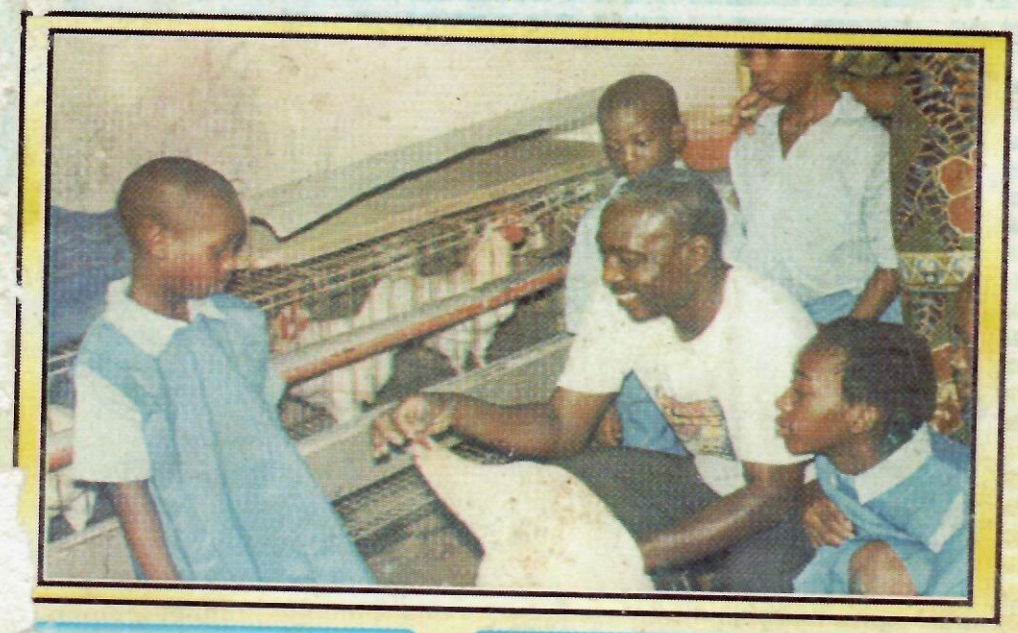
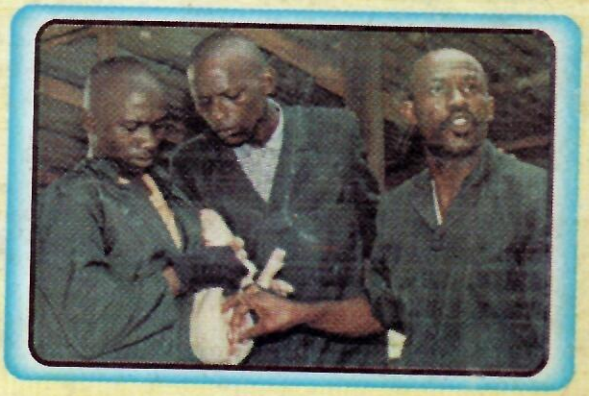
EKO CIAP 2003

BOOK OF PROCEEDINGS

EKO CIAP 2003

6Th ANNUAL RESEARCH NETWORK MEETING AND CONFERENCE OF CHILDREN -IN-AGRICULTURE PROGRAMME (CIAP)





Theme: THE NIGERIAN CHILD AND THE NATIONAL PLAN FOR DECENT LIVELIHOOD

13th -16th October, 2003

ADENIRAN OGUNSANYA COLLEGE OF EDUCATION
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ACKNOWLEDGEMENT

We would like to acknowledge the tremendous assistance rendered to us by some individuals, which ensured the successful hosting of EkO CIAP 2003.

Our appreciation goes to Dr. A.O..K NOAH, the provost of the college, who assisted us morally, financially and materially. Permission to make use of the auditorium, classrooms and college guesthouse for hosting the CIAP national executives for free was a big assistance. Then Dean of the School of Vocational and Technical Education, Mr. O. O. Agoro threw his heavy weight behind us, which lead to smooth planning and easy execution of the conference.

We must commend all the lecturers and non-academic staff of the Department of Agricultural Education, Adeniran Ogunsanya College of Education for taxing themselves physically and financially before, during and even after the conference.

The students, too, displayed a rare fit of wisdom, understanding and support unparalleled in the history of conference hosting in this great college. The National coordinator of CIAP-Professor S.F. Adedoyin was particularly pleased with their Drama performance and display of their sense of maturity.

We thank also all the resource persons, who presented lead papers, the representative of Oba Ankran of Badagry, the Deans of various Schools in the college and the Royal fathers from Ijanikin and Otto.

We also thank the Almighty God for protecting all the participants when traveling down to Lagos for the conference, during the technical sessions and their safe arrival to their individual homes. To God be the Glory.

Adekoya Yemi

Chairman LOC

FORWARD

It is a great delight that 2003 National Network Meeting/Conference of CIAP was held for the first time in a College of Education. Adeniran Ogunsanya College of Education, Otto/Ijanikin has set a record for hosting EKO CIAP 2003.

The theme- the Nigerian Child and the National plan form decent livelihood in Nigeria is timely. Globally, issues about decent livelihood, poverty alleviation and good governance is been raised and discussed, leading to nations committing themselves to making definite policies and establishing strategies to alleviate poverty and promote decent livelihood in various developing nations.

The sub-themes highlighted, further dig deep into the multi-faceted areas of decent livelihood and exhumed the down-to-earth issues that touch every cadre of the populace- youth, men, women, girls, farm child, rural and urban masses.

They are.

1. Growth and development needs of the Nigerian Child.
2. Youth empowerment for sustainable decent livelihood (youth in schools, Youth out of school and Rural/Urban Youth).
3. Training programmes for children and youths in school (Primary, Secondary, Tertiary levels) to enhance decent livelihood.
4. Involving the Nigeria youth in agro-based poverty reduction strategy.
5. The Nigerian child and low level of health care delivery, recreational and tourism development in Nigeria.
6. The Nigerian child and the problems of gender insensitivity, family crisis, poor governance and low economic performance.
7. The Nigerian child and then socio-economic problem.
8. Development models for farm child and youth development in Nigeria.

9. Urban Agriculture as a strategy for eliminating social vices in the metropolis in Nigeria.

Forty-three technical papers were presented and thirty-nine were found publishable after thorough peer-review by the Editorial team.

Four lead papers were presented and one key note address by the African and National Coordinator of CIAP, Professor S.F. Adedoyin.

Sub theme 3 attracted the highest number of papers. Nine papers were presented under this sub theme. Five papers were written under subtheme 1, six papers under sub theme 2, four papers in sub theme 4 and two papers in sub theme 5, sub theme 6 and 8 attracted no paper while sub theme 7 and 9 attracted five and four papers respectively.

Recommendations of training programmes for youths, youth empowerment for sustainable decent livelihood and the highlight of the socio-economic problems of the Nigerian Child have been the focus of most of the presenters/ participants at the conference. This is a pointer to the area of concern where the Government must of all necessity urgently address.

Our political leaders should be made to have access to the suggestions and strategies highlighted in the various papers, which stressed on how to alleviate poverty and improve decent livelihood of the Nigerian populace, particularly youths, rural farm child and farmers.

ISIAKA B.T

Chairman/Coordinator

Lagos State CIAP

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KEYNOTE ADDRESS
THE NIGERIA CHILD AND THE NATIONAL PLAN FOR DECENT LIVELIHOOD

BY

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Abstract

The Nigerian child is at great risk. Due to his / her size, physiology and behaviour, he / she is more vulnerable than the adult to all forms of hazards, especially those that obstruct his / her decent livelihood. The paper stresses the fact that, in addition to freeing the Nigerian child/youth from abuse, slavery, discrimination, neglect of his/her best interests, lack of listening ears to his / her voice, health hazards and child labour, governments and other stakeholders in the Nigerian child development process should facilitate the implementation of the action plan to improve children's and survival, provided children with quality education, revise the impact of HIV / AIDS and other diseases on his / her life and protect the child from exploitation, insecurity, violence and war. Some current research issues are highlighted and the way forward for Nigeria is proffered.

Introduction

The children-in-Agriculture Programme (CIAP) is a research and development initiative aimed at human capital development focusing on children and youths for effective harnessing, orientation toward creativity, entrepreneurial and managerial skills development; and specifically for motivating them towards productive participation in the agricultural and rural development processes.

In fact, its overall goal is to become institutionalized as an integrated human and agricultural development programme for promoting continuity, sustainability and profitability of farming thereby making it to become a panacea for food self-sufficiency, hunger reduction, poverty reduction, quality of life enhancement, market-driven and value added agricultural economy, rural transformation qualitative participation in the knowledge economy, enhancement of the environment and the overall economic development of Nigeria.

The great Greek philosopher, Plato, likened children's heart to a clean slate on which nothing has been written. Whatsoever one wants the child to be or do in later years can easily be written on it through deliberate programme of sensitization, orientation, socialization and education. It is in light of the foregoing that CIAP operates with a mission to propagate a deliberate but skillful socialization and as to give capacity, authority and power to them so that they can have a good future and become active agents of quality of life enhancement, food security, hunger and poverty reduction, civic responsibility, job making rather than job seeking, entrepreneurship and managerial abilities.

Experience form the wine routes of the Cape Town province in South Africa and Switzerland present clear illustration of the socio-economic and the overall development

import of family farms. CIAP is therefore working with farm children and farm youths along this line. It is along working with stakeholders in child development and governance to provide the enabling environment for sustainable development of family farm structures.

From this point, the paper presents the charge to members on the CIAP model, the Nigerian child, the National Plan for decent livelihood for children and youths, research issues, and the way forward for Nigeria.

The charge to members

Ladies and gentlemen, I am saying it loud and clear to all stakeholders in Nigerian's development process to be informed, "the key to unlocking the potential of this great country is agriculture". If agriculture is to perform this feat, knowledge must be focused as a major dynamic that will make it to unlock the potential of Nigeria. Good knowledge of agricultural production practices alone cannot achieve this goal, there is need to complement it with sufficient entrepreneurial and managerial knowledge and skills.

I pose the challenge to those of you in the education and training institutions that the type of education that can lead to unlocking the potential of the nation should be job creation oriented and should prepare effective entry and participation in the knowledge economy. Beware, for most of you are getting obsolete and thus incapable of participating resourcefully in the knowledge economy. I therefore call you to renew your spirit, orientation and commitment through relevant intellectual revival so that you can become a productive and creative participant in the knowledge economy. I remind you of the challenges of globalization to agriculture by which mere agricultural production can no longer bring prosperity, not until farmers and agricultural sector learn to add value by developing quality products for home and export markets.

Women are now coming up, in the most aggressive manner, to take their rightful position in the rural and agricultural development process. They should be encouraged and supported by all stakeholders by discarding with all forms of "gender-phobia" of the male chauvinists. It is time for males to see the movement of women on the upward escalator as a challenge rather than threat. This way, all hands shall be on the deck for unlocking the potential of Nigeria.

You are all gathered here as facilitators of children and youths (including the girl-children and the female youths) development. Your efforts may be in vain if you fail to act timely and deliberately by producing graduates that can:

- develop enterprises in agriculture i.e. job makers rather than job seekers,]
- navigate their ways successfully through the changes and challenges brought in by globalization,
- support sustainable agricultural development and overcome environmental degradation problems,
- make a difference in the eyes of corruption and lack of confidence in public and private institutions,
- take advantage of the knowledge economy for capacity building and resources empowerment,
- uphold "green collar culture" in place of "white collar culture",

- reverse the movement of Nigeria's economy on the downward escalator to now move on the upward escalator,
- eliminate hunger, food insecurity, poverty and poor of livelihood; and
- face with confidence, commitment and great determination the change and challenges of the movement of the economy through localization-rationalization-globalization.

Are you all ready for the tasks enumerated? You can only be ready and relevant by shifting form your encapsulated positions and orientations and acquire new skills, knowledge and attitude for successful participation in the knowledge economy.

The CIAP Model

The CIAP is developing a structure that is directed at productive utilization of the diversity in Nigeria to advantage towards effective human capital development by protecting and developing the Nigerian child. Its focus is to promote agriculture – based hunger and poverty alleviation, industrialization and value addition / export orientation in Nigeria.

CIAP came into existence on 2nd March 1995 as an output of the Rural Farm Family Resources and Research Development efforts of Dr. S. Fola Adedoyin (now Professor) and Mr. Dixon Olu Torimiro (now Doctor), in the Department of Agricultural Extension and Rural Sociology, Ogun State University (now Olabisi Onabanjo University), Ago-Iwoye, Nigeria. The researchers identified a missing link in the process of ensuring continuity and sustenance of farming as a worthy profession and they conceptualized as well as initiated this missing link as the Children-in-Agriculture Programme (CIAP). After a series of research and development activities on CIAP within the Ago-Iwoye rural enclave, the idea was shared with other researchers, policy makers and development practitioners' nation-wide in Nigeria. The positive reactions obtained were encouraging and as a follow-up, the National Research and Development Network of Children-in-Agricultural Programme (CIAP – Nigeria) was established on 24th March 1998. The Network holds annual conferences and network meetings rotated among State Chapter of the Network with books of proceedings published for wide circulation.

To the Glory of God, we are all witnessing the 6th Annual National Research and Development Network Meeting and Conference organized by the Lagos State Chapter of CIAP-Nigeria holding from Monday 13 to Thursday 16 October 2003 at Adeniran Ogunsanya College of Education, Otto-Ijanikin, Lagos State, Nigeria. The theme of EKO CIAP 2003 is "The Nigeria child and the National Plan for Decent Livelihood in Nigeria".

The success story of CIAP in Nigeria stimulated the establishment of the Research and Development Network of Children-in-Agriculture programme in African (CIAP-Africa Network) on 6th August 2002. The CIAP is fast consolidating in South Africa, Ghana, Zambia, Kenya and Swaziland.

CIAP currently have an international journal based in Vista University, South Africa; a journal operated by the Lagos State Chapter and publishes a Book of proceedings after each year's Network meeting and conference.

CIAP is proposing to integrate the 1st National Young Farmers Congress to the 2004 CIAP Network Meeting and Conference.

The Nigerian Child

CIAP classified children to include all categories of people with ages ranging from birth to 18 years of age. The categories are Early childhood (0 – 5 years), childhood (6 – 12 years) and adolescence (13 – 18 years). This is in agreement with the views of the United Nations Convention on the Right of the child and some scholars (Alao 1998, Adedoyin 2000). However, CIAP observed that, based on circumstances of poverty, unemployment and deprivations that are prevalent in Nigeria which make some people to still depend on others for survival, protection and development up to the age of 40 years, the youth category covers ages 19 – 40 years. CIAP has thus adopted a more elastic age range of 0 – 40 years for its programmes thereby covering children and youth categories.

The Nigerian child is at great risk. Due to their size, physiology and behaviour, children are more vulnerable than adults to environmental hazards. According to Creel (2002), environmental hazards still kill at least 3 million children under age five every year in the world.

The policy and the implementation strategies of fulfilling the overall rights of the Nigerian child to education, welfare and good future is very weak. The Nigerian child can be described as a disadvantaged human being and this evil befell him or her as a result of the wild governance, leadership and environment within which he / she is developing. He / she is faced daily with problems of poor health care services, crippled educational system, rapid environment degradation, corruption, insecurity of life and property, child slavery and trafficking, failed infrastructures, frequent exposure to disaster and man-made crisis, unaffordable services, poor climate for self employment and "virus-infected" political leadership.

Presently, the right of the Nigerian child to proper education, welfare services and good future is unfulfilled and the hope of its fulfillment is dim.

The National Plan for Decent Livelihood

To prepare the ground for decent livelihood of Nigerians, especially for children and youths, present and prospective workforce must opt for the productive sector in order to gear the economy towards the eradication of poverty. While counseling Nigerians on the need to improve on productivity, Kruesel (2003) observed that Nigeria is importing rice, juice and most agro-based products despite the fact it has the best selection of peanuts worldwide, first quality cocoa, palm produce, cassava, etc. The scholar pleaded for change of heart by people and government of Nigeria. He said emphatically "If you produce sufficient quantity with sufficient quality, Nigeria's economy will blossom".

The foregoing, in my view calls for the national re-orientation of the economics, scientific, political, ethnical/moral, educational, social and aesthetic aspirations. In addition, our development goals should be adjusted in line with the Millennium Development Goals (MDGs), which intends to:

(i) Eradicate extreme poverty, reduce hunger and malnutrition.
(ii) Achieve universal primary education.
(iii) Promote gender equality and empower women.
(iv) Reduce child mortality.
(v) Improve the health of mothers.
(vi) Combat HIV/AIDS, malaria and other diseases.

(vii) Ensure environmental sustainability and
(viii) Develop a global partnership for development.

Permit me to use this medium to say that I consider price increase of petroleum products as a very weak option to bringing about development. A better alternative is to use low price of petroleum products to soften the blows of hunger, poverty and unemployment, which were inflicted on the ordinary people-centeredness of the previous administrations at all, levels. This should then be followed with rapid development and honest management of the nations refineries.

Funds accruing from the petroleum sector should be used to finance the right type of education (technical/technological/entrepreneurial/managerial), promote creative employment and productivity, good health care services, improved security services, good level of infrastructure and facilities, growing of good job culture, preparation of people for participation in the knowledge economy, development of good citizenship spirit, blossomed agricultural/rural economy, rapid industrialization (small/medium/large), good livelihood (elimination of hunger, poverty and obstructions to achieving aspirations), promotion of the tourism industry and increased export business.

To this end, capacity, authority, power and conducive environment should be provided to all people, especially children and youths, to create an atmosphere of decent livelihood on sustainable basis in Nigeria.

Decent Livelihood For Children and Youths

In addition to freeing children and youths from abuse, slavery, discrimination, neglect of their best interest, lack of voice, health hazards and child labour, governments and other stakeholders in Nigeria's child development process should facilitate the implementation of the Action plan for children, which was agreed upon at the United Nations summit held in 2002 at New York, USA. The element of the action plan include (Akintunde, 2003):

(i) Improving children's health and survival,
(ii) Providing children with quality education,
(iii) Reversing the impact of HIV/AIDS on their lives, and
(iv) Protecting the children from exploration, insecurity, violence and war.

Children and youths deserve good future through sustainable development in the health, education, employment, environmental protection, persons and property security, infrastructure, political, recreational, rural and agricultural sectors of the economy.

The socialization of the child should be done in a manner that can give them immunity against corruption, short-cut syndrome, cultism, disorderliness, disobedience, disregard of rule of law and unpatriotic aspirations / desires. This is a great challenge to CIAP as a child/youth development facilitating organization.

Current Research Issues

CIAP relies on continuous research and development, focusing on current issues of child/youth in relation to rural/agricultural sector of the economy as basis for decision making, reaffirmation of precious decisions, development of new systems and practices and improvement or adapting of existing practices.

To this end, a number of topical research issues are presented to reflect the current thinking, which could guide the research efforts of members of the National Research and Development Network of Children-in-Agriculture Programme (CIAP) in Nigeria and even in the various African countries. These include:

(i) Growth and development needs of the Nigerian child, including the girl-child.
(ii) Problems and prospects of youth empowerment for sustainable decent livelihood, with particular reference to youths in schools, youths out-of-school, and rural/urban youths.
(iii) What kind of training programmes should be given to children and youths in schools (primary, secondary, tertiary) to assure their decent livelihood now and in future?
(iv) Strategic involvement of children and youths in agro-based hunger and poverty reduction.
(v) The impact of low level of health care delivery, recreational and tourism development on livelihood of the Nigerian child.
(vi) How are problems of gender insensitivity, family crisis, poor governance and low economic performance impacting on the livelihood of the Nigerian child?
(vii) The Nigerian child and his/her survival in light of prevalent problems of unemployment hunger, poverty, insecurity, corruption and political recklessness in Nigeria.
(viii) Development models for farm child and farm youth development under the prevailing circumstances in Nigeria.
(ix) The problem of environmental degradation (natural, man-made) in relation to the future livelihood of the Nigerian child.
(x) Urban agriculture as a strategy for eliminating social vices in the metropolis within Nigeria.
(xi) Strategic reform of the Nigerian education system to meet the future challenges ahead of the Nigerian child.
(xii) Developing feasible agro-based, self-employment plans for adoption by young farmers in Nigeria.
(xiii) Integrating productivity, civic responsibility, creativity, entrepreneurship and managerial skills development into the agricultural education and training strategies in Nigeria.
(xiv) Equipping the Nigerian child and youth to become active participants in the knowledge economy.
(xv) Building capacity and empowering of the Nigerian young farmers to meet the challenges of globalization.
(xvi) Developing the family farm business model for adoption in Nigeria.

Some of these issues may be addressed at this conference but members are urged to go back to engage in further in-depth studies and generate useful innovations.

The Way Forward

Functions to be accomplished in farming enterprises which training programmes for present and prospective farmers should incorporate are; technical, accounting, commercial, administrative, financial, managerial, innovative, social and public relations.

As a way forward, Nigeria needs a new generation of agricultural leaders which require particular set of skills, knowledge and skills identified by Adedoyin (2003) and Luoga and Ashimogo (2003) to include:

(i) Strong social consciousness, commitment and connection to rural communities.
(ii) Strong entrepreneurial and managerial skills as well as spirit, and the capacity to identify new opportunities;
(iii) Positive values and high ethical standards;
(iv) Commitment to a new vision of agricultural production compatible with the natural environment and the conservation of biodiversity;
(v) Scientific and technical principle that underline effective practice, practical experience and confidence, and the generalist preparation that will enable them to develop holistic solutions to the problems they will encounter in their careers.
(vi) Life long learning ability which enables the taking advantage of relevant information and new information technologies as they come into existence;
(vii) Strong leadership, citizenship, interpersonal and team building skills; and
(viii) Communication skills as well as the language of international business and information technology.

Conclusion

Much needs to be done to protect the Nigerian child/youth from the myriad threats or obstructions to his/her decent livelihood aspiration. They need to be given education, welfare services and good future. The stakeholders in the child development process in Nigerian should rise up to their responsibilities. But specifically, members of the national Research and Development Network of Children-In-Agriculture-Programme in Nigeria (CIAP-Nigeria) should rise up to develop and implement agro-based strategies for decent livelihood of the Nigerian child/youth

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LEAD PAPER 1

THE *ALMAJIRI* SCHOOL SYSTEM AND CHILDREN'S FARM LABOUR AVAILABILITY IN SOKOTO STATE: WHAT ROLE FOR URBAN AGRICULTURE?

BY

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Abstract

The study examined the extent of practice of sending children to traditional Qur'anic school (Almajiri schools) by rural and urban households in two local government areas (LGAs) in Sokoto State, and to see the effect of this practice on farm labour availability and farm output. To achieve the objectives of the study, data were collected from 100 randomly sampled household heads each from Isa (representing rural) and Sokoto North (representing urban) LGAs of Sokoto State. The collected data were analysed using descriptive statistics in addition to student T test and Z test for differences between proportions. The results show that up to 69% of all respondents engaged in sending children away to traditional Qur'anic schools. However, the proportion (93%) sending children to such schools was significantly higher ($P \leq 0.01$) for the rural LGA than the urban LGA (45%). Similarly, the number of children sent per household was significantly higher ($P \leq 0.01$) for the rural LGA. Major proportions of the respondents agreed that sending children away affected farm labour availability and output negatively. Furthermore, most of the children who have graduated from such schools took to professions other than farming. It was, therefore, concluded that the Almajiri school system constitutes a drain on farm labour availability. To return some of the labour to agriculture, it was suggested that the children and their teachers should be mobilized and empowered to participate in urban agriculture.

Introduction

In Sokoto State, like most other areas in Nigeria, family members constitute the most significant source of farm labour. Family members usually consist of men, women and children. However, while in many other areas (particularly outside the Hausa north) women are actively involved in farming, the practise of *purdah* (women seclusion), which restricts women to their matrimonial homes during the day time, effectively limits the availability of women for farm work in the state. This implies that the bulk of the farm work is left for the male adults and children. Since the female children are mostly occupied with assisting their mothers with domestic tasks such as fetching of water and fuel wood, and in selling the products of women income generating activities (Baba and Umar, 2001), their involvement in farming is also limited. Therefore, only male children seem to be actually available to assist the male adults in farm operations.

However, a possible source of competition for the availability of male children for farm work is the *Almajiri* phenomenon. *Almajiri* (pl. *Almajirai*) is a Hausa word derived from the Arabic word Al-*Muhajir* meaning "the migrant". The word is used to describe children attending traditional Qur'anic school far away from home (parent). In such

school system in northern Nigeria, children are sent usually to distant locations to acquire Qur'anic and Islamic knowledge under a teacher. This practice is as old as the history of Islam in the area. In recent times, however, this school system appears to have transformed from a "lear5ning" into a "begging" institution. A common sight in most northern Nigeria towns, is of groups of small children here and there on the streets in thread-bare clothes, carrying their food bowls and staring desperately at people, hoping for alms from some compassionate fellows that would reduce the level of hunger devastating them National Council for the Welfare of the Destitute (NCWD, 2001). The children are exposed to great risks of hunger, poverty and diseases, and spend more time begging than learning. The transformation of the *Almajiri* from a learner into a beggar has inevitably resulted in the continuous decline of the quantity and quality of knowledge from the system (NCWD, 2001). Furthermore, some of the children eventually turn to crime.

It is evident from the foregoing therefore, that the *Almajiri* system of education has become a burden to the society. The question is: in addition to being a social ill, does the system also significantly affect availability of children's labour for farm work? And is there a way of re-engaging the children in agriculture, to minimize the social ill and return some of the labour back to agriculture? This study attempts to provide answers to these questions using two local government areas in Sokoto State as a case study. The specific objectives of the study are to:

(1) determine the extent of involvement of rural and urban households in sending their children to traditional Qur'anic schools.
(2) ascertain the effect of this practice of farm labour availability and output.
(3) determine the proportion of *Almajirai* graduates who return to farming after graduation, and
(4) derive policy implications of the findings of the study with particular reference to urban agriculture.

Methodology

The study was conducted in Sokoto State which lies in the extreme northwestern part of Nigeria within latitudes 11^0 30' – $13^0$50'N and longitude 4^0 – 6^0 40'E. It is bordered in the north by Niger Republic, in the east by Zamfara State, and in the south by Kebbi State. Majority of the inhabitants of the State are Muslims and farming (both arable crop and livestock) is the main occupation of the people. The state consists of 23 local government areas (LGAs).

Data for the study were obtained from 200 household heads sampled from two LGAs in Sokoto State. It was the strategy of the study to compare the practice of sending children to *Almajiri* schools between households in urban and rural areas. Therefore, one LGA was randomly sampled from the two urban LGAs and another form the remaining LGAs, which are largely rural. The selected LGAs are Sokoto North (Urban) and Isa (Rural). In each LGA, two electoral wards were randomly selected and in each ward, 50 household heads were randomly chosen, bringing the total sample size to 200. The wards selected in Isa LGA were Dan Zanke and Turba, while those selected in Sokoto North were Magajin Rafi and Waziri B wards.

From the selected respondents, data were collected on a wide range of issues including the socio-economic characteristics of the respondents, the extent of practice of sending children away from home for Qur'anic education, how this affects farm labour availability

and farm output, the places where children are sent, the ages at which they are sent, the occupation chosen by the children on graduation, and so on.

The collected data were analyzed using descriptive statistics, aided by student T test and Z test for differences between two proportions.

Results and Discussion

Socio-Economic Characteristics of the Respondents

Table 1 shows the distributions of respondents with respect to age, occupation, number of children and farm size. The table shows that majority (about 64%) of the household heads interviewed were about 40 years old, suggesting that youth headed households were minimal. This is good for the study since it implies that those interviewed were old enough to have many children and to have enough experience with *Almajiri* school system to provide adequate insight into the phenomenon. The results show that the rural household heads (mean age of 47 years) were older than their urban counterparts (42 years). This difference in age is statistically significant ($P \leq 0.01$).

Table 1 further shows that almost all (98%) of the rural respondents (i.e. those from Isa LGA) were farmers while occupation was more varied in the urban LGA. This is expected since alternative means of livelihood, other than farming, are limited in the rural areas of Sokoto State, in contrast to what obtains in the urban areas. About 36% of urban respondents were in one form of business or another 32% were civil servants and only 25% were farmers.

Table 1: Distribution of the respondents according to some socio-economic characteristics

Variable	Isa		Sokoto North		Total		
	Freq.	%	Freq.	%	Freq.	%	T – value[a]
Age (yrs)							
< 20	0	0	2	2.08	2	1.02	
21 - 30	6	6	16	16.67	22	11.22	
31 – 40	23	23	24	25.00	47	23.98	
41 - 50	35	35	28	29.17	63	32.14	
> 50	36	36	26	27.08	62	31.63	
Total	100	100	96	100	196	100	
Mean	47.45		42.30		44.93		3.44
Occupation							
Farming	98	98	24	25.06	122	62.24	
Business	1	1	35	36.46	36	18.37	
Civil servant	0	0	31	32.29	31	15.82	
Qur'anic							
Teaching	1	1	4	4.17	5	2.55	
Student	0	0	2	2.08	2	1.02	
Total	100	100	96	100	196	100	
Farm Size (ha)							
≤ 2	34	34.69	6	25.00	40	32.79	
2.1 – 4	38	38.78	7	29.17	45	36.89	
4.1 –6	15	15.31	2	8.33	17	13.93	
6.1 –8	5	5.10	1	4.17	6	4.92	
> 8	1	1.02	1	4.17	2	1.64	
Cannot tell	5	5.10	7	29.17	12	9.84	
Total	98	100	24	100	122	100	
Mean	3.42		2.66		3.27		1.60^{ns}
Mean Number of Children	7.65		6.34		6.95		2.01^{**}

[a] for significant difference of means between the two local government areas

***, **, ns = significant at P ≤0.01, P ≤0.05, not significant, respectively.

Rural respondents also had larger number of children (mean of 8) than urban respondents (6). Perhaps, the urban respondents are more easily reached with government campaigns on population control and are more enlightened. Therefore, they probably recognize the need to have fewer children. An alternative explanation could be that being older, the rural respondents have had more time to produce more children.

