

FORESTRY EDUCATION IN AFRICA

Tolulope DARAMOLA

Northern African Regional Representative

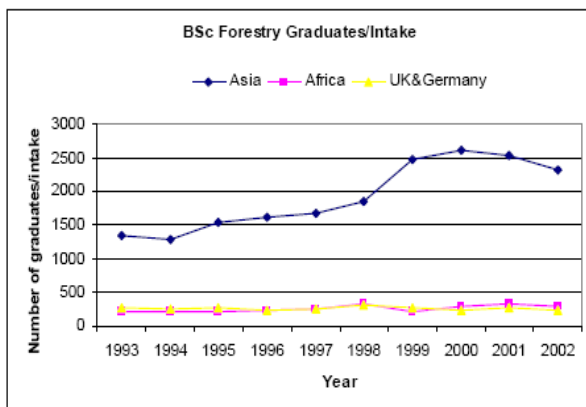
Federal University of Technology Akure, Ondo state Nigeria.

t.daramola@yahoo.com

Global Trend in Forestry Education

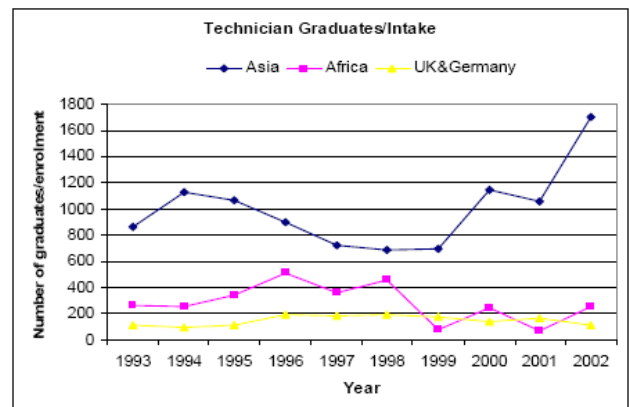
Organised forestry education began in Europe many centuries ago till the late 19th century, when the forest played important role in the economies of most countries, the forestry profession and thus, forestry education boomed. However, forestry education has been undergoing a steady decline as evidenced by the 30% global reduction in enrolment into forestry education and training programmes. Many forestry Departments and technician schools have either closed down or have vastly reduced enrolment. Enrolments in forestry professional and technician training in Europe and Africa have declined substantially since 1993 (Shown below).

Fig 1



Trends in enrolment of forestry graduates in selected countries in Africa, Asia and Europe

Fig 2



Trends in enrolment of forestry technicians in selected countries in Africa, Asia and Europe

The decline can be attributed to failure to adequately respond to rapidly changing social, economic and political environments. The combined image of incompetent governance and illegal actions may be the drivers in discouraging training and education in forestry. Though there is a slight increase in enrolment in Asia, it does not compensate for the massive decline worldwide.

Development of Forestry Education in Africa

The inception of forestry education in Africa was patterned after the European models. It started with the German "master schools" idea (a training based on apprenticeship) and developed to forestry schools where more formal education could be given. Formal forestry education in Africa can be traced back to setting up of national forestry departments in the colonial era between the 1920s and 1930s. The conceptual framework was a vibrant public forestry sector, conserving and managing forests to feed into public and private wood and fibre industries. With this in mind, early forestry education in Africa was focused to training vocational workers and technical staff. Early examples of technical schools in Africa include:

- Nyabyeya Forestry College in Uganda (1931);
- Olmotonyi Forestry Training School in Tanzania (1936);
- Ivory Coast Forestry School (1938);
- School of Forestry, Nigeria, 1948;
- Technical Forestry School in Cameroon (1949)

The idea then was that lower cadre of staff (technicians and forest rangers) would be produced by these colleges and the need for professional foresters met by expatriate staff. During this period, professional trainings were undertaken in Europe, Australia and North America.

The independence wave that swept through the continent in the early 1960s led to a need to find national staff to replace expatriates leaving forestry service. Professional degree training in Africa began in the 1950s

Some early forestry professional schools include:

- College of Forestry, Monrovia Liberia (1959)
- University of Ibadan, Nigeria (1963)
- Makerere University, Uganda (1970)
- University of Dar es Salaam, Tanzania (1973)
- University of Daschang, Cameroon (1975)
- L'École Nationale Supérieure Agronomique Cote d'Ivoire (1975)

From these few early regional schools, forestry education grew phenomenally in many African countries from the late 1970s through to the early 1990s. At the early stage, the curricula for professional forestry put much emphasis on biophysical aspects of timber production and did not reflect on the broader values expected of the profession, thus early forestry education in this placed greater emphasis placed on the biological and technical aspect and much less on the social aspect. The training period

ranged from 2-3 years for certificate and diploma programmes and 4-5 years for BSc degree programmes, 1.5-3 years for MSc programme and 3 years for PhD programme. Initially, the main goal of establishing forestry schools in Africa was to train foresters for national forest service to be absorbed in a hierarchical structure. The saturation of national forestry service meant graduates cannot be absorbed and consequently, poor job prospects for forestry graduates. Most forestry Departments in African Institutions offer programmes leading to the award of degrees to PhD level. The number of student enrolment declined between the 1980s and 1990s and increased slightly afterwards. The increase in numbers in recent years is attributed to an increase in the number of students graduating from high school, and increased government support of students to obtain Bachelor's degrees in various fields. It is quite obvious that the ratio of male to female students is quite high with the number of female students ranging between 0 and 6. Thus, the forestry professional is male dominated

Forestry Education in Nigeria: Past and Present

- Nigerian professional foresters rarely exist before 1960.
- Only 27 of 82 professional foresters in the country as at then were Nigerians.
- Need for home-grown foresters were imperative as those trained abroad could not manage Tropical ecosystems successfully.
- Forestry education was and still pivotal to national development.
- Full-fledge forestry education began in Ibadan by 1963.
- Forestry is now offered by Numbers of Universities, Colleges and Vocational training in Nigeria.

