## **GUEST EDITORIAL**

## IS FORESTRY A SOCIAL SCIENCE?

## **J** Innes

University of British Columbia, Faculty of Forestry, 2043-2424 Main Mall, Vancouver, BC Canada V6T 1Z4. E-mail: john.innes@ubc.ca

Since its inception, the academic discipline of forestry has been placed soundly in the natural sciences. This remains the case. For example, when searching for forestry journals in the ISI Web of Knowledge<sup>SM</sup>, they are included in the Science edition of Journal Citation Reports, not Social Sciences. While some forestry journals are now accepting papers from the social sciences, there is still a preponderance of papers dealing with natural sciences. This is well-illustrated by the Journal of Tropical Forest Science. Concerned with the development of tropical forest sciences, particularly the management and utilization of tropical forests, this journal might be expected to contain numerous papers about the people who manage and utilize forests, and their interactions with forests. However, a quick scan of the contents of the four 2008 issues of the journal, reveals only a couple of papers peripherally related to social sciences. With a few exceptions, the same pattern is repeated in many other forestry journals. Why is this the case?

The observed patterns do not mean that there is no social science in forestry. Rather, social scientists working in forestry often publish their work in journals traditionally not associated with forestry. This is because such scientists are often not directly related with forest research institutions or academic forestry departments. Instead, they are located in institutions traditionally more closely allied to the social sciences, and thus have a preference to publish in the same outlets as their perceived peers. Very often, such scientists have started studying forests after finishing training in another discipline, in part because the traditional forestry education remains weak in the social sciences.

Students, and thus foresters, are expected to have a thorough grounding in the natural sciences, including physics, chemistry and biology. Graduates emerge from universities and

colleges with a good grasp of the biophysical processes associated with forests. Similarly, forest scientists generally have a sound understanding of the biophysical processes, and generally prefer to publish their work in forestry journals or journals oriented towards the natural sciences. There has, in the past, been a tendency to view the science undertaken by such scientists as somehow being more rigorous and more valuable than that undertaken by social scientists, and this may be one contributor to the disproportionately low complement of social scientists in most forest science institutions.

It is appropriate to reconsider this focus on the biophysical sciences. Foresters increasingly are divided into technicians and managers, although there is of course much overlap. It seems obvious that managers would require managerial skills, and managerial research to support them, but in forestry education, the focus has always been on biophysical knowledge. With about a quarter of the world's 350 million ha of tropical moist forests now managed by rural communities and indigenous people (Putz et al. 2008), a growing proportion of other forests being managed by communities, and the recreational value of forests now being as important or even more significant than the timber value in some parts of the world, forest managers and forest scientists are increasingly ill-equipped to deal with the type of challenges that they are likely to encounter. Similarly, many research institutes (with the notable exception of the Centre for International Forestry) and university departments have insufficient numbers of social scientists capable of tackling the complex management problems faced by forests globally.

What is needed? Firstly, forest science institutions, including those dealing purely with research and those also dealing with education, need to develop a better balance between

biophysical and social scientists. Social scientists working in forestry need to be more effective in demonstrating the relevance of their research to research managers and policy makers. The forest science journals need to pay more than lip service to the inclusion of social science material: in an ideal world, the social sciences would be placed on equal footing to the natural sciences. To achieve this social scientists need to ensure that the quality and relevance of their work meets the expectations of the forestry community.

To answer the question posed in the title of this editorial: forestry is not a social science. However, it is also not a biophysical science. Instead, it is a truly interdisciplinary science that brings together many different traditional disciplines. It is time to recognize this.

## REFERENCE

Putz FE, Zuidema PA, Pinard MA, Boot RGA, Sayer JA, Sheil D, Sist P, Elias & Vanclay JK. 2008. Improved tropical forest management for carbon retention. *PLoS Biology* 6: 1368–1369.

Professor John Innes is FRBC Chair of Forest Management in the Faculty of Forestry, University of British Columbia, where he teaches courses on sustainable forest management and international forestry. He is a member of the Sustainable Forestry Board, Vice-President for Policy of IUFRO and Vice-Chair of the Commonwealth Forestry Association.