International Union of Forest Research Organizations

Union Internationale des Instituts de Recherches Forestières Instituts de Recherches Forestières

Unión Internacional de Organizaciones de Investigación Forestal Internationaler Verband Forstlicher Forschungsanstalten

Reforestation Challenges - Opportunities for Sustainable Development in a Degraded Forestry Environment

Report by Stanisław Małek, Deputy Coordinator of <u>IUFRO Working Party 7.01.08</u> - Hydroecology Meeting website: <u>reforestationchallenges.pl</u>

The Second International Conference on Reforestation Challenges on 27-29 June 2016 in Cracow, Poland, was an opportunity for scientists to gather and present results and relate experiences from research areas relevant to reforestation. A total of 149 participants from Poland, Turkey, Sweden, Czech Republic, Slovak Republic, Serbia, USA, and Spain attended the meeting, which was co-sponsored by IUFRO Research Group 3.02.00 - Stand establishment and treat*ment*. The meeting was generously hosted by the University of Agriculture in Cracow, Poland, Faculty of Forestry, and the State Forests National Forest Holding in Warsaw, Poland.

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The objectives of the conference were to

provide an opportunity for dynamic and ongoing cooperation between researchers, and to present results of the conference in a thematic publication covering all aspects of the reforestation process. The conference presentations filled the gaps in knowledge regarding successes and failures in reforestation practices. Overall, the conference highlighted challenges of reforestation and provided some solutions based on interactions between researchers and practitioners. All researchers, particularly the younger ones, got additional support and opportunity to exchange information and to build their research network and collaborative abilities.

The following key issues were discussed:

- Artificial regeneration will continue for the purpose of restoration and reforestation, especially in the process of forest ecosystems recovery after the collapse due to natural disasters.
- Container nursery technology has contributed to the development of silviculture methods: seed and forest nursery techniques and forest mechanization, in particular.
- The use of seedlings with covered root system on degraded areas, agricultural lands and post-disaster areas is preferred for silvicultural and economic reasons.
- Production of seedlings in container technology has allowed the silvicultural application of mycorrhiza plants and their use for reforestation on degraded areas.

Conclusions

Scientists postulate the conducting of research programs on experimental plots with forest communities of different age in order to investigate their current biometric parameters and overall health. This encompasses analyzing of young forest impact on carbon sequestration, as well as verification of the theses about the legitimacy of container seedlings utilization, the use of mycorrhiza technology, efficiency of mineral fertilization and finding the best way of the arboriculture on degraded and post disaster areas.

Outlook

It is necessary to conduct research and experiments on the improvement of container seedlings production technology mainly to optimize fertilization and irrigation to attain optimal properties of the substrate for best biometric parameters of seedlings. The demand for good quality seedlings is associated to recent catastrophic events in Europe such as severe wind, drought, floods, and other natural disturbance events that have resulted in significant losses of forest habitat. These events also threaten the long-term productivity of forest ecosystems, through destabilization of water balance, changes in soil properties, disturbance of ecological balance, and low resistance to biotic factors. All efforts to maintain the stability of forest ecosystems will always be at the center of attention of scientists and foresters.



Strengthening Collaboration on Criteria and Indicators for Sustainable Forest Management

Report by Stefanie Linser, Coordinator or <u>IUFRO Working Party 9.01.05</u> Published in the 3rd Working Party Newsletter at: <u>http://www.iufro.org/science/divisions/division-9/90000/90100/90105/publications/</u>

More than one third of the members of IUFRO Working Party 9.01.05 – *Research and development of indicators for sustainable forest management* participated in an international expert workshop on Criteria and Indicators that took place on 1-3 May 2016 in Ottawa, Canada. The workshop was organized by Natural Resources Canada and co-sponsored by FAO, UNFF, ITTO and FOREST EUROPE.

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About 40 internationally renowned C&I experts from all continents representing regional C&I processes, national and international bodies and organizations as well as national government agencies met to strengthen collaboration on important C&I related issues.

This event was well timed right after the 47th session of the Statistical Commission of the UN Economic and Social Council on Sustainable Development Goal Indicators to monitor progress towards SFM (Goal 15.2), a clear indication of the importance of global sustainable forest management.