The table shows that the farmer-respondents were small-scale farmers with majority (about 70%) cultivating not more than four hectares. In fact, the mean areas cultivated in the rural and urban LGAs were 3.42 and 2.66 ha, respectively. This difference in farm sizes was however, not significant.

Extent of Participation in the *Almajiri* System

The degree to which sending children away affect their availability for farm work will depend on the popularity of the practice. Attempt was therefore, made to establish the proportion of the household heads sampled who sent their children away fro Qur'anic schooling, the number of children sent, places to which sent and time taken to graduate from the schools.

Table 2 shows that a major proportion of the respondents engaged in sending their children to traditional Qur'anic schools. The practice was however, much more popular in the rural area than the urban area. The proportion of rural households sending their children (93%) significantly exceeded that of the urban households (45%). This is expected since there are several Qur'anic schools in Sokoto town and parents may prefer their children to attend such schools on a "day" basis rather than send them away to other places. Furthermore, the urban dwellers are likely to be more enlightened about the dangers of exposing little children to poor nutrition, poor health, extreme poverty and destituteness that have come to symbolize the plight of the *Almajirai*, and would want to minimize exposing their children to such unnecessary risks.

The mean number of children sent was computed first for all respondents and then only for the respondents sending their children. Table 2 shows the mean for all rural respondents (2.06) significantly ($P \leq 0.01$) exceeded the mean for all urban respondents (0.91). Similarly, the mean per rural household sending also significantly ($P \leq 0.10$) exceeded the mean per urban household sending their children away. These results show that not only was the proportion of rural households sending higher, but also the number of children sent per rural household exceeded the number sent per urban household.

Table 2: Some Indicators of extent of participation in *Almajiri* System

Item	Isa	Sokoto North	Significance
Proportion of respondents sending children away (%)	93	44.79	$Z = 7.35^{***}$
No. of children sent (mean for all households)	2.06	0.91	$t = 6.69^{***}$
No. of children sent (mean per household sending)	2.20	1.85	$t = 1.76^{*}$
Age at which sent (yrs)	6.03	7.70	$t = -1.86^{*}$
Time taken to graduate (yrs)	5.29	5.36	$t = -0.26^{ns}$

***, *, ^{ns} = significant at $P \leq 0.01$, $P \leq 0.10$, not significant, respectively.

Table 2 shows that children were generally sent at the age of about six to seven years. This is twice the age suggested by some authors (e.g. Sule-Kano, 2000). Yet, it is still a very young age when parental care is critical. It is also shown in the table that the children spend about five years before graduating from the schools.

Table 3 shows the distribution of the respondents' *Almajiri* children according to places (states) to which they have been sent. The results show that Kano State received the largest proportion of the Qur'anic school children followed by Sokoto and then Zamfara States. But the fact that only about 19% of the pupils remained within Sokoto State

suggests that the respondent prefer to send their wards to distant lands for learning. This may be connected with the widely held notion that the children do not concentrate on learning if they are close to the home. But is may also imply that the ability of the parents to monitor the condition of their children frequently is sacrificed. Hence, most of the time, the parents may be unaware of the squalor in which the children live and the suffering they are exposed to. Furthermore, the far distance will make regular provisioning for the children difficult and will limit the ability of the children to visit home to assist their parents on the farm. The far distance, and perhaps the believe that children have to be totally out of sight of the parents for them to concentrate on learning, probably explains why only about 24% of those who sent their wards to such schools reported ever visiting them.

Effect on Labour Availability for Farm Work

Apart from the social problems created by the parent day traditional Qur'anic school system, is it possible that it could have economic consequences in terms of restricting children's participation in farming? To answer this question, the respondents were asked a number of questions and requested to answer "yes" or "no". The questions and responses are presented in Table 4.

Table 3: Distribution of *Almajirai* according to the states sent

	Isa		Sokoto North		Total	
Variable	Freq.	%	Freq	%	Freq.	%
Adamawa	2	0.97	1	1.28	3	1.06
Bauchi	9	4.37	0	0.00	9	3.17
Borno	13	6.31	2	2.56	15	5.28
Gombe	4	1.94	1	1.28	5	1.76
Jigawa	17	8.25	2	2.56	19	6.69
Kaduna	14	6.80	5	6.41	19	6.69
Kano	36	17.48	22	28.21	58	20.42
Katsina	8	3.88	3	3.85	11	3.87
Kebbi	17	4.37	7	8.97	24	8.45
Niger	9	8.25	8	10.26	17	5.99
Plateau	4	1.94	0	0	4	1.41
Sokoto	44	21.36	11	14.10	55	19.37
Yobe	3	1.46	4	5.13	7	2.46
Zamfara	26	12.62	12	15.38	38	13.38
Total	206	100	78	100	284	100

Table 4 shows that majority (56%) of the farmer respondents who sent their children away agreed that the practice create farm labour shortage. Furthermore, a major proportion (60%) felt that they would have cultivated larger farm sizes if not for the practice. A significant proportion (64%) also felt that higher output would have been realized if the children were not away. In all the questions, therefore, the proportions answering "yes" exceeded those answering "no". These results are not surprising given the significant role played by Nigerian children generally in agricultural production. For instance, a survey conducted in Oyo State showed that family children/youths accounted for 27% of the total labour used in cassava production, from land clearing to harvesting (Ikpi and Hahn, 1989). Other authors (Arokoyo, 1992; Adedoyin et al., 1998) have also stressed the significance

of children in agricultural production. This significance is further accentuated in Sokoto State where women are restricted from farm work, leaving only the men and the children.

Table 4: Respondents' views on how sending children to Qur'anic schools affect their farming (%)

Question	Isa		Sokoto North		Total		z-value[a]
	Yes	No	Yes	No	Yes	No	
Does your children's being away create farm labour shortage?	56.04	43.96	55.56	44.44	55.93	44.07	0.05^{ns}
Would you have cultivated larger plot if your children were not away?	60.44	39.56	59.26	40.74	60.17	39.83	0.21^{ns}
Would you have obtained higher output if your children were not away?	64.83	35.16	59.26	40.74	63.56	36.44	0.63^{ns}

[a] for significant difference between the proportions answering "yes" in the two Local Government Areas
ns = not significant.

The implications of the *Almajiri* system for agricultural production could also be gleaned from the choice of places of residence and occupation of the *Almajirai* after graduation. In most cases, the children are sent to urban centers away from the farms. Table 5 shows that out of the 134 rural children graduated, only about 31% returned to the home LGA. In contrast, of the 41 urban children graduated, up to 63% returned to the home LGA where there are diverse occupations apart from farming. This gives the impression that many children did not return to the rural areas because farming is the predominant occupation there.

This impression is further confirmed by the choice of occupation of the children after graduation. Table 6 shows that only 16% of the rural, and 7% of the urban children took to farming upon graduation. All the remaining were lost to other occupations. This is not surprising, considering the fact that there is the usual tendency for youths to underrate the profession of farming. This is particularly true of children who were taken away at a very early age before they could learn the art of farming under their parents and the dignity in labour associated with it. Having been exposed to the urban life at a very impressionable age, there is every tendency that the children upon graduation, would opt for occupations that obtain in urban areas, rather than farming which in any case they are likely to consider backward.

Table 5: Distribution of children who graduated from the Qur'anic schools according to present places of residence

Variable	Isa		Sokoto North		Total	
	Freq.	%	Freq.	%	Freq.	%
Adamawa	2	1.49	3	7.32	5	2.86
Bauchi (town)	0	0	1	2.44	1	0.57
Gombe (town)	0	0	1	2.44	1	0.57
Ibadan	4	2.99	2	4.88	6	3.43
Imo	5	3.73	2	4.88	7	4.00
Isa	41	30.60	0	0	41	23.43
Kaduna(town)	5	3.73	1	2.44	6	3.43
Kano(town)	18	13.43	1	2.44	19	10.86
Katsina(town)	2	1.49	0	0	2	1.14
Kebbi	4	2.99	1	2.44	5	2.86
Lagos (town)	5	3.73	1	2.44	6	3.43
Maiduguri	9	6.72	0	0	9	5.14
Niger	1	0.75	0	0	1	0.57
Sokoto(town)	33	24.63	26	63.41	59	33.71
Yobe	1	0.75	1	2.44	2	1.14
Zamfara	4	2.99	1	2.44	5	2.86
Total	134	100	41	100	175	100

Table 6: Distribution of children who graduated from the Qur'anic schools according to their present occupations.

Town/State	Isa		Sokoto North		Total	
	Freq	%	Freq.	%	Freq.	%
Farming	22	16.42	3	7.32	25	14.29
Business	60	44.78	17	41.46	77	44.00
Civil servant	7	5.22	1	2.44	8	4.57
Qur'anic Teaching	18	13.43	13	31.71	31	17.71
Student	27	20.15	7	17.07	34	19.43
Total	134	100	41	100	175	100

The Role of Urban Farming

The *Almajirt* school system is a practice in northern Nigeria whereby children are sent usually to distant lands to obtain Qur'anic education. The *almajirai* or the children sent on the schooling, are however, known to many as beggars (more especially teen-aged beggars), street kids and wanderers (Sule-Kano, 2000), because of the way they move about in urban cities begging for food and money. They are indeed a societal ill. But it has been indicated that begging only emerged as part of the practice in recent times (Mustapha, 1997). In other words, in the past the practice was not an unnecessary burden on the society since their migration was usually preceded by concrete arrangements for feeding and accommodation (Khalid, 1998), and the host communities generously assisted

the children and their teachers with what they needed willingly (Abdulwahab, 1999; Ahmed, 1999). Under such a hospitable and sympathetic environment, Khalid (2000) argued that the *Almajirai* had no cause to resort to begging. But all these have changed with time and the pupils have to beg to survive. According to Sule-Kano (2000), a good number of the children have become delinquents and have turned to crime.

Considering the deteriorating situation, there is doubtlessly an argent need to address the plight of the *Almajirai*. One strategy that is worthy of consideration is to see if the labour of the children could be diverted to agricultural production in urban areas where they are mostly found. This way, the labour that is being removed from agriculture in the rural areas would be returned back in the urban centers. Furthermore, it would generate food and income for the *Almajirai* and their teachers, which would alleviate their hunger and poverty, thereby ridding the society of their burden. By being engaged in agriculture, some of the children may also develop interest in the farming profession upon graduation. Fortunately, agriculture, particularly vegetable crop production, is very popular in most urban centers of northern Nigeria. The challenge is how to properly organize the *Almajirai* and provide them access to resources (particularly land and finance) to enable them participate in urban farming along with their schooling, rather than wander about the streets begging and being exposed to unnecessary risks.

Conclusion and Policy Implications

The study has shown that the practice of sending children to traditional Qur'anic schools is quite widespread in the area. This, apart from exposing the children involved to great risks at such a tender age, also contributes to farm labour constraints. Furthermore, children sent to such schools rarely return to farming after graduation. To return the children to farming at an early age and teach them the profession, their involvement in urban farming is advocated. To achieve this, there is the need for sensitizing and mobilizing the Qur'anic teachers, the children and their parents for participation in urban agriculture. Efforts should thereafter be made to assist the teachers in acquiring land and soft loans for urban agriculture participation in urban farming, it is hoped would provide independent income for the schools and eliminate the need for street begging.

As a further strategy for improving the welfare of the children and their teachers, there is the need for the state government to become more actively involved in the collection of *Sakat* (that is, the poor due), which is obligatory on all Muslims who have the means. Part of such Zakat could then be distributed to the Qur'anic schools. This was the practice in northern Nigeria before the arrival of the British colonialists and it contributed to the sustenance of the schools.

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LEAD PAPER 2

STRATEGIC REFORMS OF THE NIGERIAN EDUCATION SYSTEM TO MEET THE FUTURE CHALLENGES AHEAD OF THE NIGERIAN CHILD

BY

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Introduction

The history of education in Nigeria shows that there have been significant efforts to put it on sound footing through Educational Acts, Ordinances and Policies. Undoubtedly, one of the most outstanding of these is the National Policy on Education 1981 (NPE) (Ademokun 2001). Noting that its implementation has been fraught with many problems, Yoloye (1994) remarked that this policy has not yet proved the most Influential Policy document of the Nigerian Educational scene since independence.

Unfortunately, after two decades of operating the policy – 1977-1998 the Educational system in Nigeria can only be said to be in crisis suffice to say that the state of Education in the country today does not justify the huge human and financial resource being invested by all the levels of Government, Philanthropists and various interest groups.

The truth is that Nigeria has never really and truly implemented any of her developed and adopted Educational systems. As it is, no would assert that it is well with our Educational system. It is for this reason that this paper intends to highlight the flaws in the system suggests possible reforms that will prepare the present Nigeria child for the future challenges.

The Nigerian Child

For the purpose of this paper, the Nigeria child is considered as a free born Nigerian who falls between the stages of babyhood and puberty i.e. ages 1-13.

The relevance of any Educational system to the Nigerian child would be determined by how well it is able to take into account the diversified interest/peculiant of Nigerian children. These peculiarities to Saber, (2000) have physical, Socio-cultural Geo-political and Economic dimensions.

The Nigeria child therefore includes:

- The handicap with learning difficulties that may need special and adapted Education depending on the nature of their disabilities.

- The gifted/talented who due to special abilities find themselves insufficiently challenged by the programme of the regular school.

- The Nomads – hunters, fishermen and herders who are hated, harassed jeered and discriminated against because they don't fit neatly into national boundaries and they tend to look and behave differently from majority population. (Wayne – Ellwood 1995).

- The disadvantages group the poor, the orphan the situational disadvantage and street children who do not enjoy equal educational opportunities.

- Other who are discriminated on account of ethnicity, sex and socio- economic status.

If the Nigerian child will be prepared for future challenges, the type of education to be provided must be wide in scope and specific to nature of child. It is only them the Nigerian child could be expected to become the best he is capable of so that he might be able to contribute meaningfully to the general development of the country.

Contemporary/Future Challenges Of The Nigerian Child

There are societal expectation and norms. These values, which are to be held in high esteem, become standard below which every member must not fall. In the light of this, Fafunwa (1974) stressed below that "every one wants him (child) to be sociable, honest, courageous, humbler, persevering and of good reports at all times". Consequently, a healthy upbringing therefore should supposedly build a youth capable of abstaining from crime which according to Hornby (1975) is an offence for which there is severe punishment by law.

Given this background, the future challenges of the Nigerian child could only be said to be Herculean. Unfortunately, the premises seem not to be helping matters. For example, the rate of growth of school-age population is explosive. The Nigerian child is therefore faced with stiff competition (healthy and otherwise) that threatens his survival. Again, our society today seems to be synonymous with crime. The incessant occurrence of violence in our cities has put a question mark on the future of the country. Although the country is faced with multifarious problems, Adebule (1999) believes no angle seems to be as battered as our morality and values. This is the culture that our children now imbibe and internalise and will eventually grow up to content with. The challenge is therefore how the Nigerian child will shun these vices and lead a desirable and socially acceptable live.

Lastly, the Nigerian child has a massive unemployment market to content with especially if the present rate of unemployment continues. The challenge here for the Nigerian child is growing up to become self-reliant, self-employed and self-dependent.

It is in the light of the foregoing that we believe that if any Educational system in Nigeria will be relevant to the future of the Nigerian child, such must in principle address the following:

- Training the child to become self-reliant and independent capable of contributing meaningfully to the state

- Inculcating positive social values of honesty, obedience and hard work against the contemporary youths crime and get rich quick mentality.

- Making graduates of our Educational system at all levels relevant in this age of computerisation and globalisation.

- Providing for each child, a system of Education that is appropriate for his (child) aptitude and interest and socio-economic status not withstanding.

Nigerian Educational Reforms

Education: A tool for development

Many theories have advance on the need for Education as an indispensable tool for human and national development. This opinion was succinctly expressed by Fager and Saba (1989) in their comparative study of Education and National Development when they said that formal Education is highly instrumental and necessary to improve the production capacity of the population. It is generally believed that Education is the most important instrument of change, as any fundamental change in the intellectual and social outlook of any society has to be preceded by Educational revolution. Neither is their any scholar nor school of thought who has expressed opinion to the contrary.

This preview in clear terms underscores the importance of a qualitative Education to enable the Nigeria child cope with the inevitable global social and technological change.

Nigeria Education reforms:

Historical background since the publication of Ashby Reports on Higher Education in Nigeria in October 1960, entitled "Investment in Education" (Fafunwa 1991), the Federal Government (FGN) is convinced that development is impossible without Education thus the FGN (1981) states that "Education will be given highly rated position in the National Development plan. Ever since Education has been receiving due attention in terms of budgetary allocations and policy development leading to the National policy on Education.

The Nigerian National Education system derived its roots from the work of Christian missionaries in the early 19th century (Ejieh 1989). Although Education in the country later witnessed the participation of the British Colonial Government, one major criticism of the Education provision was that it was "bookish" (Azikwe 1937) and according to Phelps Stokes Report (1922) needed to be adapted to the needs of the people.

In 1955 and 1957, both the Western and Eastern regions of Nigeria respectively adopted free and compulsory primary Education (UPE). This was a phenomenal break through in the development of Education in Nigeria.

In 1972, the FGN also introduced free universal primary Education. Though not an outright failure, the programme has not produced the desired effect because of problems of manpower, funding and infrastructures (Ogunneye 2001).

The adoption of the 6-3-3-4 system of Education in the mid 80s was considered as the best to happen towards Educational development in Nigeria since it was meant to develop the individual child along his area of interest and aptitude.

Again, the lunching of the free universal and compulsory basic Education (UBE) by the country by the FGN in 1999 is yet another milestone in the enhancement of the individuals

right to formal education One only hopes that the programme will be pursued with rigor so that it does not become just another good programme on paper.

6-3-3-4 system of education and the Nigeria child this is revised education system, which places emphasis on the acquisition of technical/ vocational knowledge. It is an attempt by the FGN to find a balance between technological and general/academic education at the critical middle education levels i.e. the secondary school. The aim of the system in the words of Obilade (1987) is to arouse interest in technological and vocational Education through actual exposure at a very rudimentary level and to permit students to explore various field of study in preparation for later Educational and vocational choices.

In the 6-3-3 system, the greater departures from the norm seem to have occurred at the secondary level. For the secondary school, the curriculum would no longer be restricted to include what have been termed academic or core subjects only, but would now be restructured to include both technical and vocational subject as well.

6-3-3-4 Educational System: An Assessment of:

Pre-Primary Education:
This is purely and entirely informal and left in the hand of private operator the parents and the local community. However the government is showing interest in their field. .

The primary Education:
Education given to children aged 6 for a period of 6 years. It is supposed to be broad with emphasis on attainment of permanent and functional literacy and numeracy and effective communication skill.

To pursue this goal, the curriculum is broad based. Provisions were made for educational services like school, library, health schemeand counseling specialist teachers.

What obtains today in our primary school is far cry from these laudable provisions. The situation in the primary schools in Nigeria is summed tersely in a situation report and policy Analysis of Basic Education in Nigeria by Yoloye et al (1993). Among the disturbing revelation contained in the report, the assertion below was very outstanding.

School and classrooms observations:
The school and classroom environments most schools sampled are badly conducive to learning.

- 77% of the pupils lack Textbooks.
- 47% of the school furniture is inadequate for the use of pupils
- 38% of the classroom have no ceiling
- 36% of the students have no writing materials
- 3% of the classroom have no chalk-boards
  pupils sit on the floor in 10% of classes.

In all cases the situation is worse in the rural areas than in the urban areas.

With all the possible good will, the situation described above would produce nothing but a negative effect on the quality of learning and teaching in the primary school.

The Secondary Education:

- Given in two stages of junior and senior categories of 3 years duration each, its broad aim is the preparation of students for useful living within the society and for higher Education.

The Junior Secondary School:

This category is both pre-vocational and academic by the provision of UBE shall be free, universal and compulsory.

The curriculum of the junior school includes core subject- languages, mathematics, integrated science, social science, and introductory technology. Pre- vocational subjects like agricultural science, business studies, home economics and local crafts. Other non pre-vocational subjects are physical education, religious studies, fine arts, music etc.

It is very comprehensive with the aim of preparing the students who complete the junior school to be streamed into either of the senior school, Technical college or an out of school vocational trained depending in their academic ability, aptitude and vocational interest.

The Senior Secondary School:

The curriculum of the senior school was developed to broaden the student's knowledge and outlook. Composed of core, vocational and non-vocational subjects. It is meant to be preparatory to student's specialisation in their choices of profession or vocation.

When the system was developed it promised to be potentially revolutionary if successfully implementation. However, like the primary school, every provision of this secondary school under the 6-3-3-4 has implementation problems.

Although, there is a little improvement in terms of infrastructures and funding when compared with the primary education. It is unfortunate that at this crucial level 3-3 attention was not given to where it mattered. To practical agriculture, only a lip service was being paid, introductory technology suffers from acute shortage of manpower and the subject which is supposed to be 80% practical was being taught in abstract and the streaming of the grandaunts of the junior school to the senior school was not in anyway effective on the whole, there seems to be no significant difference between what educational system was before the introduction of the 6-3-3-4.

Although there are empirical statistic at hand effectiveness of the 6-3-3-4 system leaves much to be desired in the following are as:

- Retention of students/ pupils: there are cases of drop outs even in primary and junior schools where education is supposed to be free and compulsory. There are evidences of increased dropouts in the eastern states in the last 5 years, the male children being the more affected. (T.V. Broadcast – A documentary). Possibly the efforts of the private schools now a thriving business – help matter in the primary education.

- Arguably the primary cause of dropouts may be socio-economic but if it were available free and compulsory, nobody would have had any excuse to dropout of school.

- Rate of transition from one level to other: There are guidelines for the transition of students from one level to the other. Presently, the transition from junior school to the senior school is almost automatic in contrast to the option to proceed to Technical Colleges and Vocational Training Centre and Apprenticeship Scheme. (NPE 1998).
- The quality of the product of 6-3-3-4: The issue of falling standard of education has been heatedly debated. But the question is, how much of the graduates at various levels could justify the goals and aim of the system? What percentage is really self-reliant? How many are self employed and productive compared to these who divert to trade and commerce.

The truth is the unemployed is on the increase while a lot of school leavers become miscreants, social-misfits and touts.

Judging by the aforementioned, there is an urgent need to review our educational policy implementation procedures with a view to adopting a mush more drastic approach.

Desirable Policy Implementation And Educational Reforms

It is no gain saying, that the NPE is a well thought out, developed and articulated educational package. However, it may not be difficult to identify the areas where government has performed creditably vis-à-vis area where she has performed below expectation. These will be highlighted in brief under primary and secondary education.

Primary Education:

Contained in the NPE are the objectives and the curricular imperatives from government i.e., what the government must do on her parts to realise the objectives. These essentially are what have been left undone.

First education need to be really made free by making available schools with decent infrastructures in all the works and crannies of the country no matter how remote. Importantly, provision be made for – junior libraries to the children.

- Materials and manpower in adequate in quality and quantity to teach the science subjects.

- Suitable curriculum and production of teachers for and religious education.

- Fund, suitable textbooks, teaching aids and learning materials for teachers as well as students.
- Opportunity to voluntary agencies and private individuals to establish and manage primary school so along as they meet the standard requirement.

Again it must be made compulsory by

- making schooling worthwhile and learning attractive.

- Encouraging parents by maintaining powerful campaign to awaken a burning desired for their children Education.

- Instituting legal action against erring parents.

Secondary Education

As has been mentioned, the middle 3-3, the secondary school Education is the most critical level in the 6-3-3-4 system. This is because equal attention was accorded to academic and vocational Education. Again since the adoption of the system, it implementation has not been problem free rendering the whole system ineffective, in the following areas.

First, the policy maker foresaw that one of the greatest problems that would stand in the way of successful operation of the new structure was lack of qualified teachers especially for pre-vocational courses. It was clear that the stock of the graduates of the few polytechnic, technical institute and trade-centre's in the country would not meet the requirement of the few structure for teachers of vocational subject. As part of the measure design to meet the expected shortfall in manpower for vocational Education, the policy makers recommended among others, that "where necessary local craftsmen with the use to teach pupils.

Worthy of mention is that at the take-of of the programme, a few states, including Anambra State hired local craftsmen. The finding of Ejireh (1989) while conducting a survey on "meeting the artisan manpower needs of the new secondary Education structure" inter-alia includes.

- both the students and teachers were favourably disposed to being taught and working with working local artisan respectively.

- The local craftsmen taught the students as well as teachers in the school therefore were effective.

- The artisan posses practical skills but could not express themselves clearly in English.

The question is, where are those artisans today? Why were they disengaged in the first instance? It is our opinion that the disengagement of the local craftsmen together through a cog in the wheels of the progress of the systems 6-3-3-4.

Practical Agriculture In Junior School

Agriculture is listed in-group B – pre-vocational elective along with the subject to be offered by the junior school. The NPE 1998 stressed that "emphasis on subjects in group B shall be on practice" it is therefore indicated that Agriculture in the junior school shall purely practical.

Feeble attempts were made in the late '80s by the Lagos State Ministry of Agriculture to give farm inputs to school Agric Project. This was poorly co-coordinated, grossly abused and of no effect.

In spite of the fact that Agriculture is supposed to be practical, terminal assessment of students' performance was purely on written examinations as against pre-vocational subjects like introductory Technology, Business Studies, Home Economics etc.

In the senior secondary and event in some junior secondary schools Agriculture Sciences is offered as an alternative subject to Home Economics, Typewriting etc. this often make the choice of the subject sex biased rather than aptitude and interest.

There is a gross imbalance in the transition rate of the student from Junior Secondary to Senior Secondary and Technical Colleges.

The obvious preference of the students for the S S is because the Technical Colleges are very few and scattered about and mostly without boarding facilities to cater for the graduates of the Junior School who are in their early teens.

Lastly, the curriculum developed for the Technical Colleges only gave Agriculture a partial continuity as only agricultural implements and equipment mechanics was listed.

In effect we feel that Agriculture deserves a better attention in the Secondary School system, which could be redressed by

- Making agriculture practical inclined in all respects

- Mandating each school to engage in one of practical Agriculture project be it Arable or Animal husbandry.

- Basing the terminal assessment of student performance on the weighted average of the sum of practical and written examination scores.

- Building more Technical Colleges that will compete in number and location with the senior schools.

- Broadening the Technical colleges' curriculum to accommodate more areas of studies on Agriculture.

- Making the agriculture institutes and trade centres more viable and effective.

Agriculture And The Future Of The Nigerian Child

Perhaps no discipline offers as limitless opportunities for the Nigerian Child as Agriculture. Rosulu (1998), observed that various sub-sectors of Agricultural products such as crops, livestock and fishery enterprises form a few of the numerous areas that Nigerians can look into to meet increasing needs of the family". Yet this sector remains neglected and had suffered severe set- backs over the years.

It is sad to note that Agriculture in Nigerian remains largely underdeveloped in spite of billions of Naira budgeted for the sector yearly and several Agricultural research institutes.

Worse still farming to lose attraction to the youths and the Government seems not to have developed a clear-cut or distinct policy or programme capable of developing the Agricultural sector.

The fact that the efforts of the various regimes at designing a course of development and progress for Agriculture had remained a mirage is an indication that there are basic constraints to Agricultural productivity.

This Rosulu (1999) sum up to include

- Planning problems
- Technology problems
- Storage, processing & marketing problems
- Financing problems

These are the problems that must be surmounted if the future of the Nigeria child would not be thrown into jeopardy

The hope of the Nigerian child is on Agriculture. Presently employment opportunity in other sectors is already saturated. As a matter of fact, firms and companies even government enterprises now do more of staff rationalisation and/or outright retrenchment. Agriculture and all the subsections, when fully developed will offer fresh and abundant job opportunities for the teaming growing Nigerian child.

Conclusion

A very bleak future is staring the Nigerian children in the face unless something is done and urgently too. The government therefore must of necessity be ready to prepare the Nigerian child through a well developed and religiously implemented Educational programme and provide an enabling environment for the cultured, self-reliant Nigerian children to operate. It is then that we can be sure that the country, Nigeria has a future.

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LEAD PAPER 3

POVERTY AND HUNGER REDUCTION STRATEGIES THROUGH AGRICULTURE FOR IMPROVED LIVELIHOOD OF THE NIGERIAN CHILD

BY

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Introduction

Since this conference has "Child" as its central focus of discussion, a useful starting point for this paper will be to conceptualize, "The Nigerian Child". The Oxford Advance Learner's Dictionary (1995) describes a child as: "a young person from birth to the age of full physical development: a boy or girl"; "not far advanced in life, growth, development etc; recently born or begun". United Nations (1998) describes a child as "any human being below the age of eighteen". The foregoing thus explains that a child is someone that has attained the full state of physiological, experiential and psychological maturity expected of a full-grown human being.

The Nigerian child can thus be viewed as a child with Nigerian nationality. To Nigerians and indeed Africans in general, the child is very important and that they do not wish to play with his fate and destiny. They are very much concerned about the needs of their children from infancy to adulthood and willing to invest so much to see to his/her survival and success in life. To live is to have children, and to have children is to be outlived of those children. The child is the everlasting wealth of an individual. Material wealth can vanish but children are immortal. This is embodied in the Yoruba saying that "*Omo l'aso*" – which literally means, "A child is a man's clothing, wealth, blessings, existence, happiness among others".

At the very base of individual's hierarchy of need in life is physiological need – food, shelter, clothing and security. The security of an African child is paramount and embodies food security. Food is at the very base of a child's survival and security. Feeding and nutrition play important roles in the physical and mental development of the child. The baby receives nutrients right from the mother's womb and requires effective nourishment throughout life for growth and development, initially form the mother's milk and later from the parents' purse and finally from his own efforts. The inability to access nourishment of the right quantity and type inevitably creates hunger, malnutrition and a general feeling of insecurity.

