

## **AGRICULTURE AND FORESTRY EDUCATION IN NIGERIA: THE CRITICAL CHALLENGES**

**JOHN A. AKANDE and S. L. LARINDE**

Department of Environment and Resource Technology, Bowen, University  
P.M.B. 284, Iwo, Osun State

### **ABSTRACT**

To unlock the future of Agriculture and Forestry Education (A&FE) in Nigeria, critical dynamics observable from fourteen programmes in three selected universities were studied over a five-year period (1997-2001). A&FE trend and priority settings were examined with the hope of addressing enrollment concerns, admission criteria, curricula efficiency, staff endowment/capabilities and programme sustainability. The results revealed marked attenuation in A&FE graduands vis-à-vis undergraduate enrollment; decline in societal norms and priorities which should normally attach appreciable value to the agriculture profession and the deplorable standard of professional ethics among A&FE graduates who now prefer and seek after white collar jobs. Fundamental rectifier steps are recommended to revise and improve on existing curricula; bridge apparent gap between practical and theoretical contents and improve civil perspective of A&FE, as vital component of contemporary educational needs. When A&FE graduates can, on the field, put knowledge acquired into valuable forms, the profession would have succeeded in producing job creators rather than mere job seekers.

**Keywords:** Agriculture and Forestry Education, civil perspective, challenges.

### **INTRODUCTION**

In the pre- and immediate post-independent era of Nigeria, a common adage goes that 'Education without hoes and cutlasses is incomplete'. Though philosophical, this is a reflection of the then-cultural values and norms depicted on the national flag colored 'green-white-green'. The value of agricultural and forestry profession that was promoted erstwhile now suffers cultural neglect and this calls on the stakeholders to work out arrest strategies. Professional organizations must grow if they are to thrive. The future of any profession depends on how stakeholders deal with the difficult and relevant policy issues with promptness and resolve. To ignore this fact is to sacrifice rights, status and even relevance in the course of time and the ultimate penalty is early obsolescence.

Those who are part of A&FE for the past 25 years have witnessed changing times, which influence the profession. In the sixties (60s) and seventies (70s) government programmes such as "Green revolution", "Operation Feed the Nation"



helped to increase students' awareness of their environment and agricultural practices. Incidentally, a new ethics of concern for nature and natural resources is currently sweeping through the world embracing plants and animals as well as people. This code of ethics requires the cultivation of due respect for living things which share the biosphere with man. Nigeria is already keeping faith and adapting with this global trend through the establishment of institutions dedicated to A&FE and conservation objectives, but of concern is how well the new generation is prepared for taking over A&FE related businesses. One wonders if A&FE curricula are well grounded to equip and attract the target future generation of natural resource managers.

If democracy implies citizens' rights to take part in influential decisions and points to a moral duty on the side of scientists to inform those interested in what they are doing and address possible concerns (Bennett *et al.*, 2003), then, appropriate A&FE for national development should be discussed in terms of policies, programmes, enrollment, skill acquisition and manpower development. Involvement in public policy making and dialogue in matters of concern is a professional responsibility that cannot be ignored. It is a knowledgeable public that can strengthen the promotion of good natural resource science that is basic, applied and commercial. All the A&FE programmes have functional identities and overlapping jurisdictions needed for sustainable human welfare. But investments in education is a measure of its functionality; the motivation of the students to learn; the curriculum package; the human resource availability to teach the subjects; the time for learning and the requisite tools for teaching (World Bank, 1995). The main objectives of this study are (1) to assess the status, trend and priority settings in programmes offered in the faculties of agriculture in Nigerian Universities and (2) to proffer sustainable solutions to enrollment / graduation problems, admission criteria, curricula efficiency and programme sustainability.

### **METHODOLOGY**

The methodology employed was "basically field survey of fourteen programmes in three selected universities namely; The university of Ibadan (UI), University of Agriculture, Abeokuta (UNAAB) and the University of Agriculture, Markurdi (UNAM) over a five-year period (1997-2001). Closely related programmes were grouped together with reference to the Joint Admission and Matriculation (2001/2) guidelines for admission to first degree programmes in Nigerian Universities. A pooled record of student graduation figures were obtained from the sampled universities and subjected to logarithmic function over years. In addition, expert opinions were sought and obtained through personal communications with renown experts, professionals and stakeholders in the field of agriculture.