Workshop objectives

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In the facilitated workshop the experts engaged in plenary and small group discussions towards meeting the following workshop objectives:

- Strengthen relationships between C&I processes and other forest related organizations and forums that promote the implementation of SFM, track environmental change and report on sustainable developments related to the forests
- Explore possibilities to use C&I to address SFM issues within the context of the different forest related forums and organizations
- Propose concrete actions that would advance common interests and lead to continuous improvement and enhance collaboration

Workshop results

A Summary Aide Memoire was prepared to indicate the joint desire to act both independently and collectively to advance the collaborative efforts and knowledge exchange, simplify national reporting to global forums, remove barriers and strengthen collaboration between C&I processes.



Photo source: 3rd Working Party Newsletter, page 1

Furthermore, six priority themes have been identified and developed towards the following concrete action proposals with specified outcomes, milestones, coordinators and contributing participants.

- 1) Reporting progress to global commitments
- 2) Consolidating a core set of indicators
- 3) Assessing different C&I processes
- 4) Capacity building and knowledge sharing
- 5) Integrating C&I into decision-making
- 6) Analyzing progress to date

The last priority theme was particularly assigned to the IUFRO Working Party 9.01.05. This activity will be coordinated by Stefanie Linser and is open to all interested WP members.

Find the WP newsletter at: <u>http://www.iufro.org/science/</u> <u>divisions/division-9/90000/90100/90105/</u> Further information on the workshop is also available at: <u>http://www.fao.org/forestry/ci/91695/en/</u>



International Knowledge-sharing Workshop: "Forest Landscape Restoration and Global Change: From Policy to Practice"

Report by Michael Kleine, IUFRO Deputy Executive Director and Coordinator of IUFRO's Special Programme on Development of Capacities (<u>IUFRO-SPDC</u>)

Political support for restoring degraded lands has significantly increased in recent years. This is exemplified by the establishment of the Bonn Challenge global policy initiative, calling for initiating the restoration of 150 million hectares of deforested and degraded lands by 2020. It aims at carbon richer landscapes that are bio-diverse, economically more productive and beneficial for human welfare, as well as resilient against climatic vulnerabilities.

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Given the considerable current political momentum and commitment towards Forest Landscape Restoration (FLR) by global and national policy makers, there is the need to discuss and further develop approaches and mechanisms of FLR implementation on the ground. To this end, the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) has entrusted the International Union of Forest Research Organizations (IUFRO) with the organization of an international knowledge-sharing workshop on "*Forest Landscape Restoration and Global Change: From Policy to Practice*" held back to back with the *High-level Bonn Challenge Meeting in* Kigali, Rwanda on 26-27 July 2016.

The event was organized in close cooperation with FAO, MINIRENA, Wageningen University, IUCN, WRI and CIFOR and aimed at sharing and discussing latest globally and regionally available scientific and technical knowledge on the multi-fold aspects of restoring forests and trees in the landscape.

The workshop brought together experts from Africa and overseas, to exchange latest knowledge and experiences with initiating and facilitating FLR projects in the region. The topics discussed covered a wide spectrum of issues ranging from participatory planning, landscape governance, institutional arrangements, regulatory frameworks, to market mechanisms, funding and technical aspects of FLR operations on the ground.

Publications

New Policy Brief on Forest Landscape Restoration

IUFRO launched its policy brief on forest landscape restoration on 18 July at COFO 23 World Forest Week hosted at the United Nations Food and Agriculture Organization in Rome, Italy.

Restoring Forest Landscapes: A "Win-Win" for People, Nature, and Climate outlines key messages for policy makers, synthesizing major lessons learnt from a recent review of the state-of-the-art scientific knowledge on the climate benefits of forest landscape restoration (FLR).

Following the recently concluded *Paris Agreement* of the United Nations Framework Convention on Climate Change



Photo by Janice Burns

Overall, the workshop should help participants to make connections to other FLR experts in the region and further stimulate exchange of information and experiences, thus contributing to mainstreaming FLR practices in Africa, and to feedback technical information and experiences into the Bonn Challenge regional and sub- regional policy dialogues.

A similar IUFRO-led workshop on FLR implementation in Latin America will be organized in El Salvador in September 2016.

Follow SPDC News on outcomes of the workshop and further FLR-related activities: <u>http://www.iufro.org/science/special/spdc/</u>



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(UNFCCC), the policy brief also highlights the increasing importance of forest landscape restoration for generating sustained public welfare and income in rural areas.