In line with the above framework, the focus of this paper will be to discuss the inter-relationship of poverty, hunger and malnutrition in relation to the Nigerian Child. It will seek to analyze the causes of hunger and food insecurity and their impacts on the livelihood of the Nigerian Child. Poverty, the chief cause of food insecurity occurs as a result of limited human and natural resources and the way they are used in the society. Vicious cycle of inter-dependence therefore exists between poverty, hunger and malnutrition. The solution to these concepts traverses several levels, from micro to macro-economic policies. The analysis and understanding of the related concepts are necessary so that efforts towards solutions could be effectively directed to appropriate channels. The

paper concludes by suggesting agricultural strategies for reducing poverty and hunger in Nigeria so that the livelihood of the Nigerian child can be assured.

Hunger and Malnutrition

Hunger is a symptom or sensation expressed as temporary craving for food (Olayide, 1982). It is a physiological demand for food by the body. Inability of individual or group to qualitatively and quantitatively meet this physiological demand ultimately result in malnutrition (under nutrition) and its attendant social, health and economic consequences. Malnutrition refers to poor nutrition in a quantitative (insufficient energy uptake) and/or qualitative (lack of protein or micro nutrients) sense. Thus, the person who does not have enough to eat and the person who does not eat enough of the right food are both malnourished (Tollens, 2000).

In order to achieve good nutritional status for each individual, the following steps (Tollens, 2000) should be followed:

(i) Enough food has to be made available (Sufficient availability)
(ii) Individuals must have access to enough and appropriate food (Access)
(iii) Individuals must procure enough and appropriate food (Procurement)
(iv) Individuals must ingest enough and appropriate food (Ingestion)
(v) The ingested food must be digested (Digestion)

Sen (1992) attributed the basis of hunger and malnutrition to lack of access of individuals to available food. Assured access to food can only be guaranteed by the ability to procure the food on sustainable basis. Furthermore, good nutritional status of individuals can only be attained if such individuals perceived the available food to be psychologically and culturally acceptable for consumption (Maxwell and Smith, 1992).

Food Security

World Bank (1986) defines Food Security (FS) as access by all people at all time to enough food for an active, healthy life. It implies that everybody can obtain enough for a healthy and active life (Tollens, 2000). It is also defined as 'secured access to sufficient quantity of food having adequate nutritional quality and cultural acceptable.

It has however been agreed that even assured access to enough food does not guarantee good nutritional status. Maxwell and Smith (1992) opined that "the highest state of food security requires not just secure stable access to a sufficient quantity of food, but also access to food that is nutritionally of adequate quantity, culturally acceptable, procured without any loss of dignity and self-determination and consistent with the realization of other basic needs".

Poverty

Poverty has been described as the inability of a household to adequately satisfy its basic needs of food, clothing, shelter, education, among others (Aborishade, 2001). World Bank (1995) defines poverty as the "inability to attain a minimal standard of living". Poverty is the root cause of hunger. It is people's inability to access adequate income (for whatever reason) that makes them unable to buy food and consequently go hungry. It is the inability of individuals or nations to generate the income required to purchase these foods that lead to hunger.

Table 1: Poverty Level in Nigeria 1980 – 1996

Year	Poverty / Population Index (Head Count Index)
1980	28.1
1985	46.3
1992	42.7
1996	65.6

Sources: (i) Federal Office of Statistics (1996). National Census Survey, Abuja.
(ii) Olaitan, S. O., Ali, A., Onyemachi, G. A., Nwachukwu, C. (2000). *Poverty and Poverty Alleviation Initiatives in Nigeria.* Nsukka: NERA pp. 2 – 3.

Poverty is pervasive in Africa (Maxwell, 1988). Nigeria's poverty status also confirms this. Analysis of the Head Count Poverty Index (Table 1) shows a progressive increase in the poverty situation since 1980 form 28.1 to an estimated current level of over 70percent. This situation puts over 70 percent of the populations are average of 45 and 50 percent respectively (Aborisade, 2001)

Causes of Food Insecurity (FIS) and Hunger

Poverty has been identified as the major causes of food and nutrition insecurity. It is the result of limited human and natural resources and the way they are used in society, which is affected by political decisions (Zarges, 2000). Food insecurity and hunger are therefore caused directly by many micro-economic and political factors as well as by some macro factors.

Maxwell (1998) identifies limited growth of the agricultural sector, income disparity, rapid population growth and urbanization as underlying causes of food insecurity in Africa. It may also be influenced by bad government policies, wars, drought and declining world prices. Oyejide (1993) posited that the most important underlying cause of food insecurity in Sub-Saharan Africa (SSA) is the weak agricultural performance; a situation that has resulted in relatively low Gross National Product (30 – 60%) earnings from agriculture relative to the large population percentage of people engaged in agricultural activities.

In Nigeria, causes of food insecurity was previously attributed to insufficient aggregated food availability while little attention was paid to issue of household food security, particularly among vulnerable women, and the aged). The estimation that above 40percent Nigerians live below the absolute poverty line and that incidence of poverty is more pronounced in the rural areas and agricultural sector should provide justification on the need to direct food security efforts to household level.

Food Insecurity (FIS) occurs when an individual does not have access/entitlement to food as a result of poverty. Poverty occurs when an individual lacks the resources that will enable him to access food. Individuals can access food by either selling their resources for income acquisition (e g. paid employee) or by utilizing the resources in producing food for own consumption.

Poverty, hunger and malnutrition almost always go hand in hand. They however, do not affect all segments of the population equally. Poverty and food insecurity has both time and space dimensions. Some groups are also more vulnerable than others. Available evidence and basic indicators of quality of life show that classified as living below the poverty line in 1997 compared to 34percent urban dweller (Blagche, 1998). The importance of rural poverty is not usually well appreciated partly because the urban poor are more visible and more vocal than their rural counterparts.

Rural poverty is largely agriculture induced. The basic occupation in the rural areas is Agriculture. Poverty assessment studies have shown that sometimes up to 75percent of the poor are agriculture dependent (World Bank, 1995). Household budget surveys have also shown that the major cause of low income in the rural areas has been stagnating agricultural production (World Bank, 1997).

Nigerian Child and Vulnerability to Poverty

The segments of the population that are most prone to poverty are also the ones most vulnerable to hunger and food insecurity. According to Latham (187), pre-school children and pregnant and nursing women are particularly vulnerable, other are resource poor and food deficient units such as the elderly, refugees (including children), female headed households (in which children usually constitute a significant proportion), the handicapped, prisoners orphans and unaccompanied children, street children, the landless, households headed by people without formal education, people living in areas where arable land is scarce, agricultural production is low, arid areas or where environmental degradation is common.

Incidence of poverty and hunger among children is quite worrisome. A malnourished child is anemic or calorie deficient or lethargic. Such a child is likely to develop and learn more slowly and may retain permanent deficit. Malnourished children are also subject to more frequent and more severe infections, which exacerbate the initial malnutrition. Malnutrition imparts negatively on potential human capital of a nation and leads to a waste of resources both in education and health (Omotor, 2000). Child poverty is self-perpetuating. Many poor households depend on child labour as a means of engaging the child in family activities and earning supplementary income.

Nigerian Child and Agriculture

In Nigeria and many regions of the world, children are directly productive either in agriculture or commercial ventures. A child typically beings by following his parent or sibling into the field and rapidly becomes involved in hoeing, weeding, harvesting and other tasks. They are also involved in animal husbandry. Alternatively, boys may work as low-paid farm labourers while girls care for younger brothers and sisters thereby freeing the mother for other productive work (Norton and Alwang, 1992:164).

In most cases however, these income-generating activities of the child is often at high cost. Firstly, they are mostly at the expense of schooling. For many poor people, the opportunity cost of sending children to school outweighs the perceived feature benefits especially for girls whose economic value is often reckoned to be lower. Secondly, some of the works that children do is highly exploitative. Children at times work for long hours in unhealthy conditions for low wages (World Bank, 1995:61). Thirdly, where school

going children also spend significant time on the farm, learning ability is negatively affected as lesser attention is paid to schoolwork due to time constraint and tiredness.

Recommendations and Policy Implications

Solutions to poverty, hunger and malnutrition vary depending on the types and causes of the problem. It has been suggested (Norton and Alwang, 1992) that a comprehensive solution will have to aim at

(i) Raising the incomes of the poor
(ii) Increasing agricultural production
(iii) Developing appropriate intervention programme
(iv) Improvement in health and changes in political, social and educational structure

Raising the incomes of the poor (that is poverty reduction) is pertinent to hunger reduction. The obvious link between poverty and food nutrition problem led the World Bank (1986) to claim "in the long run, food security can be achieved only through an increase in the real income of the poor in order to enable them to procure enough food". Two conditions are essential for this to be realized. Firstly, food supply must be sufficiently large to satisfy the demand (implying increased production) and secondly, employment must be created for the food insecure individual or households so that they can obtain an adequate income (Zargen, 2000:87 – 89).

This is where agriculture matters. Agriculture can effectively contribute to poverty reduction in a country like Nigeria where a large proportion of the population is agriculture dependent. Agriculture makes six contributions to poverty reduction as a provider of food, livelihood, raw materials, market, foreign exchange and investable fund saving. Increased income or food consumption by the poor is unlikely unless agricultural production increases. Increased production raises the income of the poor (who are mostly farmers or farm dependent) and also lowers food prices thus increasing the poor entitlement to food.

However, the importance of agriculture must not be over stated. While higher agricultural growth essential, it must take place within a broad framework involving other livelihood strategies. This is because while agriculture provides the bulk of the income of the poor, it is not their only livelihood. The poor usually derived their livelihood from various sources and not agriculture alone. Sizable proportions of the poor are employed outside agriculture.

According to De Waal (1989), "food security is an important but not the only dimension of livelihood security". Access to food is affected by the degree to which other needs can be realized. People are at times prepared to voluntarily go hungry in order to realize some other more compelling needs. Thus food and nutrition problem resolution strategies must "be carried out in the context of the poor people's complex and dynamic livelihood strategies and not an agricultural production strategy alone.

To specifically target children, programmes that raise women income directly must be implemented. Such programmes strengthen women status and their bargaining power within the household, reduces their vulnerability and increases their livelihood. These have direct and indirect effects on children's nutritional security. Studies have shown that

within the household, women spend up to 80 to 100percent of their wage income on family maintenance while men spend only above 40 – 90percent (Zargen, 2000).

The following programmes must be developed in agriculture to improve women's productive capacity, create access to credit for them in addition to other targeted support scheme. These will go along way in the empowerment of the Nigerian child.

(i) ***Health care and nutrition education***: Improving hunger and malnutrition will not only stop at access to food. Health care and nutrition education are also important. Nutritional advice must be provided to improve procurement, ingestion and food digestion. Mass education programmes and preferential food subsidy programmes can also be carried out for vulnerable children. An example of this is the free school lunch programme being implemented by the Lagos State Government. Others can involve other vulnerable children (and children imparting) group such as sick children and pregnant/lactating women (fee hospital food programmes, street children (food for work) etc.

(ii) ***Human capital formation:*** This is essential to agricultural growth and poverty-reduction. Vocational oriented agricultural education programme must be implemented right from the primary school level. School farm projects implemented through school children labour, can provide food or income to implement or at least subsidize the free school lunch programme. Education also has positive correlation with farm output and income-generating abilities of the poor. Agricultural education improves their human capital/assets and thereby facilitates the achievement of their livelihood outcomes.

(iii) ***Political Will:*** Stronger political will to energize higher agricultural food and nutrition policy is also essential. Political failure in form of unsuitable policies, inefficient and non-transparent resource distribution mechanism, corruption, conflicts and others causes poverty and aggravate food and nutrition problems.
The agricultural, food and nutrition policies must be such that does not place children at a disadvantages and where it does. Government has the political duty to directly address such problems probably through the principle of subsidies at the local levels. The poor must be assisted to build-up their political capital (access to means of and participation in public decision making) as a way of ensuring such policies address their livelihood problems. This is particularly important in agriculture where the bulk of producers are far removed from the centre public policy.

(iv) ***Reformation of Public Intervention Agencies:*** Many of ouf existing structural public interventions in the agricultural sector will need to be reformed to favour children and women. For example, the agricultural research focus may be adapted or redirected to the agro-ecological conditions of the poor households and the socio-economic needs of the vulnerable especially women and children. The extension, credit and input delivery systems may be improved via women extension personnel, women cooperatives, groups and organizations.

Conclusion

This paper has established that poverty is central to hunger and malnutrition problem. Thus, reducing poverty is central to any long-term strategy to alleviate hunger problems. Among the vulnerable groups, the farming populace, children and nursing and pregnant

women constitute a significant portion. Children are particularly vulnerable because they largely depend on other groups such as their parents for the guarantee of their livelihood security. A permanent solution to poverty, hunger and malnutrition problem can only take place if prime roles are given to agriculture since the livelihood of a large proportion of the populace is agriculture dependent.

Thus, agricultural production must be increased mainly via a productivity increase. Developmental and compensatory policies to mobilize peasant farmers, farmers' cooperatives, and corporate farms among others must be instituted largely within a market-oriented mechanism supplemented with targeted production and consuming intervention mechanism for the poor.

Agricultural growth alone however is not enough. People pursue varied livelihood outcomes with their livelihood assets and food outcomes (nutritional adequacy) may be secondary if it clashes with other more compelling cultural, social and survival needs. Thus, opportunity must also be created for the actualization of these needs.

Finally, children's livelihood depends not only on food availability but also on other demand variables such as the ability to access, procure, ingest and digest available food. This calls for greater investment in human capital via enhanced agricultural, food and nutritional education and targeted employment and income generating programmes aimed at the children themselves and also on their mothers on whom they mostly depend for nourishment are vital.

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LEAD PAPER 4

THE FORCES AGAINST GOOD LIVELIHOOD AND STRATEGY FOR IMPROVED FAMILY LIFE

BY

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Introduction

We live in a rapidly changing world in which the lives and livelihoods of all but of the poor are diverse and dynamic. Moreover, there has been the persistence of a high incidence of hunger and malnutrition among rural households in developing countries as a result of food crisis that involves inadequacy of food supplies in meeting the qualitative and requirement of consumers specially the farm children, youths, men and women.

In Nigeria, it has been observed among rural households that people are quite prepared to put up with considerable degree of hunger, in order to preserve seed for planting, cultivate their own fields or avoid having to sell an animal (Adekanye, 1985). Avoiding hunger therefore is not a policy priority for rural with farming-prone. He further stressed that time is very essential to ensure livelihood and secure sustainable livelihood is therefore an important condition for food security at the household level.

There are forces militating against good livelihood, which require strategic actions to arrest. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintains or enhances capabilities and assets now and in the future, not undermining the natural resources base (DFID, 1998). In order words livelihood comprises of the capabilities, activities and assets required for living (DFID, 1998). It is the totality of means by which people secure a living; acquire the requirements for survival and satisfaction of needs as defined by the people themselves in all aspects of their lives.

Livelihood activities include various ways by which human being can earn a daily living or the act of engaging in productive work in order to get money, goods and services. Food is an essential requirement of life in Nigeria, many households are not able to meet the nutritional needs of their family members especially children. It is therefore necessary for research to gather information on livelihood activities and problem of rural households in ensuring food security throughout the year. It is also important to know forces against good livelihood and strategy for improved family live.

It is very important to note that majority of Nigerians including children were born, raised and grew in the rural communities before migrating to urban areas. It is therefore very important encourage socialisation and education of children to become agriculturally sensitive to plan in them favourable disposition towards a career in agriculture in their adult life (Adedoyin et al, 1998).

This foundation will help to enhance agriculture productivity and subsequently improve the livelihood of the rural household since the children are those born, raised and grew in rural and urban areas in their adult life .

The Children-in-Agriculture programme has provided a paradigm and arrangement in preparing rural children for agricultural and sustainable livelihood sensitivity. It therefore needs a god logistic and financial support from the government, non-government and community-based and private organization and individuals. There should therefore, be a good relationship and linkage between the federal, State and Local government for sustainable to be enhanced.

Forces Militating Against Good Livelihood Among Rural Children In Nigeria

Alao (1998) described rural children within Nigeria's socio-cultural milieu those schooling and non-schooling but resident in rural communities with their families of orientation. CIAP has adopted 0 – 18 year as the age bracket for children and focused on this group for its programmes.

Jibowo (1998) stressed the importance of rural children programme as means to equip the with necessary qualities for starting to take decisions and action in the educational, economic, social, health, environmental and recreation fields. This is to enable them to become useful citizens.

Rural children are involved in various aspects of farming. Hence their role cannot be over-emphasized when considering their inputs and impacts to developmental projects at the Local, state and national levels in Nigeria. They are sincere, have less exposure and reserved. They also have the tendency to imitate their parents by cultivating their own farms.

Despite the potentials of the contributions of rural children to rural development, they face some forces that militate against their efforts. Farm children in Nigeria are involved in various aspects of farm work. They are involved in farmland clearing, planting, weeding, harvesting, packaging of farm produce, processing, marketing and so on.

United Nations International Children Education Fund (UNICEF 1990) stated that a substantial proportion of farm children work full time at too early age and relatively too many hours. There are various forces militating against good livelihood of the rural/farmer children in Nigeria. One of these forces is the fact that many of the children involved in farm activities get involved at too early age.
They combine farm activities with studies and these results in social, physical and psychological stress. This will also hinder full social and psychological development.

This could also hinder their educational progress as some may drop out of school temporarily or permanently in order to be more involved in farm work thereby reducing the dignity of the children. This can also result in poor academic performance and self-esteem of the rural children. Some of the rural children are very irregular at school especially during the farming seasons such as clearing of farmland, harvesting. This tends to have adverse effects on the academic performance of the rural children and could lead to such children dropping out of school permanently.

Some rural children are involved in marketing of farm produce, thereby hawking such goods around the villages or nearby towns. Some spend many hours of the day not attending school, and those who attend school do so early in the morning and after school hours.

Rural children therefore spend early hours in the morning tedious tasks of hawking around the streets and after school hours doing tedious work for many hours. This affects their mental and physical condition and may prevent them from carrying out their academic assignments, which will invariably affect their self-esteem and dignity. The overall effects of farm activities could result in farm children having a negative attitude towards farm work; hence, they consider it as unrewarding, uninteresting, undignifying, full of drudgery, and diminishing self-esteem (Oloruntimehin, 1999). This may result in looking these rural children into other sectors of the economy due to loss of interest in farm work. The aim of paper therefore is to highlight the against good livelihood and strategy for improved family life.

Force Against Good Livelihood and Strategy For Improved Family Life

The family is the smallest social structure comprising of the father, mother and children. Whatever happens to any component of the family unit affects the entire social system. The extended family system involves the uncles, cousins, and other blood relations. All these are included in farm family structure in Africa. In Nigeria, the father in the farm family leads family members to perform certain farm services depending on sex of the children.

Women in the farm family are usually involved in agricultural activities more than the men. They are producers, processors and marketers. Olawoye (2002) opined that African farm woman do 95% of the work related to feeding and carrying for the family including food production. The female children are usually involved in carrying out some domestic chores, assist in planting, weeding, harvesting, processing an d marketing, while the male assist in land cultivation, weeding harvesting, planning and so on. In Nigeria, force military against good livelihood among rural households are numerous, hence there is need to proffer solutions to these forces for sustainable livelihoods in rural households.

Moreover, preparing and mobilizing farm family (children, youth men and women) is potentially a sustainable strategy toward the realization of agriculture and the crucial development (Adedoyin and Torimoro, 1998).

The children-in-Agriculture programme is therefore, an integrated human development initiative aimed at building skills, knowledge, experience and dignity of honest labour into the socialization and educational processors from childhood. Achieving economic development of the family life.

In Nigeria, improvement of the life can be enhanced through improvement in the food security status of rural household in the short long through various strategies. The ultimate goal of an effective food security strategy is to provide for individuals adequate dietary intake through availability and accessibility of food, which are necessary conditions for nutritional well being and sustainable livelihoods. For a meaningful, viable and sustainable farm children programme development to take place in Nigeria, the right knowledge, skill and attitude to improve rural households must be enhanced and force

militating against good and sustainable livelihoods should therefore be stopped. Moreover, if agricultural productivity and income must be increased, hunger, poverty level and living conditions of farm family improved; there is the need to complement farm-children programme development with other strategies for improved family life. There are force militating against good livelihood which require strategic actions to arrest them. They are as highlighted below:-

Food Insecurity:- leads to loss in productivity which will invariably reduce work and school performance and the income earning ability of farm family. Frequently extreme efforts begin made both by the government and individuals and rural households.

Costs of substantial asset disposal and future indebtedness:- may plunge rural households to deeper debt and poverty. A particular household may utilize almost all its resources of achieve food security now and render itself highly vulnerable to food insecurity in the future.

Environmental Degradation:- A lot of poor and food in secured households live in ecologically vulnerable areas. Any attempt to be food secured may lead to inappropriate land use practices, which can cause environmental degradation that can undermine good livelihood.

Child Abuse:- This is a social, which involves farm children of school age irrespective of gender being forced to undertake full-time farm work at the expense of their parents on the farm and at home and sometimes sexually harassed by counterparts and elders, thereby raising up families too early. All these lead to increase in population, poverty level, food insecurity and poor livelihood.

Rural-Urban Migration:- This involves movement of farm children from the rural areas to the urban centres.

Negative attitude of farm children towards Agriculture:- Farm children view agricultural profession as uninteresting, energy sapping, laborious, and unrewarding.

Lack of educational facilities:- The is in form of vocational centres, primary and post-primary institutions. All these results in Rural-Urban Migration
Lack of infrastructural facilities will affect the family life and reduce good livelihood in the rural areas.

Strategies For Ensuring Improved Family Life In Farm Family
In order to enhance food security level of the farm family and improve their livelihood, there is the need to embark on the following strategies:

- Development strategies for farm families in the rural areas should not be to generalized but tailored precisely to local conditions
- Making special efforts to involve the rural poor especially the farm children and youth in the development and introduction of desired change
- Comprehensive assessment of inter-related national, state, local government community and household food security problems

- Assessment of the capabilities of both private and public efforts to deal with these problems at al levels
- Proper incentive to encourage co-operation among the rural households income generation activities would improve the nutrition status of the households.
- Institution of labour-intensive public work programmes should address the food security question
- Health institution should be made more functional with relevant drugs and facilities to complement other food security measures
- Stabilization of the political scene and continuity in government policies and programmes
- Establishment of industries by the Government in the rural areas. This will provide employment opportunities for farm family members.
- Establishment of school in the rural areas.
- Organization of Education Campaigns for parents on the challenges involved in farming activities.
- Government Policies should be supportive and catalytic to the process of agricultural development at all tiers of government
- Government should support and encourage organization of workshop, agricultural exhibition, seminars, lecture and students forum.
- Establishment of agricultural school project that will create employment opportunities for the active 'would be' farmers among the students.
- Farm family should be provided with adequate incentives and generally encouraged to produce almost all foods, if not all foods that will be consumed by the country. This will enhance food security.
- Farmers should be encouraged to involve themselves in Insurance scheme.
- Provision of Infrastructural facilities in rural areas such as good roads, be potable water, electricity etc
- Giving of awards to the best local farmers annually.
- Adequate attention should be given to agricultural extension and more field agents should be employed
- Soft loan package should be put together for farmers
- Awards and Scholarship should be given to the best agricultural science students in both primary and post- primary schools.

The strategies may be specific to individual local communities and households.
These strategies should be assessed from time to time, modifying them for improvement.

Summary and Conclusion

The problem of food insecurity in Nigeria may be seen as a reflection of the inadequacy of existing strategies fighting against forces mutilate against god livelihood for improved

family life. Hence, the way forward for improved family living among rural households is to help the farmers to close the gap existing between the governments and the farmers, and between the situation of shortage and scarcity on the farms. Moreover, farm children should be encouraged to develop interest in agriculture and receive a balanced education that will afford them rooms to meet with future challenges of solving food problems of Nigeria, through increased production

Demonstration on the processing and use of farm and livestock products should be encouraged, and girl-children development training programmes which include, home economics, nutrition science, needle craft, child care and other related activities centred on farm family welfare issues such as Hygiene, Meal preparation and Gardening, should be encouraged. All these will enhance good livelihood of family life.

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SUB-THEME 1

GROWTH AND DEVELOPMENT NEEDS OF THE NIGERIAN CHILD

GROWTH AND DEVELOPMENT NEEDS OF THE NIGERIAN CHILD: THE RELEVANCE TO NATIONAL PLAN AND DECENT LIVELIHOOD

BY

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Abstract
Children are known to be naturally endowed to take up responsibility of Nations development from the adult. This fact remains relevant in any programme directed at decent livelihood. However, relevant as they are, there is a need to understand the Nigerian Child in the context of their needs and the relevance to National plan and decent livelihood. This paper therefore seeks to establish the difference between growth and development and identify the needs of children in this direction. It was concluded that for a child to experience good growth and development, the nutritional, health care, psychological and social needs identified in the course of study should be addressed by the relevant sources if decent livelihood would be achieved.

Introduction

A good and clear understanding of the issues relating to the growth and development of Nigerian children remains very essential and of paramount importance to National Development. This fact would be well appreciated in the assertions of Oladele (1989), which stressed that child development is important in that adult personality takes its roots in childhood. What individuals are as adults is largely determined by the ways in which they are allowed to experience the inevitable events of childhood. In addition Farinde (1999) opined that children are naturally endowed to take over responsibilities from adult men and women who are presently in charge of activities directed at national development. In a related issue, Ajayi (2002) affirmed that children learn a lot from their parents. This was also the submission of Torimiro and Lawal (1998) on the fact that children are regularly exposed to learning the culture of their parents in a socialization process. While the relevance and importance of children to a Nation's development continued to attract the attention of international organizations such as United Nations International Children Fund (UNICEF); International Labour Organization (ILO); and United Nations Development Programmes (UNDP) among others, it was obvious from their various activities that meeting the growth and development needs of children remain their target. Need according to Laogun (1987) is the gap between what is and what ought to be. This translates to mean that the difference between the present situation and what the situation will be at the point of best. In this case, growth and development needs of children is therefore what children in Nigeria would in order for them to be adjudged growing and developing in relation to their contemporaries elsewhere in the world. In other word, growth and development needs of a child are the various ingredients required of him to meet the challenges of national development.

Form the foregoing, the general objective of this paper is to identify the growth and development needs of the Nigerian child in order to make them relevant in National plans and ensure that they grow into decent livelihood. In order to achieve this main objective the following specific objectives are set to:

i. Identify who a child is in Nigeria
ii. Differentiate between growth and development
iii. Identify the growth and development needs of Nigerian child
iv. Draw inference on the relevance of the identified needs to national plan and decent livelihood.

The Approach

Literature on child growth and development were critically reviewed and the relevant information on the needs of children for growth and development were sourced from secondary data and highlighted. Inference was drawn from the facts emanating from the study on the relevance of meeting the needs to national development and decent livelihood.

Children in the Nigeria Context

Nigeria is a nation with diverse cultural patrimony. However, a child in cultural sense is a member of a family who has roles to play both to the family and the society to which their family belongs. In Africa, especially in Nigeria, great values are attached to children in cultural terms. Unfruitful marriage can lead to divorce or polygamy or both. According to Ekong (2003) a man may take a second or third wife, if the first is not fruitful. In traditional Ibibio of Akwa-Ibom State of Nigeria, barren women in fact, went out of her way to marry another woman for her husband. Moreover, in the traditional society, a man's prestige was enhanced by the population of children he has, and so the more women he married, the larger his compound grew. In addition the male child in some cases are preferred because family system in Nigeria traces inheritance to the father. The belief that the girl-child will eventually seize to answer her father's name reinforce the importance of a male-child in some culture in Nigeria. This also contributed to the inequality in education, participation in decision-making process and execution of domestic core activities (e.g. washing, cooking and fetching of water) between a male child and female child.

In addition to cultural base of the definition stated above, a child as in the children and young person's law of Nigeria chapter 26 defined a child as any person under the age of fourteen years. In 1995, the child development Department of the Federal Ministry of Women Affairs and social Development, Abuja also defined a child as any human being below the age of eighteen (UNICEF, 1995). In addition, Megiwa (1998) also defines a child as any human being below the age of eighteen years. Simply put and for ease of analysis a child could be characterized as having cultural and demographic definition. In order to bring the two together, Ajayi (2002) defined a child as any individual under the age of eighteen without an independent means of livelihood and or are under parental care. While the above definitions remained widely used, this study will define a child as one who have cultural value to their family of orientation and serve as some kind of source of prestige and honour to their parents; yielding the instruction of same and are under the age of eighteen years.

Growth and Development

In a definitional search, it is important in arriving at the needs targeted in this paper to clarify the issue about the difference between growth and development in children. Growth according to Oladele (1989) is the permanent increase in size of cells or protoplasm acquired by an organism in the course of its development. This according to

him in measured in centimeter (cm) or grams. Basically, the human body grows proportionally by adding more centimeters in height and grams in weight through the process of cell division, which may be mitotic or meiotic. This only shows that growth is manifested in size and height in a child.

Development in a child means a progressive series of changes that occur in an orderly predictable sequence or pattern as a result of motivation and experience. Development therefore involves not just an increase in size but also in addition visible complexity.

It is relevant however to stress that growth and development are closely related and are interdependent. Authors have established that they are affected by two main factors namely: heredity and environment. Furthermore, growth and development occur in an orderly process but it is difficult to draw a line of demarcation between stages of development. In addition, organs, system and their functioning in the body of a child do not grow at the same rate throughout development. While rapid growth could be observed in the first three years, the development of genital organs is very slow during childhood but very rapid during adolescence. Development changes according to Oladele (1989) are the products of maturation and experience. Selected factors influencing growth and development might have not been justifiably described without emphasis on environmental and genetic factors as basically having influence. While there is a series of complex interaction between environment and heredity, genetics, which is mostly, inherited manifest themselves in characteristics like height, intelligence, aggressiveness, and complexion, among others.

