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Sommario/riassunto

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 studies provide an update on the scientific advances related to forestation. This information is urgently needed by land managers and

policy makers to better manage forest resources in today’s rapidly changing environments.