Tim Forsyth: Ecological Functions and Functionings

Professor Tim Forsyth’s article “Ecological Functions and Functionings: Towards a Senian Analysis of Ecosystem Services” has been published in the latest issue of Development and Change.

Read the full article here.

Abstract: Ecosystem services are part of a growing trend within environment and development to analyse environmental change within the context of socially valued outcomes. Yet, ecosystem services-based policies and analyses are increasingly criticized for failing to connect with, or even for restricting, development outcomes.

This article seeks to connect environmental analysis with development outcomes better by applying the capability approach of Amartya Sen and others. It demonstrates how scientific analysis of ecosystem services sometimes conflates pathways of ecosystem management with development outcomes, but that it can be reconfigured to include more diverse values and objectives.

The article argues that ecosystem services should be identified more as ‘functionings’ (in the Senian sense of valued development outcomes) rather than ‘functions’ (in the sense of biophysical, apolitical ecosystem properties) in order to indicate that ‘services’ always reflect social values, and that values and scientific explanations of underlying biophysical properties evolve together. Environmental science for socially valued outcomes such as ecosystem services is therefore an important site of political inclusion and exclusion.

The article illustrates this analysis with examples of ecosystem-based adaptation to climate change from the World Bank and government of Bangladesh, and in contrast to differing approaches from the field of sustainability science.

Interested in climate change and sustainability? Check out Tim Dyson’s gripping speech about birth control at the UN commission in New York.