Growth and Development Needs of A Child

The forms of manifestations of each of the above characteristics depend to a large extent on the child needs requirements. It also forms predisposing factors for the enhancement of both the social, psychological, economic and cultural values of a child to parent, community and the nations as a whole. The challenges of national development are diverse and vary. For example a child is expected to know and understand the nature of his environment hence have a rational thinking of how self actualization will complement the goal of national development. The needs of a child for proper growth and development start from the womb and transcend childhood and adolescent ages.

The study of child development is important in that adult personality has roots in childhood. What we are and what we do as adult is largely determined by ways in which we are allowed to experience the inevitable events of childhood. (Oladele, 1989). Individual child passes through series of stages of development, which are seriously influenced by many factors including heredity, nutritional environment and social conditions. It has been established that a child passes through the following stages of development:

i. Pre-natal stage: This stage start from conception to the time of birth, approximately nine calendar months.
ii. Infancy stage (age 0-2 years), the stage starts from birth and ends when the infant is approximately two years only. This stage has been described as the shortest period of all development periods.
iii. Childhood stage (age 2-11 years) and
iv. Adolescence stage (age 13-21 years).

The growth of the different parts of the infant proceeds in a proximodistal direction i.e. growth is from the central to the peripheral segments of the body. Thus, an infant learns head control first, arm control next, and lastly, control of the legs and feet. Infancy stage is a crucial stage of development of any child as it is during this period that major sensory organs of the body develop e.g. eyes, ears, nose, tongue and skin. A child's level of response to its externalities e.g. light, sound, odour, taste and touch which normally and frequently comes from things around him including parents and family members dictate or explain the level of development of the sensory organs. This period of infancy also mark the period when most of the disability in child is noticed or formed. Though this is a function of two important factors e.g. malformation of any of the sensory organ at pre-natal stage and/or destruction of the sensory organs due to sickness/illness, accidents, malnutrition and bad health care services. Parental care which include giving adequate, timely and proper nutritional diet, monitoring and supervision of the child while playing and sleeping, getting approved vaccines against six deadly diseases (diphthera, tetanus, whooping cough, polio, small pox, measles and tuberculosis) at the right time; socializing the child which transcend this stage. The parental care needs of the child helps him or her in the attainment of smooth and active motor development. Motor development refers to the development of muscle control, particularly in limbs and also in order part of the body including the trunk-neck eyes (Oladele, 1989). Motor development is a major predisposing factor to learning. Where there is proper motor development, individual child acquired such skills as walking, talking, running, ball playing, singing, jumping, eating, reading, writing e.t.c.

The childhood stage starts from the age of two or shortly thereafter to the time the child is sexually matured at 10-12 years of age in females and 12-14 years in males. The physical development of individual child is greatly noticed in terms of specific biological changes in size, weight, structure and strength of various parts of the body increases at this stage. That is why the active development of the Central nervous system, the muscle, and bones laid a solid foundation for the increased motor activities e.g. physical exercises and learning experiences that prepare the child to face the challenges of adolescent period. This also laid solid foundation for the increased motor activities e.g. physical exercises and learning experiences of various types. At this stage, growing children needs physical exercises and learning experiences that prepare the child to face the challenges of adolescent period. This also laid Solid foundation for the future of the children. The role of parent, family members and the school as socializing agents should be appreciated. This lies in the provision of better environment for physical and mental education through provision of training facilities and teaching aids.

Emotional growth and development is another experience of individual children at his state of envelopment. And this forms the basis of the forms of development that a child may experience at adolescent state. Emotions according to Oladele (1989) are out wards expressions of inner feelings, which are aroused by one's behavior of that of others. Emotion can be unpleasant which comes in form of fear, anger, anxiety, sorrow, jealously and guilty, which sometimes impede growth, learning and metal health. And it could be pleasant. In this case, the child experiences love or affection, joy, happiness, pleasure, humor and laughter. These in essence facilitate normal growth and development and bring about mental health in the individual throughout his life. It has been established and documented in history of human development that children from broken homes/separated parents who feel unsecured live permanently in most cases with fear, anxiety and worry

because they have not at one time or the other experience love and affection from their parents. Life therefore is unsecured to them, their future looks bleak and uncertain. This put negative effect on their growth, learning and mental health and hence output from them is counter productive. The children in this category in most cases dropped out of schools, takes to drug abuse and becomes drug addicts, social miscreants who engages in social menaces or nefarious activities such as arm rubbery, prostitution, area boys and senior girls, destitute and mental derailed individual. Apart from the cost of rehabilitating such individuals in this category, they are sources of national embarrassment and disgrace. The major effect on the nations economy is that foreign investors may find it difficult to invest their money in an unsecured economy where the spate of armed robbery and other killings are very high. In this regard, the parents, school, government and society have social and economic responsibilities to providing the basic needs of life to individual children in Nigeria.

Table 1: Nutritional and health care needs of Nigerian child

Nutritional needs	Sources	Value of the need
Ante-natal care	Mother	To achieve god pregnancy outcome
Exclusive breast feeding	Mother	Meet all the nutritional needs from birth to 6 mothers of age
Complementation	Mother	To meet child's developmental needs as breastfeeding is sustained
Regular adult meals	Mother	To meet daily requirement as variety of foods are served
Nutrition education	Mother education institutions, health institutions, private organizations, research institutes,	Targeted towards improve nutritional status
Hygiene	Household	To prevent contamination which could bring about illness in health children
Health needs Immunization growth monitoring water and sanitation	Health institutions health institution household	Protect against illness to detect malnutrition to maintain environmental hygiene

Tables 1 show the values of both nutritional and health care needs for child growth and development.

Ante-natal care: Mother pre-pregnancy nutrition is crucial to child's health. The only way nutrient can reach the developing fetus is through the placenta, if mothers nutrients stress are inadequate during placenta development, no matter how she eats later, the fetus will not receive optimum nourishment which determines the infant birth weight. Infant birth

weight is the most potent single indicators of the infant future health status (Whitney et al., 1991).

Breast feeding is the only activity that satisfies the needs of food, health and care of the young child. It is the most important measures for the protection of material, infant and child health. It is an unequal way of providing ideal food for the health, growth and development of all normal infants.

Complementation: From six months, complementary foods are no longer optional for the infant. Complementary foods play an important role in providing a nutritionally complete infant and toddler food (Lutter and Huffman, 2000). By six months, infants are move likely to be developmentally ready to consume a variety of foods.

Regular Adult Meals: Intake of a wide variety of foods increases the likelihood that children will meet nutrient requirement for growth (Lartey et al., 1999). To make sure that children get adequate micro nutrients such as Fe, Zn, folate, Vitamin A and C and variety of foods must be given in adequate amount and selected from the four food groups plan in the right amount of servings per day. Iron deficiency is a common nutrition problem especially in young children due to their rapid growth rate and significant place that milk, which is poor in Fe, has in their diet. Formula with iron and fortified cereals are then recommended (Whitney et al., 1991).

Water and Sanitation: The availability of safe drinking water and sanitary human waste are among the aspects of the physical environment most crucial for attaining health. Serious health risk may result from the extraction of water from rivers or wells, which have been contaminated. Countries with high access to safe water are likely to have good health environments (WHO 1996).

Hygiene: Diarrhea disease is among the top five causes of mortality of infant and children under five years of age in developing countries (UNICEF, 1997). People swallowing faecal germs cause most episodes of diarrhea, which is a result of poor hygiene conditions. This can happen in a number of ways, including people not washing their hands after defecating or after cleaning up children's faeces, then touching and contaminating water, food, food containers or eating utensils. Oke et al (1991) identified poor water supply and environmental sanitation as important environmental risk factor.

Growth monitoring: Growth is the best general index of the health of an individual child and regular measurements of growth permit the early detection of malnutrition frequently associated with diarrhea and other illnesses when remedial action is relatively easy.

Growth is the sign of a healthy child. Failure to grow steadily is the signal that something is wrong with a child's health (Dialogue on diarrhea, 1986).

Nutrition education: Nutrition education is meant to change or reinforce eating practices in order to reduce disease or diseases complications risk or improvement or nutritional adequacy or health. They are also important component of strategies for influencing individual behaviour to solving nutrition problems (Oshaug 1995).

Immunization: childhood immunization initiative was established for the purpose of eliminating six childhood diseases such as diphtheria, measles, poliomyelitis, hepatitis tetanus, and whooping cough.

Table 2: Psychological and social needs of child for normal growth and development

Psychological needs		
Love and a affection	Parents (mother and father), family members peers and schools	Emotional stability
Security and safety of life	Parent, family and other social institutions	Remove fear, anxiety and uncertainty
Joy and appreciation	Parents, schools, social groups	Preparedness for future challenges and good mental health.
Belongingness social needs	Family, peer groups, and religious groups	Love and affection
Formal education	Government and parent	Acquisition of vocational skills.
Sex education	Family, parents, schools and social institutions	Prevention of unwanted pregnancy and sexually transmitted diseases and HIV/AIDS
Nutrition education	Parents, schools and health institutions.	Acquisition of knowledge of food utilization.
Infrastructure	Government, community and NGOs	For social welfare
Health care	Family parent, government	Healthy living
Cultural values	Family, parent, society	For socialization

Nigerian child needs both psychological and social care for him to grow and develop like his counterparts in other parts of the world. Table 2 show that any child needs love affection, security and safety of life, joy and appreciation from parent, family and society, belongingness, formal education, sex education, nutritional education, social infrastructure, health care services and cultural values for him to have a decent livelihood. The implication of all these is that, Nigerian society will be cleared of all social menaces, and all her citizen progressively become productive if all the needs identified in this paper are provided at the right time and in the right quantity and quality.

In conclusion, the role of parents, family, schools, social groups/society, Governments and non-government organizations are very crucial in providing a conducive terrain for decent livelihood through the provision of nutritional, health care, psychological and social needs for the Nigerian child. Provision of these needs is a pointer to provision for tomorrow, as the children of today are leaders of tomorrow.

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THE DEVELOPMENT OF THE CHILD: THE PSYCHO-SOCIAL ENVIRONMENT

BY

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Abstract
Agriculture, having lost its old glory to other sectors such as the oil industry requires urgent attention. One of the ways of revamping Nigerian agriculture has been identified as children involvement in the sector. To mobilize the children however, demands that the intricacies of the child's development be understood to pave way for effective mobilization. This paper identified the child's maturation and perception, concept formation, attitudes development and interest and reactions to emotional sentiments and frustration as the vital factors that influence the child's development and thus, its response to mobilization strategies for participation or involvement in agriculture.

Introduction

The information that, agriculture has lost its first place among the sectors of the Nigeria's economy is stale. It is also not news that the rural areas, where agriculture is predominantly being carried out, compose of more old, aged people than the youths. This is because most of the youths have migrated to the urban. What is however recent, is the effort of Children-In- Agriculture Programmes (CIAP) in creating awareness of involving the children in agricultural activities so that, they would not only be interested to take to agriculture but constituting the lot for replacement for the dying age employed in agriculture.

Many conferences, several seminars, countless number of books have also been held and published on the subject – children involvement in agriculture. It can be understood while such efforts must be appreciated, given the threatening scenario of insufficient food supply, particularly in the developing countries like Nigeria. More than 800 million people in developing countries were undernourished at the beginning of the 1990's. In Western Europe and North America, it is 3,500 calories of food supply per person while it is 2,300 calories in African. Since 1980 the population of African countries has risen by 53% while food production has risen by only 45percent (CTA) 1998). This is certainly a gloomy picture for future of food production.

It is there fore appropriate to search for alternative strategies of improving the agricultural sector, this has been traced to getting the children involved. However the involvement of children in agriculture may not be without some problems. These may be social, cultural, political or psychological. This is because children may not be equally mobilized, given the individual differences in intelligence, in maturational period and social background. It is against this backdrop, that this paper examined the psychological environment of the child vis-à-vis his development and his consequent interest in agriculture. The paper highlighted the effect of maturation and the perception of the child, the thinking and

feeling of the child, the formation of concepts by the child and the effects of emotions inferiority and frustration of the child on his reactions to novel ideas.

i. Child's Maturation and Perception

Maturation or maturity means changes in behaviour with age, which depend primarily on organic growth factors aid by prior practice or experience (Lovell 1978). Sometimes, it may be difficult making clear – cut distraction between maturation and learning, since both have influence behaviour. However, certain kinds of behaviour are more influenced by maturation, while others by learning. Maturation, over which one does not have controls, to a large extent affects child's development and also limit greatly, an individual's rate of learning and to determine his ultimate levels of achievement. The problem of maturation is a complex one; yet, it is of great importance in human activities because intrinsic factors are involved, which are beyond human control, and considerably affect individual's behaviour.

The implication of this is that, the introduction of some new learning experience to a child before he is capable of making progress may frustrate him in so much as to cause a permanent apathy for the subject. The mental activities of the child are equal, more likely to be affected by maturation. Maturation may also influence the social-emotional adjustment and character training of the child.

Adedoyin (2001) clarified the issue of age at which an individual is classified as children. According to the author based on the Nigerian constitution, ages below 18 years are regarded as children. It is therefore certain that the programme of CIAP revolves around this age bracket. However, the ages graduate from a day old to 18 years. The graduation is from infancy (birth to 2 years) childhood (early 2 – 5 years, late 6 – 11 years), adolescent (12 – 18 years). Levels of learning difficult task by these graduated age bracket differ, given equal learning potentials. This consequently affects the levels of perception and comprehension of certain orientations such as involvement in agriculture. Since an idea that a child dislikes because it is misunderstood or misconstrued may result in the child's frustration and inferiority and for which may develop a permanent apathy, the actual age at which the child can benefits from agricultural programmes must be determined. It is therefore advisable that, making the child to have interest in agriculture should be at least up to the onset of concrete operational thought and the best clues are the signs that a child is attempting to engage in some particular activity on his own.

ii. The Concept Formation

The development of concept in a child is the process of thought formation. Concept formation in children differs from age to age. The evidence is clear that there are great individual differences in the chronological ages of children when they attain a given concept, and that concept formation depends on factor than mental age.

According to the works of Piaget (1963, 1969), the development of thought in children can be considered from infancy to late childhood. From birth to 2 years, the child puts a structure on his actions, and on his sensations received from the sensory organs (Sensory – motor intelligence) and then incorporates the outside world into this structure. The child pulls objects to himself without an understanding of what the objects are, whether the object is sharp, hot, dangerous or harmful he cannot perceive. At this stage, the child needs much of attention of the worker. The child cannot at this stage have any real understanding

of any overall situation. Definitely too, he cannot grasp any idea on agriculture. This is not also the best stage of using the farm tools to stimulate the interest of the child, contrary to Torimiro et al (1999) since most objects of farming can be harmful to the child at this stage.

The age 2-4 years which Piaget referred to as the pre-conceptual though. At this stage the child cannot see the other reason for a concept if a concept is already formed. Though it may be the right stages to begin to familiarize the child to concept formation in agriculture, it can however be counterproductive when the child begins to form a concept of seeing agricultural as the only productive venture whereas, there are other means to agricultural production. There are engineering economic extension, and industrial aspects among others. If the world encounters difficulty in forming concepts on all these, to avoid conceptual conflict, this is not the stage for the introduction of agriculture.

Ages 4 – 7 years has been regarded as the age of intuitive thought at which the child's thinking is characterized as semi- logical rather than as logical or systematized. At this stage the child is unable to hold in mind two-relationships at a time pertaining to a given situation and thus has a great difficulty in making a judgment. Therefore his thinking is directed by what he sees, though at 7 years, he can relate a comparison of objects. This should be the stage at which the interest of the child in agriculture can begin to be stimulated using visual objects.

The stage of concrete operations (7 – 11 years) according to Piaget, is the stage when the child develops what is referred to as logical thought, by concrete operations, he means actions or operations, which can be carried out in thought. That is, one thinks before he acts. He becomes aware of the sequences of actions in his mind. At this stage the though of the child is also directed by his observation. The child at this stage can form concepts and group things into categories based on certain characteristics.

This would therefore be an ideal stage at which, learning experiences on agriculture can provoke interest in the children. The more agriculture is made interesting to the child at this stages, the more he is likely to associate with its conditions. The child can be made to associate agriculture with life and survival by emphasizing its importance in the provision of food, materials for shelter and clothing, the provision of raw materials for industries, sources of employment and income. Positive concepts formed at his stage can attract emotions of admiration. The learning experiences should be aided with visual institutional materials and the child should be made to embrace the idea that he has a role to play just like the adults.

iii. Attitude and Interest

Attitude may be regarded as the sum total of a person's inclinations towards a certain type of object or idea (Lovell 1978). Interests may be defined as an individual' behaviour, tendency to be attracted towards a certain class of activities. Both concepts can therefore be seen to lay vital roles in the decision the child makes towards a particular operation. Both attitude and interest can be regarded as determinants of any action the individual child takes. Attitude and interest can be referred to as two sides of a coin. What a child has positive attitude towards will aspire his interest in it and thereby stimulates positive disposition towards that thing.

The attitude of the child, when motivated positively towards agriculture, through emphasis on the gains the child can make in agriculture, that will turn stimulate the child's interest. When interest of the child is secured, his participation in agricultural activities can be guaranteed. In the circumstance where the child participates willingly in agriculture, it results in emotional satisfaction, if it is otherwise it may lead to frustration.

iv Emotions and Frustrations

Emotions generally influence one's decisions and actions. Knowledge which does not arouse an emotion has very little influence. Emotions one experiences according to Derville (1978), influence one's present and future behaviour towards the object although an emotion such as anger, fear or joy does not last for a very long time, yet the memory of an emotional experience may last a life time. The association of a certain emotion with a person or a thing becomes a sentiment. If children therefore associate the emotion of hate and rejection with agriculture, he shows the sentiment of hate and rejection towards it. This is because sentiment gives rise to attitude. If a child is to be motivated to have positive attitude towards agriculture, the child must be inculcated with ideas on agriculture that would make him form sentiment of admiration for agriculture.

However, where the child's goals are not achieved or cannot be achieved, it may result to frustration. While a little dose of emotion may engender positive effort for accomplishing a task, an intense emotion may result in fear, anxiety and frustration. The child must be assisted not to be frustrated in the cause of making him to appreciate agriculture. A frustrated child may become totally disillusioned which may counter productively affect his health and mental and mind set.

Conclusion

The paper has reviewed that the involvement of children or the making of the children is the right step in the right direction. It however highlighted that, the stage or age at which the child is approached with the information and the strategies of the efforts need to be considered with care as the child's maturation and perception, concept formation, his attitudes and interests can either mal or make his desire for the concept and practice of agriculture. Also, the child's emotion and sentiment formation was discussed to be capable of resulting in frustration with devastating consequences to the child's minds and mental health.

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CAPACITY BUILDING NEEDS OF OIL PALM YOUTH FARMERS IN EDO STATE OF NIGERIA

BY

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Abstract

An infinitely great number of youths are involved in oil palm cultivation in Edo State, but are faced with a lot of limitations and constraints. They can however, be made to perform facilitating roles in agricultural and rural development if the capacity needs of youths are met to improve the oil palm industry in Edo State. Against this background, the study was conducted to identify capacity building needs required to enable youths perform their expected roles in the development of the oil palm industry. The data obtained were subjected to descriptive statistics. Fifty two (52) youths identified to have been involved in oil palm farming were interviewed for the study and results revealed that capacity building needs for the youths include:- availability of funds, human resources, adequate infrastructures, government assistance and extension services to empower them for active performance in the oil palm industry in Nigeria.

Introduction

It has been asserted that the incidence of poverty in Nigeria is related to agriculture (Federal Office of Statistics, 1999). It has also been asserted that about 70 percent of Africa's poor people live in rural areas and are largely dependent on small-scale agricultural production (FOS, 1999 Panos Institute, 2001). It is only through collective effort and organization however, that the poor people can be encouraged for participating action and self-reliant development. In this regard, the organisation of youths is the key ingredient for farmer development and is essential for the success of agricultural development projects.

A lot of positive impacts have been attributed to the functional role of youth farmers' groups/organisations in rural and agricultural development. The benefits have been noted to include:- higher adoption rates, wider farmer access to knowledge and researchers becoming more aware of youth ideas and circumstances. It is however unpleasant to note that these positive attributes are not being witness in Edo State and Nigeria in general.

For youths to be involved in rural development they must be well organized and empowered (Ojemade, 1999) to pool available resources, to achieve strength and power. A lot of youths engage in oil palm cultivation in various towns/villages in Edo State and their inputs are fervently sought for enhanced sustenance of various development projects.

It therefore becomes imperative to identify gaps to be filled in the structure and operations of these youths, as a first step towards seeking to capacitate them for effective input into rural development programmes. This is the objective of this paper.

Methodology

The study was undertaken in Edo State situated at the South West zone of Nigeria. Two local government areas were studied. Farming is the main occupation of the people in these areas. The soil and other climatic factors are suitable for oil palm cultivation. The two local government areas were Ovia North East and Esan central. Some of the towns and villages within the study area include Ekiadolor, Iyowa, Eko-abetu, Ugbogiobo, Oluku, Irrua.

Based on sampling frame of youth farmers obtained from the study areas, a random sample of 70 youths farmers engaged in oil palm cultivation were selected. Data were collected from these farmers in December 1999 through tested, well structured interview schedule. Information was obtained on demographic characteristics of the youth farmers. Descriptive statistics were used to analyze the data.

Results and Discussion

The data collected were analyzed, presented and discussed below. Out of 70 youths selected, the researchers were able to collect information from 52 youths, a response rate of 74.28percent.

Socio-economic characteristics

Majority (88%) of the youths were males, a trend which indicates the preponderance of male gender in oil palm cultivation.

Table 1: Demographic Characteristics

S/No	Characteristics	Frequency	Percentage
1.	**Age (years):**		
	<18	5	9.62
	18 – 22	18	34.62
	22 – 26	20	38.46
	26 – 30	5	9.62
	>30	4	7.69
2.	**Marital status**		
	Married	41	78.85
	Single	11	21.15
3.	**Sex:**		
	Male	46	88.46
	Female	6	11.54
4.	**Occupation:**		
	Farming	21	40
	Civil servant	5	9.62
	Private endeavour	19	36.54
	Others	7	13.46

	Educational level:		
	Primary School	5	9.62
	Secondary School	27	51.92
	Post-Secondary Sch.	15	28.85
	No Education	5	13.46
6.	**Yearly Farm Income**:		
	<20,000	32	61.54
	20,000	11	21.15
	>60,000	1	1.92
	No Income	8	15.40
7.	**Farm Size:**		
	< 1	48	92.31
	1 – 3	1	1.92
	> 3	2	3.85
	None	1	1.92

Source: Field Survey, 1999.

Eighty-two point seven percent (82.7%) of them fell within the age bracket of 18 – 30 years; 34.62percent constituting age 18 – 22 years. 9.61percent fell within 26 – 30 years. Most (78.8%) of them were married. Most of the respondents 90.4% were literate. A trend, which Blum (1991) has attested to as a facilitating factor towards achieving group service.

Table 2: Distribution of respondents according to method of land acquisition

Mode of Acquisition	Frequency	Percentage
Inheritance	39	75.00
Renting/leasing	4	8.00
Gift	1	2.00
Purchase	8	15.40

Source: Field Survey, 1999.

Most of the youths (75.0%) acquire farmlands through inheritance (Table 2), with 92.3percent having less than 1 hectare (Table 1). Most of the male youths carried out activities like climbing and cutting down of oil palm bunches during harvesting, diseases and pest control, fixing of wire-collars, lining-out of the field, clearing and under-brushing. In contrast, weeding collection of loose fruits, transportation of harvested bunches, processing and marketing were tasks performed more by female youths in oil palm production.

With reference to economic characteristics, Table 1 reveals that 40.4percent of the respondents cited farming as their primary occupation, with yearly income from farm operations accruing to less than ₦20, 000, for more than 60 percent of the respondents. This is a very disheartening trend, which had earlier led Bebbington (1994) to question the

capability of agriculture to address the felts needs of the poor. This situation has led respondents to depend on other business and private endeavours especially trading.

Table 3: Distribution of constraints affecting youth farmers in Edo State.

S/No	Constraints	F (%)	Remark
1.	Inadequate finance (funds)	27(51.92)	Constraint
2.	Gaining access to land	2(3.85)	
3.	Inefficient infrastructures	5(9.62)	Constraint
4.	Lack of technical information services inadequate	5(9.62)	Constraint
5.	Pest/disease control difficult because of high cost of required chemicals	2(3.85)	
6.	Human resources	4(7.69)	Constraint
7.	Lack of government assistance	4(7.69)	Constraint
8.	Lawlessness	1(1.92)	
9.	Quarrel among youths	1(1.92)	
10.	Poor organisation	1(1.92)	

- Percentages in parentheses
Source: Field Survey, 1999

Youth Perception Of Constraints In Oil Palm Production In Edo State

To determine constraints affecting youths a list of 10 constraints was drawn up through intensive interaction with them. Table 3 reveals that five major constraints were identified to include lack of funds (51.92%) inform of credit facilities as they lack investment capital to secure loans. The issue of finance acting as a major impediment to group success has been well documented (Onibokun and Faniran, 1995). Another inadequacy is supporting physical infrastructures (9.62%). These physical infrastructures include good feeder roads, drinkable water and adequate storage facilities. Also identified is lack of technical information through inadequate extension services, (9.62%), (Table 3). This results to lack of adequate knowledge of research findings that can help to improve their production techniques. Others constraints include lack of government assistance (8%) and inadequate human resources (7.69%), as middle and high-level manpower especially the youths are most needed to carry out management and production of oil palm products.

Conclusion and Recommendation

This study has revealed the very high level of financial constraints being experienced by youth farmers in Edo State. This is a consequence of low income and poor savings, which has not enabled the Nigerian youths to obtain agricultural inputs in form of modern farm equipments and fertilizers. The oil palm youth farmers however possess some requisite social-economic characteristics that may be harnessed to develop sustainable youth development.

In essence the youth farmers need to be capacitated to mobilize their own resources to help solve their development problems. In this regard, and to enhance success and eventual sustenance, the following areas of capacity building need to be facilitated to enhance youths profitable and creditable involvement in oil palm production, that is , capacity to:

(i) Mobilize funds and local resources (human and material)

(ii) Negotiate with external bodies (NGOs, research institutes) to provide essential/sufficient infrastructure (feeder roads, water and storage facilities).

(iii) Take major steps at improving the relationship with government so as to improve the standard of living of the youths populace engaged in oil palm cultivation and to make it an attractive occupation for solving most of the unemployment problem.

(iv) Obtain and utilize beneficial information, especially in the area of adequate knowledge/technology of research and extension processes

(v) Identify and utilize economic opportunities within and outside the youth environment.

It is however, expected that the following recommendations would enable youths actualize their potentialities: There is the need for

(a) Extension agencies to train their officers to be pro-active in helping youth farmers to development skills in: Social organisation, establishment of beneficial linkages, and communication of needs to appropriate authorities

(b) Government should take steps or intervene to empower youths through certain measure e g. diversification of agricultural enterprises.

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CREATIVE EXPERIENCE AND DEVELOPMENT OF THE NIGERIAN CHILD AS AVENUE TO IMPROVED LIVELIHOOD

BY

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Abstract
Nigeria is a society where parents believe that children should be seen and not heard, where they should be conformist and obey adults order. The educational system emphasises convergent thinking rather than divergent thinking. Children are forced into professions, which they lack interest as well as ability because of the belief that these fields are lucrative or more popular, without considering the ability or special gifts of the children. Creative Arts experiences allow individual expression and creativity; it encourages self realisation rather than being someone else. It fosters total development and creative thinking which ultimately leads to improved livelihood. This paper examines the value of creative arts experiences in child development and how this creative development influences his future, with recommendations for well funded and comprehensive art education programme in schools.

Introduction
Human beings live in a world of art. All around are creative works of art, both natural and man made. Human beings are consumers of art works in the homes, offices and public places. We use works of art such as the clothes we wear, the furniture and furnishings in our homes and offices, the shoes, the buildings, the music, the drama, even the cars and many more creative arts products.

As a nation, we build palaces we call museums, Art theatre, and cultural centres to display the fruits of artistic inquiry, and construct halls to experience the heights we can reach, through music and other performing arts. In effect, we recognise, as a culture that arts represent the apotheosis of human achievement, which are all creative experiences. Yet, paradoxically, we provide little place for creative arts in our school programmes. Many of our school are not teaching creative arts especially the elementary schools; in the few schools where art is taught, facilities are in most cases grossly inadequate. Some parents do not help the situation, they would rather encourage their young ones to go into professions such as medicine, law, accountancy, business and so on, instead of the arts.

There is the common but erroneous notion that art is for the dullards, or those with low intellectual ability. Creative experiences according to Linderman (1984) increase the understanding and skill in using art media, and in appreciating the role of art and artist in the society. The Nigerian child needs this type of experience especially in his growing years. He needs to be disciplined, creative, resourceful, adaptive and experimental.

Art is a universal language, it can be read and understood by anyone irrespective of race, language, culture, educational level or age. The Nigerian child needs exposure to creative

experience more than the adults, if we must develop his potentials fully, and if he must be able to compete with his counterparts from other cultures, then he must acquire and develop the skills and competencies which come through exposure to creative experiences.

