

Forestry graduates must be able to direct plantation establishment like this of eucalypts at James Finlay in Kericho. (Photo: BGF) ... and (inset) also to work with communities. (Photo: Jan Vandenabeele)



Where are the foresters?

Professionals need to define what good forestry is all about and provide leadership in forestry management

By Moses Imo and Baloz B. Kirongo

Although Kenyan forestry has undergone many changes over the last 10 decades, of late ecological, social, economic and political changes have influenced profoundly the forestry sector, its professionals and institutions. Professional management of natural resources, and particularly forests, has suffered from political interference. Consequently, there has been a drastic decline in the forest cover, now estimated at less than 2 per cent of the total land area of Kenya. Unpredictable weather patterns and climate change have also impacted on forest cover.

Up to the late 1980s, Kenya's forestry followed a general pattern of evolution of forestry management philosophies as has been witnessed previously in most other parts of the world. This involved a paradigm shift from traditional exploitative (no explicit management regime), administrative (focusing on laws and rules), ecologically-based (including management for timber) to finally social forestry (emphasising multiple use), which is now the most acceptable practice worldwide. Unfortunately, none of these

classical management philosophies - in which management decisions are based on established knowledge, experience, and site-specific conditions - is strictly adhered to in Kenyan forestry.

Currently in Kenya, forest management decisions are rigid without regard to growing demand for limited forest resources by the increasing population. The decisions are marked by political interference, populist activism and, to some extent, selfishness among our leaders. This has been compounded by systematic dismantling of taboos, customary regulations and rules that allowed sanctions for misuse. In this regard, the current state of Kenyan forestry is a manifestation of the inability of forestry as an institution and profession to respond to the increasing pace of societal needs because of lack of either the will to effect change, insufficient knowledge and experience, deficiency in problem analysis and solving skills, or inadequate scientific foundations to support the desired change.

To prevent further depletion, there is need

to put in place forestry educational, research, outreach and advocacy institutions with the capacity to provide the required leadership for effective management and governance of forest and tree resources (state, community and private forests, as well as trees on farms) in the country.

However, the fundamental question is, who should be responsible for these developments, and why have professionals shied away from these critical issues over the years, yet they have the mandate and public expectations to do so? In this article, we address the issue of the contribution of institutions of forestry education to sustainable forest management in the country.

Any forestry training programme should produce professionals with basic competencies in managing forest resources for multiple benefits, improving the quality of the environment and entrepreneurship. In addition to these key competencies, forestry graduates should also endeavour to fulfil the other two key responsibilities of any forester, that is, to refuse inappropriate forest practices, and to resist socially and ecologically inappropriate pressure

from interest groups (environmental, political or otherwise) who may desire to derive selfish interests that are not founded on any philosophy of the forestry profession. This requires professional forestry to consider the professional ethics of the profession, and to wrestle with the complex question of what good forestry is all about.

Key challenges

While Kenyans depend on forests and tree resources for timber, water, food, energy, medicine, shelter and aesthetic and leisure needs, there is a decline in the youth interested in taking up professional careers in the sector.

It is unfortunate that most forestry training in Kenya (and in Africa) over the last five or so decades has focused more on timber production and water conservation and neglected other forest uses and products such as ecotourism, biodiversity, carbon sinks and climate change. Reconciling all these issues in a single forestry curriculum designed to deliver a degree within a specified period in a traditional forestry course is not easy, but societal demands on these issues must be addressed.

As in many other parts of the world, the key challenges have traditionally revolved around issues such as declining enrolment, funding constraints for both undergraduate and continuing education, rapid reduction in faculty, inadequate curriculum content, dynamically changing societal needs, non-responsiveness to global perspectives, and limited incorporation of other disciplines in forestry education. Other factors include lack of attachment to the forestry profession, falling standards in professional ethics, lack of information on prospects in professional forestry, low practical aspects in curricula, low information access, inadequate business aspects of forestry in the curriculum and the wrong view that forestry is a rural-based profession.

Chepkoilel University College of Moi University

Since its founding in 1984, the Department of Forestry and Wood Science (initially under the Faculty of Forestry and Wildlife, which is the School of Natural Resource Management) has evolved to become one of the finest training grounds for national leaders in forestry and wood science technology. It offers undergraduate courses in forestry, wood science and industrial processes, and agroforestry and rural development. Figure 1 gives a summary of the number of graduates of these programmes since inception.