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Since forest landscape restoration projects on the ground are complex, the multi-fold benefits, including those related to climate change mitigation and adaptation, are longterm and not always easy to understand.

The key messages from IUFRO's analysis of literature and restoration case studies from various regions of the world are intended to support more informed and inclusive decision-making. Ideally they will help policy makers to shape an enabling policy framework and institutional environment conducive to FLR implementation, so as to better enable people in the long-term to cope with the challenges of a changing climate.

You can download the *Policy Brief* and the corresponding IUFRO World Series publication on *Forest Landscape Restoration as a Key Component of Climate Change Mitigation and Adaptation* here: <u>http://www.iufro.org/publications/</u> <u>series/world-series/article/2015/12/01/world-series-vol-</u> <u>34-forest-landscape-restoration-as-a-key-component-of-</u> <u>climate-change-mitigation/</u>

Governments Reclaiming Role in Forest Certification (IUFRO Spotlight #39)

The International Union of Forest Research Organizations (IUFRO) has issued a Spotlight on the report "*From gover-nance to government: The strengthened role of state bureaucracies in forest and agricultural certification*" by Lukas Giessen, Sarah Burns, Muhammad Alif K. Sahide and Agung Wibowo.

Lead author Dr. Lukas Giessen, Senior Researcher and Head of the International Forest Policy Working Group at the Chair of Forest and Nature Conservation Policy, University of Goettingen, Germany, says the report provides counter-balance to existing research on private actor/institution certification, which has shown a bias toward overestimating private influence. It also shows the significant role ministries and other state forest administrators can and do play in certification politics worldwide.

Report: <u>http://dx.doi.org/10.1016/j.polsoc.2016.02.001</u> *Spotlight article* "Governments Reclaiming Role in Forest Certification": <u>http://www.iufro.org/media/iufro-spot-</u> <u>lights/iufro-spotlight-39/</u>



Teaknet Bulletin July 2016

The latest issue of the Teaknet Bulletin has been posted on the IUFRO 5.06.02 publications page: <u>http://www.iuf-</u>ro.org/science/divisions/division-5/50000/50600/50602/ publications/#c20880

New FAO Publications

State of the World's Forests 2016 (SOFO) - Forests and agriculture: land-use challenges and opportunities State of the World's Forests (SOFO) 2016 shows that it is possible to increase agricultural productivity and food security while halting or even reversing deforestation, highlighting the successful efforts of Costa Rica, Chile, the Gambia, Georgia, Ghana, Tunisia and Viet Nam. Integrated land-use planning is the key to balancing land uses, underpinned by the right policy instruments to promote both sustainable forests and agriculture. Details at: bit.ly/SOFOEn

Download PDF: http://www.fao.org/3/a-i5588e.pdf

Forestry for a low-carbon future: Integrating forests and wood products in climate change strategies Details at: <u>http://bit.ly/2amRhoF</u> Download PDF: <u>http://www.fao.org/3/a-i5857e.pdf</u>

Trees, forests and land use in drylands: first global assessment

This document presents preliminary results of the first global assessment of trees, forests and land use in drylands. More than 200 experts with knowledge of the land and land uses in specific dryland regions conducted the assessment, using freely available satellite imagery and a newly developed survey methodology.

Details at: <u>http://bit.ly/29RPioZ</u> Download PDF: <u>http://www.fao.org/3/a-i5905e.pdf</u>

Division 3 Podcast Episodes 7 and 8!

Episode 7: Successful Research Collaboration with Forest Industry. FORAC Research Consortium of Laval University (Part One)12.07.2016

This is the first part of two episodes featuring an interview with *Dr. Luc LeBel*, Director of FORAC, and *Dr. Sophie*



D'Amours, Vice Rector of Research and Innovation at Laval University. This episode introduces a brief history of FO-RAC, their mission and strategies for successful research collaboration with forest industry.

Episode 8: Successful Research Collaboration with Forest Industry. FORAC Research Consortium of Laval University (Part Two)12.07.2016

This episode presents the future research directions of FO-RAC, ongoing IUFRO activities and their strong commitment to graduate student education and training.

Listen to these and other episodes at: <u>http://www.iufro.org/science/divisions/division-3/30000/</u> <u>podcasts/</u>



Positions

http://www.iufro.org/discover/noticeboard/position-announcements/

Programme Manager: Forest Management

The Institute for Commercial Forestry Research (ICFR) is inviting applications for the post of Programme Manager: Forest Management.

