

VOCATIONAL AGRICULTURAL EDUCATION TRANSFORMATION: STRATEGIES, CHALLENGES AND PROSPECTS FOR NATIONAL DEVELOPMENT

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Abstract

There is hardly any argument against the role of Technical and Vocational Education and Training in general and Vocational Agriculture in particular in national development. This paper therefore focuses on the strategies for empowering youth for national development through vocational agricultural education programmes and challenges that may hinder vocational agricultural education programmes for youth empowerment in Nigeria. Consequently, mandatory entrepreneurial agricultural training of University students offering general courses (GST), training of vocational agricultural education teachers and adoption of research and technologies are some of the strategies that would enhance youth empowerment for national development while wrong policy implementation, school- community relationship and imbalance between theory and practice are some of the challenges that hinder vocational agricultural education programmes for youth empowerment in agriculture in Nigeria. A well formulated policy or programme is useless unless it is properly implemented. Over the years, we have been emphasizing the issue of economic diversification with main focus on agriculture. The national policy on education places premium on Technical and Vocational Education and Training as one of the ways of achieving national development. The paper has also highlighted some prospects for improvement using the Universal Basic Education which places emphasis on vocational subjects including agriculture and developing skill oriented workforce in the society. It is recommended that government should seriously monitor and supervise the implementation of the provisions of the National policy on Education regarding Vocational Agricultural Education in order to enhance youth empowerment through vocational agriculture to foster economic growth and national development. It is also recommended that more qualified vocational agricultural education teachers be recruited to teach vocational agricultural education courses to facilitate the transformation of Vocational Agricultural Education programmes to self-reliance sub- sector in the Nigerian economy.

Keywords: Vocational Agriculture Education, Strategies, Challenges and Prospects

Introduction

Agriculture in a developing economy such as Nigeria and other West African countries has enormous potential of improving and increasing the soils, crops and livestock productivities (yields). In Nigeria as in other West African countries, agriculture is the major source of income and it contributes to about 30 to 70 % of the GDP (Ojha and Michael, 2006).

In spite of a good number of limitations, the Federal government of Nigeria has made a great deal of progress in modernizing agriculture so as to achieve higher productivity in the sector. This shows the importance of agriculture in the economic development of Nigeria. There is still great hope and more room for improvement in agriculture to further boost the Nigerian economy.

About two decades ago, the major approaches for improving agricultural productivities were by improving genetic materials, application of fertilizers, improving irrigation potentials and pests/diseases control using chemicals, while ignoring important inputs to agriculture such as energy, improved machinery and management factors such as timeliness and precision in agricultural operations (Ojha and Michael, 2006). In the aforementioned approaches, the full potentials of costly inputs and human resources could not be fully exploited.

The last three decades in Nigeria has witnessed the introduction of high yielding and diseases/pests resistant cereal and root/ tuber crops and livestock into the agricultural sector but this was hampered by the traditional system of farming with inefficient agricultural implements which would not facilitate the achievement of higher productivities. As a result, the demand for higher dosage of energy with matching implements to the power sources attracted the attention of the farmers. However, the application of these implements and inputs attracted some positive benefits only to the farmers who could apply them. Even at this point of modernization and mechanization of agriculture, agriculture is not fully transformed and food security of the black African countries is still in doubt. The answer to national development seems to lie to a great extent on youth empowerment (capacity building) to be in a better position to implement the new technologies, inputs and the managerial skills acquired. This is where Vocational Agriculture Education for the school (students), out of school youth and adult farmers in adult education centers become imperative.

The success of any programme, be it social, economic, political or educational depends mainly on the extent of literacy and the availability of technical knowledge and skills of the implementers, that is the people who have

acquired the technological knowledge and skills to put into the actual practice. The effort geared towards improving the availability of skilled manpower for agricultural sector is through farmers' education in Agricultural Development Programme (ADP). It is a well-tested approach based upon "learning by doing" to empower the communities to build their capacities for informed decision making with respect to food production, processing, storage and sales. This is a platform for the farming communities to share their experiences and knowledge to improve the existing practices through experiential learning process leading towards sustainable agricultural production. The Agricultural development programme activities are based on discovery learning process through non-formal, adult education or continuous education techniques involving simulation and group dynamic activities.

For agricultural transformation to be a reality and pragmatic, it must go beyond adult and non-formal education levels. It must be systematically planned, organized, supervised and monitored by experts in order to achieve the aims and objectives of the vocational agricultural education. This is the rationale for establishing pre-vocational and vocational educational institutions at Basic, Post Basic and Tertiary levels. Vocational Education of which vocational agricultural education is an integral part was targeted at training and developing the interest of youths in agriculture and makes them to acquire useful skills in soil management, crop production and livestock husbandry in order to contribute their quota to national development.

