

Forest Landscape Restoration as a Strategy for Mitigating and Adapting to Climate Change

Side Event at the XXIV IUFRO World Congress, 10 October 2014, Salt Lake City, USA
Report by John Stanturf, Palle Madsen, Promode Kant and Michael Kleine

This Congress side event jointly organized by the World Resources Institute (WRI) and IUFRO aimed at discussing forest landscape restoration (FLR) as a strategy for mitigating and adapting to climate change. To this end, a group of IUFRO scientists led by [IUFRO Research Group 1.06.00](#) "Restoration of degraded sites" has developed a framework to demonstrate how FLR contributes to climate change mitigation and adaptation and how this contribution can be enhanced through more efficient methods and systems. This communication tool should help decision-makers to build resilient landscapes and learn how climate objectives can be addressed through FLR. ([Full report](#))

In his opening remarks Björn Hånell of the Swedish University of Agricultural Sciences and Coordinator of IUFRO Division 1 Silviculture (meanwhile IUFRO Vice-President) explained, "IUFRO is an active member of the Global Partnership on Forest Landscape Restoration (GPFLR). As such it supports the call to restore 150 million hectares of deforested and degraded lands by 2020 as an important component of the *Bonn Challenge Initiative on forests, climate change and biodiversity*. Research activities on FLR within IUFRO have been carried out for many years - long before FLR restoration has been placed high on the political agenda at global and national levels."

IUFRO is pleased to partner with the World Resources Institute in implementing a joint project, financed by the German Ministry of Environment, called "*Inspire, Support and Mobilize Forest and Landscape Restoration*" in support of the Bonn Challenge Global Forest Landscape Restoration Policy Initiative.

IUFRO's role is to provide state-of-the-art scientific knowledge on FLR through analysis of restoration case studies, review of scientific literature and development of capacity building material. Thus far, IUFRO's input to this process includes a:

Feasibility Study on Peer Review for the Bonn Challenge Initiative, providing options for evaluating FLR pledges by countries or other proprietors; and

Forest Landscape Restoration as a Strategy for Mitigating and Adapting to Climate Change; an analysis and communication tool based on a wide array of case studies.



Restoring natural beech forests on farmland in Denmark
(Photo by P. Madsen)

On behalf of Lars Laestadius, Senior Associate, World Resources Institute, Michael Kleine, IUFRO Deputy Executive Director, gave a presentation on the Global Initiative "*Inspire, Support, and Mobilize Forest and Landscape Restoration*".

Almost half of the global forest landscapes that have been deforested and/or severely degraded over the past centuries are considered as relevant target areas for FLR activities. They account for about 2 billion hectares of degraded land and, once restored, potentially support the multiple environmental benefits provided by forests and trees.

Numerous examples from around the world (e.g. Republic of Korea, China, Brazil etc.) show that successful restoration of forest ecosystems is not only technically and economically feasible, but also socially acceptable if prepared and designed with adequate participation of relevant stakeholders.

Michael Kleine underlined, "Now forest landscape restoration needs to be up-scaled to cover much larger areas, in order to significantly contribute to climate change mitigation and improve environmental conditions globally."

John Stanturf, US Forest Service and IUFRO Research Group Coordinator leading the project provided insights into the work thus far accomplished through a presentation titled "*Application of the Adaptation & Mitigation and FLR spotlight(s)*".

In total 10 case studies of forest restoration from around the world were assembled including South and Southeast Asia, East Africa, Europe, Latin and North America. These case studies were evaluated in detail for their context, activities and impact, in order to know they represent forest landscape restoration.

Following the presentation on preliminary project results, a panel discussion and audience question and answer session entitled “Contributing to climate change objectives at local levels through FLR” took place.

Three members of IUFRO’s FLR expert group leading the project formed a panel:



From left to right: Palle Madsen (Denmark), Promode Kant (India) and John Stanturf (USA) (photo by Ramin Khorchidi)

The analysis of the case studies and discussions on the results revealed a number of important lessons learnt:

- The results of this assessment of FLR case studies as presented in the side event mainly serve as communication tool;
- The case studies help decision makers to realize what types of concrete action on the ground contribute to climate change mitigation and adaptation;
- They also help to connect high-level discussions on climate change (UNFCCC-COP etc.) to reality on the ground, thus enabling the formulation of appropriate policies, support schemes and financing mechanisms;
- FLR and mitigation and adaptation projects are not always resulting in win-win situations; sometimes compromise or sub-optimal designs from the perspective of one or the other is necessary to meet project objectives; and
- The stoplight presented in the side event is not a prescription, but is meant to suggest where no- or low-cost design alterations to FLR would have additional mitigation and adaptation benefits.



Landscape restoration Udaipur, Rajasthan, India (Photo by Foundation of Ecological Security)

The final report of FLR mitigation and adaptation stoplight will be published in March 2015.

(Side event report abridged by the editor; full report: <http://www.iufro.org/science/divisions/division-1/10000/10600/>)