Towards improving agricultural education in Nigerian Universities in the 21st century

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TOWARDS IMPROVING AGRICULTURAL EDUCATION PROGRAMMES IN NIGERIAN UNIVERSITIES IN THE 21ST CENTURY

By

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Abstract

This paper X-rayed the agricultural education programmes in Nigerian Universities today and beyond the year 2000 AD. It described the philosophy and implementation of University education in agriculture in the country since its inception and identified pitfalls that exist which must be tackled prior to maintaining a sustainable agricultural industry. Based on the defects, some suggestions that could improve the agricultural education programmes as we march into the 21st Century were made.

INTRODUCTION

In 1960 when Nigeria had her independence, shortage of manpower was the major limitation to agricultural development in Nigeria (Ojo, 1983) and the situation persisted until late 1970s (Obi and Forni, 1976). Consequently, rapid expansion in University education was encouraged so much that by 1985 more than 25 Universities were established which offered courses in agriculture. This resulted in increased production of graduates in Agriculture and allied courses.

Against expectation, however, the production of graduates in agriculture neither resulted in increased presence of graduates in agro-oriented businesses nor in increased food production. Olayiwola (1983), observed that about 40 per cent of the annual turnover of graduates in agriculture in Nigerian Universities were employed in non-agricultural businesses. Olaitan (1988), agreed with the Olayiwola’s (1983) observation and added that the observed slippage in agricultural manpower makes the shortage of skills for modernizing rural agriculture more critical. Consequently, as noted by Odunisi (1988), and Olaitan (1992), the problem is no long lack of skilled manpower but the inability of those trained to forge careers in farming.
In fact, high rate of unemployment among University graduates of agriculture has now become a major national problem (Udeagwu, 1990). Despite this position, Uwadiae (1992) reported that many of the graduates are even resilient, dogged and painstaking in their search for paid employment. Furthermore, employment opportunities have continued to be low in spite of increases in the production of graduates in agriculture and existing programmes are yet to make serious changes in their programmes.

It is against this background that this paper is conceived to examine agricultural education programmes offered in our Universities today with a view to forecasting future possible situation and evolving workable strategies that could be employed to counteract the envisaged situations that could be detrimental beyond the year 2000 AD.

HISTORICAL OVERVIEW OF AGRICULTURAL EDUCATION PROGRAMMES IN NIGERIAN UNIVERSITIES

University level education started relatively late in Nigeria. However, University agricultural education programmes were introduced with the inception of University level education in the country. The first Nigerian University to award degree in agriculture and allied subjects was the premier University (University of Ibadan) in 1963, which was at that time attached to London University. It was not until after independence, that the first set of full fledged indigenous Universities offering courses in agriculture were established in Nigeria. These were the University of Nigeria, Nsukka (established in 1960), the Ahmadu Bello University, Zaria (established in 1963), and the University of Ife, Ile-Ife (established in 1963). The first batch of twenty-four (24) University graduates of agriculture were produced by the University of Ibadan, Ibadan, in 1963 (Ojo, 1983). Soon after this first crop of graduates in agriculture were produced, Universities like the University of Nigeria, Nsukka, Ahmadu Bello University, Zaria, and University of Ife, Ile-Ife produced their own in 1964, 1965 and 1965 respectively. Agricultural Sciences were
the first few courses that were offered at inception of the few Universities mentioned above.

While it is true that the University level training programmes in agriculture started early in the development of universities in Nigeria, nearly all of them were fashioned after the British or American traditions. Consequently, there were little or no modifications of the structure and functions of the universities as they existed in Europe. Agricultural curricula of the universities also were not tailored to the needs of the immediate communities where the universities existed. Taylor (1976) reported that the focus of agricultural education at the outset was on the production of advisory personnel who could introduce scientific methods and techniques to the farmers. The farmers were, in turn, expected to employ the new methods in revolutionalising agricultural production. This orientation in the Nigerian University agricultural programme created an agricultural delivery system that had sound scientific theories on methods and technologies of agricultural production without a corresponding observable positive change in the agricultural sector. At the apex of this delivery system were the university professors. Following closely were the agricultural graduates who lacked practical-based skills in production while the uneducated peasant farmers occupied the bottom of the continuum. Uwadiaye (1993) observed that many of those who studied agriculture earlier were more of theorists than individuals committed to farming.

