

**ISSUES AND CHALLENGES OF AGRICULTURAL EDUCATION IN  
THE SECONDARY SCHOOL IMPEDIMENT TO SUSTAINABLE  
AGRICULTURAL PRODUCTION IN THE NEW MILLENNIUM; THE  
COUNSELLING IMPERATIVE**

***O. U. Onete, (Ph.D)***  
*Faculty of Education,*  
*Cross River University of Technology*  
*Calabar.*

***M. B. Eyo, (Ph.D)***  
*Faculty of Education,*  
*Cross River University of Technology*  
*Calabar.*

***V. E. Ukam***  
*Cross River College of Education,*  
*Akamkpa.*

**Abstract**

The paper attempts to highlight the challenges of teaching and learning agriculture in secondary schools in Cross River State. In doing this, the paper traced the historical development of Agriculture and its evolution as an academic endeavour. It reviews the National Policy on Education vis – a – vis objectives of teaching/learning agriculture in secondary schools. The highlighted challenges include: Curriculum content, methodology which is theoretically oriented; language barrier; insufficient Agricultural science teachers, and inadequate instructional resources. The paper finally draws conclusion and proffers solutions and counseling interventions which include: approaching agricultural education from the humanistic and vocational perspective; motivation of Agricultural science teachers and students. Besides, vocational counseling on skill acquisition for self reliance through seminars, workshops and conferences was equally recommended.

Historically, agriculture was discovered by a woman about 6,000 BC (some 8,000 to 10,000 years ago) somewhere in the area between the Nile in Egypt and the valley of the Indus River in Western India, and subsequently, spread to

other parts of the world including Nigeria, (Onete, 2002). Agriculture may be conceptualized as the production of plant and animal products, agro-based chemicals and equipment, the distribution and marketing of these products, and the ultimate utilization of these products for the benefit of man, (Onete, 2002). To say that agriculture is important is an understatement. Agriculture is the backbone of any stable economy and its importance particularly in developing nations like Nigeria cannot be over emphasized. A healthy and well fed nation is indeed a strong nation. This has prompted the Federal Government of Nigeria to formulate policies that will not only sustain but increase and improve agricultural productions. One of such policies is the introduction of agricultural education in the school system as a vocational subject with emphasis on practical activities.

Laogun (1991) identified the following as the objectives of teaching/learning agricultural science in our primary and post primary schools.

1. The development of an intelligent interest in, and appreciation of the animals and plants in the world.
2. Development of an agricultural science attitude.
3. Helping the child to acquire useful knowledge of agricultural science principles through observation.
4. Helping the child to acquire a scientific method of solving problems.

A critical look at the aforementioned objectives as identified by

Laogun presents agricultural education as a methodologically theoretical subject. However, it is to be noted that the then educational policy as it affects agricultural education only emphasizes certificate acquisition after passing the prescribed examination. The emphasis was actually on the teaching and learning of principles and concepts to the detriment of a practical approach. Following the continuous search for lasting solution to the perennial food shortages in Nigeria, one measure to tackle the issue is to change the theoretical teaching and learning approach to a more or less vocational approach which emphasized the acquisition of practical and employable skills as well as a sustained interest in practical and creative production in agriculture. This view is consistent with the provisions of the present National Policy on Education (NPE) (2004) in which practical or vocation agriculture is made a pre-vocational subject at the junior secondary school level.

The objectives of this approach according to the NPE (2004) are as follows:

- (i) Provide technical knowledge and vocational skills necessary or agricultural, industrial, commercial and economic development.
- (ii) Provide trained man-power in the applied sciences, technology and commerce at sub-professional grades. In the area of agriculture, the policy specifically aims to.
- (iii) Stimulate and sustain students' interest in agriculture.
- (iv) Enable students acquire useful knowledge in agriculture.

- (v) Expose students to opportunities in agriculture
- (vi) Prepare students for occupations in agriculture.

The policy in respect of the above objectives stipulates that agriculture should be taught solely as practical/vocational activity based subject where the students actually hear, see, touch and practice what they learn. Emphasis is implicitly being placed on teaching/learning resources such as qualified teachers, appropriate instructional materials, farm space, farm structure, equipment, livestock unit(s), supply of fertilizers and other agro-based chemicals.