## **RESULTS**

Agriculture and forestry education in Nigeria include disciplines like Agronomy, Animal Science, Forestry, Fishery, Agricultural Extension and communication, Veterinary Medicine and Environmental Management. The universities offering these disciplines in Nigeria (Table 1) often encourage significant overlap of programmes (Table 2) at institutional levels maybe to broaden their scope and relevance. The agricultural universities have ethical responsibility to evaluate A&FE in light of contemporary attitude of parents to their wards proposing to pursue a course in any of the aforementioned subject areas. The survey data (Table 3) suggests that the universities experience stunted growth in student graduation figures over years. Agriculture and forestry education in Nigeria appears to be a vehicle mired down in mud. There are poor enrolment problems and a need for increased recognition and relevance within and outside the profession. These concerns should, however, be seen as challenges and opportunities rather than burdens or barriers to achieving sustainability. With the forestry profession, in particular, identified obstacles to student enrollment include:

- ⌚ The lower priority given to the profession by governments who should be alert to and understand the interconnectivity between forestry and environmental issues;
- ⌚ The forestry curriculum itself emphasizing less of practical and societal needs;
- ⌚ Increased number of forestry schools not commensurate with employment opportunities in the government sector, which is on the decline;
- ⌚ Minimal private involvement in forestry activities and forestry establishment;
- ⌚ Lack of scholarships for forestry students;
- ⌚ More attractive remuneration for white-collar jobs that promote withdrawal syndrome in the current generation from activities that can soil their hands; and
- ⌚ No published list of job opportunities in forestry for the civil society to consider.

The challenges here are enormous and call for an awareness program to educate on the potential benefits of A&FE and in a wider context of job and trade opportunities and other functional goals calling for A&FE applications. Inadequacies exist in A&FE curricula and duration to graduation. Recommendations are therefore needed on the objectives, contents, methods and materials for A&FE in Nigeria.



Table 1: Institutions offering agriculture and forestry education in Nigeria

Institutions	Number of A&FE courses offered	Program areas (key provided in table 2)														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Ambrose Alli University, Ekpoma	2		*	*												
Ahmadu Bello University, Zaria	1	*														
Abia State University, Uturu	5	*	*	*	*					*						
Usman dan Fodio University, Sokoto	1	*														
Babcock University, Ilishan Remo	2					*	*									
Abubakar Tafawa Balewa University, Bauchi	3		*	*		*										
University of Benin, Benin City	6		*	*	*	*					*	*				
Bowen University, Iwo	8	*	*	*	*	*				*	*	*				
University of Calabar, Calabar	4		*	*	*	*										
Delta State University, Abraka	6		*	*	*	*					*	*				
Ebonyi State University, Abakaliki	1									*						
Enugu State University of Science and Technology, Enugu	4		*	*		*				*						
Federal University of Technology, Akure	6		*	*		*				*	*	*				
Federal University of Technology, Owerri	4		*	*		*				*						
University of Ibadan, Ibadan	11	*	*	*	*	*		*	*	*	*	*				*
University of Ilorin, Ilorin	1	*														
Imo State University, Owerri	5	*		*	*					*	*					
Kogi State University, Ayigba	6		*	*	*	*	*				*					
Kano University of Technology, Kano	2					*	*									
Ladoke Akintola University of Technology, Ogbomosho	3		*	*		*										
Federal University of Agriculture, Makurdi	9	*	*	*	*	*	*			*	*	*				
University of Maiduguri, Maiduguri	3	*				*				*						
Federal University of Technology, Minna	7	*	*	*	*	*				*		*				
Obafemi Awolowo University, Ile-Ife	6	*	*	*	*	*	*									
River State University of Science and Technology	6		*	*	*	*	*					*				
Olabisi Onabanjo (Ogun State) University, Ago-Iwoye	7	*	*	*		*	*				*	*				
University of Agriculture Umudike, Umuahia	7		*	*		*	*			*	*	*				
University of Agriculture Abeokuta	10	*	*	*		*	*			*	*	*	*	*	*	*
University of Ado-Ekiti, Ado-Ekiti	1					*										
University of Nigeria, Nsukka	6		*	*	*	*	*			*						
University of Uyo, Akwa-Ibom	7		*	*	*	*	*				*	*				
Federal University of Technology, Yola	4		*	*		*					*					

