



forests



Special Issue Reprint

Afforestation and Reforestation: Drivers, Dynamics, and Impacts

www.mdpi.com/books/reprint/1713

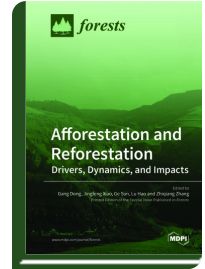
Edited by
Jingfeng Xiao

Ge Sun

Lu Hao

Gang Dong

Zhiqiang Zhang



ISBN 978-3-03921-447-1 (Softback)

ISBN 978-3-03921-448-8 (PDF)

Afforestation/reforestation (or forestation) has been implemented worldwide as an effective measure towards sustainable ecosystem services and addresses global environmental problems such as climate change. The conversion of grasslands, croplands, shrublands, or bare lands to forests can dramatically alter forest water, energy, and carbon cycles and, thus, ecosystem services (e.g., carbon sequestration, soil erosion control, and water quality improvement). Large-scale afforestation/reforestation is typically driven by policies and, in turn, can also have substantial socioeconomic impacts. To enable success, forestation endeavors require novel approaches that involve a series of complex processes and interdisciplinary sciences. For example, exotic or fast-growing tree species are often used to improve soil conditions of degraded lands or maximize productivity, and it often takes a long time to understand and quantify the consequences of such practices at watershed or regional scales. Maintaining the sustainability of man-made forests is becoming increasingly challenging under a changing environment and disturbance regime changes such as wildland fires, urbanization, drought, air pollution, climate change, and socioeconomic change. Therefore, this Special Issue focuses on case studies of the drivers, dynamics, and impacts of afforestation/reforestation at regional, national, or global scales. These new



are an update on the scientific advances related to forestation. This information is provided by land managers and policy makers to better manage forest resources in changing environments.
www.mdpi.com/books/reprint/1713

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.