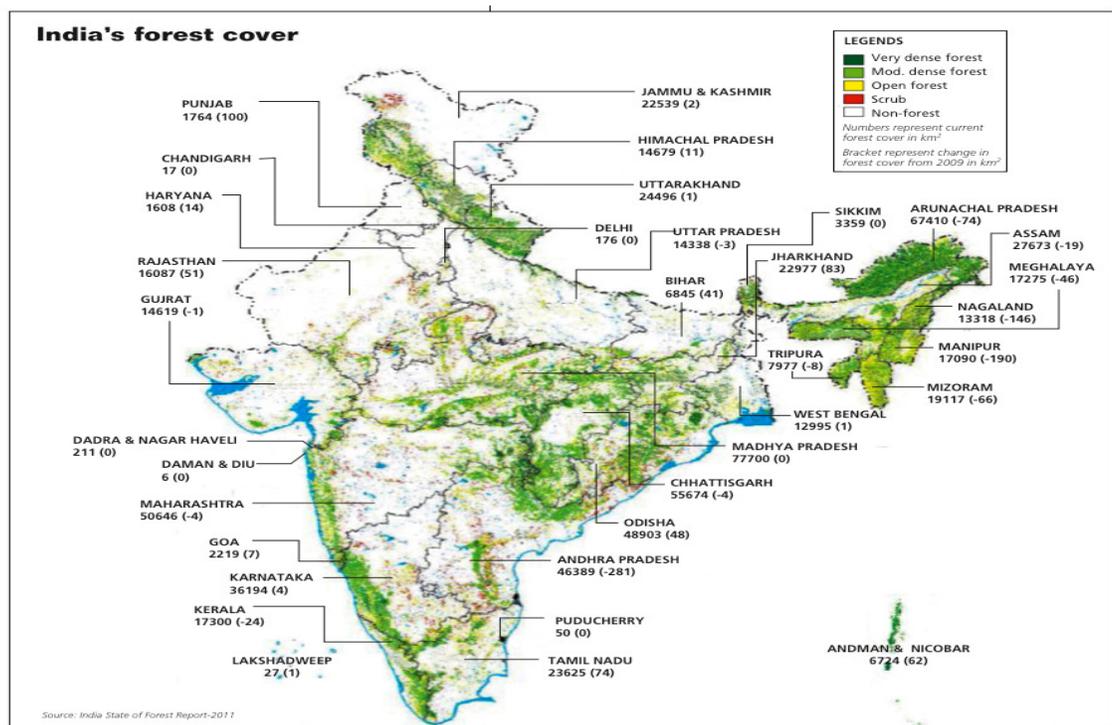
At present, agriculture besides farming includes forestry, fruit cultivation, dairy, poultry, mushroom, bee keeping, arbitrary, etc. Today, marketing, processing, distribution of agricultural products etc. are all accepted as a part of modern agriculture. .Agriculture plays a crucial role in the life of an economy. It is the backbone of our economic system. Agriculture not only provides food and raw material but also employment opportunities to a very large proportion of population.

"With a population of just over 1.2 billion, India is the world's largest democracy. In the past decade, the country has witnessed accelerated economic growth, emerged as a global player with the world's fourth largest economy in purchasing power parity terms, and made progress towards achieving most of the Millennium Development Goals. India's integration into the global economy has been accompanied by impressive economic growth that has brought significant economic and social benefits to the country. Nevertheless, disparities in income and human development are on the rise. Preliminary estimates suggest that in 2009-10 the combined all India poverty rate was 32% compared to 37% in 2004-05. Going forward, it will be essential for India to build a productive, competitive, and diversified agricultural sector and facilitate rural, non-farm entrepreneurship and employment. Encouraging policies that promote competition in agricultural marketing will ensure that farmers receive better prices."(—*World Bank: "India Country Overview 2011)*

India has lost 367 square kilometers of forest cover in the past two years. According to the India State of Forest Report, 2011, released by the Forest Survey of India (FSI) on February 7, the total forest cover in the country is now at 6,92,027 sq km. This accounts for 21.05 per cent of the total geographical area of India (Figure-1).

