Emerging Global Forest Resource Management Issues that Cannot be Ignored in any Forest and Ecosystem Science Education Programme

[1]Andrew H.H. WONG & [2]Yoon Soo KIM

[1]Faculty of Resource Science and Technology
Universiti Malaysia Sarawak
94300 Kota Samarahan, Sarawak
Correspondign author: Email: ahhwong@frst.unimas.my

[2]Department of Forest Products and Engineering
Chonnam National University
Gwangju 500-757, South Korea

1. Introduction – are Forestry and Wood Science education programmes still relevant this century?

An expectation of forest science education of many universities worldwide being threatened with closure of this academic curriculum, is to unavoidably shift the focus of teaching and research fields from "**forestry**" to "**forests**" or "**natural resources** programmes including the transformation of future graduates' image (or society's perception of this field). Such necessary shifts in this academic curriculum is accompanied with changing emphasis from traditional "**wood science and technology**" to a more acceptable field "**forest products technology**", or even "**materials science and engineering**" academic programmes, which includes the multitude of non-wood and wood products and competing materials. While traditional university forest science (or forestry) programmes in many regions even today are still the usual home for wood science and technology, it is uncommon for wood science and technology and forest products disciplines to flourish as independent departments in universities, unlike forestry departments. In some cases a very few of wood science groups became parts of material science and/or engineering programmes. Thus it is ironic that while most major university engineering programmes now have independent departments of Materials Engineering and that profession has created its own societies and associations that provide services to the professionals, the global wood science and technology or the forestry profession however has struggled to be of equal status as their counterparts in Materials Engineering (or Materials Science). Understandably most wood science and technology programmes were spawned in forestry, the latter has become less management and production oriented nowadays than it was in the past, in responding to public pressures for forest environmental protection safeguards. Nevertheless it is not too late for the "Wood Science or Forest Science" programmes to evolve and regain acceptance in related society.

Apparently the phrases "forestry" and "wood" in today's environmentally-sensitive society mainly in the developed economies of the world conjure negative environmental implications that people in these fields are responsible for the degradation and destruction of forest and timber resources. This has also weakened the career prospects of graduates and teachers in these fields while student enrolments also suffered. Indeed one way to overcome this disturbing declining popularity in forest and ecosystem science education is to tackle the major challenge to develop student skills with education that is outcome-driven rather than the traditional content-driven curriculum. This infers that the employability and thus, the adaptation of forest science education systems to the demands of prospective employers of sorts (makers of forest products; forest environment and conservation policy-makers in international/national government and non-governmental agencies alike) have gain far more importance.