This will facilitate vocationally and practically – based teaching/learning of such topics as contained in the junior secondary school curriculum as:

1. Plan forms
2. Classification and uses of crops
3. Agricultural implements
4. Soil formation and composition
5. Soil fertility and management
6. Propagation of crops
7. Cultural practices in farming
8. Animal nutrition/husbandry/fishing
9. Diseases/pests of crops and animals/control and management.
10. Farm tools/machineries and maintenance
11. Farm buildings/structures and maintenance

As earlier noted, the emphasis on these topics is practice and skill acquisition through vocational education method. The

over all objective in preparing the curriculum of Junior Secondary School (JSS) Agricultural Education as provided in the National Policy on Education (2004) is to provide adequate orientation for the integration of Agricultural Science with productive work at schools and prepare students for future activities in agriculture. It is expected that sufficient interest may be generated in the students and pre-vocational orientation/counseling provided to enable them practice agriculture at the end of the JSS program.

Vocationalizing agriculture in the JSS is not only important but has become imperative in the present day circumstances in Nigeria where looking for job is increasingly becoming a job. The dwindling job opportunities imply that the educational system should develop employable skills in the youths so that they can be self-employed. This phase according to Denga (2008) was attained in USA by 1905 during the depression years through the effort of Frank Parson who introduced vocational guidance to help the youths out of unemployment distress. The new millennium requires intensive and practical training and educating the youths in agriculture. If the youths develop their capacities in productive agriculture, they can become self employed and employers of labour and minimize their dependence on government that is more interested in creating job opportunities on the lips than creating jobs on ground. For agriculture education to become completely vocationalized, the various aspects of agricultural production such as crop and

animal production, soil management, horticulture, agricultural mechanization, agro-chemical, floriculture, marketing, equipment supplies, farm management and agricultural extension services should be stressed in the secondary school curriculum.

### **Teaching/Learning of Agriculture Science**

Teaching according to Balogun (2003) is the passing on of ideas, knowledge, skills, attitudes, beliefs and feelings to some one with the aim of bringing about particular changes in the behavior of that person. By this definition, it is expected that the changes would be those that should become part of the learner's life and make him self reliant and self confident in what ever he chooses to do, and at the same time, make him a useful personality in the society. Teaching agriculture as a vocation is more than the art of unfolding that which is potentially latent in an individual in terms of the use of "mind" and "hand" but an activity designed by a person more experienced, knowledgeable, and matured in motivating the learner to learn. Usually, the outcome of effective teaching is learning which is a relatively permanent change in behavior as a result of reinforced practice. The changed behavior of the learner often manifests in terms of performance with regards to knowledge, attitudes and skills in the subject matter(s).

The teaching/learning of agriculture as a vocational subject under the 6:3:3:4 in the Junior Secondary School

(JSS) has been plagued with challenges which range from methodology to socio-cultural over the years. These challenges are highlighted in the following below:

The teaching/learning of Agriculture (Agricultural Education) is a plagued with challenges which run counter to effective agricultural education as a vocation. These include:

#### (i) ***Curriculum Content***

The curriculum content of agricultural education in the JSS is structured around three major principles of production, protection and economics. A cursory observation at the content would leave one wandering if the experiences therein can adequately equip students with the skills and prepare them for practical production especially if one considers the vast array of opportunities available in agriculture. Beside, the training duration of three (3) years for JSS is deemed reasonably inadequate for any meaningful skill acquisition.

#### (ii) ***Methodology***

Agricultural education in most cases is not run as a practical/vocational program, rather much emphasis is laid on theory. In agricultural science lessons, the learning activities should be practically oriented. This is because skills can also be developed through practical experiences. Understanding also comes best through practice. Adequate exposure to practical agriculture would encourage the development and sustenance of

learners' interest in agriculture (P9) and during which students find out knowledge by themselves on the farm. But the lack of farm space especially in urban or city schools makes it even more difficult. Learning about farming is done best only by engaging in farming activities, and this presents agriculture as a vocation. At the end of the first three (3) years of secondary education, if the graduan goes into the labour market, he should be self-employed in farming in the absence of any other alternative employment.

(iii) ***Language Barrier***

Language as a medium of expression and communication plays an important role in lesson presentation. The use of language affects lesson delivery as well as its understanding by students irrespective of the subject involved. This issue, in agricultural science lessons, according to Onete (2002) presents itself in two dimensions namely:

(a) ***The Problem of Bi-Lingualism***

There are certain agricultural terms which can not be explained in vernacular, for example bacteria, soil texture, roughages, ruminants, cross-bar etc. This makes the conceptualization of these terms difficult. This is because, psychologically, there are certain things one could conceive in one's own first language (mother tongue) before translating them to English language most especially as it affects

the transformative period of secondary education which invariably coincides with the JSS programme. This advantage seems to be elusive in Agricultural Education.

