



## **Vegetation, runoff and erosion**

M.J. Kirkby, B.J. Irvine

School of Geography, University of Leeds, UK (m.j.kirkby@leeds.ac.uk)

Although vegetation cover has long been considered perhaps the dominant control on runoff and soil erosion, the mechanisms involved have not been fully identified, and both models and data suggest that the relationship is not a simple one. This review considers the contributions of crown cover, root strength, soil organic matter and frictional flow resistance to reductions in runoff and erosion, primarily in semi arid and agricultural contexts. Conclusions may be incorporated into erosion models at different time and space scales, to focus mitigation of on- and off-site damage from erosion and to combat desertification in the contexts of global warming and oil scarcity.