



Editorial

Introduction to the Changes in Global Forest Resources from 1990 to 2015[☆]

Understanding global forest resource change is more complicated than one might think. This is true irregardless of whether the assessment of change is done with ground-based measurements, satellite image analysis, aerial imagery or some combination of these approaches. National governments use a wide variety of approaches in measuring, monitoring and regulating their forests – and have access to widely divergent levels of national forest resource data. Despite the challenges that countries face – our awareness of the global role of forests in climate change, the importance of forest loss or gain and gaps in wood supply have over the past 60 years come largely from the Global Forest Resources Assessment (FRA).

Too often the FRA is viewed solely for changes in forest area – particularly deforestation rates. While this is important, there are many aspects of the forest resource and forest management that are perhaps more important. These include indicators of stocking, designated management and ownership, sustainable forest management and forest disturbance. What happens to the forest and how it is changing is far more than the conversion of forest land to agriculture and other uses – the forest that remains as forest is also often changing. Part of this comes from the activities of man – as it has been since man and forest first met. Part comes from a changing climate and the stress that this places on forests that have adapted to site conditions that are no longer what they once were. Part of this change is also due to the fact that forests are generally always in some kind of change – whether from shifts in management, pest and disease, drought, fire, severe weather or some combination of these. Change is as much a part of the ecological balance of forests as it is a critical element for foresters to understand and manage.

The job governments do in monitoring and reporting on their forest resources is often complex. Multiple jurisdictions, changes in monitoring and analysis related technologies and the availability of human and financial resources for monitoring and assessment all impact how countries are able to monitor and manage their forests. The countries reporting through the FRA account for nearly 99% of the world's forest area – and 91% of this area is reported in the top two quality tiers.

This volume reports forest change over the period 1990–2015. The Global Forest Resources Assessment has worked with governments since the mid-1940s to prepare and assemble a global view of how the world's forests are changing. This volume is the latest in

that series – although this is the first time a large portion of the technical analyses have been published in the peer-reviewed open literature. This volume was written by over 50 authors from some 25 countries from every continent and includes world experts from many disciplines and institutional homes. Over 75% of the authors are from organizations other than the Food and Agriculture Organization which organizes and leads the FRA process. It is itself an evolutionary change in how the results diligently provided by 155 governments are aggregated and analyzed to help us all understand the global forest resource and how it is changing.

Generally the results of FRA 2015 show positive trends – increased knowledge about the resource, a slowing in the rate of both forest area loss and carbon emissions from forests and increasingly important actions taken by governments to improve sustainable forest management.

The papers in this volume cover a broad range of topics – but still there is much more to explore from FRA 2015. We encourage readers to look at these other sources for data and analysis of FRA 2015 reporting. These include:

1. The Forest Land Use Data Explorer. This online portal provides access to download FRA 2015 data, some of which has been updated since this Special Issue was published. It also allows exploration of other natural resource data – including the agricultural statistics kept by FAO – along with FRA 2015 data.
2. The FAO report: *Global Forest Resources Assessment 2015: How are forests changing?* This synthesis document represents FAO summary reporting of key results from FRA 2015. It and the Desk Reference are available in all six official UN languages.
3. *Global Forest Resources Assessment 2015 Desk Reference*. This document provides summary tables for nearly all of the quantitative variables reported in FRA 2015. It is designed to be downloaded, printed and used as a handy paper reference or a digital reference.
4. Country Reports. Since the year 2000 Country Reports have been the primary source of data reported through the FRA. All 155 Country Reports are freely available online as are 79 Desk Studies that were produced for countries and territories that did not submit reports. Country reports cover nearly 99% of global forest area.
5. Background documents, graphics and infographics are all available on the FRA website (<http://www.fao.org/forestry/fra/en>).

The world has learned much about global forests and how they have changed over the last 25 years. We have discovered as well

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that the conditions for better forest management have also expanded during that time. This evolution is critical as total forest area declines, human populations and demand for forest products continue to increase. We all have much to learn about how to meet these new challenges. Understanding the global resource is an important part of this process. We believe this volume is one step in that direction.

Kenneth MacDicken

Food and Agriculture Organization of the United Nations, Rome, Italy
E-mail address: kenneth.macdicken@fao.org

Greg Reams

*USDA Forest Service, National Office, 1601 North Kent Street, Suite 400,
Arlington, VA 22209, USA*

Joberto de Freitas

*Brazilian Forest Service, Ministry of Environment, SCEN, AV. L4,
Trecho 2, Bloco H, Brasília-DF 70818-900, Brazil*

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