(b) ***Communication Problem***

This manifests itself in the language gap between the teacher and the children. Sometimes the teacher may engage in the use of "high sounding" or "jaw breaking" language which students cannot comprehend during lesson presentation. At other times, some teachers are known to have difficulties expressing their ideas or instructional contents to students in a manner that such materials or ideas can be understood. This leaves the students frustrated and unmotivated.

(iv) ***Exploitation of Student Labour***

One of the criticisms of Agricultural Education in the secondary school system is that students labour is exploited to provide free agricultural products for school staff. This criticism is often not without basis. This is an unwholesome practice which can generate a lot of disgust for the learning of the subject by students. It will be more encouraging if schools allow the students to receive free of charge a reasonable proportion of the agricultural product while staff are made to pay for what they take. The business aspect of agricultural education must be emphasized. The need to teach agriculture as a vocation also stresses

the business component of the subject. Furthermore, revenue will be needed for running the farms from time to time and sales from the farm produce is one way of generating such revenue for the school. Again, it is a well known fact that teachers use farm work as punishment in schools. This is psychologically damaging to the child who may likely in future consider any agricultural endeavour to be punitive.

(v) ***Instructional Resources***

Inadequate resources for Agricultural Education constitutes yet another challenge to its proper implementation under the 6:3:3:4 system of education. This singular factor presents itself in various forms as analyzed below:

(i) ***Man Power***

The lack of trained and qualified Agricultural science teachers to handle Agricultural Education in the junior secondary school is of great concern. Those who possess academic degrees in Agriculture still lack the requisite professional training in teacher education to facilitate professional competence in the teaching of agriculture in a vocational manner. Agricultural Education as a vocation has something special about it and as such must be handled by those who possess the skills, motivation, and interest.

(b) ***Material Resources***

The instructional materials in our secondary schools for agricultural education are grossly inadequate (Olotu, 1992). In most schools, farm tools, farm land, laboratory equipment and appliances needed to implement practicals in Agricultural Education are not there. The land where students are supposed to acquire practical experiences are not adequate for students to have the required experiences. Inputs like improved seeds, fertilizer, pesticides, chemicals are recommended in the National Policy on Education (2004) for individual students use are not provided. This makes the teaching/learning of agriculture in the secondary schools more of theory than practice. For the purpose of improving upon skill development, appropriate requisite agricultural tools must be made available for teaching/learning.

(vi) ***Cultural Belief***

In Nigeria, there are many erroneous impressions about agriculture. For example, many think that farm work is a menial job meant for the "Never do well" in the society. Parents, therefore, prefer their children to offer other school subjects rather than Agricultural science. They do not think of their children having anything to do with the farm. Educated members of the society would willingly take up any available white collar jobs instead of

agricultural job which is clearly regarded as “dirty job”.

### **Suggested Remedies/ Counseling Interventions**

From the fore going, it could be observed that the efforts so far made towards agricultural education in the junior secondary school in a way that benefits the individual and society at large in terms of socio-economic consideration seems to yield little or no desirable results. Agriculture is a human activity and as such, its teaching and learning should employ the humanistic approach since human beings are the main participants in the process. In view of the above assertion, and in consideration of the challenges so far highlighted as impediments towards effective agricultural education in the junior secondary school, this paper hereby proffers the following suggestions/counseling interventions.

a. ***Approaching Agricultural Education from the Humanistic/Vocational Perspective***

There should be a total reorientation in the methodology of teaching and learning agriculture in the JSS if children are to develop the appropriate skills, interest, abilities and competencies for a vocation in agriculture. To this end, the use of humanistic approach in Agricultural Education throws a lot of challenges to the teacher. For instance, the needs of the learner, interest development and ultimate success in school depend largely on the guidance of the teacher

who must display his professional expertise, knowledge and skill in handling Agricultural Education. The teacher has a great challenge in creating and maintaining a conducive learning environment capable of facilitating the child’s development to become useful to himself and the society in spite of any challenge with which he was admitted into the class. Worthy of note is that, emphasis must be placed on the fact that children respond to a teacher who is interested in them, who shows love and affection, appreciates and recognizes the importance of positive self worth and concept in any learning task. The Agricultural science teacher should function as a facilitator, motivator and helper who will lead the children to the desired destination.

b. ***Field Trip***

Children should be taken out on field trips from time to time. Field trip is a method of teaching where by the teacher organizes an educational visit to some agricultural establishments of interest so as to expose the students to the actual study of objects in their natural environments. Students derives a lot of fun and knowledge when they are taken outside the conventional classrooms to study agricultural science. Such places of visit include orchards, zoo, fish pond, horticultural/floricultural sites, poultry farms, piggery, farm machinery workshop, agro-based centers etc.