Ironically, some of the methods and techniques were developed out of context of the farmers’ problems and capabilities (Salmon, 1976). As a result of the conflict between what was introduced and what was required, little progress was recorded in the area of agricultural production. Abelega (1995) observed that this situation in the agricultural sector compelled the Universities to restructure their curricula in order to produce specialised personnel to handle the problems of specific occupational callings in agriculture. However, such efforts could only shift the forms of agricultural education gradually from practical and basic skills of production to specialised theoretical disciplines as the crop of graduates produced, wrestled with the problems of agricultural production
in Ivory towers. Additionally, Ojo (1983) and Abelega (1995) reported that low investment and inadequate personnel with competent production-oriented skills in agricultural education programmes of the universities soon made the university level education in agriculture to be perceived as irrelevant to the needs of the immediate communities. Ohuche (1987), Eze (1990) and Fafunwa (1991) stated the same view and concluded that the entire educational system alienated Nigerians from the needs of the society. They further claimed that after Nigerian "Flag independence" the educational system of the country was not only colonial, but more like education meant to fit children to European countries.

In the same vein, Taylor (1976) also reported that the University lecturers at the time were faced with the problems of adaptation as they were torn between societal development goals and scholastic excellence introduced by the colonial masters.

Consequent upon the apparent failure of the university level agriculture education programmes to meet the yearnings and aspirations of the Nigerian people, curriculum review and improvement were openly advocated for. A proposal was then submitted in 1964 for curriculum modification not only in agriculture but in all learning activities provided in Nigerian school system (Fafunwa, 1991). However, action on the proposed curriculum modification was delayed by the political crisis in the country until 1969 when the famous Nigerian Curriculum Conference was held.

Fafunwa (1991) reported that the 1969 curriculum conference was not that of experts and professionals, but that of the people. According to him, the aim of the conference was to "hear the views of the masses of the people" (first hand) who were not directly engaged in teaching or other educational activities. Over all, the national curriculum conference was a bold step to chart a new course for curriculum development and resolve the inconsistencies, hitherto, existing between the aspirations or needs of the greater majority
of the Nigerians and the set goals in agricultural programmes in the school system (Boateng, 1991). From the views expressed in the conference, a new philosophy of not only general education, but agricultural education was hatched to govern the orientation of agricultural education programmes from then onwards.

Thereafter, further efforts culminated in the formulation of Nigeria Policy on Education (NPE). The NPE states inter alia:

1. "In respect to agriculture, government . . . has programme of mass participation in and orientation towards food production in programmes by providing farm implements, fertilizers and seedlings; and the services of extension staff of the various state ministries of agriculture..."

2. "The curriculum will be geared towards producing practical persons, and the course content will reflect our national needs, not just a hypothetical standard ..." (FRN, 1981 : 13-24)

Despite the introduction of the NPE, the agricultural education programmes in the Nigerian Universities have remained essentially devoid of practical-based skills in agricultural production. Consequently, graduates in agriculture seem to be produced yearly without relevant skills in agricultural production and/or self-employment. This has indirectly affected agricultural production adversely.

Surprisingly, the danger of this unwholesome development in university agricultural education was not felt since university graduate of agriculture easily got government employment (Uwadiae, 1992). However, in 1984 when unemployment became manifest with embargo placed on recruitment of staff in government agencies, many new graduates in agriculture became jobless (Uwadiae, 1992). At that point, it became clear that the graduates of agriculture were ill-prepared for self-employment. Hamza (1987) reported rising unemployment at the time and blamed the university education system in Nigeria
for failing to remedy the situation. As a result of the unemployment problem, government began to urge universities and other institutions of higher learning to re-orientate programmes towards job creators rather than job-seekers (Uwadiae, 1992). Despite the government position, the agricultural education graduates are still found either jobless or employed in occupations unrelated to their training.

NIGERIA UNIVERSITY AGRICULTURAL EDUCATION TODAY: IMPLICATIONS FOR THE MARCH TOWARDS 2000 AD

The role of education in the world had long been recognised (Dewey, 1959 and Oranu, 1994). All societies, primitive or modern, require education to enable new members not only to fit into their work roles in the world of work, but also to satisfy the labour needs of the economy. Consequently, a functional education is expected to be linked to the employment needs of the individual and the labour needs of the economy in order to exert a positive influence on the employment situation.