Table 2: Program number and titles\* as used in various universities in Nigeria

Number	titles/key	Number	titles/key
1	Agricultural Extension Agricultural Extension & Education Agricultural Extension & Communication	6.	Home Economics Home Science and Management Hotel Management and Tourism
2	Agricultural Economics Agricultural Economics & Extension Agricultural Economics and Farm Management Agricultural Economics and Rural Development	7.i.	Veterinary Medicine
3	Agronomy (Crop) Plant Physiology and Crop Ecology Horticulture Crop Protection and Environment Crop Production and Crop Protection Crop Improvement Plant Breeding and Seed technology	8.	Agricultural Biochemistry and Nutrition
4.	Agronomy (Soil) Soil science and Agricultural Mechanization	9.	Food Science and Technology
5	Animal Science Animal Nutrition Animal Production and Health Animal Breeding and Genetics	10.	Forest Resources management Forestry and Wood Technology Forestry and Wild Life Management Forestry and Environmental Management Forestry, Wildlife and Range management Pasture and Range Management
		11.	Fisheries and wild Life Management Aquaculture and Fisheries Management
		12.	Environmental Management and Toxicology
		13.	Agricultural Meteorology and water management
		14.	Agricultural Engineering.

\*Titles are as reflected in JAMB U.M.E./DE Brochure

**Table 3: Pooled record of student graduation in A&FE programmes in three Nigerian Universities (1997 – 2001)**

Programmes*	1997			1998			1999			2000			2001		
	UI	UNAAB	UNAM	UI	UNAAB	UNAM	UI	UNAAB	UNAM	UI	UNAAB	UNAM	UI	UNAAB	UNAM
1	23	-	62	31	-	56	17	-	17	21	-	13	19	-	10
2	63	111	61	82	102	62	42	113	37	84	81	76	71	94	50
3	68	42	33	46	20	16	20	39	13	47	33	16	45	35	20
4	10	17	-	12	17	-	6	11	-	-	8	-	-	15	-
5	37	50	24	28	70	18	19	81	9	29	76	7	36	95	17
6	-	28	6	-	12	2	-	22	6	-	31	-	-	52	9
7	65	-	-	53	-	-	59	-	-	47	-	-	48	-	-
8	8	-	-	7	-	-	-	-	-	-	-	-	-	-	-
9	10	41	18	15	45	15	6	44	11	14	48	13	17	69	14
10	27	2	10	14	19	7	2	25	11	8	29	9	6	23	-
11	35	11	2	13	23	3	4	17	5	13	12	6	17	54	41
12	-	10	-	-	13	-	-	29	-	-	25	-	-	43	-
13	-	6	-	-	19	-	-	13	-	-	16	-	-	-	-
14	18	-	19	18	-	21	10	-	16	26	-	21	26	-	11
Sub-total	364	318	235	319	340	200	185	394	125	289	359	161	285	480	172
Total		917			859			704			809			937	

UI – University of Ibadan; UNAAB – University of Agriculture, Abeokuta; UNAM – University of Agriculture, Markurdi

\*Programme key given in Table 2.

## DISCUSSION

### Civil Perception of Agriculture and Forestry Education

In the days of 'Operation Feed the Nation' and 'Green Revolution' in Nigeria, the country experienced growth in tertiary education enrollment in Agriculture and related disciplines. These were the days of national reconstruction from civil war ravages, employing the oil fall-outs for national building, and to some extent, agricultural development. As Nigeria's foreign exchange earnings became threatened in the 80s with concomitant negative balance of payment, structural adjustment programmes of the government impact on people's attitude to look for lines of least resistance to obtain liquid cash. The banking sector grew in the 80s and 90s and together with the oil industry became significant employers of labour ready to pay relatively higher salaries than obtainable in the agricultural and forestry sector.

The age of information technology (IT) also influence career choice, as IT professionals are more valued across public and private enterprises. A&FE apparently soils the hand in the process of producing needed goods and services and the society appears unconvinced; uncompromising or perhaps unknowledgeable about the financial justification for such required efforts. This is not to say that



A&FE has sunk into oblivion but is obviously not radiating recognizable emissions. It is therefore time for stakeholders to rise up to and accept our professional responsibilities in encouraging greater enrollment.

It is useful to provide professional information that has purified effect on the way people perceive and do natural resource related business. This is more than an opportunity; it is a responsibility – demand on A&FE professionals to influence positively the societal well being. Students, parents, guardian, individuals and agencies invest in education on a belief that it brings enlightenment and helps the individuals to develop profitable skills needed for development.