Agro-forestry may be defined as the intimate integration of trees and crop and/or animals in the farming system or, more widely, as the integrated management and use of forest and agricultural resources. It combines woody perennials with annual crops and/or livestock, either simultaneously or sequentially on the same unit of lands. Its purpose is usually to satisfy local consumption needs and generate additional income, while sustaining agricultural productivity and maintaining ecological stability. (Source.<http://www.fao.org>).

Figure-1



To fulfill the need of food, fodder, fuel and fibre to the world population along with creation of employment, conservation of biodiversity, soil erosion, climate change and adaptation and for sustainable growth, agroforestry may be

considered as complementary enterprise rather than supplementary enterprise for sustainable farm income.

Importance of agroforestry

As global forests shrinks, trees outside forests and on farm become more important. Over one billion hectares of agricultural land, almost half of the world's farmland, have more than 10% of their area covered by trees; 160million hectares have more than 50% tree cover.

Agroforestry means growing working trees and shrubs on farms and in rural areas, combined with crops and livestock, to create profitable, productivity, healthy and sustainable landscapes.

Planting useful trees makes existing land more fertile and productive, increases incomes, draws ground water to the surface, restores degraded zones, produces fruit and other products and provides animal feed.

Over 3 billion people worldwide use fuelwood and other solids for cooking, boiling water, light and heat. Planting the right trees provides easy access to fuel and reduces pressure on forests.

(Source: World Agroforestry Centre.)

To understand importance of agroforestry for food, fibre, fodder and fuel and to understand of scope of agroforestry and its impact on reduction of pressure on natural forests author was attended for 3rd World Congress on Agroforestry, 2014 with the following objectives.

1. To understand Agroforestry research findings in India and world-global perspective.
2. To understand Policy on Agroforestry, Employment, Income, Land Reclamation, Climate Change Mitigation and Adaptation and
3. To understand Research on Tropical Homegardens, Trees Fodder & Animal Nutrition, Agro Forestry Business, Sustainable Development and Applying Science to the Future Agroforestry.

Background

1st World Congress on Agroforestry (Working Together for sustainable land use systems) and 2nd World Congress on Agroforestry (Agroforestry- The Future of Global land use) was held on 2004 & 2009 at Orlando, Florida, USA and Nairobi, Kenya respectively.

The 3rd World Congress on Agroforestry 2014 (TREES FOR LIFE: ACCELERATING THE IMPACTS OF AGROFORESTRY) was held in Delhi, India, 10 – 14 February 2014, organized by the World Agroforestry Centre, The Indian Council of Agricultural Research, The Indian Society of Agroforestry and Global Initiatives.

The Congress is structured to generate outputs that will shape the next steps in the field of integrative science, transformative change in landscapes, tree improvement, innovative tree-based value chains, debates on global and local sustainability, reform of land and tree tenure and holistic education. Source (www.wca2014.org/agenda/)

With the aim to significantly boost awareness, engagement and investments in agroforestry, the Congress attracted up to 1200 participants, about 500 foreign participants from more than 80 countries, including pre-eminent researchers, senior politicians, policy makers and donors, as well as major businesses with concerns for sustainable development.

Brief note on world congress on agroforestry

Policy on agroforestry and tree based farming systems

Research papers on policy on agroforestry and tree based farming systems includes various topics among those research papers, CAFNET- First effort in India to value Ecosystem Services from Coffee Based Agroforestry Systems explained how intensification of coffee production have resulted in reduction in density and diversity of shade trees and associated bio-diversity and how sustainable coffee cultivation more attractive for future generations through sustainable agricultural management principles which sustains the environment .

Under going research on “ The role of agroforestry in newly allotted Forest lands in Tribal Odisha by Kamla Khanal, School of Geography, University of Nottingham, Nottingham, United Kingdom presented effects of the Recognition of Forest Rights Act and the role of agroforestry in newly allotted forestland in Odisha.