The development of any child should be total. It should not be limited to the physical and intellectual alone. Feeney (1979) opined that education should stress the development of humaneness in children, and should deal with all areas; social, emotional, and physical as well as intellectual of a child's development. The child's education should be broad based, the school experience should foster the development of the child's cognitive processes – meaning that it should help him to learn how to learn as well as provide him with the opportunities to use and strengthen the varieties of intellectual faculties he possesses. This in a way is stating that creative experience is not only affective, it is intellectual, and this can be understood if we conceive the mind as a collection of relatively independent faculties or aptitudes; which includes the ability to infer, to speculate, to locate and solve problems, to remember, to extrapolate, and even to visualise. These are the faculties that must come into play in order to adequately deal with the problems of adult life which inevitably every individual must face in a life time. For the school programme to emphasise the mere acquisition of information, the accumulation of fact, or even the discrimination of theory, is not in a long run useful, because both facts and the theory may change with time, stated Eisner (1988). If what is emphasised in the child's educational life is only what is already known, then the child is a poor position to deal with problems and issues that will inevitably arise in the future, many of which at present cannot be envisioned. The most effective to deal with such problem is not to over-emphasise rote learning or convergent thinking, but rather to strengthen those cognitive processes that can be used later in life, and for this to occur, art education must form part of the school's life.

Art Education is not only about object making or drawing and painting, it includes art history, criticism and aesthetics among others. The exposure to art education nurture creative growth and helps the child to grow better because according to Strand (1986) creative arts convey knowledge and meaning not learned through the study of other subjects. Exposure in the arts will foster growth in all directions – intellectual, emotional, social, psychological, and so on.

The paper examines the value of creative experience in the life of children and relevance to development. It also focuses on how the attainment of improved livelihood may be achieved through creative exposure and total development of Nigerian children. The paper finally recommends proper integration of art education in schools, from elementary to tertiary level, and adequate provision of materials and facilities in educational institutions especially in teacher training institutions.

Creative Arts: Meaning and Importance

Creative arts means more than, a drawing, a song, a play, more than pictures on a museum wall, more than making of paintings or sculpture, more than the creation of our environment, by building structures or planning landscaping and open spaces. These are the tangible evidences of art within our society and artists are the ones who design, build, paint and cast while the artistes create the song and plays.

According to Lowenfeld (1982), art can also mean an attitude toward living, a means of formulating feelings, and emotion and giving them tangible expression. It is a means by which sensitivities to experiences are heightened and refined. Creative art is both academic and vocational, it is theoretical and practical, it is both external and internal. Because of our internal traditional but erroneous thinking and belief that art is only about the making of objects for use, we have failed to appreciate and explore to the fullest, the educational value of art, and its contributions to enhance and improve livelihood.

Creative Arts, as contained in the National Curriculum Guidelines, is made up of Music, Drama and Fine and Applied Arts. Wangboje (1985) stated that creative Arts have the capacity to aid learning processes. Corroborating this view, Lowenfeld (1982) opined that young children use art as a means of learning, through the development of concepts, which take visible form, through the making of symbols, which capture and are an abstract of the environment and through the organisation and positioning of these symbols together in one configuration.

Music, Drama, Dance as well as Visual Arts, Communicate thoughts and feelings through visual forms, sounds and movements, and this is also a learning experience for the child. As a learning experience according to Boyer (1986), creative arts deserves to be an integral part of every child's education, considering the fact that they convey knowledge and meaning not learned through the study of other subjects.

Creative Arts As Experience

There is no single definition of art. Authorities in aesthetics, music, drama, visual arts, and so on, have all attempted to define the subject based on personal involvement. However, one thing that is common to all definitions and interpretation of the subject is the concept of art as experience.

Experience according to the Oxford Advanced Learner's Dictionary means knowledge and skill that one gains through doing something for a period of time. De Francesco (1958), Lowenfeld (1982), Linderman (1984) and Boyer (1986), to mention a few, all defined arts in terms knowledge and skills transferable to children and their desirability. John Dewey (1964) interpreted 'art as experience' to mean, the interaction of organism with environment, an environment that is human as well as physical, that includes the materials of traditions and institutions as well as local surroundings. In essence, the explanation given by Dewey (1984) highlights the essence of creative activities. The explanation that 'experience' functions in two ways, one is passive and the other is active. The active experience is reflected in experimentation while the passive one has to do with what we undergo. For example, when we experience something, we act on it, we do something with it.

We can appreciate the significance of art as experience, if we appraise the earliest forms of education or learning and teaching processes found in primitive societies as well as their common aspects of preparing children for successful participation in the family, and in the communal life of our time, we would discover that the education is based not on abstract concepts, but rather on experience whereby there is a direct interaction between the child and the environment, including the people. De Francesco (1958) opined that experience through things and situations is essential as the true source from which

children draw ideas and concepts which later manifest themselves in the creative unfolding of each individual

Art activities as well as products are essentially expressions of the two modes of experience identified by Dewey (1986) – the active and the passive, and the quality of our experience matters if we desire unproved livelihood

The Need for Art Education

During the colonial days, art was taught in Nigerian Primary and secondary schools. Years after independence too, most schools did not consider it necessary to introduce visual art education into their school programmes. Art was only taught as a leisure time activity, or something one could get into after more important school subjects must have been given attention. This is erroneous idea harboured even by some professional educators.

Art has a body of knowledge, it has history, vocabularies and skills that must be studied and taught. Art education does not start or end with the creation of visual images alone, it is about seeing, feeling, thinking creating and responding to the visual environment. We sometimes confuse art education with teaching of art, but teaching and learning of art do not constitute art education, it means more than that. Chapman (1978) stated that simply providing art materials to children so that they may occupy themselves on a rainy day or discovering and training those few children who show artistic promise do not constitute are education. Art education she opined, is more involving, it focuses on planning, thinking, organizing, adopting, researching, experimenting and motivating in a conducive atmosphere.

Art education is the study of art products and processes in a way that would facilitate understanding and appreciation of its role in the life of the society. Ultimately, Wachowiack (1977) stated that the emphasis in Art Education is on art and its relevance to human development. Development according to Advanced Learner's Dictionary means the gradual growth of something, so that it becomes more advanced, stronger, better, etc, while improvement is the act of making something better or the process of becoming better.

Artists through their various creations have changed their visual environment tremendously. Different architectural designs have transformed the ordinary environment into visually stimulating and aesthetically appealing places, design of tools, equipment and products have also changed with time to make life, living and general human activities a more worthwhile experience.

Art Education provides knowledge about art and artists, and their role in the society, and when children are not exposed to art activities in or schools, it may be difficult to nurture their creativity and imagination, both are needed for innovative thinking and problem solving.

Children Development and Creative Growth

The children of today are no doubt the adults of tomorrow. Their development and growth into adulthood should therefore be the concern of educators, teachers, parents and other concerned individuals

The Nigerian children and their counterparts in other parts of the world have something in common as far their development and creative growth is concerned. Nigerian children refer to those born and raised within typical Nigerian socio-cultural set-up and in particular, exposed to Nigerian educational life among other experiences.

Researchers in child development including Piaget (1950), Feeney (1979) have postulated fixed sequences of development closely bound to chronological age. Others like Lowenfeld and Linderman (1982), see the child's development more closely corresponding to the quality and quantity of his environmental experiences. In particular, Feeney (1979) stated that research in child development had demonstrated that the childhood years have significant effect on the child's later development.

A nation genuinely interested in the total development of her young ones should be more concerned about the quality of education both formal and informal available. For a nation to raise children with integrated, well rounded personality, a place should be created for arts activities in their educational life, this is the opinion of art educators and researchers including De Francesco (1958), Young (1981) and Chapman (1978).

The failure of this country to attach great importance to art in school programmes may affect the adult life of children, and consequently their livelihood.

Towards Improved Livelihood

We live in a technological age today. An age which calls for improved mental capacity to displace old perceptions and ways with new and frequently improved ones, an age full of technical inventions, conceptual breakthroughs in industrial and business negotiation, new and valuable services and products in the market place, entrepreneurial businesses formed, constructive new personal relationships, new concepts in musical compositions, and experimental efforts in visual arts.

This is not the age when any nation can afford to toy with the development of her young ones, and for our nation to experience improved livelihood, some degree of creative ingenuity would be needed. Duke (1986) opined that no child is fully educated or adequately prepared to live in an increasingly technological world without understanding the meaning and beauty transmitted by arts. Corroborating this view Kieschnich (1986) stressed the importance of creativity and innovation; he stated that, the fate of an individual, a business, a community, institution or a country can be constructively leveraged through innovation. Creative arts encourage creativity, because artists are constantly experimenting with expressive images, sounds, and motions.

Going by the popular notion that when a child lives with hatred, he learns to hate, when believes with love, he learns to love. At the intellectual level, it is a common experience that those who appreciate and understand the creative process are often innovative themselves in their various fields outside the arts, while those who cannot tolerate artistic products and innovations often exhibits disdain for other creative stimuli. It is the expressed opinion of Kieschnick (1986) that encounters with successful experiments in art promote and co-exist with innovation in other activities and professions.

Conclusion and Recommendations

The Nigerian child, just like other children in other parts of the civilized world needs creative experience to be able to develop into a balance adult capable of contributing positively towards improved living and better society.

Linderman (1984) opined that when we teach children to develop skills and to comprehend what a pleasing art and craft is, we have increased his creative experiences. With increased creative experience De Francesco (1958) affirmed that the child's sense of form is educated, habits of attention, discrimination, and exactitude are cultivated, the experience becomes for him, a kind of therapy and, at the same time, a kind of fulfillment, and also an escape, in the sense that exposure to art activities world liberate him as an individual from the rigidity, and regimentation of traditional society. With this liberation, the child is better prepared to live in an increasingly technological society where technical inventions, conceptual breakthrough in arms negation, new and reliable services and products, entrepreneurial businesses as well as constructive new personal relationships are the order of the day

The ideas is not that every child or adult should become professional artist, but, some degree of creativity is needed in every profession, in order to promote innovation in other human activities which invariably leads to improved livelihood.

The Nigerian child needs all round development, he needs to be creative and innovative in a highly competitive technological age to enjoy improved livelihood. To achieve this, it is recommended that

1. all children must be exposed to creative arts activities at all level of education;

2. specialist teachers in creative Arts education must be engaged, help children grow creatively, and

3. necessary facilities, including art tools and equipment must be provided in schools. By so doing, improved livelihood for Nigerian child and the entire citizenry is assured.

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EVALUATION OF EXTENSION MEDIA USE AMONG YOUTH FARMERS IN OYO AND ONDO STATES, NIGERIA

BY

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Abstract

The study on evaluation of extension media among youth farmers was carried out in Oyo and Ondo States. Data were obtained from 48 youth farmers and 24 extension agents from one zone of the ADP per state. The youth farmers were purposively sampled for having participated in extension media training at one time or the other, or their parent being contact farmers. Structured and validated questionnaires were used to elicit necessary information coupled with personal interview. The data were analysed using frequencies, percentages and correlation co-efficient. The respondents were 30 years and below with the modal group being 16 – 20 years. The respondents were educated, only 25percent were without formal education. Majority of them (67.5%) got innovation disseminated through television. Over 80percent were aware of extension media in the study areas while only 20percent were not aware. Technologies disseminated include agricultural mechanization, improved seed production, mixed farming, and fertilizer application among others. The channels that were popular among the respondents include radio and personal contact (53.7%) each, while demonstration was popular among the extension agents. There was negative correlation between age of respondents and diffusion of innovation. All the variables fitted were significant with exception of farm size. Based on the findings, the following recommendations were proffered: Government should make provisions for creating extension service departments in agricultural establishment where they do not exist.

Introduction

Agricultural extension service was established in order to impart knowledge, teach skills and change attitudes of people towards acceptance of innovations. Hence, farmers have to be assisted to develop a frame of mind and attitude conducive to acceptance of new technology.

Agricultural extensional is an education endeavour, which seeks to help a particular set of people (farmers) to identify and solve their problems by themselves. It is created to fill the cultural gap between farmers and extension workers. Extension education can be defined as the out of school process of bringing desirable changes in the knowledge, skill and attitudes of adults and youth in order to help themselves in their day to day problems. (Adeagbo, 1998 and Ewuola, 2002)

Young people are a driving force in development. They are strong, bold, dynamic, largely unselfish and uncorrupted. They are a replacement stock and the major ingredient in any

sustainability arrangement. They are the hope of continuity for any nation, profession or organization (Ewuola, 2002).

Extension is a system that helps in improving the knowledge of farmers to improve their farming methods and adopting a new practice with a view to increasing their standard of living. Through extension services, a new technique can be adopted for better production efficiency and income level to improve the living standard of the rural people.

There are various types of extension media, which include:

(a) Demonstration: This includes method demonstration and result demonstration.
- ❖ Tours and field trips
- ❖ Specimen and real life objects
- ❖ Model
- ❖ Picture
- ❖ Exhibit and display

(b) Projected visuals which include the following: Films, overhead projector, film strips, flash card, posters, chalk boards, flannel graph, magi board, flip chart, computer projector among others.

(c) Finally, electronic media which include radio and television

In addition to ensuring that the target audience easily tends to accept information, the use of media in extension work enables the extension staff to operate more effectively. Furthermore, extension aids are attractive to the receivers and motivate them. Audio-visual aids are visual symbols accompanied by some form of simultaneous or nearly simultaneous auditory utterance (Obinne, 1992).

The ultimate aim of any agricultural extension programme is to help in improving the knowledge of farmers to improve their farming methods, and adopting a new practice with a view to increasing their standard of living. This can be achieved by using right extension media.

In Oyo and Ondo States where majority of the population are deeply involved in agricultural production, farmers in these areas still practice the old method of cultivation which disallow them from adopting agricultural innovations or when adopted could not be sustained. In addition, most agricultural information do not reach them on time or at all.

Extension agents have attributed these problems to inadequate delivery of agricultural research information through the right extension media. It is unanimously believed that majority of farmers are not educated, it is also believed that majority of their children are well educated. The household can be better reached, if the youths are focused and the right extension media are used (Ogunsumi, 2003).

The main objective of this paper is to evaluate the effectiveness of extension media in the dissemination of agricultural innovations among youths in Oyo and Ondo States of Nigeria. Other specific objectives include to:

(1) determine the extent of usage of extension media in disseminating agricultural information/innovations in the study area;

(2) determine the level of youth awareness of extension media;

(3) determine the effectiveness of various extension media in the dissemination of agricultural innovations:

(4) know the problems facing the dissemination of agricultural innovations to the youths

Methodology

The instruments employed in collecting data for this study were the use of validated and structured questionnaires and personal interviews. The farmers' households were randomly selected from one ADP zone in each of the states where extension media had previously be used

A sample size of 60 households was initially proposed, however only 48 households were found with adequate information for this study at 24 households per zone per state. Youths that were involved in the previous training activities using extension media were included in the sample within the ages of 30 years and below. 24 extension agents were only interviewed within the ADP zone. The data collected were analysed using frequencies, percentages and correlation co-efficient.

Results and Discussions

Socio economic characteristics of respondents

Table 1: Distribution of respondents by socio-economic characteristics

Age (Years)	**No. of Respondents**	**Percentage**
Less than 15	12	25
16 – 20	17	35.4
21 – 25	14	29.2
Above 25	5	10.4
Total	48	100
Gender	**No. of Respondents**	**Percentage**
Male	30	62.5
Female	18	37.5
Total	48	100
Level of Education	**No. of Respondents**	**Percentage**
No formal education	12	25.0
Primary six	17	35.4
Modern III	3	6.25
WASC	3	6.25
Higher Institution	3	6.25
Total	48	100

Source: Field Survey Data. (2002)

Table 1 shows that 35.4% of the respondents were between the ages of 16 and 20 years mean age of the respondents was 12 years

The table also reveals that majority of the respondents (62.5%) were males while 37.5percent were females. this may be as a result of cumbersome masculine nature of farming activities. The educational status of respondents interviewed reveals that 35.4 percent had Primary Education and Modern III. WASC and Higher Institution recorded 6.25 percent respectively (Table 1)

Table 2: Channel of Disseminating Agricultural Innovations

Channel	Frequency	Percentage (%)
Demonstrations	5	10.45
Television	27	56.25
Radio	12	25.00
Postal/Hand Bills	4	8.30
Total	48	99.95

Source: Field Survey (2002)

It can be deduced that television has the highest percentage of 56.25 followed by radio with 25%. Other channels used by the extension agents to reach the youths are posters and handbills (Table 2)

Table 3: Awareness of extension media among the respondents

Awareness of Extension Media	Frequency	Percentage (%)
Yes	40	83.00
No	8	17.00
Total	48	100

Source: Field Survey (2002)

It can be seen from table 3 that the level of awareness of extension media was high among respondents. Majority (83%) was aware, while only 17percent were not aware.

Table 4: Effective of various Extension Media/Channel

Channel	Frequency (%)	Ratings
Demonstrations	25(52.1)	1st
Radio	19(39.6)	2nd
Television	3(6.3)	3rd
Postal/Hand Bills	1(2.1)	4th

Source: Field Survey (2002) * Figures in parentheses indicate percentages

Personal contact was rated 1st among the respondents this is followed radio while television was rated 3rd and post bills was rated as the least effective of extension media (Table 4)

Table 5: Agricultural Technologies Disseminated to Farmers

Technologies	Technologies known to Youth Farmers	Technologies Disseminated By Agents
Agric mechanization	9(18.8)	6(25.0)
Improved seed/production package	6(12)	2(8.33)
Mixed farming	7(14)	6(25.0)
Fertilizer application	8(16)	--
Seed dressing	5(10)	--
Farming methods/proven agriculture	3(6)	--
Grafting/Budding method	2(4)	--
Seed treatment	5(10)	--
Livestock rearing	1(2)	--
Modern agric Technology		10(41.7)
Total	48(100)	24(100)

Source: Field Survey (2002) *Figures in parentheses indicate percentages

The table 5 shows that youth farmers were aware of many technologies than the number disseminated by the agents. While farmers received 9 technologies the agents claimed they have disseminated 6 technologies. The multiple sources of information available to farmers could have been responsible for the awareness of many other technologies disseminated by extension agents. These sources may include radio, television programmes, poster and jingles.

Table 6: Channels of Disseminating Agricultural Innovations

Channels of Innovation	Youth		Extension	
	Frequency	%	Agents Frequency	%
Demonstrations	--	--	10	41.7
Television	6	12.5	1	4.2
Radio	29	60.4	12	50.0
Postal/Hand Bills	2	4.2	1	4.2
Personal contact	10	20.8	--	--
Others	1	2.1	--	--
Total	48	100	24	100

Source: Field Survey (2002)

The channel of innovation dissemination represented in table 6 shows that radio and personal contacts were the most prominent means by which youths received innovation. On the other hand, extension agents use demonstration as the most prominent means of disseminating innovation. Other sources used by the agent include radio and hand bills.

Table 7: Effectiveness of channel of innovation by respondents

Channels of Innovation	Youth		Extension	
	Frequency	%	Agents Frequency	%
Radio	21	42	28	60.87
Television	3	6	4	8.69
Bulletin	--	0	1	2.17
Leaflets	--	0	2	4.34
Postal	1	2	--	0
Demonstrations	--	0	10	21.73
Projected visuals	--	0	--	0
Personal contact	23	50	--	0
Total	48	100	46	100

Source: Field Survey (2002).

Table 7 presents the most effective channel by which extension agents disseminated innovation and consequently, the means of reception by youth farmers. Personal contact and radio were the most effective channels from the farmers' perspective, while radio and demonstrations were effective from the view of extension agents. The impact of the mass media could have been responsible for the effectiveness recorded for radio.

Table 8: Usefulness of Extension Information

Usefulness of Extension	Frequency	Percentage (%)
Very useful	21	42
Useful	23	47.9
Not useful	4	8
Total	48	100

Source: Field Survey (2002).

The usefulness of extension information to the farmers as contained in table 8 shows 42percent of the youth farmers found extension information to be very useful, about 50percent of them found it useful while 8percent of the farmers considered it as not useful. This is very encouraging and it means that the farmers were able to practice the innovation disseminated to them and they found it useful.

Table 9: Correlation between Diffusion of Innovation and Independent Variables

Independent Variables	r	p value	Remarks
Age	-0.65	0.03	Significant
Farm size	0.37	0.06	Not Significant
Information usefulness	0.39	0.04	Significant
Channels	0.54	0.003	Significant
Contact with extension agents	0.55	0.006	Significant
Farm size	-0.38	0.04	Significant

$P \leq 0.05$

Where s = significant
ns = Not significant
r = correlation value
p = probability coefficient

Correlation analysis between diffusion of innovation and some independent values indicated that age had a strong inverse relationship with diffusion of innovations ($r = -0.65$; $p \leq 0.05$). Similarly farm size had r-value of -0.38. This indicates that there is no significant relationship between farm size and diffusion of innovation ($p > 0.05$). Other variables that were significant were channels of innovation and contact with extension agents with r-value of 0.54 and 0.55 respectively.

Conclusion

Findings from this study highlight the prospects that could be achieved if correct extension media are used to disseminate agricultural innovations. Also rate of adoption of technologies by the farmers or any other targets will be high and there will be increase in the production of agricultural produce. And subsequently the nation will achieve the national goal of been self sufficient in food production.

Recommendations

The following recommendations will however, alleviate the problems of dissemination and adoption of agricultural innovations:

- Since the farmers prefer to receive farm innovations through agricultural programmes on radio, agricultural programmes should be aired at farmers' convenient time, probably in the evening when they would have returned from their farms.
- Extension agents who have direct contact with the farmers can also put the farmers through on how to link the originator of the agricultural messages disseminated through broadcast media.
- Extension agents should also help to provide a supporting service to the farmers in order to comprehend what they are being taught over the radio or television.
- Government should assist on the provision of community radio and television, so that every rural dweller will have opportunity of enjoying the broadcast media.
- Efforts should be made to introduce basic adult education to the illiterate farmers since most of the farmers did not even attain primary school education. This will go a long way in improving on the adoption level of the introduced technologies and further remove other problem of technology transfer.

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SUB-THEME 2

YOUTH EMPOWERMENT FOR SUSTAINABLE DECENT LIVELIHOOD (YOUTH IN SCHOOLS, YOUTH OUT OF SCHOOL AND RURAL/URBAN YOUTHS)

YOUTHS EMPOWERMENT FOR SUSTAINABLE, DECENT LIVELIHOOD THROUGH THE VISUAL ARTS

BY

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Abstract
The youths of today appear to be so much in a hurry that they often forget that the elements of readiness in them are crucial for continuity and survival in a competitive world of today. Any youth whose cognitive, effective and psychomotor domains are developed tends to live a creative life and would be positive about life. Most adolescents now, are of school age and several of them are in schools. They react violently and destructively, whenever exposed to the slightest provocation. The creative person is usually not violent, because he or she knows the painful processes of creation and would rather preserve the life of a thing or person. This paper posits that the introduction of visual arts to youths (in and out of school), would awaken their creative power which would eventually empower them for sustainable decent livelihood.

Introduction
The idle hand is the devil's workshop. Several youths today allow themselves to be used by either influential or rich people in the society. A major problem with such youths is the dearth of the appropriate knowledge, skills and behaviour necessary to empower them for a sustainable and decent living. For the purpose of clarity, the youths concerned here, will be taken as those children of school age, from secondary schools upwards. This is the adolescent period of any person. The problems of the adolescents are worsened by uninformed decisions of some parents. According to Ezema (1999), parents preferred the males to engage in high-level jobs, more especially in science-based ones. Parents also prefer female adolescents to do jobs related to managerial, clerical, musical, entertainment and welfare services, including nursing, teaching, Home Economics and secretary ship. The visual arts are potential sources of inspiration for such empowerment, especially when one considers the fact that they permeate all the matrices of life.

Such art education is about seeing, feeling, thinking, creating and responding to the visual environment. It does not start and end with creation of an image or non-art educators commonly assume picture as. Art education should have unquestioned merit as a unique avenue to mental, social and individual growth and also be recognized and welcomed as a learning experience in its own right (Anidugbe, 2001).

Visual Arts and Science
This comprises the theories and practice of Fine and Applied Arts. Fine Art is the aspect of Visual Art that deals with aesthetics and expressions of feelings, ideas, and emotions. Technically, Fine Art embraces painting, sculpture and architecture, (Uzoagba, 1982). Applied art is the aspect of visual art related to the industries. Emphasis is usually placed on the commercial aspect of such applied art. Some applied arts are ceramics, textile

design, graphic design and photograph. Could these visual arts empower the youths so that they would be able to have a sustainable and decent life?

The empowerment of youths could start from the type of education they have, especially when the future of the country rests on their shoulders. All the facets of education are influenced by the visual arts and, by implication, knowledge of such visual arts would enhance their learning and comprehension.

Comparing both science and visual art from the basic pedagogical and epistemological points of view, one finds a close relationship between them. Ikara (1997) opines that both science and art share the same principal aim of making human life better on this planet. In dissecting nature, or imitating it, both share the same technical vocabulary of discourse such as order, system, arrangement, regularity, balance, scale, proportion, equilibrium, unity, structure, perspective, dimension, shape, value, model, design, quality, quantity, size, composition, repetition etc.

Science and the visual arts are concerned with the processes of transformation, the visual arts are not even representation arts, and each work of art transforms reality in its own way. Reality is the common base for both, but the artist deals with it in his own way (Encyclopedia Britannica).

The visual arts and science also deal with the practical questions of order in the universe as well as in nature and society. Graves (1951) assets that the imagination, voyaging through chaos and reducing it to clarity and order is the symbol of all the quests, which lends glory to our dust. He adds that expressionists are of the view that art is a medium of emotional communication on a level with the conceptual verbal communication of the sciences and of practical life. At another level, visual art is seen as an open-ended creation just like a mathematical hypothesis or a scientific theory.

Visual Arts and Other Spheres of Learning

Concepts like perimeters and areas of a shape are easier to calculate if the shape is drawn rather than attempting a mental calculation or description of such mathematics. The arrival of 'Modern Mathematics', which embodies the theory of numbers, was applauded with considerable doubt and skepticism and it takes quite some time before the confusion died down. Thanks to the visual arts, which made its understanding easier with the Venn Euller diagrams.

Looking at the complex field of mathematics, which is seen to be both a science and an art but clearly 'the language of science', one finds out that mathematics is also said to be the 'queen and servant' of all the sciences, but then the queen and servant would need a king and master, which is the visual art.

Literary courses like literature in English Language or other language, Christian Religious Studies, History, Geography, Economics, Government, etc. would be better understood if illustrations are included. For example the biblical flood during the days of Noah, a period long before our generation was born, could be 'brought to reality' through careful and near accurate analysis and visual interpretation by an artist. This reduces mental stress while it also increases the students' ability to assimilate information presented to him or her.

A hard working youth begins to benefit from the visual arts also if he or she partakes in exhibitions, even as student. During such exhibitions, he or she would derive satisfaction and enjoyment from the works while he or she gives same to the audience. This student would get exposed to both local and international audience, which could lead to popularity and fame. If the quality of the student's works is high, the art works could be sold and money would exchange hands. Some students have become economically comfortable through such exhibitions (Aruevingho, 1999).

Influences of Visual Arts

When technology is seen as a representation of all man's efforts to influence and control nature, and to aid his survival as a social being, it becomes easier to see how the visual arts are used in making technology solve material and spiritual problems in man's life. For example, the visual arts could aid technology in solving problems of how to obtain food, shelter, clothing, procreation and physical, as well as spiritual satisfaction.

The process of obtaining industrially produced food or materials for finished products could be explained though carefully drawn diagrams or photographs, to those using the appropriate technique for that production. At the end of the production, the graphic artist (a visual artist) could assist the technologist by advertising both the raw or processed food for people to buy, so that the money obtained could be ploughed back into the business for expansion. Walker (1992) in his writing promotes the sales of products of technology such as offset duplicator and plate-maker, using photography (a visual material) as a tool for creating awareness in the minds of prospective buyers.

In the case of clothing, a textile designer has to work with a textile technologist, to ascertain the quality of textile products. For example, if some yarns produced by a textile technologies mistakenly cut during production, a designer could advise him or her on what to do and how to re-adjust the yarns to specification.

Another example can be taken from the involvement of visual arts in modern technology for building and construction. Nowadays, most modern buildings have their façade decorated with murals, this usually serves as a prestige item for the owner of the building. Typical instances are those on the walls of buildings in Zaria, Kano and Kaduna areas where Islamic motifs are used as external decorations for contemporary building.

Culturally, the visual arts enable us to see the differences between our past and present culture when we look at our socio-cultural history. Attempts have been made to show how various types of art have been used to express the social, political and economic life of a community or nation. Wangboje (1982), supports this view when he says that the culture of a people – their total life style – could be seen through their art works. He asserts that, of all the facets of culture – traditional etiquette, law, dance, music, and drama etc. – the visual arts of the people represent a more permanent aspect of culture. People exposed to visual arts become developed and this means that such persons have gone through a creative process, which is a method of mental and material transformation of man's environment. According to Soge (2001) through art and design creative man seeks to cause to be social conditions and physical structures, which enable man to explore and exploit the world of nature.

In the spiritual realm the youths would be able to learn about the relationship in the use of visual arts in Christianity, Islam and traditional religions, how the positive aspects of such use could be emphasized and used (Ovekola, 2003). For instance, if the youths know that history of a people could be revealed from the description, analysis and interpretation of religious art works, he or she would be able to appreciate the use of such works in such religions and not their outright condemnation. Such empathetic feeling would lead to better understanding among members of the various religious organizations, thereby ensuring peaceful co-existence with one another.

Conclusion

This paper has discussed the meaning of visual arts as embracing the theories and practice of Fine and Applied arts including Art History and Art Education. It has also enumerated the roles played by them in easing teaching and learning in and outside schools. It is recommended that if parents and guardians endeavour to expose their children wards to creative activities that would develop such youths' knowledge, skill and behaviour, the society would experience less violence. This is because any creator would always prefer to preserve the life of a thing or person.

The various arms of government should not pay lip services to educational programmes, especially the vocational ones. They should be positive about the empowerment of our youths for sustainable, decent livelihood, by using the various print and electronic media to enlighten both parents and their children and wards of the usefulness of the several aspects of visual arts in the development and growth of such youths.

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FACTORS AFFECTING TEACHING OF PRE-VOCATIONAL AGRICULTURE IN SELECTED PRIMARY SCHOOLS IN LAGOS STATE, NIGERIA.