Other closely related courses include wildlife management and tourism, fisheries and aquatic sciences, water resource management, sustainable energy and climate change, and integrated natural resource management.

These programmes, which are unique to Chepkoilel University College, are offered at undergraduate, masters and doctoral levels. Some diploma and targeted short courses are also offered. These programmes have been developed in consultation with various stakeholders, and have taken into consideration the contribution of the graduates in the forestry and general natural resource sector.

Teaching, research and outreach activities have expanded to include not only the science of natural resource management, but also the fundamental concerns that today constitute the challenge of environmental policy and ethics. Chepkoilel graduates are equipped with broad educational experiences that enable them to assume influential roles in government, business, non-governmental organisations, public and international affairs, research and education.

The central goal of the college is to build interdisciplinary academic fields focused on the environment and to train a new generation of leaders capable of tackling some of the most urgent and complex issues of our developing economy. These issues touch almost every aspect of our lives and transcend economic, social and political boundaries.

The core of the programmes is thoughtful analysis and rigorous

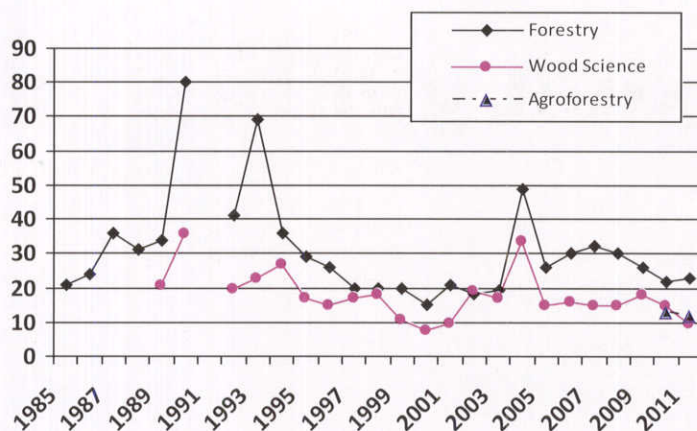


Figure 1: Students graduating annually in various forestry programmes at Chepkoilel University College, Moi University since 1985.

scientific study of the interactions between human societies and the natural resources they rely on for their livelihoods as a basis for sound and practical environmental management. And because many of the solutions to today's environmental challenges lie outside the established natural resource sector, the programmes offered at Chepkoilel incorporate many other professional areas such as economics, sociology, business, law and engineering.

Following the first global workshop on forestry education held in Nairobi in 2007 (Temu et al 2008)¹, the Department of Forestry and Wood Science has embarked on reviewing all forestry programmes to realign the curricula to the changing societal needs at local, national and international levels. The revised curricula are expected to reflect a competency-based and holistic approach to professional forestry including energy, climate change and water resource management.

These updates are accompanied by continuous improvement of teaching and research facilities through collaboration with partners worldwide. Some of the most recent include collaboration with the Kenya Forest Service resulting in the construction of an ultra-modern office complex for forestry and wood science, with fully equipped computer laboratories, lecture and conference rooms. The Department is also developing Open Distance Learning and ICT facilities for e-learning in collaboration with the University of Eastern Finland. This will enhance access to learning resources by off-campus students.

These new facilities will be ready for use by the next academic year.

Other unique and modern teaching and outreach facilities include a modern fish farm – the only one of its kind in the eastern and southern Africa region – a wood workshop, a tree nursery, and a nature trail for ecotourism and biodiversity conservation in the Western Kenya region, including the Central and North Rift regions.

Other collaborative research projects with various partners have enabled Chepkoilel graduates achieve their career goals by building a foundation of knowledge and experiences that equip them to meet the environmental, social and economic challenges facing their daily lives.

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¹ Temu A B, Chamshama S A O, Kung'u J, Kaboggoza J, Chikamai B and Kiwira A (eds). 2008. New Perspectives in Forestry Education. Peer reviewed papers presented at the First Global Workshop on Forestry Education. ICRAF, Nairobi, Kenya.