Agroforestry for rural employment and income generation

Research on above topic covers so many aspects on how agroforestry creates rural employment in different parts of the world and how agroforestry improves income generation and poverty elevation. Explained model of symbiotic relationship between farmers and wood based industries etc

Land reclamation

Land is a limited resource and we have to utilize this resource at most careful in a scientific way to enhance efficient use of the land and increase the productivity.

Research findings explained how land reclamation can make possible by bio drainage and salinity control by agroforestry.

Dry land and agroforestry

Researchers across the world made their presentation on dry land and agroforestry and explained how the dry land can be made productive and

diversified farming system by agroforestry and livelihood diversification through agroforestry in semi arid regions of India.

Agroforestry for climate change mitigation and adaptation

Climate change has become a serious environmental, social and economical threat particularly to natural ecosystems, biodiversity and livelihood of agriculture and forest fringe communities.

A researcher presented their research findings on the above topics and explains how climate change is becoming a key driver in agriculture and forest management, but its complexity and magnitude threaten the sustainability and how agriculture along with forestry can play an important role in climate change adaptation, through diversified land use practices, livelihoods and sources of income.

Research papers explained how sustainable agroforestry has a tremendous potential to serve as a tool in adapting climate change, protecting ecosystems and livelihoods and creating a foundation for economic and social development and how agroforestry play a important role in climate change mitigation through increased carbon storage in the above ground biomass and below ground soil.

Tropical home garden: Multi functionality and benefits

Tropical home gardens hold a large potential for climate change mitigation and adaptation due to their multi functional role in providing income and ecosystem services while decreasing pressure on natural forests.

Various research findings were presented by the researchers on above topic and explained with their research findings on multi functionality of the tropical home garden and its benefits.

Tree fodder and animal nutrition

Presentations on above topic explained how we can meet the fodder

requirement by suitable silvipasture models how fodder production through agroforestry profitable and its nutritional value of the agroforestry foliage.

Business of agroforestry

The research findings were explained by researchers by both presentation and poster presentations which includes research findings related to the viability of trees as crops: agroforestry, pulp and wood-based enterprises, bio fuels: using trees as a sustainable energy resource, improving nutrition through agroforestry: the business case, Building livelihoods on tree products, Public-Private partnership: adding value to develop markets for producers, Valuing the environmental services of trees in the landscape.

Sustaining development through agroforestry

The research findings were explained by researchers by both presentation and poster presentations which includes research findings related to Meeting development challenges with integrated approaches, The gender dimensions of applying agroforestry innovation, Adapting to climate change, Bridging science and development, Increasing food production through trees on farms, Building development abilities through education and capacity development,

Applying science to the future of agroforestry

Breakthroughs and innovations

Various research findings across the globe was presented by researchers which are related to Humid Multi-Strata systems, New tools and paradigms, Biodiversity and agroforested habitats, The agroforestry of dry and degraded lands, Temperate agroforestry, The social Science of agroforestry,

Policy Innovation and Global Issues

Various research findings across the globe was presented by researchers which are related to Policy, governance and international frameworks, The ecology and economics of rubber agroforestry, The science of scaling up and the trajectory

Participation Report on World Congress on Agroforestry, 2014.

beyond subsistence, Landscape approaches, The case of wild flower holdings, Agroforestry, water quality and nutrient export, Successful and scalable business models for agroforestry with quantified mitigation and adaptation co-benefits.

India:

Forest Policy Division of the Ministry has been actively working on the regulatory regime on Tress species grown on non-forest/private lands, a Committee under the chairmanship of Shri A K Bansal was also constituted to study the regulatory regime in this regard and submitted its report. Further the Forest Policy Division has been engaged in providing inputs to the Ministry of agriculture and National Advisory Committee for the preparation of National Agroforestry Policy.