BY

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Abstract

Several factors have been identified as problems militating against the effective teaching of pre-vocational agriculture. These include: non-availability of demonstration farm plot, non-inclusion of pre-vocational agriculture in primary school module by curriculum planners etc. Hence this study was therefore designed to suggest ways of solving the problems militating against the teaching of pre-vocational agriculture in the primary schools. Two null hypotheses were postulated to guide the study. The questionnaire was used to collect data from a sample of twenty-seven agricultural science teachers and nine head teachers. The data were analysed using frequency counts, mean and standard deviation to answer the research questions while t-test was used to test the hypotheses at .05 level of significance. The null hypotheses tested revealed that the two groups of respondents did not differ significantly in their opinion in the methods that can be adopted for effective teaching of pre-vocational agriculture in primary schools.

Introduction

Pre-vocational agriculture is that aspect of agriculture taught to pupils from the Junior Secondary level and below. Formally it was called gardening. The Nigerian Educational Research and Development Council (NERDC) (1990), listed the following as curriculum objectives for the Primary Agricultural Core Curriculum as to:

1. arouse and sustain pupils' interest in the art of farming
2. enable pupils acquire elementary knowledge of Agriculture.
3. enable pupils develop some basic manipulative skills required in Agriculture
4. prepare pupils for further studies in Agriculture; and
5. introduce pupils to the career in Agriculture.

To achieve the objectives, the curriculum is structured along a thematic framework, which considers the child's physical environment and farming community. Nwabuisi (1999), stated that agriculture trains an individual to be healthy and strong, skilled, dedicated, painstaking, disciplined and self-sufficient. Hence, the teacher of agriculture is expected to impart the basic knowledge of pre-vocational agriculture to their pupils while trying to minimise the factors militating against its effective teaching.

Several factors have been identified as problems militating against the effective teaching of pre-vocational agriculture. Nneji (2002), listed them as follows: non-availability of demonstration farm plot; lack of adequate financial support by the authorities-in-charge; lack of qualified teachers; non-inclusion of pre-vocational agriculture in primary school module by curriculum planners, inadequate weekly periods in the school time-table, negative attitudes of teachers, pupils and parents towards per-vocational agriculture and lack of facilities for teaching agriculture. The present study was therefore designed to suggest ways of solving the problems militating against the teaching of pre-vocational agriculture in the primary schools.

The study is important because its finding could provide empirical basic for improving the teaching for pre-vocational agriculture in primary schools and junior secondary schools, in order to provide the "Golden Gateway" for millions of young primary and junior secondary school leavers. Now and in the future these young people must have an education that will equip them to function in the society. Perhaps more than anyone, the task of providing these skills falls on the agricultural education teacher.

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

HO_1: There is no significant difference in the mean ratings of Head teachers of primary schools and pre-vocational agriculture teachers in the primary schools on the effects of lack of qualified vocational agricultural teachers on the effective teaching of pre-vocational agriculture in primary schools in Lagos State.

HO_2: There is no significant difference in the mean ratings of Head teachers of primary schools and pre-vocational agriculture teachers in the primary schools on the methods that can be adopted for effective teaching of pre-vocational agriculture in primary schools in Lagos State.

Methodology

This was made up of all Head teachers and all pre-vocational agriculture teachers in Lagos State. They were made up of nine Head teachers and twenty-seven pre-vocational agriculture teachers. Thus making a total of 36 respondents formed the sample of the study.

A four point questionnaire was developed and used for the study. The items of the instrument were scaled 1,2,3 and 4 representing Strongly Disagree, Disagree, Agree and Strongly Agree respectively to the effects of lack of qualified vocational agriculture teachers on the teaching of pre-vocational agriculture and methods to be adopted for effective teaching of pre-vocational agriculture in primary schools. The instruments was validated by three Adeniran Ogunsanya College Vocational Educators

The data were analysed by frequency counts, means and standard deviation to answer the research questions while t-test statistic was used to test the stated hypotheses. Based on the 4-point scale of instrument, cut-off point of 2.50 was adopted as the minimum score an item can be regarded as "Agreed" but rated other items below the cut-off point as Disagreed.

NS = not significant; S = significant n_1 =Agric teachers' Population ; X_1 = mean for Agric. Teacher; S^2_1 = Variance for Agric teachers; n_2 - Head teachers" populations; X_2 =mean for Head teachers; S^2_2 = variance for Head teachers.

Table 1 presented items of the effect of lack of qualified vocational agricultural science teachers in primary schools. Seven out of the nine effects, lack of qualified vocational agriculture teachers recorded table values between 0.04 = 1.89, which are below the table t-value of 2.021. For this reason the null hypothesis was accepted for these seven effects of lack of qualified vocational agriculture teachers on the effective teaching of pre-vocational agriculture in primary schools. Two of the effects of lack of qualified agriculture teachers recorded 2.07 and 3.41, which are above the table t value of 2.021. For this reason, the null hypothesis was rejected for these two effects of lack of qualified vocational agriculture teachers on the effective teaching of pre-vocational agriculture in primary schools.

Table 2: t-test analysis of the method that can be adopted for effective teaching of pre-vocational agriculture in primary schools.

(N_1 = 27; N_2 = 9)

S/N	ITEMS	$\bar{X}_1$	$\bar{X}_2$	S^2_1	S^2_2	t-cal	Remarks
1	Grouping pupils to recognise individual differences among them	3.56	3.33	0.280	0.385	1.65	NS
2	Encouraging pupils participation in class and farm activities	3.78	3.74	0.116	0.201	0.37	NS
3	Drawing up performance tests for evaluation of pupils.	3.67	3.59	0.251	0.251	0.66	NS
4	Keeping records of pupils processes in class and home assignment.	3.89	3.780	0.111	0.180	1.83	NS
5	Planning effective group and individual project for pupils.	3.56	3.48	0.280	0.259	0.89	NS
6	Promoting goods rapport between the teacher and class	3.89	3.81	0.111	0.157	0.63	NS
7	Asking questions that are not really answerable in order to stimulate pupils thinking.	2.11	2.44	0.918	0.804	1.47	NS
8	Ensuring that the pupils hear and see teacher's demonstration clearly	4.00	3.89	0.009	0.133	1.69	NS
9	Using both theory and practical for teaching effectively.	4.00	3.92	0.009	0.072	1.63	NS
10	Maintaining a good laboratory farm for demonstration.	3.67	3.81	0.251	1.156	0.18	NS
11	Taking pupils on field trips and excursion.	3.78	3.62	0.195	0.243	1.40	NS
12	Possessing a good command of the subject matter	3.85	3.89	0.111	0.133	0.47	NS

$df = 34 (n_1 + n_2 - 2)$: Table t – 2.021 at 0.05 level of significance
X_1 = Mean for Agric teacher; S^2_1 =Variance for Agric. Teachers;
N_1 = Agric teachers population
N_2 = Head teachers population
X_2 = means for head teacher; S^2_2 = variance for head teachers.

Table 2 presented 12 items on the methods that can be adopted for effective teaching of pre-vocational agriculture in primary schools. All the 12 items of the methods that can be adopted for effective teaching of pre-vocational agriculture recorded the table values between 0.37 – 1.89 which are below the table t value of 2.021.

For this reason, the null hypothesis was accepted for twelve of the methods that can be adopted for effective teaching of pre-vocational agriculture in primary schools.

Discussion

The study revealed that unqualified agriculture teachers lack qualities that can motivate pupils to develop interest in pre-vocational agriculture. Olaitan (1984) noted that a teacher of agriculture is not a teacher but also a technician in agriculture, hence his role differs to some extent from that of other teachers in the school. He is expected to deal with the cognitive, psychomotor and affective outcome of the subject and he is looked upon as a master of definite skills.

This finding thus confirmed the study of Olaitan (1984) that the teacher of agriculture will find it difficult to motivate the pupils unless he/she uses the following steps:

(a) Stop using punishment for farm work
(b) Solicit the cooperation of other teachers and parents' teachers' association
(c) Encouraging the use of locally available instructional aids while teaching so as to make teaching and learning effective. He added that, it is very important to stimulate pupils' interest through the combination of theory and practical work on the farm.

The respondents agreed with 2 out of the 12 items on the methods that can be adopted for effective teaching of pre-vocational agriculture in primary schools (Table 2). This confirmed the study by Ogbazi (1986) where he identified twenty-five competencies needed by the teacher of agriculture, these include among others:

1. Motivating pupils with intrinsic value of ideas of activities
2. Grouping pupils to recognize individual differences among them
3. Allowing pupils participation in class and farm activities
4. Devising performance tests for the evaluation of pupils
5. Seeking each pupils attention before starting a lesson
6. Evaluating pupils' progress in class and home assignment
7. Allowing pupils' to determine their own level of aspiration
8. Helping pupils develop alertness
9. Maximising the transfer of learning from one situation to the other, etc.

Conclusion and Recommendation

Unqualified agriculture teacher lack qualities that can motivate pupils to develop interest in pre-vocational agriculture unless he/she uses steps like: step punishment for farm work, encouraging the use of locally available instructional aid and combination of theory and practical work on the farm. Qualified teachers of agriculture should utilise agricultural equipment and facilities available to teach pupils adequately.

Agriculture teacher need good knowledge, skills, and attitude in methods and techniques of teaching. They must be capable of selecting appropriate teaching methods for a particular topic they want to teach. The pupils should hear and see teachers, demonstration clearly. Pupils should be taken out on field trips and excursion, which helps them to get more familiar with farming activities around their environment as well as making the relationship between the school and community programme closer.

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JOB SATISFACTION AMONG AGRICULTURAL SCIENCE TEACHERS IN PUBLIC SECONDARY SCHOOLS IN ESAN WEST LOCAL GOVERNMENT AREA OF EDO STATE

BY

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Abstract

This study was carried out to determine job satisfaction among agricultural science teachers in public secondary schools in Esan West Local Government Area of Edo State. Data for the study were collected through a structured questionnaire administered on 40 agricultural science teachers sampled from 8 secondary schools. The study showed that the variables that motivated the teachers were self-fulfillment, expectation in job, regard from colleagues, participation in decision-making procedure, commendation from authority and opportunity for self-growth and development. The study also indicated that job satisfaction among the teachers could be improved through positive challenges from colleagues, accurate workload, job lifestyle and encouragement. Correlation analysis showed that job satisfaction declined with age and family size. It also showed that male teachers were more satisfied than the female teachers. The study therefore, recommends that head teachers and government should make efforts in improve the factors that motivate and promote job satisfaction among teachers.

Introduction

Job satisfaction could be simply defined as a pleasurable or positive emotional state, resulting from appraisal of one's job or experience (Idu, 2000). For this study, it's taken to mean contentment derived from one's working place and work experience (Asiabaka, 1999). It is a central issue of employee motivation at work. Management efforts at boosting workers morale have the ultimate aim of achieving high level of job satisfaction among the workers. Motivation and job satisfaction are very closely related. Motivation has been defined in various ways by many authorities. Sonobi (1972) defined motivation as the process that causes human behaviour to be energized, directed and sustained. Simply put, it is that force, which influences a worker to work to the best of his ability in an organization (Roger 1976). This propelling force however may be internal or external (Idu, 1998).

Several studies have been carried out by renowned psychologists on what motivates an average worker to achieve better job satisfaction and many classical theories of motivation have been put forward in the past. Notably among these are: Maslow's Need Hierarchy Theory: Alderfer's Modified Need Hierarchy Theory; Herzberg's Two Factors Theory; McLlelland's Need to Achieve Theory; Vroom's Valence-Expectancy Theory (Eric, 1996; Jibowo, 1977), to mentioned a few. They all talked on what could be considered to be important in maintaining a man's psychological balance in order to get the best out of man in an organizational set up. Some even went further to state which of the needs ought to be met first before the other, hence the need for hierarchy. For example, Maslow stated in his need hierarchy theory that the needs must be satisfied in sequence and they include the

following: Physiological needs, Social needs, Safety needs, Esteem needs, Self fulfillment needs/Self actualization needs (Sharma, 1970).

Other studies have also been carried out by social scientists as to what motivates a Nigerian worker to achieve better job satisfaction. Such studies put forward by Ejiofor and Aniago (1984) listed among other things like salary, retirements benefits, recognition for job done, shelter, promotion and participation in decision making as some of the factors which motivate workers. Since job satisfaction varies from place to place and job to job (Agumagu, 1992), there is need for job type and location specific study of this nature.

This study sets out to look into those factors, which could and would motivate agricultural science teachers in public secondary schools in Esan West local government area of Edo State to gain better satisfaction on their jobs. The assumption is that if these factors are identified policy prescriptions can be suggested to improve on them in order to enhance the impartation of agricultural science knowledge to the youths in the secondary schools.

Methodology

The study took place in Esan West Local Government Area of Edo State. The state comprises eighteen local government areas, some of which are Oredo, Ehor, Esan-West, Esan Central, Igueben, Estako east, Owan West, Estako Central, Estako West, Owan East, Owan West and Akoko-Edo Local Government Area but to mention a few. The secondary schools in the Local Government Areas were identified and eight of them were randomly selected for the study. They are Ujemen, Emado, Ukpenu, Ihumudumu, Iruekpen Eguare, Ujeulen and Iruekpen grammar school.

The questionnaire was carefully designed for the research to obtain primary data. To make the questionnaire effective, the questions were structured out in order to allow for easy understanding. The setting was logical and sequential with one question leading to another. The researchers personally went to the teachers in the secondary schools and administered the questionnaire. This method was employed to ensure that the instrument was appropriately filled out and returned for successful analysis. The data collected for testing the hypothesis were analyzed statistically. The mean score was calculated using Likert Scale of 1 to 4, where very important, important, not important, not applicable were scored 4, 3, 2, 1, respectively. Any mean score below 2 means that the particular variable is not important. Frequency, percentage distribution and mean score were used to analyze the generated data. Teachers perception on their job situation needs, satisfaction and job performance data were analyzed using the Pearson Product Moment Correlation (PPMC).

Results and Discussion

Table 1: Distribution of Respondent by Educational Level

Level of Education	Frequency	Percentage
B. Sc.	16	40.0
H. N. D.	9	22.5
M. Sc.	8	20.0
N. C. E.	4	10.0
O. N. D.	3	7.5
Total	40	100

Source: Field Survey, 2002

Table 1 reveals that about 40.0 percent of respondents were B. Sc degree holders, while the equivalent (H. N. D.) had 22.5 percent of respondents, 20.0 percent were M. Sc degree holders, 10.0 percent were also N. C. E. holders. About 7.5 percent were O. N. D. holders. This shows that there are qualified teachers teaching the course, the high caliber of teachers should reflect on the quality of agricultural science teaching.

Table 2: Distribution of Respondents by Area of Specialization

Area of Specialization	Frequency	Percentage
Agric – Education	12	30.0
General Agric	9	22.5
Agric – Economics	5	12.5
Animal Science	4	10.0
Agric – Extension	3	7.5
Soil Science	3	7.5
Crop Production	3	7.5
Agric – Engineering	1	2.5
Total	40	100

Source: Field Survey, 2002

Among the respondents sampled for this study, those who specialized in agric-education were in the majority (30.0%) followed by those who specialized in general agric (22.5%), 12.5 percent were specialized in Agric-Economics, 10.0 percent and were also specialized in Animal Science. While the remaining respondents were specialized in Agric Extension (7.5%), soil science (7.5%), crop production (7.5%) and just 2.5 percent were Agric-Engineering.

The above table shows that the majority of teachers were professionals / educationists. The emphasis on agriculture is significant in line with the policies that only qualified teachers teach agriculture. This study found that among the teachers sampled, the majority (30.0%) were agricultural educationists. It is possible that the dearth of this calibre of teachers may have informed the appointment of holders of degrees in general agriculture to teach agricultural science in secondary schools.

Table 3: Distribution of other courses taught by the respondents

Subject(s) taught	Frequency	Percentage
Agric – Science with other subject	30	75.0
Agric – Science alone	10	25.0
Total	40	100

Source: Field Survey, 2002

Table 3 reveals that more than half of the respondents (75.0%) teach agricultural science with other related subjects while a few (25.0%) teachers teach agricultural science alone.

However, these set of teachers teach senior classes which automatically means that concentration is not on agricultural science alone as shown on table 3. The implication of this is that those teachers who combine other subjects with agricultural science may not fully concentrate on agricultural science.

Table 4: Problems faced by respondents in their Teaching Activities

Problems	Mean Scores
Lack of teaching facilities (i.e. farm and equipment)	3.78
Poor attitude of pupils	3.43
Non co-operation from other teachers	3.30
Non co-operation from school head	3.03
Lack of in-service training for staff	2.83
Poor condition of service as an Agric. Science teachers	2.20
Inadequacy of allowances (Housing, transport allowances etc)	1.90

Source: Field Survey, 2002

This results indicate that job related conditions of; teaching facilities, poor attitude of pupils, non-cooperation from other teachers, non-cooperation from head, lack of in-service training and poor conditions of service were the major problems of the teachers and these can adversely affect their job satisfaction and performance.

Table 5: Job satisfaction of Respondents

Job satisfaction	Means Scores
Level of challenges by teachers	3.90
Work load	3.78
Life style and type of job	3.75
Level of encouragement	3.72
Level of pupils performance	3.05
Salary paid by employer	2.73

Source: Field Survey, 2002

Results indicated on table 5 shows how job satisfaction is been obtained. Based on the level of satisfaction, salary paid by employers had the lowest mean score. It means that teachers are not adequately paid; this may consequently reduce their job satisfaction.

Table 6: Factors Motivating Respondents

Motivational factors	Means Scores
Self fulfillment of position	3.65
Expectation in life and job	3.63
Regards from colleagues	3.60
The opportunity in participation in procedure	3.53
Commendation from authority for job well done	3.50
The authority associated with job position	3.45
Opportunity for personal growth and development	3.45
Chances that makes feel good as a person	3.23
Degree of job security	2.98
Overall job satisfaction	1.95

Source: Field Survey, 2002

Table 6 reveals that the factors motivating respondents with their means scores. The results show that these teachers can be made more productive by making them more fulfilled on the job, increase the expectation of promotion, regards from colleagues, opportunity to participate in decision making, give authority to them, give opportunity for personal development and growth, make them feel good and job secured.

Table 7: Pearson Product Movement Correlation (PPMC)

Variables	Means Scores
Staff motivation and job satisfaction	0.019
Staff salary and job satisfaction	0.079
Age and job satisfaction	-0.394*
Educational level and job satisfaction	0.006
Sex and job satisfaction	0.654*
Marital status and job satisfaction	0.158
Family size and job satisfaction	-0.478*
Teachers performance and job satisfaction	0.141
Teaching experience and job satisfaction	-0.086
Area of specialization and job satisfaction	0.160
Teaching of Non-Agricultural Science courses	0.015

Source: Field Survey, 2002
*5% significance level

This correlation shows that age and family size have negative relationship with job satisfaction but are not statistically significant. It means that job satisfaction decline with age and number of members of the family. Sex is positively related with job satisfaction, which indicates that men are more satisfied with teaching agricultural science than women. This may be due to the tedious nature of agricultural science teaching especially the practical aspects.

Conclusion

Arising from the findings of this study, the following conclusions were reached. The first of these conclusions was that teachers training and development programmes were useful because they could, when done correctly, remove performance deficiencies. The second was that fringe benefits did give rise to job satisfaction and higher job performance, and it is therefore our conviction that a good staff service programme will induce staff to work hard and improve their morale, satisfaction, tenure and healthy competition. The third conclusion was that staff performance could be hampered by inimical working conditions. We also recommend that factors motivating teachers such as teaching materials, prompt payment of salary, prompt promotion, provision of mobility, prompt payment of allowances should be recognized and implemented.

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PARENTS' PERCEPTION OF DEVELOPMENT INDICATORS FOR SCHOOL YOUTH: IMPLICATIONS FOR ENHANCING DECENT LIVELIHOOD IN NIGERIA

BY

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Abstract

The study focused on the development indicators of school youth as perceived by the parents in some selected schools in rural communities of Oyo state, Nigeria. Specifically, the socio-economic characteristics that influenced the parents' perception of the youth's development indicators were discussed and implications were drawn for enhancing decent livelihood in Southwestern Nigeria. Pre-tested and structured interview schedule was used to elicit information from one hundred and eighty six (186) rural parents randomly selected form twelve rural communities in Oyo state, Nigeria. Simple descriptive statistics were used to describe the data collected while indicator matrix was used to establish the influence of the indicators at the various levels of youth development. The study revealed, among others that physical maturity and puberty changes (81.72%), personal values and ethics (52.69%), participation in community development projects (63.44%) and meaningful application of values and beliefs (52.69%) are indicators influencing high level of school youth development. This implies however that decent livelihood can be enhanced if the indicators are significantly explored in developing the school youth.

Introduction

Baumrind (1987) in his research findings indicated that positive developmental pathways are fostered when youths have developed a sense of industry and competency, a feeling of connectedness to others and to society, a belief in their control over their fate in life, and a stable identity. According to him, youths who have developed these characteristics appeared to be more likely than others to engage in social behaviours, exhibit positive academic performances, and be members of non-deviant peer groups. The following types of interactions according to him appear to promote the development of these characteristics: interactions in which youths engage in productive activities and win recognition for their productivity; interactions in which parents control and monitor youth behaviour in a consistent and caring manner while allowing their psychological and emotional independence; interactions in which parents emotional support, encouragement, and practical advise to youths; and interactions in which youths are accepted as individuals with unique experiences based on their temperament, gender, biosocial development, family, cultural and societal factors.

Several studies have also showed that a strong predictor of positive developmental level in the youths is their possession of a sense that they are connected to other persons, their community, and the society (Resnick, Blum, Bose, Goldenberg and Hirsch, 1994). Those who have a greater sense of connectedness to school tend to be more likely than other youths to perform well academically and to stay in school (Connell, et al 1994).

Interactions that appear to promote development of a sense of connectedness to other persons are those in which parents provide social and emotional support to youths while permitting them psychological and emotional independence (Youniss and Smolla, 1985; Barner et al 1995). Interactions in which parents attempt to control youth's behaviour through monitoring their activities also appear to promote the development of a sense of connectedness because they signal to youths that parents in the family care about them and are willing to become involved in their lives (Patterson and Dishion, 1985; Sampson and Laub, 1994).

Youths who have a sense of control over their fate in life believe that they can affect their futures. This belief appears to be nurtured when they are engaged in interactions in which they can successfully predict the outcome of their actions (Sampson, 1992). When parents consistently respond to prosocial behaviours with positive sanctions and misbehaviours with negative sanctions, youths learn that their behaviours are related to certain responses.

Identity development is fostered when youths receive support for their future goals from parents and when they have opportunities to express and develop their own points of view in their families (Grotevant and Cooper 1985).

The foregoing therefore necessitates the need to conduct a research on parents' perception of development indicators of school youth. Specifically, it identified the socio-economic characteristics that influenced the parents' perception of the youth's development indicators and drew implications for enhancing decent livelihood in Nigeria.

Theoretical framework

The key concepts identified and considered relevant in developing a theoretical framework for this study are: role performance and youth development.

Menzies (1982) in his theory on role performance posited that a person's role perception leads to role performance in line with the expectations of others. The theory therefore provides the background for studying the roles of parents in developing their rural school youth. If a stable consensus exists and if all behaviour patterns fit into it (i.e. what people actually do is what they think they are doing), then role theory predicts that what people do as social products creates or reproduces themselves as these same social products. However, the perception of individual's roles is shown to have relationship with the performance of their roles and this is greatly influenced by the individual's personal and socio-economic characteristics (Torimiro, 1999).

Development, according to most psychoanalytic theories, is based on biological changes within the individual. The genital stage of development between ages eleven and eighteen is a time of regression rather than progression. The biological changes that occur with puberty bring about a regression from the emotional stability of the latency stage of the childhood period. The youth begins to show signs of experiencing stress and of giving up some of the accomplishments in school and social conformity that were achieved during childhood. As a result, the youth manifest not only regressive tendencies but also a variety of defensive maneuvers to ward off the regressive pull (Fromm, 1941).

For vast majority of individuals, the pathway from childhood to adulthood appears to be characterized by a period of temporary maladaptive functioning at some time during

youth, particularly with respect to engaging in anti-social or potentially life-threatening behaviours (Moffit, 1993). At present, there is no generally accepted explanation for this phenomenon. Moffit further suggests that because males and females are not accorded adult status by society until many years after physical growth and maturation, they may view antisocial behaviours as a means of attaining that status. Arnett (1992) postulates that the neurological, hormonal and cognitive characteristics of youth foster both sensation-seeking behaviours and a reduced perception of potential negative consequences of actions, resulting in a temporary increase in risk taking behaviours.

Regardless of the casual explanations however, a certain amount of experimentation with risky behaviours has been described as an essential component of a healthful youth experience and even as contributing to optimum development (Baumrind, 1987). Often, these behaviours reflect the normal process of separating from parents and establishing an identity. For parents and other adults, whose task it is to assist youth in making successful transitions to adulthood, the key issue is to differentiate anti-social behaviours that are only temporary and reflect experimentation from those that may result in a pattern of maladaptive functioning continuing into adulthood.

The consideration of the role theory is to demonstrate that the performance of roles is affected by the perception of such roles while the ecological theory shows that the development of the child is affected by a set of embedded system. The purpose here is to articulate a view of the variable presumably influencing parental role performance and also the development of school youth.

Methodology

The study was conducted in Oyo state, Nigeria. Multi-stage random sampling technique through the use of table of random numbers was used to select the Local Government Areas (LGAs), the rural communities covered by the study and the parents (with their youths) interviewed from all the four zones of the state (see Table 1). From the number of households in the twelve rural communities, a proportionate sample of five percent was randomly selected and one hundred and eighty six parents (and their school youths) were interviewed for the study.

Pre-tested and structured interview schedule was designed and used to elicit information from the respondents on some selected socio-economic characteristics of parents and their school youth, role perception and role performance by parents, and level of role performance by parents. The data were collected between February and May 2003.

Descriptive statistical techniques such as frequency counts and percentages were used to analyze the data collected while indicators matrix were used to establish the influence of the indicators at various levels of development.

Results and Discussions

(a) **Demographic and socio-economic characteristics of the respondents:** The study revealed the age range of parents to be between 35 – 70 years with 42.47 percent falling within the age class interval of 56 – 65 years old. 24.73 percent fell within the age class interval 46 – 55 year old and 66 – 70 years old respectively while only 8.06 percent were recorded for age class interval of 35 – 45 years old.

Table 1: Distribution of Youth by Level of Development

Development Indications*	Highly Developing	Moderately Developing	Just Developing	Not Developing
Cognitive Development				
1. Expansion of knowledge	0	34	152	0
2. Critical thinking and reasoning skills	(0.00)	(18.28)	(81.72)	(0.00)
3. Competence in academic achievement	0	34	152	0
	(0.00)'	(18.28)	(81.72)	(0.00)
	0	54	132	0
	(0.00)	(29.03)	(70.97)	(0.00)
Social Development				
4. Communication and negotiation skills	0	29	157	0
	(0.00)	(15.59)	(84.41)	(0.00)
5. Meaningful relationships with peers and adults	24	63	99	0
	(12.90)	(33.87)	(53.23)	(0.00)
6. Exploration of adult rights and responsibilities	43	93	50	0
	(23.13)	(50.00)	(26.88)	(0.00)
7. Search for role models, heroes and heroines	30	51	80	25
	(16.13)	(27.42)	(43.01)	(13.44)
Physical Development				
8. Physical maturity and puberty changes	152	21	13	0
	(81.72)	(11.29)	(6.99)	(0.00)
9. Habits promoting life-long physical fitness	26	91	38	31
	(13.98)	(48.93)	(20.43)	(16.67)
10. Taking and managing appropriate physical risks	26	91	38	31
	(13.98)	(48.93)	(20.43)	(16.67)
Emotional Development				
11. A sense of personal identity	40	21	13	0
	(81.72)	(11.29)	(6.99)	(0.00)
12. A sense of personal autonomy and control	40	82	57	07
	(21.50)	(44.09)	(30.65)	(3.76)
13. Coping decision and stress management skills	85	64	37	0
	(45.70)	(34.41)	(19.89)	(0.00)
Moral Development	98	55	33	0
14. Personal values and ethics	(52.69)	(29.57)	(17.74)	(0.00)
15. A sense of accountability and citizenship	118	41	27	0
	(63.44)	(22.04)	(14.52)	(0.00)
16. Application of values and beliefs in meaningful ways	98	55	33	0
	(52.69)	(29.57)	(11.74)	(0.00)

Source: Field Survey, 2003 Note: () represents percentages: * Multiple responses were recorded.

With reference to sex most of the respondents (85.48%) were male while the remaining 14.52 percent were female. This is in agreement with the findings of Jibowo et al (1996), that a high percentage of adult male was involve in farming than their female counterpart. For the school youth, 62.90 percent were male while 37.10 percent were female. This agrees with the findings of Fafunwa (1980), which indicated that there is a low enrolment

of girls in Nigerian schools compared to their male counterparts. It was further revealed that majority (80.11%) of the parents were married while 14.52 percent, 5.38 percent and 4.84 percent were widowed, divorced and separated respectively. Also 58.60 percent had no formal education. This is an indication that majority of the parents were illiterates, that is, they could neither read nor write. For the school youth 18.28 percent were in primary school while 81.72 percent were in secondary school.

Majority of the parents i.e. 66.13 percent were Christians, 32.26 percent were Muslim while only 1.61 percent were a traditional worshipper. Also, the findings showed that majority of the household sampled had between 7 and 11 members, 11.83 percent had less than 6 members while 32.26 percent had 12 and above members. These findings deviated a little from that of Osotimehin et al (1999) in which the household with 12 and above members was rated as the most frequent. Majority (68.28%) of these households had between 1 and 2 school youth while 29.08 percent had between 3 and 4 school youth. Very few i.e. 1.08 and 1.61 percent had 5 – 6 and 7 – 8 school youth respectively. These few minorities are those parents who are polygamous i.e. having many wives and consequently a large household size. Majority (88.17%) had spent well over 20 years in their various communities. This same group indicated that they had the opportunity to travel out of their communities while 11.83 percent indicated that they had never traveled out of the communities. This is an indication that they have had exposure to life beyond their communities and this may bring about greater awareness towards role performance.