University of Ibadan was the first university to offer forestry education in Nigeria. It was at a time the regional training centre in forestry. Students from other African Countries were also trained at UI. Virtually all home-grown foresters before 1977 graduated from UI. Recent educational revolution has cause the establishment of forestry in many institutions.

Factors affecting the Choice of Forestry as a Career in the Nigerian Universities

"Interest" is the foremost of all the factors guiding a choice of career. This interest is built on some other factors, including:

- Fore-knowledge of the course.
- Public perception/ popularity of the course.
- Professionalism
- Status/ impact of role-models

It's however noted that:

- Forestry is under-represented in secondary school curriculum and teachers seldom mention it to students
- Public awareness of the course is very low.
- Small to medium scale enterprises in forestry have not gained much popularity.

Under-representation of forestry in secondary school curriculum

- Students were not well-informed about forestry in their respective secondary schools
- Many were not opportune to hear anything about forestry prior to their admission to the field.
- Prospects of the course are rarely discussed wherever it is mentioned.
- People rather discuss the potentials of courses like medicine, pharmacy, engineering and so on in career talks.
- Students enrolled into forestry programme often want to change to other disciplines.
- Lack of adequate information about forestry at the secondary school level impedes many students from choosing forestry as a career of choice.

Public perception/ popularity of forestry profession

- Many people (including the elites) are ignorant of the forestry profession.
- The public misconstrue forestry as a profession to mean lesser than what the profession actually entails
- Professional foresters are often confused for forest guards and timber contractors.
- They sometimes refer to forest produce checkpoint officers as professional foresters.
- Such field officers portray not forestry as a profession or discipline, rather as a money touting group of officers.
- Their ill-practices might be discouraging factors for many to choose the profession.
- The public is, however, not aware of any existing relationship between the environment, agricultural production and forestry

Limitations/Constraints

- African forestry institutions and Departments have the tendency to be too theoretical and there is often limited exposure to field experience.
- The biggest constraint facing the forestry schools and Departments is continuing to run a robust training and research programme amidst dwindling national and donor funding resources.
- Research funding in most forestry institutions in Africa is either totally lacking from whatever sources tends to be small and restricted to actual research project work and not to the purchase of expensive equipments like vehicles or major lab instruments.
- The capital cost of big equipments will have to be met by government funding (which is extremely limited in all SSA) and through major collaborative donor support programmes.
- This will also require active linkages between forestry education, the national forestry service and the NGO sector. Collaborative arrangements with other national and international organisations must be pursued more vigorously than in the past.
- Declining student numbers
- Capacity constraints to programme delivery

Future Directions

There is urgent need to review of curricula in many forestry Departments in African Universities. To capture a “fast paced and dynamically” evolving forestry situation. The time for forestry academia and other key stakeholders to better inform the situation could not be more urgently needed to address the social needs of the society and produce graduates with good job prospects and meet the needs of the wider society. There must be connection between forestry schools producing manpower and national forestry agencies charged with implementation of forestry programmes. Often, there is no national policy to guide forestry education vis-à-vis the national forest sector.

There is urgent need to create awareness and change the negative perception of the public about the forestry profession. If this is effectively done, enrolment may increase

Investments in infrastructures and equipment in forestry Departments/faculties must be increased substantially. Forestry education in

Africa must graduate from the current heavily theoretical inclination to include much of practical training

Conclusions

- The temperate influence led to a rather narrow view of forestry in Africa and forestry education has correspondingly developed in the same direction. Consequently, African forestry graduates have contributed little in transforming livelihoods of small-scale landholders.
- Targeting forestry training to public sector employment was short sighted; it has created unsustainable forestry educational programmes in most African countries.
- Forest research and teaching at professional, technical and vocational levels is undermined by lack of resources. In fact, the issue is not so much the content of the curriculum but the delivery process.
- The importance of getting the right balance between theory and practice cannot be overemphasised – which means investment not only in facilities on campus but also availability of forest field facilities to offer students adequate exposure to field conditions.
- In the last two decades, declining student enrolment in forestry education, especially at the technical level, has emerged, which is due to low investments in forestry education, poor perception of forestry profession, poor job prospects, etc.
- Student enrolments are still largely in favour of males despite international push for gender balance, though this imbalance is not in any way unique to Africa.
- The current student enrolment levels cannot justify the heavy infrastructure and running costs of the forestry programmes. This is critical in view of increasingly dismal national funding allocations to universities.
- Unless forestry education is repackaged to make it more competitive in terms of student enrolment and future career options, many institutions will be forced to cutback heavily or close down forestry as is already happening among technical level institutions and Universities in more advanced countries.
- Massive public enlightenment on forestry education and its prospects is needful.
- The need to re-orientate and re-direct people's focus is highly imperative for forestry education to be relevant in the future of Africa.