

## Reinventing forestry education

Is professional forestry education today preparing future foresters effectively? To answer this question, it may be necessary to rethink what is meant by “forestry” and “forester” – concepts that are becoming increasingly difficult to define.

The role of the forester is changing as the forestry profession increasingly focuses on the multiple values, products and services of forests, and on forestry’s contribution to society and the environment. Management objectives have broadened to recognize the interrelationships between land production systems, forest resource tenure and rural livelihoods. Advances in the natural and social sciences, changes in society and the environment, and evolution in societies’ aspirations for and needs from forests continually challenge the content and relevance of university-level forestry education.

Indeed some may find it harder to think of forestry as a distinct discipline at all. Those working in the profession may well be trained in related fields such as ecology, agronomy, biology, economics or sociology – perhaps explaining an apparent drop in interest in and funding for forestry education. If there is still to be a place for professional forestry education, it needs to embrace a wide range of disciplines – e.g. gender studies, political and social sciences – which were seen as completely outside this field only a decade ago.

In the first article in this issue of *Unasylva*, C.T.S. Nair predicts how future changes in society, the economy and the forest sector are likely to have an impact on long-standing educational concepts and institutions. He stresses that professional forestry education will need to be even more dynamic as the pace of change accelerates.

Nair’s speculative contribution is followed by a series of articles analysing the current situation. Twin surveys for Southeast Asia (P.G. Rudebjer and I. Siregar) and sub-Saharan Africa (A.B. Temu) analyse trends in forestry education over the period 1993 to 2002.

Focusing on Africa, J.L. Kiyiapi points out the uncoordinated development and duplication of professional forestry education programmes, and advocates better national planning and regional collaboration as solutions. Following up the need for curriculum change pointed out in Temu’s survey, a short piece (O. Hamid) describes a forestry curriculum development programme already under way for the Southern African Development Community (SADC). J.J. Landrot outlines technical training needs for forest industries in Africa. The discussion includes in-service

training and stresses the advantages of creating linkages between industry and technical schools.

In many developed countries, the problem is falling enrolment: Hugh Miller’s survey of forestry education in Great Britain and Germany from 1992 to 2001 indicates that interest in pursuing forestry studies has declined. Miller weighs the consequences of this trend for the future availability and quality of professional forestry education.

In Central America, on the other hand, opportunities for forestry education have been growing – but opportunities for forestry employment have not. F. Rojas Rodríguez draws a connection between the development of forestry education and the level of forest development in the countries of the subregion, underlining the need to provide professional opportunities for educated foresters to enhance the environment and people’s livelihoods.

The remaining articles explore some particular avenues for change. A number of regional partnerships for forestry education are already building on the complementarities of individual programmes. P. Kanowski describes a new initiative for collaboration on a global scale – the International Partnership for Forestry Education (IPFE).

Online learning has not yet become widespread in forestry. D.W. Längin, P.A. Ackerman and S. Lewark examine its opportunities and limitations, providing a few examples from Germany and South Africa. J. Ball then makes an appeal for teaching foresters to communicate better in writing. Online learning is one of the means he proposes.

M. Miagostovich describes a non-traditional learning approach developed in Asia: forest management learning groups, through which forest users learn to identify and develop silvicultural practices to address local needs through hands-on experimentation.

Forestry in the twenty-first century must also adapt to the changing roles and increased participation of women – a change that many would argue is overdue. Instilling gender equality in forestry requires education to change the attitudes and behaviour of both men and women. A short case study by J.D. Gurung and K. Lama presents a strategy that cultivated such changes as part of a forestry project in Nepal.

Finally, M. Hosny El-Lakany, FAO Assistant Director-General for Forestry, argues that awareness of global issues is essential for future foresters. He advocates offering courses and degrees in international forestry, to equip foresters and forestry researchers to address issues at the global level and to participate fruitfully in intergovernmental debates.

Developed and developing countries need to respond to forest-related issues of both national and global interest such as environmental degradation, conservation of biological diversity, the contribution of forestry to rural livelihoods, participatory forest management and competition among different resource uses. Professional forestry education needs to produce rounded graduates prepared for the breadth of the responsibility.