Location: Pietermaritzburg, KwaZulu-Natal, South Africa Submit application by: 12 August 2016

Details: <u>http://www.icfr.ukzn.ac.za/icfrfiles/Adminfiles/</u> Forest%20Management%20July%202016.pdf

EFI Seeks Head of Communications

The European Forest Institute (EFI) is seeking a senior professional with a strong communications background to lead all communications activity at EFI. Location: EFI Headquarters, Joensuu, Finland Submit application by: 15 August 2016 http://www.efi.int/portal/careers/open_jobs/?bid=2544

Senior Researcher in Natural Resource Economics

The University of Idaho invites applications for a Senior Researcher to join the Policy Analysis Group in the College of Natural Resources (www.uidaho.edu/cnr/pag). They seek a skilled economist to join their interdisciplinary team of policy and economic specialists working on natural resource issues important to the state of Idaho. Location: Moscow, ID, USA Submit application by: 26 August 2016 https://uidaho.peopleadmin.com/postings/14688

Senior FLEGT Policy Advisor for China and Regional Asia

The European Forest Institute (EFI) is seeking a Senior FLEGT Policy Advisor to support the EU in its FLEGT related policy dialogue with China, the regional dimensions of the EU's and EFI's work with the countries and institutions in Asia, and general support to Voluntary Partnership Agreement (VPA) processes in South East Asia.

Location: ÉFI Asia Regional office, Kuala Lumpur, Malaysia Submit application by: 31 August 2016

http://www.efi.int/portal/careers/open_jobs/?bid=2543

IUFRO Meetings

Search our online calendar for a full list of meetings: http://www.iufro.org/events/calendar/current/ Find non-IUFRO meetings on the IUFRO Noticeboard: http://www.iufro.org/discover/noticeboard/ Also search for forest-related events in GFIS at: http://www.gfis.net

29 Aug – 2 Sep 2016 EcoSummit 2016: Ecological Sustainability: Engineering Change Montpellier, France

IUFRO 8.03.00 Contact: Alexia Stokes, alexia.stokes(at)cirad.fr http://www.ecosummit2016.org/

29 Aug - 1 Sep 2016

Forest Communication Meeting - Joint Meeting with UNECE-FAO Forest Communicators Network Portland, Oregon, United States IUFRO 9.01.02

Contact: Cynthia Miner, clminer(at)fs.fed.us http://www.iufro.org/science/divisions/division-9/90000/90100/90102/activities/

21-24 Sep 2016

Bringing Knowledge on Fir Species Together Abies 2016: The 15th International Conference on Ecology and Silviculture of Fir Sapporo, Japan

IUFRO <u>1.01.09</u>

Contact: Toshiaki Owari, owari(at)uf.a.u-tokyo.ac.jp Andrej Bončina, Andrej.Boncin(at)bf.uni-lj.si http://www.uf.a.u-tokyo.ac.jp/hokuen/Abies2016/



24-27 Oct 2016 IUFRO Regional Congress for Asia and Oceania Forests for Sustainable Development: The Role of Research Beijing, China http://www.iufro-ao2016.org/en/

24-28 Oct 2016

IUFRO All-Division 8: Forest Environment und Changing Climates and Societies Beijing, China http://www.iufro-ao2016.org/en/page.

asp?hid=&pageid=82.html

15-18 Nov 2016 National Conference on Forestry in India: Current Scenario and Future Prospects

Shimla, India IUFRO <u>4.01.03</u> Contact: V.P. Tewari, vptewari(at)icfre.org <u>http://hfri.icfre.gov.in/UserFiles/File/Conference-</u> <u>Brochure_18Jul16.pdf</u>

19-21 Apr 2017

Sustainable restoration of Mediterranean forests -Analysis and perspective within the context of biobased economy development under global changes *Palermo, Italy* IUFRO 1.06.00, 3.02.00, Task Force on Climate Change and Forest Health, Task Force on Forest Adaptation and Restoration under Global Change Contact: Donato Chiatante,

donato.chiatante(at)uninsubria.it http://www.palermocongress2017.com/

17-19 May 2017

Water - Soil - Waste: 2nd Dresden Nexus Conference: Session A.4 - Water and Soil Related Ecosystem Services provided by Forests and Agroforestry Systems