In light of this, the national policy on education aims at:

- ⌚ Inculcating national consciousness and national unity,
- ⌚ Inculcating the right types of values and attitudes for the survival of the individual and the Nigerian society,
- ⌚ Training of the mind to understand its environment and the world around, and
- ⌚ Encouraging the acquisition of appropriate skills, abilities and competencies needed to live in and contribute to the development of the society (Okeke, 1981).

The current craze for non-A&FE disciplines is however disturbing and unjustified in view of Nigerian national problems and priorities. Parents who send their children to school are now less concerned about what their wards will learn than about the certificate and money they will earn after graduation. Manpower training for economic development should not necessarily be the overriding aim of education and the efficacy of agriculture and forestry profession must be preserved. A situation where many agriculture and forestry jobs lie fallow, in waiting to be done, while people with requisite education, relevant skills, technical knowledge and proper orientation can not be found is unjustified.

Graphical trend (Figure 1) shows a general decline in the number of agriculture and forestry education graduates produced from 1997 to 1999 in two of the three universities sampled. Only the University of Agriculture at Abeokuta (UNAAB) demonstrated significant aggressiveness in student recruitment efforts and this is reflected in the consistent and progressive graduation record for the period under consideration. The reasons for decline in U.I. graduates may be traced to the university plan to decrease undergraduate and increase postgraduate enrollment of students (ratio of 40: 60 respectively) in all programmes. Some strategies adopted by UNAAB include the broadening of agricultural program areas and establishment of specialized schools administering the programmes. This gives greater credibility as students can identify better with programmes adopting environment, rural development, toxicology, veterinary medicine as “market attractants” than when institutions stick to orthodox nomenclature and paradigms.

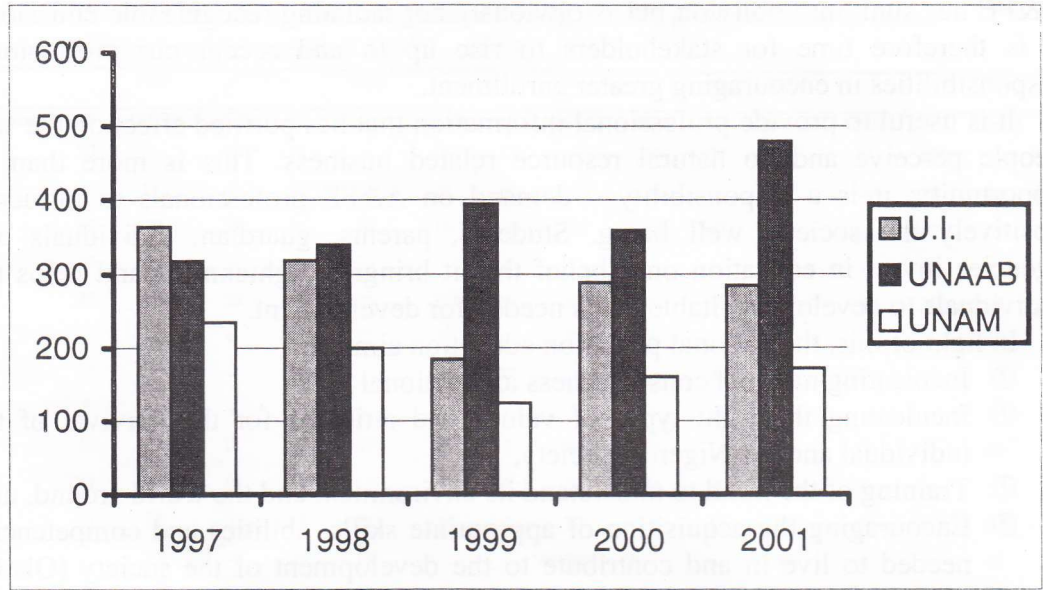


Figure 1: General trend of student graduation in Agriculture and Forestry education disciplines in sampled universities over a five-year period

Up till the year 2000, a logarithmic decline in student graduation records (Figure 2) was found and is a source of concern. Student enrollment in A&FE is a critical public policy issue affecting the profession. There is therefore a need for timely intervention of experts in this matter of utmost importance to the nation. First and foremost, the admission pool to A&FE disciplines should be revisited to encourage greater enrollment, so also curriculum review exercises to ensure sustainability of programmes. It is certainly not advisable to remain silent when issues affecting A&FE are treated with disdain and levity.