In Nigeria, the national policy on education (NPE) acknowledges the need for functional knowledge and skills as cardinal goals of education (FRN, 1981). The policy emphasizes that the teaching and learning of any work-bound subject must, inter alia, focus on the training of students in the basic skills required to serve as productive workers in their respective subject areas. However, the Nigerian society is yet to see the positive outcome of the supposed functional guiding philosophy, principles and policies in the school curriculum as students still fail to fully realize the usefulness and the importance of the courses they study to themselves and the country's economy. As a result, Dikko (1989) reported that every year, thousands of people graduate from our institutions of higher learning without a clue as to where they will secure employment in the areas of their training with the result that majority of trained manpower drift to other areas.
in Nigeria do not sufficiently equip the trainees with necessary skills for various tasks they have to perform after graduation. According to them, university graduates are exposed to limited manipulative skills during the pre-service training such that they leave the school with impeccable theory without the required practical skills for employment in the agricultural production. Consequently, Adewumi (1990) and Olatunji (1992) concluded that the absence of employment in the agricultural sector has more to do with the inadequacies of education in agriculture than the state of the Nigerian economy. In their opinion, there is abundant employment potentials in the field of agriculture for its graduates if they could possess the appropriate skills.

In the same vein, Sofofan (1987) observed that there are vacancies in many establishments and hundreds of unemployed graduates, but most of the latter are not trained in the skills required by the former. Also a recent study of the University level education (Hamza, 1987) revealed that the curriculum of the universities have not kept pace with the important needs of the graduate in order to make them effective in their work life. According to this study, the university curricula have tended to be conservative and there are gaps between the universities and the needs of the rapidly changing society which the former is expected to serve.

Even where necessary skills are provided, Dressel (1971) showed that the way the skills are organized make it difficult for the prospective graduates to comprehend and utilize.

According to Wallace (1976) the teaching staff fail to bring reality to their thinking because they are not in touch with the rural situation. He observed that as teachers work in isolation with the local community, they fail to appreciate the problems/situations in the society which makes them to train graduates for hypothetical situation. When training experiences are unrelated to the environment and the situations under which the prospective graduates will work, the learning experiences fail to prepare the graduates for work-roles in society (Cooke, 1977); and consequently, there could be 'slippage' or drift
among the graduates.

Based on Wallace (1976) and Cooke (1977)'s observations, it is essential to opine that the teacher's experiences in their occupational areas should be constantly tested against the requirement of the labour market. Omozokpia (1994) revealed that testing the experiences of the teacher against the requirement of the labour market provides the opportunity for teachers to bridge the gap between the society and the classroom. For now, it appears the Nigerian university agricultural programmes are yet to relate, properly, their training to emerging needs and challenges of the university graduates, not to talk of a safe march beyond the year 2000 AD. For example, in spite of the paucity of the jobs in the agricultural industry, Uwadie (1992) reported that training for self-employment has been neglected and many youths have substituted the goal of self-employment with the goal of working for some one else.

Blaug (1973) demonstrated in a study of developing countries that the graduates that are deserting agricultural occupations are doing so because they lack jobs and the bulk of the existing formal education restricts their initiative and stunts their entrepreneurial spirits.

Blaug (1973)'s study is revealing for the reason that a university graduate of agriculture requires technical and special entrepreneurial skills that promote success in agricultural business to be self-employed.

Anyakoha (1994) identified entrepreneurial skills as ability to:

1. Identify and use market opportunities;
2. Set appropriate business goals;
3. Keep appropriate records;
4. Communicate effectively with the employees and customers;
5. Relate properly with people and
Understand client/customers' needs.

Relevant as the entrepreneurial skills seem to be to the Nigerian agricultural programme at the moment, Industrial Training Fund (ITF) in 1979 reported that Nigerian universities are more pre-occupied with "maintaining International Standards". According to ITF (1979), the Nigerian university training neglect to take into consideration the educational gap between the "advanced" and the "developing countries." As a result, graduates are produced for the labour market with theoretical knowledge equivalent to those of their colleagues from Oxford, Cambridge, Stanford etc., with little or no practical skills. This situation in the Nigerian educational system has necessitated the emergency of thousands of unemployed graduates in agriculture while thousands of jobs are awaiting to be done because people with the right education, training and skills cannot be found.

Ogbazi (1985) in the same vein remarked that, graduates of agriculture are not employed because the pre-service training programme in our educational institutions is primarily limited to classrooms instructions with little or no "hand-on" experiences in agricultural establishments. Anaso and Anene (1984) observed that there is the tendency to overload the student with the masses of factual information which they are expected to reproduce in the examinations without relating them to the world of work. However, when the teaching learning process merely encourages students to master the concepts and processes by recall, without the opportunity to apply it in real-life setting, such memorized knowledge has no transfer value (Ajeyalemi, 1990) and it is of little use in the world of work.

Now that we have tried to show that there is a defect in the Nigerian University agricultural education programme at the moment, what are the obvious implications for the march beyond the year 2000 AD? Indeed, training is intended to provide the agricultural sector with people who have knowledge that can be useful to themselves as
farmers or to help farmers. The problem is that there seems to be better opportunities outside agriculture. Therefore, very often, educated people would rather do something else. If strategies were put in place to increase opportunities for the educated people, they could stay in agriculture.