Dresden, Germany IUFRO <u>8.01.04</u> Contact: Yanhui Wang, waingyh(at)caf.ac.cn <u>http://www.dresden-nexus-conference.org/2017/</u>



28-31 May 2017 **23 International Wood Machining Seminar (IWMS-23)** *Warsaw, Poland* IUFRO <u>5.04.08</u> Contact: Michal Strzelecki, michal.strzelecki(at)oigpm. org.pl http://www.iufro.org/science/divisions/division-5/50000/50400/50408/activities/

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24-28 Jul 2017 IUFRO Acacia Conference 2017 "Towards a sustainable future for Acacia plantations" *Yogyakarta, Indonesia* IUFRO <u>2.08.07</u>, <u>1.02.06</u> Contact: Wickneswari Ratnam, wicki(at)ukm.edu.my http://www.iufro.org/science/divisions/division-2/20000/20800/20807/activities/

19-22 September 2017 125 Years of IUFRO Anniversary Congress Freiburg, Germany http://iufro2017.com/

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The following IUFRO Divisions will hold their all-Division meetings in Freiburg:

D3 - Forest Operations Engineering and Management

D4 - Forest Assessment, Modelling and Management

D6 - Social Aspects of Forests and Forestry

D7 - Forest Health

D9 - Forest Policy and Economics

IUFRO2017 on Twitter and Facebook: *Twitter:* <u>https://twitter.com/iufro_2017</u>, #IUFRO2017 *Facebook:* <u>https://www.facebook.com/iufro2017/</u>

Posters and promotional material for the IUFRO 2017 Anniversary Congress can be downloaded here: http://www.iufro.org/events/anniversary-congress/

Feel free to print the poster and display it in your institutions, and at any regional or international meetings you attend in the lead-up to the Congress!

Other Meetings

28 Aug - 1 Sep 2016 **Integrative Risk Management - towards resilient cities** Davos, Switzerland http://idrc.info/

5-6 Sep 2016

Bioeconomy and ecosystem services – synergy or conflict? - Horizontal and vertical policy analysis, modelling and orchestration in practice: Final Conference of COST Action FP1207 - Orchestrating forestrelated policy analysis in Europe (ORCHESTRA) *Louvain-la-Neuve, Belgium* Details at: http://www.uclouvain.be/orchestra.html

Additional information: ORCHESTRA, <u>http://www.cost.eu/COST_Actions/fps/FP1207</u> IUFRO Occasional Paper 29 - COST FP 1207: Orchestrating Forest-related Policy Analysis in Europe (ORCHESTRA),Synthesis Report of WG1 Country Reports, based on contributions of many IUFRO member organizations, http://bit.ly/29B0NIM

12-16 Sep 2016

25th Session and 48th Executive Committee Meeting of the International Poplar Commission: Poplars and Other Fast-Growing Trees - Renewable Resources for Future Green Economies Berlin, Germany

Jointly organized by the German Federal Ministry of Food and Agriculture (BMEL) and the Food and Agriculture Organization of the United Nations (FAO) https://ipc25berlin2016.com/

24 Sep – 5 Oct 2016

17th Meeting of the Conference of the Parties to CITES (CoP17)

Convention on International Trade in Endangered Species of Wild Fauna and Flora Johannesburg, South Africa <u>https://cites.org/cop17</u>

7-18 Nov 2016

22nd Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC - COP22) Marrakesh, Morocco http://www.cop22.ma/

14-17 Nov 2016

ISS2 – 2nd International Smoke Symposium Long Beach, California, USA This conference on issues of wildland fire smoke combines in-person and streaming presentations. http://www.iawfonline.org/2016SmokeSymposium/index. php

4-17 Dec 2016

13th Meeting of the Conference of the Parties to the Convention on Biological Diversity *Cancun, Mexico*

https://www.cbd.int/doc/?meeting=cop-13

With the **launch of the GFEP Rapid Response Assess**ment Report on Illegal Timber Trade and accompanying "policy brief":

http://www.iufro.org/science/gfep/illegal-timber-traderapid-response/

3-7 Apr 2017

19th Commonwealth Forestry Conference: Forests for Prosperity and Posterity

Dehradun, India ICFRE, FRI, with support from MOEF & CC, Government of India and Commonwealth Forestry Association http://www.cfc2017.in/

29 May - 2 Jun 2017 **International Water Resources Association (IWRA)** *Cancun, Mexico* <u>http://www.worldwatercongress.com/</u>