Ikutal, Ntui, Ben and Oku (2013) observed that Vocational Agriculture Education emphasizes adequate orientation for productive work at school and to empower youth for future activities in agriculture. Tibi (2012) and Egbule (2012) noted that Vocational Agriculture Education is the type of education that is

employed in training learners as well as the techniques for teaching of agriculture. Knowledge, skills and self-confidence acquired are forms of empowerment that would help such individuals to be eligible to compete in the world of work. In other words, Vocational Agriculture Education is viewed as education for work. Tibi further defined Vocational Education as that type of education which develops the mental and physical qualities of people who engage in vocational agricultural studies thereby increasing their skills, knowledge and attitudes required for utilizing the natural resources needed for national development of the nation and for their self-improvement. The delivery of Vocational Agriculture Education should not be handled as scientific theories but rather as a vocational and technological subject area for acquisition of practical agricultural skills for meaningful living.

Judging from the importance of Vocational Agricultural Education, there is no doubt about the prospect of transforming the nation in terms of socio-economic, political and technological development. This explains why the status of Vocational Education in Nigeria continues to be the national discourse at all levels. However, the issue that needs urgent attention is the place and role of Vocational Agricultural Education in national development especially in this era of economic meltdown and dwindling petroleum oil prices in Nigeria. Nigerian Agricultural sector has not been able to meet up with the demands of the global best practices which borders on food security in this era of global economic competitiveness. The situation calls for careful examination in order to proffer genuine and workable solution to national development. The implementation of Agricultural Education programmes in Nigeria is not active and not responsive to societal demands despite the level of reforms and innovations that have been introduced in the

sector. There are a number of variables that constitute Vocational Agricultural Education and these variables by themselves and in combination influence directly or indirectly the implementation and achievement of the Vocational Agricultural Education objectives.

Vocational Agricultural Education Programme Offering and Duration

Vocational Agricultural Education is offered at the tertiary institutions of learning after Post Basic Education. At the university level, it is run either in the faculty of Agriculture or Education as a unit in department of vocational education. The duration of the programme ranges from three to four years depending on whether it is direct entry or unified tertiary matriculation examination (UTME) mode of entry leading to the award of Bachelor of Science Education degree. The Colleges of Education offer Agricultural Education in the School of Vocational Education. The duration of the course is three years leading to the award of Nigeria Certificate in Education (NCE). The programmes afford the learners the opportunity to function as trained teachers of agriculture as well as qualify to work in any government establishments or private sectors that are agricultural- oriented. The programmes also trained and empower youth in agriculture and above all make them acquire useful skills in agriculture.

Strategies for Transformation of Vocational Agricultural Education for National Development

Vocational Agricultural Education programmes can be transformed through introducing into the tertiary vocational institutions the internship scheme through entrepreneurship programmes that would ensure acquisition of skills and rekindle interest of students' in agriculture. Nsa, Ikot and Udo (2014) defined entrepreneurship education as a process of planning and organizing small

business ventures (agriculture), using people and resources to create, develop, implement and solve the problems of the society. This means that entrepreneurship is a process of planning or organizing small ventures in order to combat the problem facing the nation. Through the internship scheme of the entrepreneurship programme, students learn organizational skills, time management, leadership development and interpersonal skills, all of which are highly needed skills sought by employers and in the running of private agricultural business ventures.

Teacher quality is crucial in Vocational Agricultural Education programmes. The outputs of the teachers are measured in terms of the performance of the students. Usoro and Usoro (2010) asserted that the source of the students' ability is the teacher. The teachers need to be well equipped for the task ahead of them so that they can give vocational Agricultural Education graduates the opportunity to acquire relevant skills through better monitoring in the supervised occupational experience programme (SOEP).

Furthermore, the running of Vocational Agricultural Education programme needs to be harmonized to give a focus and coordination of the programme to achieve its set goals. The current practice of operating as a unit in the Department of Vocational Education does not afford the programme to be well coordinated with its vast areas of studies. Having in mind that vocational agricultural education programme made up of more than eight specialized areas of studies. Therefore with the current effort of the government to make agriculture the main stay of the economy, there is need to start from the restructuring of vocational agricultural education to make it a distinct area in order to impart skills to the learners effectively through:-

- Adoption of research and technology development in the area of biotechnology, genetic production, nanotechnology, ICT and agro-ecology.
- Developing the entire citizens with a strong consciousness for lifelong education and strong commitment to its vigorous promotion.
- Empowering the youth to be self-reliant through the promotion of vocational agricultural education training.
- motivating vocational agricultural education students in all aspect of their life and also encourage enrollment into the various career programmes in agriculture
- Promote vocational agricultural education as a means of reducing unemployment, youth restiveness, violence, militancy and kidnaping in the society which may affect rapid national development.

