

Guest Lecture

Prof. L. A. (Sampurno) Bruijnzeel
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"Hydrological impacts of tropical reforestation: A fresh look at 'traditional' and 'modern' views"

The presentation summarizes the state of play with regard to the streamflow impacts of tropical forest conversion to other land uses and vice versa (regrowth and reforestation), focusing in particular on changes in annual and seasonal streamflow totals, peak flows, and infiltration before highlighting some of the more recent work conducted in this respect by the Amsterdam Critical Zone Hydrology Group. In doing so, traditional 'laymen' views and modern 'scientific' views are scrutinized and compared with the best available experimental evidence for 'real-world' situations.

Outstanding gaps in our knowledge with respect to the general theme of tropical forests and water further include the quantification of the hydrological behavior of regenerating forests (indications of enhanced water use relative to old-growth forest), cloud-affected montane forests (especially those bordering arid lowlands), and perhaps above all, the gamut of agro-forestry systems in view of their likely replacement of natural forests and woodlands in many densely populated tropical regions including sub-humid ones.

Professor Dr. L.A. (Sampurno) Bruijnzeel is specialist of Land Use and Hydrology. He has more than 38 years of experience with hydrological research in the humid tropics of South- and South-East Asia, the Pacific, the Caribbean, and Central and South America, with a primary focus on the influence of land cover and land use on water yield, soil erosion, sedimentation, nutrient cycling, ecosystem services, and meso-scale climatic circulation. His research is based at Vrije University Amsterdam, The Netherlands, where he leads the Amsterdam Critical zone Hydrology Group. Nowadays Prof. Bruijnzeel is also guest researcher at the King's College London.

Monday, April 20th, 2015
4:00pm
Room Z.1.29