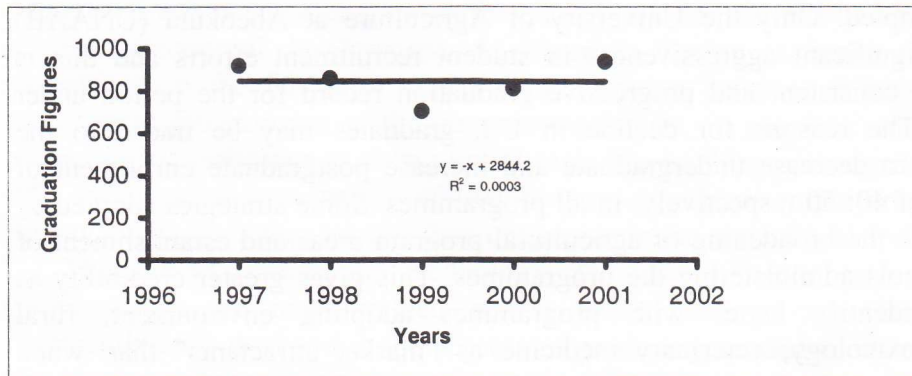


Figure 2: Logarithmic trend of the graduation figures over years



### **Barriers and challenges**

There remain a number of key challenges to natural resource education in Nigeria. These include attitudinal changes (i.e. a measure of customer appreciation of the sector), value addition, need for entrepreneurial and commercial character and improved extension practices. These features must be addressed to meet the challenges to A&FE as a threatened component of development. Interest of applicants rather than institutional or national plans or priorities must also be catered for.

The mind frame of the civil society on what should be a socially acceptable discipline must be addressed. "Is it the furniture that is moving around or the whole furniture changing? Why is there diminishing public confidence in agriculture and forestry education? The civil society needs a re-orientation from an attitude of anything goes; buyer beware to a realm where professional expertise would be seen to go beyond popular input. It is evident that a majority of the civil populace could not reach a negotiated consensus on how A&FE could evolve from being a risky and un-attractive profession if the graduates cannot be gainfully employed. Increased dissatisfaction was expressed, both within and outside the university community, about the role the universities are playing (Sherrard, 2002). They are accused of not responding adequately to market forces and the employers are dissatisfied with the type of graduates being produced. The graduates seek white-collar jobs and could not adapt well to the needs of the producers, rural communities, agricultural industries and businesses neither are they skillful enough to meet tomorrow's challenges (Maguire, 2000).

### **Identified opportunities**

The key to educational success lies in the attitude of the civil society, the workforce and the academia. Evidently, the situation at hand demands an open platform for discussion between the various stakeholders so that the rationale for social objections can be evaluated and their legitimacy appraised to assess the desirability of developments in A&FE. The particular nature, subjects and circumstances of the A&FE problems require public dialogue to open up the parameters for neglect or objections that fall outside scientific rationality. Methods and curricula in many agricultural programmes result in professionals with narrow focus when contemporary demands in development call for a wider range of skills and abilities. Emerging curricula in A&FE must challenge the youths to select careers in natural resource management whereby trainees would know how to use the resource properly. Educational materials and projects must be well prepared to help the next generation of Nigerians to appreciate the mechanics of natural resource management.



Until very recently, industry and academic alike largely overlooked the need for business and market-oriented A&FE graduates. Yet, it is employees in the sales, distribution and customer relations' side of the industry that most frequently interact with customers to discuss proper application of materials and problems in use. A&FE in Nigeria has so far failed to raise the level of productivity, initiative, creativity and inventiveness of Nigerians and this should not be:

Agriculture and forestry education obviously has a big selling to do in convincing industry executives and the civil society of the value of contemporary training in A&FE related professions. While the goal is to develop job creators, there is more potential to increase job opportunities for A&FE graduates in industry than in any other areas of employment. Less direct but more likely effective in arousing enthusiasm, not only among students but also possibly among some jaded professionals, would be extension news describing existing and rewarding experiences on Agriculture and Forestry endeavor. This could be research breakthroughs, a new or improved product, an economy in production, an innovation in processing or quality control or a new twist in marketing. The underlying thought is to call attention to the attractiveness of a career in A&FE and, incidentally, to stimulate a heightened "es-spirit de corps" within the profession.