Government of India has recently framed a National Agroforestry Policy 2014 defining Agroforestry as a land system which integrate trees and shrubs on farmlands and rural landscapes to enhance productivity, profitability, diversity and ecosystem sustainability. It is a dynamic, ecologically based, natural resource management system that, through integration of woody parennials on farms and in the agricultural landscape, diversities and sustains production and builds social institutions.

Agroforestry is perhaps an alternative to achieve the target of increasing forest or tree cover to 33 percent of the Geographical area of the country , as envisaged in the National Forest Policy, 1988.

Conclusion

As we progress into the next century, the world as a whole will continue to produce enough to feed an increasing population. Nutrition will continue to improve in most developing regions. For sustainable agriculture and to achieve higher farm income the agriculture approaches like integrated farming system, organic farming, agroforestry etc may be practice to increase farm productivity and for control on climate change.

To fulfill the need of food, fodder, fuel and fibre to the world population along with creation of employment, conservation of biodiversity, soil erosion, climate change and adaptation and for sustainable growth. Agroforestry may be considered as complementary enterprise rather than supplementary enterprise for sustainable farm income.

Shri Salman Khurshid, Minister of External Affairs, Government of India delivered Valedictory Address on the concluding day of World Congress on Agroforestry here today. While appreciating efforts of World Agroforestry Centre and Indian Council of Agricultural Research for organizing this event of global importance

World congress on agroforestry, 2014 made platform to researchers, institution, government, NGOs, policy makers to share research findings on agroforestry and opportunity to implement / consider the research findings while making policies related to agroforestry.

Much more forest research on tree genetics is to be address to over come hurdles of agroforestry for better adoptability. Extension of agroforestry research findings may address to disseminate the best practices of agroforestry and its benefits across the globe.

Agroforestry may be considered as complementary enterprise rather than supplementary enterprise for sustainable farm income and to control climate change and to reduce pressure on natural forests.

India has a greater untapped potential for fully realising the opportunity in Agroforestry and its role in the domain of environmental services.

References

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2. www.icar.org.in
3. *World Bank: "India Country Overview 2011"*
4. <http://www.fao.org>
5. <http://www.worldagroforestrycentre.org/>
6. www.downtoearth.org.in
7. [www. agricoop.nic.in](http://www.agricoop.nic.in)

(Jitesh Kumar)
Technical Officer(Forestry), Forest Policy Division
Ministry of Environment and Forests



**WORLD
CONGRESS ON
AGROFORESTRY**
DELHI - 2014

TREES FOR LIFE:
ACCELERATING THE IMPACTS
OF AGROFORESTRY

10 - 14 FEBRUARY 2014
VIGYAN BHAVAN &
KEMPINSKI AMBIENCE
DELHI, INDIA



global initiatives

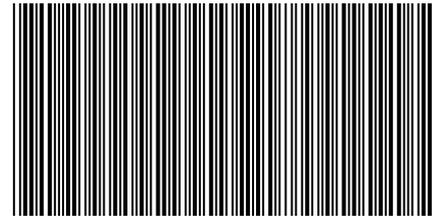
Tuesday, 28 January 2014

REGISTRATION SLIP

Dear Jitesh KUMAR

Please bring this document with you while coming for your badge & conference kit collection.

YOUR IDENTIFIER: WCA2014-I/1446



YOUR REGISTRATION DETAILS:

Reservations

Description	Details	Quantity
REGISTRATION		
	3rd World Congress on Agroforestry 2014	
	Indian Delegate	1

YOUR PAYMENT STATUS: Paid

INVOICED AMOUNT	RECEIVED AMOUNT	BALANCE AMOUNT
8000.0000000000000000	8000.0000000000000000	0.0000000000000000



MCI, in the name of ICRAF

Mr Jitesh KUMAR
Ministry of Environment & Forests
govt of india
Jitesh Kumar, Technical Officer
Forestry, Room No. 523 Ministry of
Environment & Forests,
Paryavaran Bhawan CGO Complex,
Lodhi Road
110003 New Delhi
INDIA