The findings further revealed that 60.22 percent of the parents earned below ₦7,000 monthly while 39.78 percent earned above ₦7,000 (about US$55), which is the Nigerian minimum wage. This very low income has serious implication for role performance especially the provision of necessary textbooks for school youth, payment of prescribed school fees and the provision of good and adequate nutrition among others.

Majority of the parents i.e. 84.41 percent belonged to rural community associations, while 15.59 percent indicated non-membership of such associations. Also 71.51 percent indicated membership of their child's school Parent Teachers' Association (PTA) while 28.49 percent indicated non-membership. Membership of community association s may enhance the exchanged of ideas and opinions which may further enhance positive role performance while membership of child's school PTA affords parents the opportunity to contribute positively to the academic achievement of their youths and thereby promoting their general development.

(b) **Development indicators and level of youth development:** The various development indicators in the respondents were either observed and measured or tested and subsequently categorized. Table 1 showed that majority of the respondents was developing highly in aspects of moral and physical development. For moral development 52.69 percent of respondents exhibited high development in personal values and ethnics, sense of accountability and citizenship, 63.44 percent; application of values and beliefs in meaningful ways, 52.69 percent. The only indicator of physical development that recorded 81.72 percent of respondents was physical maturity and puberty changes. 50.00 percent of respondents were found to be developing moderately in their exploration of adult rights and responsibilities. All indicators of cognitive development in the respondents including expansion in knowledge, critical thinking and reasoning skills, competence in academic

achievement were just developing in 81.72 and 70.97 percent of respondents respectively. Very few of the respondents were found to have some indicators of social, physical and emotional development not to be developing at all. These include search for role models, heroes and heroines, 13.44 percent of respondents; habits promoting life-long physical fitness, 13.67 percent; sense of personal identity, 3.76 percent; and sense of personal autonomy and control, 3.76 percent.

The underdevelopment of some indicators in the rural school youth is attributable to the rural nature of their environment which may not be challenging and where they find little or no exposure to the outside world.

Implications for enhancing decent livelihood in Nigeria

Bie (1996) noted that the youths represent the future and hope of every nation and the high return invested in youths today has both immediate and long-term benefits. Developing the school youths in rural communities in terms of cognitive, social, physical, emotional and moral development, will therefore help them develop skills and fill roles that will help them develop the characteristics of adulthood as well as self-reliance; thereby empowering them for sustainable decent livelihood in their communities. These characteristics according to Pittman (1991) include among others a sense of competence i.e. feeling that one can make a contribution and what is done is of value to other people; a sense of belonging i.e. a feeling that one has a place one knows one belongs. Youths that are so empowered by the virtue of the development of these characteristics will therefore live more satisfying and productive lives.

When youths develop a sense of industry and competency as noted by Baumrind (1987), they are more likely to get engaged in prosocial behaviours and be members of non-deviate peer groups. These characteristics have positive implications because when they grow to become adults, they are most likely to have developed stable emotions and an industrious mist set which can be utilized towards creating for them a sustainable decent livelihood.

Conclusion and Recommendations

This study posits that parents need to perceive the development of their school youths more seriously to be able to contribute effectively to positive developmental outcomes of their children.

Evidences emanating from this study indicate that development indicators in school youths such as physical maturity and puberty changes, personal values and ethics, participation in community developmental projects and meaningful application of values and beliefs all influence high level of school youth development.

It is therefore recommended that these indicators be significantly explored in developing the school youths. This consequently will enhance decent livelihood for such youths.

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AQUATIC ENVIRONMENT: A POTENTIAL SOURCE OF LIVELIHOOD FOR THE NIGERIAN YOUTHS

BY

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Abstract

The renewable physio-geographic natural resources in the aquatic environment contribute to bulk of the food, traditional medicine, raw materials for small, medium and large industries and source of foreign exchange. As a form of potential livelihood it can promote self-fulfilment, social stability, financial empowerment, poverty alleviation, national economic development and reduce crime-rate among youths. It is recommended that government should not dredge the River Niger so as not to destroy the habitats of aquatic organism where the youths can and derive means of livelihood. Also, ministry of Fisheries and wild life should be established to take care of the utilization, management of aquatic and wetland resources and aquatic related activities geared towards integrated community management of resources.

Introduction

Youth comprise nearly 30% of the world population and the involvement of today's youth in environmental and developmental decision-making and in the implementation of programmes is critical to long-term success of the earth (Rio de Jeneiro, 1992). Youth is defined in this paper as individuals between the ages of 15 and 35 years. Seventy-seven percent of the world youth were in the developing countries and are mostly in the rural areas. Sixty-six million youths are reported to be unemployed throughout the world, representing more than 40percent of global unemployment, and that hundreds of million work fewer hours than they wish, and still others, work long-term hours with little gain and no social protection in the informal economy (WYF, 2001). They are also critical stakeholders of improvement in National Resource Management (NRM). This entails how young people make use of local natural resource endowments to their livelihood.

Youths constitute about 65percent of Nigerian population and live in rural and peri-urban communities and about 90percent depend on agriculturally related activities for their means of substances and livelihood (Okuneye, 1998). According to Waldei (2003), youths usually engage in sustainable livelihood through NRM due to the fact that they are full of energy and are good explorers, consequently, they are found in jobs/occupations that;

- Require heavy, sustained and physical effort; strength in particular, is commonly seen as key asset of youths.

- Are risky and often short-term, but may offer high and or quick returns
- Are rural and peri-urban based but do not depend upon control of land or other key NR assets (although access to common-pool resources may be significant).

Aquatic environment is an asset of natural resources (NR). Its livelihood potential can be described as the art and act of making a living out of water and wetland environment. This paper intends to concentrate on renewable aquatic resources as source of livelihood for the Nigerian youths.

The Nigeria Aquatic Physiogeographic Potential

Water bodies, if properly managed is the most abundant inexhaustible resource. Nigeria is blessed with abundant inland water resources about 149,919 km^2 (12.5 million ha) made up of major lakes, rivers, ponds, flood-plains, mining and stagnant pools (Ita et al, 1985) and the saline coastal mangrove swamps covers 9,000 km^2 in the seven coastal states of Lagos, Ondo, Edo, Delta, Rivers, Akwa-Ibom and Cross River States. The coast can be classified according to four regions according to differences in general morphology, vegetation and equally beach types from the west to east. These regions are, the barrier-lagoon complex, the transgressive mud beach, the Niger Delta and the strand coast (Ajao, 1994). She is equally blessed with a shoreline of about 960 km stretch (Badagry - Calabar) and 200mm (nautical miles) of Exclusive Economy Zone (EEZ) and area of 210,900km^2 within which Nigeria exercise sovereign rights for the purpose of exploiting, exploring, conserving and managing the nautical resources (Dublin-Green and Tuber, 1992) (fig. 1).

Fisheries

Fisheries are perceived as all the activities involved in bringing the fish to the dinning table. However, fisheries for the purpose of this paper can be defined as the renewable resources of water and wetland environment (Anetekhai, 2002). Fish in this regard refers to finfish (teleost), shellfish (invertebrate) and aquatic plants. The existing species of fish in a body of water and the method used to rationally harvest it is equally referred to as fisheries (Anatekhai, 2002). Fish account for 40percent of the animal protein in Nigeria diet and 80percent in form of bush meat in the diet of rural and peri-urban coastal communities including the Niger Delta areas of the country (Amosu, 1997, Ayeni, 1998 and Ajayi, 1979). Fisheries in Nigeria are in three broad categories namely, artisanal, trawl fisheries and aquaculture, but youths participation is more feasible in artisanal and trawl fisheries compared to aquaculture.

Artisanal Fisheries

Youths fit very well in various fishing activities at the village level using locally dug-out wooden canoes which are usually unmotorised while the few ones are able to move far up to 5m compared to the unmotorised ones which are more often used in the inland waters and within 2mm of coastal waters. Here, fishing gears uses are mainly traps, hooks and line, cast-nets, and other unconventional gears (poison and chemicals).

Children and youths learn this fact of fishing from childhood by joining their parents in fishing. After mastering by art they are now left alone to execute the various activities such as harvesting, transportation (navigation), storing, processing, marketing and distribution of the produce. Children and youths go to gutters, drains, pools, and pools

immediately and after rains to search for aquatic organisms mainly for home consumption. At the rural and peri-urban level, artisanal fisheries is mainly for home consumption but occasionally, large landings may be sold for cash (Anetekhai 2002). This sector is the most important part of fisheries as it accounts for over 80percent of fish production in Nigeria.

Trawl Fisheries

In Nigeria, trawl fishing is purely industrial, transitively, it is highly intensive and requires over 100 million Naira for a trawler or one boat operator (Anetekhai, 2001). Their area of operation is 5mm and beyond which include the EEZ. Youths are usually the backbone of this industry, since they form bulk of the force. This is because they still have the required strength to withstand the rigour, turbulent and harsh weather condition of the high sea. These youths are usually those from the coastal states and the Niger Delta youths that have known and graduated from the act of artisanal fishing from mostly the rural and peri-urban coastal and wetland communities of the country.

Aquaculture and Wildlife Conservation

Youths participation in aquaculture has not been too feasible compared to artisanal and trawl fisheries, but seasonal traces during harvest time are well understood. Village and community youths are employed on a daily or contractual basis due to heavy strength required in the dragging process of harvesting. Aquaculture is the cultivation of fish in a controlled or semi-controlled environment. It can also be called fish or farming, as an in-situ conservation method of aquatic resources. It is an aspect of Natural Resources Management (NRM). The ex-situ methods refers to wild animals in zoological gardens, games reserves, national parks and museum which is mainly for Aesthetic, tourism, recreation and education of both youth and adults.

The Nigeria Aquatic Renewable Potential

Fisheries and wildlife resources could be referred to as the renewable natural resources obtained within the inland waters, coastal water, shoreline (splash and supratidal zone) and the EEZ.

Fin/Shell Fish

Most of the renewable resources exploited for foods in Nigeria are fin and shellfishes. There are over 200 species of finfish in Nigeria inland waters (Ita, 1994). An existing diversity of finfish consisting of about 199 species from 78 families can be found in the brackish and marine environment (Ahove, 2001). With the exception of the family Tetraodentidae the puffer fishes, which are poisonous, all other Nigerian fishes are edible. (Amadi, 1991) The Nigeria shellfish resources include shrimps, crabs, lobsters, and molluscs.

Reptiles

The main reptiles are tortoise, snakes, crocodiles, monitor lizards and terrapins. They are hunted extensively for their meat and skin. The high demand for crocodile skins, meat and body part for traditional medicine certainly have contributed to the observed decline in their population (Anon, 1986).

Amphibians

In Nigeria, there are 59 species of amphibians (Ita, 1994) frogs and toads are the most common, they have a wider distribution during the rainy seasons and abundant in Lagos, Ogun and Kwara States and as they move towards the coast the species diversity tends to increase (Adedayo, 1988).

Birds

While in many countries aquatic birds are hunted for sports, in Nigeria, they are predominantly regarded as a source of meat (Ajayi, 1971) seventy-two species of water associated birds have been identified water fowl and other large birds such as darters, goliath-heron, fish eagle and gulls are hunted around the River Niger and Lake Kainji. These aquatic birds contribute to the tourism industry and a very popular sport among the local elite, (Ita, 1994). Body parts of aquatic birds are used in fishing communities as traditional medicine for ailment and protection against water diseases (Okaeme et al 1989).

Mammals

Among the mammals are the marsh mongoose, manatte, hippopotamus, civets, genets and others. Only mamal of the foothed whales have been found in Nigeria coastal waters. The common dolphin *Dolphins deeplis* is regularly found, (Tobor, 1992). species of mammals have been identified in Nigeria aquatic environment (Ita, 1994).

Plants

About 29 families of aquatic plants have been identified in Nigeria (Ita, 1994). Among them are red-mangrove trees, which are largely exploited for fuel-wood by the rural and coastal communities. These are used for furniture, building of canoes and houses. Raphia palms (*Raphia hookeri*) are tapped for palm wine and distilled to provide local gin. Aquatic plants can also be converted to fertilisers, matting, bedding, pulp and paper etc.

Endangered Nigerian Fisheries Resources

Nigeria loses several hectares of wetlands to development projects annually, through conversion of wetland into dumpsites, dredging, sanitary landfills, sand filling, agriculture, bridge, rail, road construction impoundment, industrial waste (pollution), urbanisation (commercial/residential development), deforestation and are due largely to the uncontrolled exploitation and exploration of the countries aquatic resources in the rural and wetland environment. Various resources are currently threatened through these activities. The birds and the mammals are greatly decreasing in population owing to uncontrolled exploitation. In the fresh water, important fish resources endangered include bonga, sardinella, juvenile, shrimps and the young of high value in nursery grounds are also affected Kusemiju (1992) listed some endangered marine species such as rays, croaker, marine cat-fishes, soles, grunters, tilapias, crustaceans, molluscs, mangroves oysters and the pink shrimps which is of particular interests, as the target of at least 80percnt of licensed trawlers and shrimpers in Nigeria coastal waters.

Socio-Economic And Environmental Benefits

Youths according to Anetekhai (2002) can derive self-employment, financial employment, self-fulfilment, fun and pleasure in the act of fishes. The subject of fisheries is indeed capable of providing solutions to the problem of poverty. It can also be the antidote to economic and rural development approach to alleviation of poverty, which Matanmi

(1999) described as going at a longitudinal national rate of 33-50percent since 1970. According to Anetekhai (2002). provision. provision of conducive environment in the rural and peri-urban communities would encourage the youths to have a rethink, move back to their communities and be meaningfully engaged. instead of moving into the urban area where they are often unemployed.

This could also stop the problems of mischief, gangsters. ethnic militias, and touting, which have spread across our geopolitical zones. The intensive participation of the and peri-urban youths in the Bakassi boy, OPC, Almarijis, Egbesu, Area boys and a host of others can convert these abandoned renewable aquatic and wetland resources to economic values. Aquaculture, which could be described as the management phases of fisheries, can stock water bodies at little cost and ensure wild life conservation through the ex-situ method. These youths knowing fully well that if they go close to those ecological resources, they are likely to have sizeable bush meat and other resources that could be eaten or sold for cash would want to practice such activities.

Recommendation

Empowerment of Nigerian youths through fisheries and wild life in aquatic and wetland environment as source of livelihood is an ecological blessing. Due to the natural aquatic resources coupled with the in-depth human resources the nation could establish a ministry of fisheries and wild life for proper management of the natural resources. Emphasis should be placed on research in fisheries and wild life and exploitation of these resources in an environmental friendly manner. On this note, it is better for the government not to dredge River-Niger, because this area forms the nursery ground for the Nigerian rich fisheries resources (Anetekhai 2002). This activity will result to parallel destruction of the natural recruitment of these resources. Government should also promote primary environmental care activities that address the basic needs of communities, improve the environment for children at the household and community levels. The participation and empowerment of local population, including women, youth, children, and indigenous people, towards the objective of integrated community management of resources should be encouraged.

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A SURVEY OF RURAL YOUTHS INVOLVEMENT IN NON – FARM ECONOMIC GENERATING ACTIVITIES IN SELECTED LOCAL GOVERNMENT AREAS OF LAGOS STATE

BY

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Abstract

The study was designed to survey the involvement of rural youths in non-farm economic generating activities. The sample was made up of one hundred and fifty (150) crafts men and artisans randomly selected from five local government areas of Lagos State. Questionnaire was used for data collection. The result showed among other things that fashion designing was the most common trade in the localities surveyed. Females are more involved in non-farm economic generating trade than males. Inadequacy of basic infrastructural facilities contributes to the incessant drift of youths from rural to urban centers. Non-farm economic activities play a major role in reducing unemployment among youths in the state.

Introduction

The youths of any nation are generally referred to as the labour force or the working class. Youth are characterized by special features which include: innovation, proneness, minimal risks aversion, faster reaction time, less fear of failure, less conservatism, greater physical strength, social propensity and faster rate of learning (Jibowo and Sotomi, 1994). These characteristics possessed by youths made them an indispensable group in any society. They can work effectively better than the old people. The youth age ranges from 15 to 35. It is between this age range that one can classify oneself as youth. The capability and ability can be properly measured during the youth age range.

Employment generation is one of the major issues that the structural adjustment programme (SAP) was expected to address and is second only to the diversification of Nigerian's production and export base in importance, several policy instruments were sued to address the issue of employment generation within the SAP framework. One of these is the establishment of the National Directorate of Employment (NDE), which has as its mandate, the stimulation of self-employment generation.

The NDE recognized that the development of artisanal and craftsman's skill among Nigerian youths is a major means of stimulating self-employment generation, hence its emphasis on the youth employment and vocational skills development programmes (Offong, 1988).

The NDE has three main schemes, namely: the national open apprenticeship, the school on wheels and waste to wealth; which are directed at developing the artisanal and craftsman's skill of unemployed youths. The development of these skills has in addition to reducing unemployment, other benefits to the economy such as production of goods, which serve as import substitutes, e.g. garments and shoes, recycling of materials which otherwise would

have been regarded as waste or obsolete and improvement in the purchasing power of ether underemployed or unemployed youths with the attendant multiplier effects.

The level of productivity and the overall contribution of artisans and craftsmen to the gross domestic product (GDP) depend, given a certain level of available resources, on the technology in use. Technology could be viewed as a collection of techniques (Moundlack and Hellighausen, 1982) or all the technical information about the combination of inputs necessary for the production of a particular output (Henderson and Quandt, 1980). Thus, training to improve skills, that is, investment in human capital, an innovations which results in the development and use of new capital assets, both have the capacity to change technology, shift production to a higher level production function and therefore, increase output for a given level of resource inputs.

It has been estimated that between 20percent and 30percent of the rural labour force in most developing countries turn to non-farm activities as a primary source of employment and earnings (World Bank, 1978). These people are often the poorest of the rural poor with neither land nor capital, and can barely achieve their basic needs of life. An integrated rural development approach must therefore, include non-farm activities for those with no opportunity for farming. Even among the remaining 70percent to 80percent of the rural population which has access to land and can farm, income may be insufficient to meet the family's basic needs of food, shelter and clothing.

The families of these poor farming households are often unemployed or underemployed for many weeks or months of the years in the slack agricultural seasons, and there is a considerable potential need for secondary employment. A cottage industry either using family or hired labour does not use motive power for any operation and employs less than 20 hired workers. The cottage or small-scale industries, which are mainly found in the rural setting, are the bricklaying, carpentry, fashion designing, mat and cloth weaving, and block making. This is an association of people especially in the rural area coming together to work in other to form a small-scale industry.

Manufacturing industries which is broadly classified in different ways can be introduced to the rural area in order to improve the standard of living and more so the social well being of the rural people. The divisions in the tables include capital goods, intermediate goods and consumer goods. There is very little production of machinery or capital goods. In Nigeria, these accounts for few percent of value added in manufacturing; nearly all capital goods, therefore, are imported.

There is on the other hand, substantial production of intermediate goods, goods that are not consumed directly by consumer but use up as inputs by other industries of one type or another. The largest category of manufacturing activity, in Nigeria, was the production of consumer goods for domestic market, accounting for about 55 percent of total value added. Since the people in the rural area have little or no contact with capital goods and intermediate goods, then, there is a great need to establish consumer goods manufacturing industries in the rural area and also improve the existing ones. These consumer goods include soap, tea, cloth, bag, shoe, and milk, which the people in the rural area can benefit from to improve their standard of living and also provide secondary employment.

This paper intends to survey rural youth's involvement in non-farming economic generating activities in five selected local government areas of Lagos State. It highlights all the available trades in arts and crafts and examines the contribution to employment generation among the youths in the selected areas.

Research Hypotheses

The following hypotheses were postulated for the study.

(1) There is no significant difference (at $P<0.05$) between inadequate social amenities and the production rate of the artisans.

(2) There is no significant difference at ($P < 0.05$) between employment generation by agriculture and artistry.

(3) There is no significant difference (at $P< 0.05$) between available guaranteed minimum credit fund and the artisan's productivity.

(4) There is no significant difference (at $P< 0.05$) between the artisans' investment in economic generating activities and returns.

Methodology

The population of the study was made up of one hundred and fifty (150) rural youths employed in non-farm economic generating activities in five selected local government areas of Lagos State.

A total of one hundred and fifty youths involved in non-farm economic generating activities were randomly selected from five communities in five geo-political zones of the state. Thirty (30) youths each from Ajara (Badagry), Onmedu (Ibeju-Lekki), Iba (Alimosho), Ita-Elewa (Ikorodu) and Poka (Epe).

A five-point scale questionnaire of Likert type was developed and used for the study. The questions asked from the target group were derived from detailed literature and discussions with Agricultural Education Specialists were designed to elicit the information needed to answer the hypotheses stated. Being subjected to criticisms and modification by Agricultural Education specialists validated questionnaire.

One hundred and fifty copies of the questionnaire were distributed to the respondents. This was done by personal calls in the five selected local government areas. One hundred and forty five (145) completed copies of the questionnaire were recovered and used for the study.

The responses made to the items in the questionnaire were analyzed using frequency, and percentages and mean. Standard deviation and chi-square statistics were further used to answer some of the hypotheses.

Results And Discussion

Ho_1: There is no significant difference (at $P<0.05$) between inadequate social amenities and the production rate of the artisans.

Table 1: Responses on the availability of social amenities and production rate

S/NO	ITEMS	5	4	3	2	1	X^2	RESULT
1	There are enough accessible roads in your locality	11	33	37	64	-	22.35	S
2	There is adequate supply of electricity to support your trade or vocation	17	12	28	88	-	24.78	S
3	There is adequate supply of pipe-borne water in your locality	27	31	36	51	-	14.04	S
4	There are adequate medical facilities in your area.	09	14	39	83	-	31.51	S
5	There is a good means of communication in your locality.	09	23	38	75	-	26.98	S

X^2 table = 9.48

Ho_2: There is no significant difference at ($P < 0.05$) between employment generation by agriculture and artisinal.

Table 2: Level of employment generation by agriculture and artisinals.

S/NO	ITEMS	5	4	3	2	1	X^2	RESULT
1	Do you engage in farming at your leisure time?	14	35	40	53	3	10.70	S
2	Do you prefer farming to your trade or vocation?	11	18	33	78	5	16.19	S
3	Do you enjoy doing your trade or vocation?	32	36	28	42	7	2.11	NS
4	Do you encounter great health hazard on your trade or vocation?	28	33	39	42	2	4.92	NS
5	Do you prefer to operate your trade or vocation in urban center?	66	58	12	7	2	6.78	NS

X^2 table = 9.48

Ho_3: There is no significant difference ($P< 0.05$) between available guaranteed minimum credit fund and the artisan's productivity.

Table 3: Availability Of credit and the artisan productivity.

S/NO	ITEMS	5	4	3	2	1	X^2	RESULT
1	Is there any small-scale loan from the government for people in your trade or vocation?	4	17	48	66	10	33.15	S
2	Is there any bank in your locality, which gives loans to traders or artisans?	15	24	49	55	2	11.76	S
3	Most of the raw materials you used are locally produced.	10	35	39	52	9	12.28	S
4	There is need for your trade or vocation to form an association. which can channel your need to the government.	49	39	31	18	8	0.05	NS
5	Do you make as much return per month as your urban counterparts?	10	27	48	53	7	13.50	S

X^2 table = 9.48

Ho_4: There is no significant difference ($P< 0.05$) between the artisans' investment in economic generation activities and returns.

Table 4: Artisans' investment and income generating activities.

S/NO	ITEMS	5	4	3	2	1	X^2	RESULT
1	Do you spend less than ₦10,000:00k to start your trade or vocation?	26	40	22	50	7	3.8	NS
2	Do you spend up to ₦20,000:00k to start your trade or vocation?	55	49	10	29	9	3.20	NS
3	Do you spend above ₦20,000:00k to start your trade or vocation?	16	28	33	60	8	8.87	NS
4	Do you make less than ₦10,000:00k per month?	34	46	35	25	5	1.33	NS
5	Do you make up to ₦10,000:00k per month?	22	25	31	65	2	8.79	NS

X^2 = 9.48

Discussions

From the analysis of the results of the effects of inadequate social amenities and the production rate of the artisans. there was significance difference in all the variables measured (table1). This agreed with (Idachaba. 1986) who observed that the greatest constraints to rural development are inadequate infrastructural facilities. The constraints relate to the acute shortage and lack of basic infrastructure and social amenities such as

good shelter, portable water, accessible roads, electricity, health and education among others. The prevision of these facilities could not be solely the responsibility of government alone, private sector agencies and non-governmental organization participation is necessary, if any reasonable progress would be made in the area of infrastructural supply.

The significant role of agriculture in generating employment was compared to non-farm economic activities. The findings revealed that involvement of rural youths in non-farm economic activities was not a substitute for their preference for farming as an occupation (table 2). This result agreed with (World Bank, 1978) who estimated that between 20% and 30% of the rural labour force in most developing countries turn to non-farm activities as a primary source of employment and earning. An integrated rural development approach must therefore, include non-farm activities for those with no opportunity for farming.

The result of the analysis of the effects of guaranteed minimum credit fund and the artisans productivity was quite revealing. It was observed that all the items considered were significant except the need for the trade or vocation to form a rural based association to channel their need to the government (table 3). This though, the researcher considered of utmost importance. The findings agreed with Staley and Morse, (1965) who opined that finance is crucial to the sustainable development of small-scale industries in developing countries. Availability of credit facilities could go a long way in reducing unemployment among youths by encouraging establishment of small-scale businesses in rural areas.

There was no significance difference between the artisans' investment in economic generating activities and returns on all the observed variables (table 4). The youths surveyed all agreed that their returns were not significantly different. The capital invested by the respondents might not be substantially large enough to give an appreciable return, which can guarantee the youths further investment into other sub-sectors. This agreed with Goldstein and Hilber, (1984) who reviewed rural development and employment generation opportunities for the youths and found that there is opportunity for fund generation for investment purposes in the rural communities.

Conclusions

The importance of non-farm economic activities in the traditional rural settings and its development could not be over-emphasized. Non-farm economic activities help to develop the skill of art and craft in youths. It helps in providing alternative for the farm work, thereby developing the youths into art and craft and making them resourceful. This will further help to retain the youths in rural areas.

Non-farm economic activities will further reduce unemployment in the nation and thereby reducing social ills and hazards through reduction of miscreants. It will also serve as a source of income generation of government from taxes they will obtain from the artisans and craftsmen. Exportation and technology development could further be achieved through governmental involvement and support of the scheme. It will finally serve as secondary employment for rural farmers during the lean season and reduce rural – urban migration of youths.

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SUB-THEME 3

TRAINING PROGRAMMES FOR CHILDREN AND YOUTHS IN SCHOOL (PRIMARY, SECONDARY, TERTIARY LEVELS) TO ENHANCE DECENT LIVELIHOOD

ENHANCING TRAINING PROGRAMMES FOR AGRICULTURAL STUDENTS IN NIGERIAN UNIVERSITIES FOR DECENT LIVELIHOOD

BY

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Abstract
The functionality of the agricultural curricula of Nigerian Universities is a subject of debate amongst practitioners of the discipline and, indeed, the entire Nigerian citizenry. There are indications that there is an existing gap between what is and what ought to be. There is an urgent need to examine the totality of the agriculture curriculum in general, and the cognitive, psychomotor and affective domains in particular. The paper found the training programs for agricultural students in Nigerian Universities to be defective.

The paper suggests among other things a review of the present curriculum making use of the thematic approach to include themes, performance objectives and evaluation guides.

Introduction

The importance of agriculture in the economic growth and national development of a developing country like Nigeria cannot be over-emphasized.

Firstly, efficient agriculture helps a country to meet the food demands of a growing population.

Secondly, agriculture supplies adequate and cheap raw materials for our industries since many of our industries are agro-based.

Thirdly, agriculture supplies savings to other sectors of the economy.

Fourthly, agriculture serves as a market for the products of the industrial sector.

Fifthly, agriculture provides productive employment.

Sixthly, agriculture brings in foreign exchange or capital formation through increased earnings from the agricultural sector. Improved agriculture, according to Akubuilo and Akubuilo (2000) is beneficial to the nation as a whole and to the individual farmers in terms of raising the per capita income as well as improving the socio-economic conditions of the farming population.

From all indications it would appear that many disturbing facts and questions have now arisen on the role of agriculture in the economic development of Nigeria. With the advent of oil (petroleum), various Nigerian governments started to pay lip service to agriculture. Apart from food shortages (which are essentially culminations of other factors), critical issues in the Nigerian food arena today according to Olaitan (1993) are:

- disinterest and poor attitude of youths to farming.

- an abundant supply of graduates of agriculture who are neither able to find paid employment nor employ themselves, and
- an obvious situation where about 90% of the food supply is produced by aged illiterate peasants.

This paper takes a critical view as to why an abundant supply of graduates of agriculture are neither able to find employment nor employ themselves.

The Bachelor of Agriculture Curriculum of Nigeria Universities

The Bachelor of Agriculture Curriculum of Nigerian Universities is a 5-year programme. The curriculum aims at training young people in the various areas of agriculture to acquire skill and competence necessary to scientifically adopt techniques in agricultural resource management and production. Most faculties also have Departments of Food Science and Technology where the techniques of food processing are acquired. Constituent departments of faculties of agriculture in various Nigerian universities include:

(1) Department of Agricultural Economics, Extension and Management.
(2) Department of Animal Science and Fisheries
(3) Department of Crop Science
(4) Department of Soil Science
(5) Department of Food Science and Technology

Individual universities have modified the names of some department in the faculty of Agriculture principally aimed at attracting more students into the faculty. For example, some faculties have merged their departments of crop and soil science and renamed them, Department of Agronomy.