It is necessary to become very active in the student recruiting exercise. Whether one agrees philosophically with the idea of student recruitment or not, the truth is that other fields are recruiting and aggressively so. Hiring of specific personnel vested with the responsibility of student recruitment is pertinent. It is valuable to have people who eat, drink and sleep with student recruiting as the number-one issue on their minds.

Peradventure the quality and management of education are too low for the jobs to be performed. It is also possible that the content of curricula be out of line for local needs and conditions. Whatever the case, it is time to invest in new generation of agriculture and forest resource specialists by introducing a healthy interest in natural resource programmes. Volunteers and local government officials should help to propagate this new agenda of bringing agriculture and forestry education to the limelight while preserving the rich heritage of farming in Nigeria.

### **Recovery strategies**

What a nation makes of her educational system dictates the tempo of the march to nationhood and self-sufficiency (Okeke, 2001). Like all endeavors that succeed, the A&FE profession in Nigeria is blessed with a number of talented, devoted and enthusiastic people that can nurture and accentuate the professional fortune. To encourage potential careers in food, agriculture and forest resources management, A&FE professionals must look towards a critical infusion of members. The following steps in the recruitment exercise are pertinent:



- ⊙ The introduction of qualified secondary school and OND graduates to A&FE through admission to any of the professional programmes offered in the agricultural universities.
- ⊙ The successful conversion, upon graduation, of student members of the professional student bodies to organized registered professional units.

Actions that might aid the recruiting process include:

- ⊙ Development of complete teaching units relating to A&FE to be used in secondary schools;
- ⊙ Production of high quality videotape and compact discs (CDs) describing career opportunities in A&FE; and
- ⊙ Agricultural extension arm should be encouraged to take this project in joint venture with government and universities.

The fact that marketing oriented courses are mounted in A&FE represents opportunity for the future. These professionals are also relied upon by the industry to bring a total marketing focus rather than a mere sales focus to them. Politics of the time now favor the establishment of private universities (JAMB 2001/2002) to compliment the existing tertiary institutions. In the private universities, faculty interests are also changing the direction of thoughts about A&FE and this is directly related to their resourcefulness. The primary concerns include public image enhancement, student involvement and recovery strategies. The agricultural universities, in general, must work with the Nigerian Universities Commission (NUC) to fashion a 4-year A&FE program for the purpose of encouraging timely program attainment of goals, enduring equity, and encourage student attraction from other fields.

Agricultural extension programmes must be given high priority. Modern communication technologies should be employed to extend A&FE courses to secondary schools. Special introductory course packages may particularly be important as these may serve to attract potential students. Other strategies that can help to alleviate the status of A&FE in Nigeria include:

- ⊙ Offering of agriculture and forestry education related courses as 'General Studies' for non A&FE students. This will help to spread essential information that will likely serve to attract greater numbers of students to natural resource management courses;
- ⊙ Publication of recruitment posters, information packages, personal contacts, introduction and promotion of "career days" when secondary schools; polytechnics and monotechnics are visited to enlighten about the agriculture and forestry education profession; and
- ⊙ Extension overtures through newspaper, public broadcasting and television programmes. Also, distribution of program pamphlets, brochures and

videotapes to secondary school counselors and at all agriculture and forestry education fora.

More strategies could be engaged but it is up to the professionals to give these a great deal of thought and then act to build the desired numbers.

### **Sustainability of A&FE**

The future of A&FE is increasingly tied to the integration of essential knowledge and information to showcase the superiority of the disciplines in providing an enviable professional stature. Some coping mechanisms are needed against market vulnerability and disempowerment. To achieve a winner figure, it is necessary to understand what is at stake and what should constitute a social compromise. If enough graduates are produced, the professions would be self-perpetuating; the graduates would be visible and would be a continuing advertisement to clientele on the viability of agriculture and forestry profession. The reverse is the case now as the number of enrolment/graduands dwindles and there is danger of becoming invisible and disenchanted. This is a legitimate cause for concern, thus, professionals must:

- ⌚ Take hard look at existing academic curricula. Some re-package may be necessary to serve the industry and other private sector better and this will in the near future attract a greater number of clients;
- ⌚ Develop strong marketing-oriented and entrepreneurial curricula that provide job attraction and ensure greater exposure to agriculture and forestry education;
- ⌚ Evolve and be involved in joint industry/university recruiting program for A&FE graduates; and
- ⌚ Try to secure more and better-funded scholarships for A&FE students.