**c. Motivation**

The practice whereby school staff deprive students of the use of products from their farm endeavour should be discouraged. Rather, agricultural prize giving day should be observed yearly during which awards in the form of farm inputs are given to best student farmers of the year. Individuals, cooperative bodies or government should seize such opportunities to give scholarship for posts JSS programmes to deserving student – farmers. There should be a deliberate government policy to institute payment of enhanced agricultural science teachers allowance to serving teachers. Again, there should be regular seminars, workshop on vocational agriculture for serving teachers to up date their knowledge. There is need for the reorientation of the poor attitude of the society, especially youths toward agriculture through government public enlightenment campaigns to see dignity in agricultural labour and the resuscitation of the old farm settlement scheme given prevailing circumstances.

**Provision of Instructional Materials**

Teaching facilities should be provide to schools to enable the teachers to be more effective in their jobs. School should be encouraged to go into cooperative ventures with communities to procure farm inputs or share facilities so that students can have real occupational experiences in agriculture. The present agricultural science curriculum should be improved with more of vocational

contents. This is because the concepts of production, protection and economics that form the core content of the curriculum presently is not sufficient to transform theories to skills in student, and without the practical skills, the students cannot produce crops or rear animals as stipulated in the National Policy of Education, (NPE).

**Counseling Youths for Agricultural Development**

It is unfortunately that, the attitude of Nigerian youths toward agricultural occupations continues to be negative. The prestige and salary emphasis in the society today have contributed towards worsening the attitude of youths toward farm occupations. Before poverty can be alleviated, schools must develop competent agricultural manpower and guide students to exploit the natural resources which are God's gift to mankind. This can only be done through guidance and counseling where children are guided on how to: select and study relevant agricultural aspects such as agricultural mechanics, agricultural marketing, farm construction, food production, quality control, crop dusting technology and fisheries. The counselors can also instill in them an understanding and appreciation of the value of agricultural occupations; as well as positive attitude and human relations skill needed to succeed in agricultural occupation through the establishment of "young farmers club".

Seminars, workshops and conferences can be organized for student on the theme: "Embarking on Agricultural

Development” where guest speakers can deliver lectures on the process of becoming successful farmers, careers opportunities in agriculture and the nature of job activities in the field of agriculture. Besides, Government should employ specialists and qualified teachers in sufficient numbers to teach both theory and practical agriculture in secondary schools.

Government should provide well equipped and functional guidance and counseling centers and employ professional guidance counselors for the purpose of counseling students on skill acquisition on agriculture for self-sustenance and reliance.

### Conclusion

It is apparently very clear that the number of jobless youths on our street is growing in leaps and bounds daily. This bulk of Nigerian population with productive energy rather than being useful to the society has become a nuisance in their desire to live and survive in a depressed economy like ours. It is hoped that if the suggestions made in this paper are favorably considered promptly, it will help to check further production of jobless citizens as they will be caught young in vocational agriculture in the new millennium.

### References

Belogun, D. A (2003). *Principles and practice of education*. Nigeria: Macmillan Publishers.

Olotu, B. (1992). Causes of students underachievement in agricultural science students. *Journal of the Science Teachers Association of Nigeria*. 27(2) 76 – 80

CESAC (1984). *Agriculture for junior secondary school*. Nigeria: University Press

Denga, D. I. (2008). Educational agenda for the new millennium: Nigeria in perspective. In D. I. Denga & A. A. Ekoja (eds) *Education for the new millennium: Foundations and Pedagogy*. Calabar: Rapid Educational Publishers Ltd.

FRN (2004). *National Policy on Education*. Lagos: NERDC Press.

Laogun, R. (1991). *An assessment of agricultural science objectives under the 6:3:3:4 system of education in Igbo-Eze L.G.A of Anambra State* (B.Sc Ed.) unpublished Bachelor Thesis of University of Nigeria, Nsukka.

Onete, O. U. (2002). Appraisal of factors that militate against the effective teaching and learning of agricultural science in JSS. *Akamkpa Journal of Science and Mathematics Education*, 3 (1&2), 76-87