New Delhi 31 December 2013
Registration No.: WCA2014-I/1446

Account Statement

Issued Financial Documents

Document Information	Issue Date	Currency	Amount
Invoice - WCA2014-I/1446-1	24 Dec 2013	INR	8,000.00
Total invoiced in INR		INR	8,000.00

Payments received

Payment Information	Received Date	Currency	Amount
Bank Transfer EBS-SBI PG VISA Debit Card 21992171	30 Dec 2013	INR	8,000.00
Total received in INR		INR	8,000.00

Summary

BALANCE (PAID)	INR	0.00
AMOUNTS TO BE CREDITED	INR	0.00

Payment Conditions



WORLD CONGRESS ON AGROFORESTRY

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DAILY BULLETIN

Tuesday 11 February 2014

Congress website resources

The Congress website is being updated all the time. Here is a summary of what is available:

Latest social media activity

We have a team of people who have volunteered to keep our social media campaign humming. In fact it is exploding. See tomorrow's Bulletin for some statistics. Some delegates will be live tweeting from the sessions, others posting material on Facebook and some will even be writing blogs. So go to the website and click on your platform of choice to follow all of the action that you can't get to yourself.

We will also be posting the presentations from the sessions as soon as we can on SlideShare, and photographs on Flickr. Later in the Congress we will have some video material coming on line.

Abstract listing with search tool

Go [here](#). (Sorry about this strange-looking link style.)

Live blog

All plenary sessions will be blogged. Keep coming back to [this page](#) for the latest reporting.

Live streaming

Feeling lazy? Watch the action on your laptop in your room. The resolution is really good, as is the sound. All plenaries and one session for each of the breakouts will be streamed. Here is Tuesday's schedule.

0910-1025

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

1100-1230

Session 3.4 Building livelihoods on tree products

Chairs: Ram Prasad and K D Singh

1400-1530

Session 4.4 Bridging science and development

Chairs: Daniel Callo-Concha and Anna Schwachula

Up to the minute Agenda

The Congress programme is still changing, mainly because some delegates are having trouble getting here. Click on the far right of the website home page to download a pdf of the very latest version of the Programme.

EAM | [DOWNLOAD AGENDA](#) |



President inaugurates Congress



"A pond equals ten wells, a reservoir equals ten ponds; a son equals ten reservoirs, and a tree equals ten sons".

CGIAR features Congress

The Consortium website featured the story of the Congress yesterday. See [here](#). This story is trending on Twitter, with 70 000 views so far today.

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Search by keyword

Katja Bessonova tweeted: Full house at the session on #homegardens! More info [here](#)





WORLD CONGRESS ON AGROFORESTRY

DELHI - 2014

DAILY BULLETIN

Wednesday 12 February 2014

www.wca2014.org



Congress painting competition

Hundreds of children from all over India entered the painting competition that the Indian Council of Agricultural Research ICAR held to mark the Congress. The contest was open to children aged 6 to 12 years and the winner was Km. V. Niharika of Coimbatore, Tamil Nadu, who depicted the role of trees in our lives in a very accomplished way. I'm sorry but I really can't find out how old she is. Still, it is a striking image.

Talking about ICAR, check out the Bollywood promotional video they posted on YouTube



Day 2
storified

Hard talk in the garden

Following up on the panel discussion he chaired in the first plenary session of the day (The role of business in accelerating the impacts of agroforestry), Tony Simons, Director General of the World Agroforestry Centre mediated a 'The Business Hard Talk Dialogue' in the Kempinski garden. Over 50 hardy delegates braved the New Delhi winter to hear a stellar line up of business leaders from Mars, Danone, Tata and the Pur Project discuss the real opportunities for greater business engagement in agroforestry. Building on the morning plenary session the speakers looked at the opportunities for

greater collaboration between stakeholders and engaging small-holder farmers. Tony Simons grilled the panel with tough questions like, "And so we put it to you that you are not really interested in the smallholder, if you could get it cheaper, more reliably or higher quality you will go there and abandon the smallholder." Needless to say, the business leaders were able to explain their genuine belief in social responsibility and the challenges of merging them with commercial realities. There were two bloggers and a tweeter in the audience, so look out for a full report(s) later today.