Factors that Influence Implementation and Achievement of Vocational Agricultural Educational Programme Objectives at Tertiary Education Levels

The implementation of educational policy has always been the key factor in the educational innovations which could lead to rapid transformation in Vocational Agricultural Education. However, the education system in Nigeria has become more notable in terms of graduating students without relevant skills for the world of work as identified with in by the following challenges:

1. Policy Implementation

Tijani, Bulama and Musa (2014) viewed policy as a principle that guides the existence of a programme. It is a document that gives any programme a sense of direction and legal supports. According to Okon (2014) policies are meant to regulate in order to promote peace and harmony in the system. Okon further stated that policy is a document that spells out all official actions of a system. Kenworthy (2011)

observed that proper compliance to the school rules and regulations help to promote effective learning. It is obvious that formulation of any education policy prepares the ground for implementation of the programmes.

The Federal Ministry of Education (FRN, 2013) stated that the objectives of Agricultural Education includes to:

- stimulate and sustain interest in agriculture
- enable students acquire useful knowledge and practical skills in agriculture
- prepare students for further studies in agriculture and
- Prepare students for occupations in agriculture.

However, the objectives have suffered non-implementation due to inadequate governmental commitment and sincere wish for educational development. The failure on policy implementation greatly hindered the opportunities that a large population of students would have used to acquire useful knowledge and skills for effective living.

2. Image status of Vocational Agricultural Education

The importance of Agricultural education is still being obscured in the minds of most Nigerians. Though the importance of Vocational Education is now gaining recognition, yet majority of Nigerians especially the elites whose educational orientation were liberal in contents are still confused and vexed with the whole idea of this type of education. They tagged Vocational Agricultural Education as education for the less intelligent students.

Vocational Education Programmes which Agricultural Education is one of them are programmes geared towards facilitating graduates employment. Vocational Agricultural Education training is the provision of skills, knowledge, attitude and values needed for the world of work (Tibi, 2012). Agricultural

Education is meant to prepare learners for careers based on practical activities. It also accelerates and deepens the teaching/learning of basic skills which are critical for national development. Skills training programmes are central in food security and poverty reduction with respect to producing technically and entrepreneurially qualified people who are able to stimulate investment opportunities, create jobs and increase productivity in the country and should be seen as such.

3. Funding Challenge

Poor funding have denied many institutions in Nigeria the chance of competing with other institutions in other parts of the world. Poor funding limits the amount of technical and industrial exposure that trainees would have acquired on the course of learning. Poor funding has manifested in a number of labour unions' industrial actions, dilapidated structure and ill-equipped laboratories and so on. It is very common in Nigeria to see that infrastructure in educational institutions are dilapidated for many years and inadequate to provide quality education service delivery (Sanusi, 1998).

Etuk and Uya (2015) observed that the classrooms and offices in most of the schools were inadequate in terms of decency, space, ventilation and insulation from heat. These combined deficiencies constitute a major gap in the quality of input and output in education sector, hence, the non-attainment of the set standards and goals of agricultural education. Funding remains a sore point in Vocational Agricultural Education particularly and education generally. Ogbodo and Efanga (2014) observed that though the Federal, State and Local Governments have been making allocation to education in recent times, there is an evident of under-funding and under investment at all levels of the educational system in Nigeria.

4. Imbalance between Theory and Practice

Vocational subjects are being taught theoretically while the practical aspects are ignored due to absence of teaching/learning facilities. Laboratories where the skills are supposed to be learned are ill-equipped most of the times, making the learners to learn only the theories to qualify certification and for white collar jobs.

In Vocational Agricultural Education, emphasis is on both principles and applications. It is not just an education for helping students and trainees to understand the principles underlying the course and thus become knowledgeable in the subject area, but also an acquisition of technical knowledge and vocational skills for actual work situation. The National Policy on Education provides for Vocational Agricultural Education training in trades skill areas to school students who may not be academically oriented but will still need to possess some occupational skill to earn a living as well as employ youths handicapped by poor social or economic background so that they become small scale entrepreneurs (Evanson, Usoro and Asukwo, 2015). However, Agricultural Education transformation agenda requires a balance between the theory and practice in order to achieve the desired objectives of national development.