IMPROVING THE USEFULLNESS OF AGRICULTURAL EDUCATION PROGRAMMES BEYOND THE YEAR 2000 AD.

In order to avert the observed problems in University agricultural education programmes and improve our chances of success in the agricultural sector beyond the year 2000 AD, Nigeria must work towards halting the negative trend in agricultural education. Much as this goal would appear difficult at first sight, however, it is achievable if taken as a challenge.

The problem of non-functional education was created by our educational orientation, and so, educational re-orientation can solve the problem. Some of the way that the required re-orientation could occur include:-

1. Utilization of skill-oriented admission criteria for selection of freshmen into University agricultural education programmes: Studies (Ikejiani, 1971 and Uwadie, 1993) showed that the problem of prospective graduates which start at the time of admission continue throughout the training period to the working life. In Nigerian agriculture, one of the problems of prospective graduates which start at the time of admission is poor attitude towards farming. This poor attitude towards farming can be eliminated through pre-selection criteria that makes it possible to exclude candidates who possess negative trait to farming. Of course, one way of evolving the pre-selection criteria that would exclude those with negative traits towards farming is to adopt selection criteria that are skill-oriented. Although these criteria would vary from one agricultural area to the another, a rule-of-thumb statement would be to state that admission officers should sieve and utilize those skills that are commonly expected of a person in the category of the
occupational area a candidate is seeking admission into.

2. **Increased exposure to practical agriculture**: Closely related to the first suggestion is the need to follow up the selection of university freshmen with provision of practical skills relevant for agricultural production. The practical skills should start in the second year and should take the student to far-away places on rural and research oriented psycho-productive skills to acquire the practical knowledge that will enable them operate confidently in the area of their speciality. Students’ practical exposure should cover all skill related areas in agricultural production but prospective graduates should spend more time on animal nutrition and land evaluation. The essence of such a training should be to educate and train qualified agricultural experts who would remain in the agricultural discipline as self-employed farmers or help farmers to increase their productivity once they are graduated.

3. **Introduction of leadership training in the agricultural education programmes**: Employment generation could be engendered through structured agricultural education and leadership training. Leadership training in the university could start in form of inaugurated clubs along the same lines as the 4H clubs of USA and the defunct young farmers’ clubs. In these clubs, members should be assisted with inputs and facilities that would enable them adopt modern production techniques in agriculture for the purpose of making agriculture a career.

4. **Introduction of Healthy Competition in the University Agricultural Education Programme**: Healthy competition can be introduced in Nigeria university agricultural education programme by adopting “achievement-based employment policy”. Under the policy, employers of labour should offer jobs to schools. The school should depend on a committee of teachers which should nominate and rank dependable quality graduates to fill the vacancies for those jobs.
Thus, prospective graduates should be made to compete for jobs before entering the labour force. Because of the confidence that will be evolved, employers will hire graduates that they do not require as investment in the relationship with the schools. On the other hand, schools will nominate students who will satisfy employers in order to keep receiving their job allocation in future, and the employers will continue to employ in order to keep on receiving a steady source of employees of dependable quality.

CONCLUSION

This paper x-rayed agricultural education programmes in Nigerian Universities today and beyond the year 2000 AD. In a null shell, the paper described the philosophy and implementation of university agricultural education programmes in the country and identified pitfalls that exist which must be tackled prior to maintaining a sustainable agricultural industry in Nigeria. Prominent among the defects discussed are the dearth of practical skills in the pre-service training programmes, lack of training for entrepreneurship, and poor quality of teaching. Based on the limitations, it was suggested that utilization of skill-oriented admission criteria for selection of freshmen, increased exposure to practical agriculture, introduction of leadership training in agricultural education programmes and encouragement of healthy competition among students in agricultural education programmes should be utilized to improve agricultural programmes as we march towards the year 2000 A.D. and beyond.

It is hoped that a committed and sustained effort towards enhancing the quality of agricultural education programme at the university level will positively change the future of the agricultural sector beyond the year 2000 AD. According to Olaitan and Uwadiea (1993), as agricultural education becomes more and more effective, more and more people will opt and find employment in agriculture. This, no doubt, will ensure that the desired workforce replaced the aged men in the agricultural industry at the moment.
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REFERENCE


Home Economics Related Business: Implications Conference on Vocational Education held at Umunze, April 20-23rd.


Taylor, T.A. Plant Science Curriculum and Training in Developing Countries. In a *Report on the National Seminar on Manpower Planning for Agricultural Development*.


Nsukka : Nigerian Vocational Association, University of Nigeria.