Curriculum Vitae

Ruth S. DeFries

Department of Ecology, Evolution, and Environmental Biology Columbia University, New York, NY 10027; email: rd2402@columbia.edu

Current Appointment

Denning University Professor of Sustainable Development, Columbia University, New York Emeritus co-founding dean, Columbia Climate School

Previous Appointments

Associate Professor and Professor (1999 - 2008), Department of Geography, University of Maryland, College Park Associate Research Scientist (1992-1999), Department of Geography, University of Maryland, College Park Senior Project Officer (1983 - 1992), National Research Council, Washington, D.C.

Research Associate (1981 - 1983), Environmental Science and Engineering Group, Indian Institute of Technology, Bombay

Education

Ph.D. (1980), Dept of Geography and Environmental Engineering, Johns Hopkins University, Baltimore, MD B.A., *summa cum laude* (1976), Washington University, St. Louis, MO (major in earth science)

Areas of Expertise

Climate, agriculture and tropical forests; social-ecological systems; sustainability science; food security; conservation and livelihoods in central India

Fellowships and Honors (selected)

MacArthur Fellowship (2007)

Elected Member, National Academy of Sciences (2006)

Elected Member, National Academy of Engineering (2024)

University Professor (highest faculty rank), Columbia University (2016)

Corresponding Fellow, British Academy (2023)

Web of Science, Highly Cited Researcher, 2016, 2017, 2018, 2019, 2020, 2021

Marsh Award for Climate Change Research (2021)

Distinguished Scholar Award, American Association of Geographers (2015)

Honorary Doctorate, McGill University (2016); Honorary Doctorate, University of Leuven Belgium (2017)

Fellow, Ecological Society of America (elected 2012); Fellow, American Academy of Arts and Sciences (elected 2010); Fellow, American Geophysical Union (2009)

Fellow, American Association for the Advancement of Science (elected 2008); Fulbright Award for Research in India (2007)

Representative Recent Publications

DeFries, R., Ahuja, R., Friedman, J., Gordon, D., Hamburg, S. P., Kerr, S., Mwangi, J., Nouwen, C., Pandit, N. 2022. Land management can contribute to net zero. *Science*, 376 (6598): 1163-1165.

DeFries, R., M. Agarwala, S. Baquie, P. Choksi, S. Khanwilkar, P. Mondal, H. Nagendra, and J. Urpelainen. 2021. Improved household living standards can restore dry tropical forests. *Biotropica* 54 (6): 1480-1490.

Davis, K., A. Chhatre, N. Rao, D. Singh, S. Ghosh-Jerath, M. Poblete-Caenave, N. Pradhan, and R. DeFries. 2019. Assessing the sustainability of post-Green Revolution cereals in India. *Proceedings of the National Academy of Sciences*:1-8.

DeFries, R., Chattre, A., Davis, K., Dutta, A., Fanzo, J., Ghosh-Jerath, S., Myers, S., Smith, M. 2018. Impact of historical changes in coarse cereals consumption in India on micronutrient intake and anemia prevalence. *Food and Nutrition Bulletin* 39, 377-392.

DeFries, R. and H. Nagendra. 2017. Ecosystem management as a wicked problem. Science, 356, 265-270.

DeFries, R., J. Fanzo, R. Remans, C. Palm, S. Wood, and T. Anderman. 2015. Metrics for land-scarce agriculture: Nutrient content must be better integrated into planning. *Science* **349**:238-240.

Books for Popular Audiences

DeFries, R. 2021. What Would Nature Do?: A Guide for Our Uncertain Times. Columbia University Press. 264.pp.

DeFries, R. 2014. The Big Ratchet: How Humanity Thrives in the Face of Natural Crisis. Basic Books. 288 pp.

Silver, C and DeFries, R. 1990. *One Earth, One Future: Our Changing Global Environment*. National Academy Press. Washington, D.C. 196 pp. (translated into French, Portuguese, Arabic, and Japanese)

Linking Science with Action

Trustee on various boards including Worldwide Fund for Nature-US and Environmental Defense Fund Founder, Network for Conserving Central India