5. Evaluation and Supervision Challenge

Poor evaluation and supervision hinders performance of Agricultural Education Programme. For effective teaching and learning to take place, proper evaluation and supervision are required. This act as a check for standard and progress to follow both in process and administration, Evaluation and supervision of agricultural education is an instrument that fosters productivity which is the end product of Vocational Education (Okorie, 2001).

Apart from the societal expectation of quality in evaluation and supervision of Agricultural Education programmes, there exist external and internal criteria for evaluating the quality of Agricultural Education programmes. The external criteria are concerned with how the system can cater for the needs of the students and ascertain how the students perform. Evaluation and supervision eliminate poor quality of job performance by trainers and trainees/ graduates of Agricultural Education programmes.

6. School and Community Collaboration

Poor liaison and unhealthy rapport between the school and the host communities in Nigeria is very common. The programmes of Vocational Education should be tailored to meet the needs and aspirations of the community. This is lacking in Agricultural Education across the nation. Okorie (2001) posited that Agricultural Education is the acquisition of skills and knowledge in Agricultural Science with the view to impart this knowledge and skills into prospective farmers for better productivity. The negative effect of poor collaboration with the communities and the schools manifests in land disputes to the extent that learners cannot access the available lands for practical and so graduate out without the requisite skills and knowledge required in the world of work which hinders national development.

7. The Teacher Factor

The teacher is the most important factor in the effective implementation of Agricultural Education programmes. No matter what amount of material resources are put into the nation's educational system, without properly trained and motivated teachers, we cannot expect any good results from the system (Okon, 2014).

Most teachers of Agricultural Education were trained in the traditional technology; hence they lack the necessary skills to impart to the

students (Nsa, et al, 2014). The teacher is saddled with the responsibility of implementing, interpreting, executing and determining the extent to which the national objectives of education are attained. This position underscores the importance of qualified teachers in the education sector. The task of attaining the desired objectives depends on what happen in the classroom and in the field. Teachers are required not only as models but also as persons of virtue whose conduct can have positive impact on the life of the student.

Despite the large number of Agricultural Education teachers trained by the universities and colleges of Education, the number keeps dwindling in our schools due to attrition. Teachers' attrition in this context refers to voluntary and permanent withdrawal of Agricultural Science teachers from teaching to other occupations due to unfavourable conditions of service (Ekong and Akpan, 2011).

Students' Enrolment and retention

The number of students that enroll for Agricultural Education programmes every school year at all levels of tertiary institutions is an issue of great concern. The number gets smaller as compared to what goes on in other disciplines. The reason for the low rate of enrolment in Agricultural Education is due to public perception about the subject (Egbule, 2012). Egbule noted that Agricultural Education can be compared with other Agricultural Science courses as it offered opportunities for graduates to work in government Ministries as well as in private sector.

The issue of students' retention of admission in Agricultural Education is worrisome. Anioke (2012) observed that in colleges of Education, application for admission for Agricultural Education programmes are among the lowest while a good number of those admitted in the first year of Agricultural Education programme

apply for a change to another course at the beginning of the second year, this may be attributed to the public image of vocational education programme.

Conclusion

Agricultural Education is an investment that yields short and long term benefit to the nations that take it as important. The present economic challenges have placed Nigeria in a position she cannot play with Agricultural education. Therefore, government at all levels and stakeholders should take Agricultural Education with the seriousness it deserves. The poor public image can be reversed by serious commitment to development of Agricultural Education by government at all levels. Hence, Agricultural Education transformation is the key to our national economic transformation and development.

Recommendations

From the foregoing, the following recommendations are made:

- 1) Government should be decisive and strategic in supervision and monitoring of implementation of the provisions of the National Policy on Education regarding Agricultural Education in order to enhance the agricultural development of the Nigerian citizens as issues concerning economic diversification to agriculture is re-emphasized.
- 2) More qualified vocational agricultural education teachers should be recruited to teach vocational agricultural education courses at all levels of education.
- 3) Vocational Agricultural Education teachers should be retrained by Federal government and State government through sponsored workshops, seminars and conference

- 4) Government should equip schools with modern equipment and facilities.
- 5) Agricultural education students should be made to take part in Students' Industrial Work Experience Scheme (SIWES).
- 6) A period of internship scheme should be given to Agricultural Education students as done in Faculty of Agriculture in Nigerian Universities.
- 7) The National Universities commission should monitor and ensure that requisite facilities for skill training are owned and maintained by the Universities and other institutions offering Vocational Agricultural Education.

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