

## **DAIRY MANAGEMENT, ECOSYSTEM SERVICES AND SUSTAINABLE LIVELIHOODS**

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### **ABSTRACT**

Agro-ecosystems are frequently degraded beyond their capacity to support vital ecosystem services and thus sustain farmer livelihoods over the long-run. Adopting a more sustainable dairy management system is particularly important given the pressure of this dominant human land-use worldwide. This research analyzes farmers' perceptions and the effects of different dairy management methods on ecosystem services provision, milk production, farm quality of life, and environmental awareness in two contrasting studies in Santa Catarina, Brazil and Vermont, U.S. Management intensive grazing (MIG) was found to out produce traditional grazing in Santa Catarina, while contributing to improved biodiversity protection, animal welfare, and ecosystem services from greater pasture coverage and soil restoration. No production differences were found between MIG, confinement and traditional grazing in Vermont, however environmental and social variables saw similar improvements under MIG adoption. Education and access to information was critical for the adoption of better management practices and environmental awareness. Both cases inform integrated policy strategies to address production, conservation and sustainable livelihoods.