Catch up on the latest blogs



11.02.2014

[The missing link in agroforestry business chain](#)



[Mum's rather mum in agroforestry](#)

Several studies have confirmed that women smallholder farmers



[Beyond the project cycle, smallholders can sustain better farming practices](#)



WORLD CONGRESS ON AGROFORESTRY

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DAILY BULLETIN

Thursday 13 February 2014

Where are we?

Well, in Delhi, of course, but that was not what I meant. At this Congress a thousand agroforesters have witnessed a world first as India launched a National Agroforestry Policy that has the potential to leverage a billion dollars in support, and breakout sessions focusing on policy, employment, drylands, climate change and food in South Asia. Then came coordinated sessions on how agroforestry science and business can work together, the impact of agroforestry on improving people's lives, and the latest innovations in agroforestry science.



One of the poster areas, before the influx of a thousand eager scientists. Novel ways were found to use double-sided tape

Outcomes

Now on Thursday we are looking to see and hear how the whole lot can be integrated. Does agroforestry have any role in the upcoming Sustainable Development Goals? Then what lessons have we learned and what is the way forward from here.

Outputs

Many of you have been asking about access to outputs of the Congress. As we've noted before, all the session abstracts have been posted on the website and published in a Congress booklet. You have displayed an overwhelming number of posters and the poster sessions have been really popular. All the posters that we obtain in a reasonable time will be included in the Congress Compendium, which will be published with an ISBN a few months after the Congress so you can cite it.

The Compendium will also have all the session abstracts, with corresponding research papers if available, videos, photographs, a digest of all the plenaries and sessions, the summary of the Congress outcomes and the list of participants (which will be available on the Congress website sometime today, Thursday). Our editor Betty Rabar may be contacting you in the near future to follow up.

Session and photos

We have all the presentations from Days 1, 2 and most of Day 3. We are starting to upload them to SlideShare. Keep monitoring that site if you are interested in a particular session. We are aiming to post all the presentations there by the end of the week. We are receiving excellent images from our official photographer. A preliminary selection is already available on the Flickr page. A much more comprehensive selection will become available as we title and label them in the next week or so.



Audience participation was high in the discussion sessions

The world is following us

Our social media campaign has exploded since the start of the Congress. Every day, over 200 of you, the participants in the Congress, and a few watching the livestreaming, are sending out over 650 tweets, using the hashtag #WCA2014, which are delivered to 864 000 Twitter users. Since the start of the Congress, our material has been retweeted 1.12 million times, including by the World Bank with 628 000 followers.

On Wednesday we published 13 blogposts, which are automatically published on Facebook. The Congress website is getting over 2300 page views a day, probably because we are posting so much interesting material.

Environmental impact

As the poster in the foyer tells us, the World Agroforestry Centre has purchased carbon credits to compensate for the 900 tonnes of carbon we have produced in these four days. You may also have noticed a conspicuous lack of paper and printed products around the Congress. This has been deliberate, to minimize consumption. The wooden frames for the signage will be reused, and most of the signs themselves will find another purpose.

Catch up on the latest blogs



12.02.2014

[Agroforestry saves on farm inputs and softens wind speeds](#)



12.02.2014

[Saving Chile's precious grazing landscape, the](#)



12.02.2014

[A looming chocolate scarcity? The cocoa story](#)



Inauguration of Agroforestry Congress-2014

&
Presentation of Krishi Kalyan Award 2012-13
by

Shri. Ashish Bahuguna

WORLD
CONGRESS ON
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DELHI - 2014

TREES FOR LIFE
Accelerating the Impact
of Agroforestry

SHRI. SHYAM SUNDAR

SHARAD PATEL

DR. S. MOHILY

ASHISH BAHUGUNA