Public perception of A&FE should be made objective through increased awareness and understanding of its relevance to development. In some quarters, A&FE is traditionally regarded as purely academic endeavor with its merits evaluated independently of its relation to the society. This is evidently not so if we fall back on past experiences. It is time to come up with natural resource plan act. That is, a philosophy of encouragement from the academic community for increased visibility, credibility and recognition of A&FE specialist at the work place. A&FE studentship should be made a process of discovery and excitement, a time to develop an attribute of working towards laudable goals and of achieving success in the chosen field.

Nigerians cannot afford to neglect the agriculture and forestry education sector. Influential citizens should foster increase cooperation among the universities, as the consequence of neglect would be loss of support, contained relevance and funding opportunities. If education increases the stock of knowledge and ensures its



diffusion (Aghenta, 2001) then A&FE promises the society with the needed human capital for further achievement.

Once a student is enrolled in a professional A&FE curriculum, a faculty adviser must be attached and he/she becomes the key to success in promoting and maintaining the students interest. It is essential to develop A&FE ethics that would lead to the evolution of mature community base partnership in agricultural production and resource management.

New commitment to A&FE is anchored on a vision and need to produce students that will be trained for self-sufficiency in knowledge and self-reliance in the practice of their career. There is an established correlation between the nations economy and market, which determine the effective direction to which collective goods are channeled. Where students constitute the collective goods, improved patronage could be achieved through private institutional participation in agriculture and forestry education because of competing hypothesis.

The undergraduate programme of study in agriculture and forestry normally takes a period of 5 years and combines a series of lecture courses with practical fieldwork. It is necessary to advice the NUC to allow the programmes to be condensed, particularly in the private Universities, to a 4-year module without compromising contents (credit hour load) and by using three summer school (one academic session equivalent) period to complete the work meant for the fifth year. It is valuable to surgically remove the current state where applicants shy away from the 5-year arrangement which portent no preferential bargain after graduation. Granting the request shall be a very positive development in creating a common platform for science oriented and management disciplines.

### **CONCLUSION**

Perceptions whether legitimate or protectionist is as important as reality because a huge cost is associated with inaction. Attainment of A&FE goal in Nigeria is predicated on the availability and proper utilization of the high-level manpower with requisite technical and professional skills. The character and extent of our national development actually mirror the attitudes and values of the people as well as the stock of A&FE knowledge and skills acquired or accumulated for national development purposes.

A&FE is crucial to national development. Quality management in this realm is the collective responsibility of all stakeholders who must jointly guide their fortunes. From the scientific and commercial standpoint, A&FE holds many promises in creating functional identities. In Nigeria, it is necessary to evolve a strategic framework for managing A&FE capital. When such is effectively directed, it is capable of generating high performance and relevance.

In retrospect, A&FE has provided the necessary tools; skills and knowledge that helped our nation survive and develop to the present stage. It is good to look back at our past and project to greater heights in a new form and dimension. In a rapidly changing world, universities must respond to the stakeholders and civil society. It must be dedicated to the production of professionals with knowledge; skills attitudes and value that will enable them integrate production with social and environmental concerns. In essence, the universities must improve on problem-solving approaches to experiential and participatory learning; develop in the student's social and environmental consciousness, also entrepreneurial mentality and skills suitable for creating outstanding opportunities in the market place.

Quality education is a precondition for development and a crucial part of this is the national motivation to encourage specialized sectors such as agriculture and forestry management. A challenge to secure the involvement of the society in A&FE is necessary through citizen conference, value workshops and dialogue (World Bank, 1995) and the responsiveness of educational policy in Nigeria, to this issue, would be measured by how A&FE is able to address people's aspirations and personal interests. If the stakeholders remain silent, they will fall short of achieving the highest calling of being a vital vehicle through which professional matters and priority programmes are delivered to the public and thereby contributing to the well being of the nation.

What does this mean in the long run for wise use of natural resource? It means that at least several hundred thousand of youths may select projects and businesses related to agriculture and forest resources and would be able to manage such professionally and sustainably. Higher education in agriculture and forestry should prepare students for breakthroughs and useful living within the society. It must also provide support for sector – wide programmes and development.

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