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# On the Concerted Adaptation of Soil, Water and Vegetation to Water Management and Climate Change

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#### Message from the Guest Editors

rural areas, available freshwater resources are In increasingly under pressure due to the growing competion of land use functions for available water. Both natural vegetation and agricultural crops depend largely on soil moisture conditions in the root zone. Climate change leads to more prolonged drought periods that alternate with more intensive rainfall events. With unaltered water management practices, this may result in a severe reduction of crop yields and plant biodiversity. These risks can partly be avoided by adapting the groundwater and surface water regime. This Special Issue is seeking contributions focussing on i) a better understanding of interacting processes in the groundwater-soil-plantatmosphere system, both of natural vegetation and crops, ii) effects of climate change on the future freshwater availability for nature and agriculture, iii) adaptive measures to anticipate and adapt to limited freshwater availability, and iv) integrated approaches to optimize freswater availability for all land use functions.



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### Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. Water invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological scientific domains and and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision

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