Department Objectives

Department of Agricultural Economics and Extension

The departmental curriculum tries to satisfy the three domains of curriculum planning, notably, cognitive, affective and psychomotor domain. The training is expected to equip the students for diverse careers in education and research, banking industry, government and private enterprise. The students on graduation should be able to:

(i) establish and manage an agro-business;
(ii) serve as an adviser in the setting up and running of cooperative organization;
(iii) advise on a full time or consultancy basis on the management of scarce agricultural resources in private firms or international organizations like the FAO, UNICEF, UNDP, UNIFEM etc.
(iv) serve as project evaluator and manager for banks interested in agricultural programmes;
(v) serve as extension officers for the Ministry of Agriculture.

Department of Animal Science and Fisheries

The overall objective of the programme is to train students to acquire skill and competence required for service as animal scientists and fisheries' specialists. Graduates of the programme will be expected to serve as major sources of manpower for the livestock industry, government ministries and international organizations which emphasize animal/fisheries productions and management, government and private farms.

Department of Crop Science
The departmental curriculum is designed to produce agronomists, horticulturists, genetics and crop protection professionals who will be able to translate their theoretical knowledge into practice with the objective of increasing the production of food crops, fruits, vegetables, ornamentals and flowers and at the same time, conserve the environment.

Department of Soil Science
The departmental curriculum is designed to produce graduates with sound and in-depth knowledge of the fundamentals of soil science, a good research capability and intensive practical experience in the management of the soil to be able to support the growth and production of crops to effectively perform as ,soil scientists, agronomists, teachers, research officers extension workers in specialist areas, and managers of agricultural business concerns.

Department of Food Science And Technology
The objectives of this programme are:

(i) to provide the expertise needed in the present and future Nigerian food industries;
(ii) to produce graduates who may be involved in research and development in government or private industrial laboratories or in product and process development in food and related industries.

What is (the Present Position)?
The Bachelor of Agriculture curriculum is such that Faculty General Courses are taken by all students in year one, two and three irrespective of the discipline of specialization. Fourth year is the IT year or the Farm Year. In the farm year, the students are expected to have a 9 – 12 months industrial training component during which period, students are supposed to be given intensive practical farm training. The industrial training period in the case of the Department of Food Science and Technology emphasizes acquisition of on-the-job skills in the food and allied manufacturing organizations.

To be eligible for a Bachelor of Agriculture degree in any department of the faculty, a candidate must successfully complete the following:

(a) University common courses;
(b) Inter and intra faculty courses;
(c) Departmental core courses;
(d) 9 – 12 months industrial training
(e) Satisfactory completion of an original research project work.

Review of Related Literature
Curriculum evaluation concerns itself with the value judgment or the worthwhile ness of a learning process as well as the effectiveness with which it is carried out. Levy (1977) noted that curriculum evaluation is the diagnosis of curriculum for decision-making and improvement on the entire curriculum.

Tyler (1949) in his evaluation model focuses on defined instructional objectives vis-à-vis:

- statement of objectives in behavioural terms;
- focusing teaching objectives on learners;

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- statement of objectives in behavioural terms;
- focusing teaching objectives on learners;

(i) Antecedent Variables (variables related to University teachers)

(ii) Intervening Independent Variables (variables related to the university system which provide the enabling environment for improvement in students' knowledge, skill and attitude).

(iii) Dependent Variables (contribution of training) education to effectiveness and efficiency on the job i.e. lecturers' performance or functional effectiveness in the classroom).

(iv) Consequent Variables (attainment of organizational expectations, goals and objectives. That is, a measure of the relative success of agriculture graduates to contribute to the nation's agricultural development).

The Present Bachelor of Agriculture Curriculum

A critical examination of the above treatise would lead one to suggest some modifications in the present curriculum. These suggestions include:

(1) Faculty general courses should end in year two. This means that from third year, departmental specialization should be intensified.

(2) However, if faculty general courses are to proceed up the third year, then the 4th year (farm year) should be devoted exclusively to departmental courses and the attendant practical work.

(3) Admission requirements into the faculty should be reviewed. This has become more urgent now than ever before since many universities now operate Pre-Science/Pre-Degree programmes through which they admit prospective students into the various departments in the faculty. This implies that the entry behaviour of some students admitted to study agriculture in many of our universities is questionable.

(4) The farm year is a very important year in the Bachelor of Agriculture Curriculum. Ironically, because of many constraints, relevant government and private industrial/agro-establishments are reluctant to offer students places in their establishments. Where such offers are made, such students are not given the opportunity to handle sensitive equipment or to know the intricacies on the job. Again, teachers from the universities are supposed to pay inspection visits to assess the performance of their students on industrial training. Due to poor funding of the universities, such visit are now rarely undertaken.

(5) Earlier on in this paper, it was highlighted that each student should be guaranteed adequate equipment, farm space, farm structure and regular supply of fertilizers and animal feeds. In practice this is not obtainable in most universities including even the universities of agriculture. Agriculture science equipment, tractors and associated implements. Laboratories and fixtures and other ancillary inputs are either not available or if available at all, are grossly inadequate.

(6) Most of the inadequacies in the implementation of the agricultural curriculum in our universities have been blamed on poor funding. This assertion has been corroborated by a number of researchers. There is sufficient evidence now (Ajayi, 1985: Adesina, 1987 to say that varsities and other tertiary institutions are poorly funded and that the burden is too much for one government. They stressed the fact that it is generally agreed upon that two sectors are very vital for national development: these are education and health.

According to Ivowi (1998) poor funding affects real academic work of the universities. He stressed that this is mostly likely to affect standards, as staff vacancies cannot be filled because of lack of funds. Similarly, according to the author, research funds are ridiculously lean, staff participation in learned conferences is adversely affected and publication of academic journals for the dissemination of ideals, research results and findings is below expectation. He finally advocated the need for a complete reversal of this ugly situation for the proper implementation of the current policy on higher education.

Recommendations

For effective and efficient training of agricultural students in Nigerian universities, the following recommendations are adduced:

(1) Universities should be properly funded. In this direction, governments, Non-Governmental Organization (NGO's), Educational Tax Fund (ETF), the Private Sector, etc. should all assist in funding education.

(2) Faculty libraries should be properly equipped with relevant textbooks, journals and other materials. Relevant agricultural textbooks by universities teachers should be assessed before they are recommended to students to determine their readability, adequacy and usefulness for learners. This has become necessary in this era of self-publishing by lecturers.

(3) Teachers of Agriculture in our universities should be competent. Also, every department in the faculty should be properly staffed in line with the minimum standards of the National Universities Commission (NUC).

(4) All lecturers in agriculture in our universities should be encouraged to obtain the Post Graduate Diploma in Education (PGDE) in addition to the conventional qualifications. This will undoubtedly enable them to teach better.

(5) University lecturers should be motivated to increase their productivity. Research grants and in-service training should be provided as a matter of routine. Salaries should be paid as and when due to be able to invert on personal texts and journals purchases.

(6) Students enrolment in our faculties of agriculture is not encouraging. This may be partly due to the apparent neglect of agriculture by the Nigerian government. To redress this anomaly, it is suggested that within the next fifteen years, the Federal Government should award every undergraduate student of agriculture automatic scholarship. On graduation, loans (Supervised Agricultural Credit) should be given to the graduates to enable them become self-employed. In line with these suggestions, the Land Use Act should be reviewed to ensure its functionality.

(7) The teaching of agriculture in our universities in our declining economy will take a big stride toward relevance and the solution of pressing national problems if the school experience of students and teachers include a closer and more investigative look at our environment.

(8) The present Bachelor of Agriculture curriculum of our universities should be reviewed. In so doing, use should be made of the thematic approach to curriculum content selection and should include themes, performance objectives and evaluation guides.

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EVALUATION OF MATERIALS AND METHODS FOR TEACHING AGRICULTURAL SCIENCE IN LAGOS STATE PUBLIC SECONDARY SCHOOLS: A CASE STUDY OF KOSOFE LOCAL GOVERNMENT AREA OF LAGOS STATE

BY

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Abstract

The study sets out to examine and evaluate the materials and methods for teaching agricultural science in public junior and senior secondary schools in Lagos State. The instrument for data collection was structured questionnaire. It was discovered from the study that educators especially in junior secondary schools concentrated more on theory aspect of agriculture (62.67%), while those in senior secondary schools teach theory and practical aspects averagely (56.00%). Fifty percent of the junior secondary and forty-six percent of senior secondary students respectively were not exposed to farm practical experience. Majority (72%) of the students' junior secondary and 64 percent (senior secondary) were not exposed to any laboratory work throughout the session. Students were conversant with hoes and cutlasses as tools of agriculture. Almost 77.33 percent (Junior Secondary) and 80.67 percent (Senior Secondary) students were not willing to take agriculture as their main career. The result clearly shows that insufficient and inadequate emphasis was placed on "Learning and doing" in Lagos state schools, which does not stimulate and sustain students interest in agriculture.

Introduction

It is generally accepted that people learn more and faster when the material being taught is presented through different methods. The objective of secondary school agriculture according to the National Policy on Education is: to stimulate and sustain students' interest in agriculture; enable them acquire basic knowledge and practical skills; and prepare them for further studies and for occupation in agriculture (Federal Ministry of Education, 1985).

The implication of this is that over four million Nigerian children in secondary schools (CBN, 1994) would have an opportunity of acquiring some basic knowledge of agricultural science at this level of education. This is why evaluation of the materials and methods available in the secondary schools for teaching agriculture is essential to determining if they meet the needs and aspirations of the expected future farmers (Obinne, Agada and Idu, 2001).

Akinbode and Ladipo (1979) reported that in four agricultural and related schools they studied, insufficient and inadequate emphasis was placed on "Learning and doing". Practical experience in these schools was limited by lack of equipment, funding and time, worsened by lack of field experience by tutors themselves who had gone through the same system prior to taking up jobs as agricultural teachers.

Result and Discussion

Age and Gender Distribution of Students

Table 1 shows that total number of students and distribution in terms of sex and class. 69 male (46%) and 81 female (54%) from junior secondary schools were sampled while 60 male (40%) and 90 female (60%) from senior secondary schools were selected for the study.

Table 1: Gender Distribution of Student involved in the Study (n = 300)

	Junior Secondary Schools		Senior Secondary Schools	
Gender	Freq.	%	Freq.	%
Male	69	46	60	40
Female	81	54	90	60
Total	150	100	150	100

Source: Field Survey, 2003

Table 2: Age Range of Respondents

	Junior Secondary Schools		Senior Secondary Schools	
Age	Freq.	%	Freq.	%
Below 9 years	--	--	--	--
9 – 13 years	49	32.67	22	14.67
14 – 20 years	101	67.33	126	84.00
21 years above	--	--	2	1.35
Total	150	100	150	100

Source: Field Survey, 2003

The larger percentages of the respondents (Table 2) fall between 14 – 20 years of age (67.33% for junior secondary schools and 84% for senior secondary schools). These groups of students are referred to in this study as youths. In order to achieve the goal of involving youths in the agricultural production and to replace the aging farmers, the teaching and learning environment has to be stimulating and adequate enough for the youths to be attracted to farming and progress in agricultural occupation. This group of students can be motivated towards the development of agriculture in the country through effective teaching and learning process.

Method of Lesson Presentation

It must be noted that the methods and materials employed in the teaching of agricultural science do not differ in both junior secondary schools and senior secondary schools. The teaching of agricultural science is heavily dominated by the "chalk and talk" method. The teacher is the central "actor" with the students passively watching or sometimes taking notes. The class assignments, though, occasionally given are generally in the form of either reading the textbook or answering questions in writing. A summary of the findings is presented in table 3.

In order to attune the goal of involving youths in agricultural production and to replace the aging farmers, the teaching and learning environment has to be stimulating and adequate enough for the youths to be attracted to and interested in agricultural occupation. Isiaka and Dacosta (2001) defined teaching environment as the organization of material resources available for effective teaching – learning process. They include classroom, laboratory, poultry houses, rabbit pens, simple farm tools, farm machineries and so on.

Instructional media often referred to as teaching and instructional aids are also included in the materials resources necessary for effective teaching – learning process. That these material resources are available is not enough, the organization, maintenance and appropriate selection for use is most important. The onus then falls on the agricultural science teacher, whose responsibility is to organize, maintain and use economically and appropriately the material resources available in order to ensure effective teaching and learning process. Additional efforts by the teachers and exposure of students to materials and methods of teaching becomes very necessary to enhance the performance of the students by having access to different modes of presentation and organization of teaching methods.

The objective of this study was to determine the level of attitudinal disposition of students to agricultural science in Lagos State public secondary school. (A case study of Kosofe Local Government Area), identify the materials available for teaching agricultural science, identify the methods of teaching and teaching aids to which the students were exposed to, determine the attitude of students to agriculture as a profession and suggest ways of improving the teaching of agriculture in secondary schools

Methodology

Students from public secondary school in Lagos state were the respondents for the study. Three hundred students were selected from ten (10) secondary schools in Kosofe Local Education District (LED) in the state. Thirty students were stratified and randomly chosen from each school. The stratification included male and female students as well as junior secondary and senior secondary schools in the local government.

This survey was carried out in Lagos state Kosofe local government area with a view to determining the factors, which are crucial to the success of the above policy statements. It was centered on the following variables.

(i) the teaching methods used:
(ii) availability and proper use of science laboratories, field trip, type of school farm students were exposed to, equipment and supplies.
(iii) Attitude of students to agriculture as a profession.

The data were collected through the use of structured questionnaire. The questionnaire was taken to ten secondary schools (including five junior and five senior secondary schools), which were randomly selected, from Kosofe Local Government Area of the state. The questionnaire reflected questions that elicited responses to issues on exposure of students to materials and methods employed in the teaching of agricultural science in Lagos State secondary schools.

Table 3: Method of Lesson Presentation that Students were exposed to

Method of Lesson Presentation	Junior Secondary Schools		Senior Secondary Schools	
	Freq.	%	Freq.	%
(a) Teacher teaches only the theory aspect of agric	94	62.67	57	38.00
(b) Teacher teaches both theories and practical	62	41.33	84	56.00
(c) Students participate fully in farm practical and laboratory work	42	28.00	24	16.00
(d) Teacher presents summary of facts on the chalkboard after lesson	102	68.00	90	60.00
(e) Teacher gives note to class captain to copy on chalk board after lesson	70	46.67	102	68.00
(f) Teacher delivers note through dictation	15	10.00	27	18.00
(g) Teacher presents lesson through reading of handout	27	18.00	15	10.00
(h) Teacher do not give note at all	12	8.00	3	2.00
(i) Teacher uses teaching aids/instructional materials while teaching	26	17.33	29	19.33

It can be deduced from table 3 that:

(i) teachers teach more of theory aspect of agricultural science in the J.S.S. classes (62.67%) while the practical and theory are averagely taught in the S.S.S classes (56.00%)

(ii) only very few students participate fully in the farm practical and laboratory work 28% for the J.S.S classes and only 16% for SSS classes;

(iii) 46.67% of students in the junior classes and 68.00% of the senior classes agreed that notes were copied by the class caption on the chalkboard after class lessons and

(iv) uses of teaching aids/instructional media were minimally used inmost schools 29.00% in junior schools only 19.33% in senior schools.

Level of Exposure to Laboratory Work

Table 4: Number of times students were exposed to laboratory work in a session

Number of Time	Junior Secondary Schools		Senior Secondary Schools	
	Freq.	%	Freq.	%
1	26	17.23	27	18.00
2	10	6.67	15	10.00
3	6	4.00	12	8.00
4	--	--	--	--
5	--	--	--	--
Note	108	72.00	96	64.00
Total	150	100.00	150	100.00

The results in table 4 shows that majority of the respondents (72%) in junior secondary schools and 64 percent in Senior Secondary Schools were not exposed to laboratory work thought the session. The implication of this is that students' understanding of the subjects will not be in-depth (shallow) since learning is equally enhanced when people see, touch, feel, smell and even take part in learning (Obinne, Agada, and Idu, 2003).

Teaching and Learning through Excursion / Field Trip

Table 5: Number of time students were exposed to field trip/excursion per session

Number of Time	Junior Secondary Schools		Senior Secondary Schools	
	Freq.	%	Freq.	%
1	18	12.00	17	11.33
2	3	2.00	4	2.67
3	5	3.33	3	2.00
4	--	--	--	--
5	--	--	--	--
Note	124	82.67	126	84.00
Total	150	100.00	150	100.00

Table 5 presents the number of times students were exposed to field trip/excursion in a session. As much as 82.67 percent of the respondents in junior secondary schools and 84 percent in senior secondary schools indicated that they and never gone on a field trip. Akinbode and Ladipo (1979) also reported that in four agricultural and related schools they studied, insufficient and inadequate emphasis was place on "learning and doing". This practice will not enable students acquire basic knowledge and practical skills of agricultural science.

Exposure to Practical Farm

Table 6: Type of practical farm students were exposed to

Practical Farm	Junior Secondary Schools		Senior Secondary Schools	
	Freq.	%	Freq.	%
(i) Arable crop	36	24	59	26
(ii) Sheep & Goat	--	--	3	2.00
(iii)Vegetable Gardening	21	14	15	10.00
(iv) Poultry	18	12	24	16.00
(v) Fruit	--	--	--	--
(vi) None	75	50	69	46.00
Total	150	100	150	100

Source: Field Survey, 2003

One striking feature of the result of this study indicated that teachers teach more of theory aspect of agricultural science than practical aspect. Table 6 reveals that only very few students participated in farm practical. Twenty four percent of respondents in junior

secondary schools and 26 percent in senior secondary schools were exposed to arable crop production, while 12 percent and 16 percent respectively were exposed to poultry production. Students were not adequately exposed to other useful aspects of agriculture (like sheep and goat, vegetable gardening and fruits). It is interesting to know that about 50 percent of the students in junior secondary schools and 46 percent in senior secondary schools were not exposed to practical farming at all, due to shortage of land in the state. This could lead to lack of interest in agriculture. Students need to be exposed to all aspects of agriculture to give them broader knowledge and career prospects.

Tool(s) and Farm Machinery Available for Use

Table 7: Type of tool(s) and farm machinery available for use

Tools/Farm Machinery	Junior Sec. Schools	Senior Sec. Schools
	Freq.	Freq.
Cutlass	72	86
Hoe	60	78
Hand trowel	6	28
Garden fork	8	44
Shovel	36	60
Pick-axe	4	32
Hand pan (basket)	30	46
Watering can	36	64
Rake	24	68
Wheel barrow	12	40
Tractor	1	--
Plough	1	2

Multiple Responses Existed

Table 8: Career Choice of students (Readiness to take Agriculture as a Career)

Career Choice	Junior Secondary Schools		Senior Secondary Schools	
	Freq.	%	Freq.	%
(a) Wish to take Agric as a career.	34	22.67	29	19.33
(b) Do not wish to take Agric as a career.	116	77.33	121	80.67
	150	100	150	100

Source: Field Survey, 2003

Many of the respondents both in J.S.S. and S.S.S. classes were exposed to simple farm implements like hoes and cutlasses (Table 7). Working with this farm implements is very tedious, labour intensive and itęm consuming. Only small areas of land could be cultivated. Output per unit time is low resulting in low income and discourages people from going into agriculture and as well causes faster ageing in the faming population.

Based on the facts above, in table 8 only 22.67 percent of the respondents in J.S.S. and 19.33 percent in S.S.S. classes indicated their willingness to take agriculture as a career, while 77.33 percent and 80.67 percent respectively were not willing to take agriculture as a career. To stimulate their interest, modern techniques of farming with less stress and minimum drudgery, good method of "Learning and doing" process should be encouraged.

Conclusion and Recommendations

Land is an important resource for teaching of Agricultural Science, since it is used for agricultural field practical. In urban Lagos, land constraints had been identified as a factor militating against the teaching and learning of Agricultural Science (Oluwole, 1987).

From the result of this survey, it could be concluded that teaching methods required for teaching agriculture at the secondary school level were not meaningfully employed. Teaching could be enhanced by several methods using visual and audio visual aids. More time is needed to be devoted for students' practical work either in the laboratory or outside it. Science films, excursions to places of agricultural interest and young farmers' club activities could all be used to supplement the relatively under equipped laboratories.

In view of this finding, the following recommendations are proffered that:

(1) Agricultural science teachers should be encouraged to attend seminars, workshops and in-service training programme in order to sharpen their practical and teaching skill. There is urgent need for both in-service and pre-service teacher education programmes on the teaching of agricultural-science to expose the teachers to the methodology of agricultural science teaching as well as the understanding of the psychological and intellectual development of children;

(2) land should be made available by the government for the teaching of agricultural science. The teaching of practical aspect of the subject should be more emphasized.

(3) government should be make more funds available for construction and maintenance of laboratories and teaching aids/instructional materials for effective learning.

(4) students should allow to make field trips to agricultural research centers and well established private farms

(5) teachers' friendliness towards students, effective use of demonstration method of teaching, organization of Youth Farmers' Club, all these will go a long way in motivating students to choose agriculture as a career in future.

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ANALYSIS OF TRAINING PROGRAMMES FOR CHILDREN AND YOUTHS IN SCHOOLS TO ENHANCE DECENT LIVELIHOOD

BY

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Abstract
This paper examines analysis of training programme, with special reference to children and youths in schools in Ogun state, Nigeria. Evidence abounds in most schools that the training programmes given to children and youth were regular and relevant to satisfying their actual competencies in job performances. More importantly, the training programmes identified for children and youths were practical and related to prevailing objectives of the national educational policies. Properly developed questionnaire was used to obtain information from respondents. A total of eighty (80) children and youths were surveyed. Descriptive statistics such as percentage, frequencies and mean scores were used for analyzing personal characteristics, inferential statistics (Pearson Product Moment Correlation Coefficient) was used to test stated hypothesis. The finding of this study indicated no major philosophical various areas of training programmes desired. It is clear from the findings of the study that children and youths have needs for training programmes in the various subjects considered. Although knowledge and competence are fundamental; provisions of training programmes for children and youths should be a joint responsibility of the Local, State and Federal Governments.
Key Concept: *Training Programmes, Children and Youths.*

Introduction

One of the main factors limiting the development of effective training programmes for children and youths in developing countries is the total lack of information on the training needs of children and youths. It was noted by Patel, (1980), that although developing countries are faced with acute shortage of resources for development they are also characterized by a high degree of wastage both in terms of effort and scarce resources.

The successful implementation of a project's objectives / activities requires that qualified children and youths (human resources) be employed/deployed into the organization, and be further trained for executing all the tasks in their job positions as a means of realizing the goal of the organization (Patel, 1980).

Human resources development is one of the most important tasks. However, the effectiveness of this development depends on how well is utilized. Therefore, in order to ensure that work is efficiently and effectively done, children and youths should be adequately given the relevant training that would enhance their performance and productivity (Onazi 1994).

Training programme should be designed to stimulate interest and to arm agricultural science children and youths with the necessary skills and attitude, which will help them to enhance decent livelihood (Williams et al, 1984).

It is imperative that in an attempt to develop systematic training programmes in the agricultural science, every effort should be made to critically analyze training needs and evaluate the methods, techniques, content and procedures to be sure that the training provided accomplishes 'what is desired' (Jaiswal, 1989).

If the training programmes are to be progressive and enjoy institutional support, both the long-term needs of individuals and organizations should be reflected in the programmes (Patel, 1980). Williams et al (1984) identified specific subject areas in which agricultural science children and youths in Nigeria needed training. He found that programme planning procedure was the most important area of need, followed by staff relationships within agency and with outside agencies and thirdly, the teaching learning situation. He further stressed the importance of thorough knowledge of technical subject matter in agriculture as a first basis of effectiveness in agriculture enterprise or venture.

One thing that should form a major concern is the attitude of school children and youths towards agriculture. Agricultural science is taught in post primary and tertiary schools or institutions within the frame work of the National Policy on Education to serve the following purposes; to stimulate children and youths interest in agriculture; to enable children and youths acquire basic knowledge of agriculture, to expose/acquire basic knowledge of agriculture, to expose children and youths to opportunities in the field of agriculture in order to enhance livelihood etc.

Recent seminar or a National Policy on Agricultural Education and training agreed that Agricultural education and training programme must be considered as an instrument for revolutionalising and accelerating the pace of agricultural development to enable the children and youths to make substantial contribution to the economic growth of Nigeria.

Implicitly, the quality and ability of the children and youths depend on the functionality of the training programmes they went through in relation to the purpose for which they are trained.

This work thus proposes to study the relevance of the training accorded the children and youths to the actual duties they perform after their course.

Methodology

The area of study is Olabisi Onabanjo University, Ago – Iwoye in Ogun State Nigeria, which is one of the states, owned Universities in Nigeria. Olabisi Onabanjo University has College of Agricultural Sciences Comprising of Two Faculties namely Faculty of Agricultural Management and Rural Development and Faculty of Agricultural Production and Renewable Resources.

The two faculties consist for 4 (four) different programmes each. The eight programmes are Agricultural Economic, Agricultural Business and Farm Management, Agricultural Extension and Rural Sociology, Animal Production, Crop Production, Agricultural Chemistry and Food Nutrition, Fisheries and Renewable Resources and Soil Science and Farm Mechanization.

The population of the study is made up of all the males and female students of College of Agricultural Sciences, Olabisi Onabanjo University. With the use of registration course

forms of students: ten (10) students assigned to each programme/department were interviewed for the study.

A developed validated questionnaire was administered on respondents to obtain required information.

Descriptive statistics such as percentage and frequencies were used to arrange and group the raw data into a consistent, convenient, usage and understandable form. Inferential statistics of the Pearson product movement correlation coefficient was used to test the hypothesis set up for the study.

Results and Discussion

Personal Characteristics of Respondents

This section presents information on the personal characteristics of the respondents such as Gender, Age, Educational background Rural/Urban background, level of programmes and future plan.

Table 1: Personal Characteristics of the Respondents

Characteristics/Varieties	Attributes	Frequency	Percentage
Gender	Male	50	62.50
	Female	30	37.5
Age	15 – 20	45	56.25
	21 – 25	25	31.25
	26 – 30	10	12.50
Educational Background	SSCE/GCE	55	65.75
	OND	10	12.50
	NCE	15	18.75
Rural/Urban Background	Village	15	18.75
	Town	25	31.25
	City	40	50.00
Level of Programme	300	20	25.00
	400	25	31.25
	500	35	43.75
Future plan	Read Agriculture at M.Sc level	30	37.5
	Read others discipline at M.Sc level	35	43.75
	Farm privately	15	18.75

As show in table 1, out of the eighty respondents used in this study, 62.5 percent were found to be males while 37.5 percent, as one would expect males to be more prominent because of the nature of work expected of a professional farmer especially in the areas of practical. Majority of the respondents (56.25 percent) fell below the age of twenty; 31.25 percent were aged between 21 – 25 years while 12.50 percent were between 26 – 30 years. Majority of the sampled respondents 968.75%) stressed that they possessed Senior Secondary Certificate of Education while 12.50 percent had Ordinary National Diploma.

By the respondents responses to where they spent most period of their lime 18.75 percent claimed they have been in villages most of the time while some lived mostly outside the village with 31.25 percent in towns and majority 50 percent in cities. This reflects the fact that very few respondents of agricultural science have rural background while most of them had urban orientation. It is however considered that those with rural background will relate much more easily to agriculture than those with urban background. By the responses made by the respondents used in this study, it was found that 25 percent were already in the 3rd year of their programmes, only 31.25 percent have been on the programmes for 4 years while 43.75 percent have been on the programmes for 5 years. When respondents were asked about their immediate future plan 37.5 percent said they will continue with Agriculture at M.Sc level 43.75 percent wished to proceed to read other programmes/courses but not agriculture at master level while 18.75 percent would want to take up farming privately.

From this data, it is observed that at least majority would still want to be engaged in agricultural endeavour. This shows their interest of making a good living from agriculture.

Table 2: Distribution of respondents according to Adequacy of Facilitates used by Respondent in Training Programme

Facilities		Frequency	Percentage
Classroom	Satisfactory	20	25.00
	Good	45	56.25
	Poor	15	18.75
Library	Satisfactory	--	--
	Good	35	43.75
	Poor	45	56.25
Teaching and Research farm	Satisfactory	--	--
	Good	50	62.5
	Poor	30	37.5
Laboratory	Satisfactory	25	31.25
	Good	40	50.00
	Poor	15	18.75
Farm implement	Satisfactory	--	--
	Good	20	25.0
	Poor	60	75.0
Piggery unit	Satisfactory	20	25.0
	Good	50	62.5
	Poor	10	12.5
Poultry unit	Satisfactory	20	25.00
	Good	60	75.00
	Poor	--	--

Training programmes facilities

Respondents were asked to access the facilities offered during their course of study. It is expected that training is more facilitated with adequate facilities in terms of quality and quantity. Thus respondents were asked to rate each facility presented in table 2 as

satisfactory, good and poor. Table 2 reveals that 56.25 percent of the respondents surveyed during the study indicated that the classroom for the training programme was good; while 25 percent of the respondents claimed that the classroom was satisfactory. It was discovered that majority of the respondents (62.5) of the respondents claimed that the teaching and research farm was good for the training programmes. By the respondents' responses to laboratory, 50 percent claimed it was good while 31.25 percent said it was satisfactory. From the above data, 75 percent of the respondents expressed that the farm implement was poor while 25 percent claimed it was good. 62.5 percent however stressed that the piggery unit was good for training programmes while 25 percent of the respondents was satisfactory. About 75 percent of the respondents interviewed during the study claimed that the poultry unit was good. Apart from those facilities above, there are some others that are grossly inadequate as expressed by the respondents during the course of study. Those include orchards, green houses, fishpond and teaching aids. The majority of the respondents rated them as poor or unavailable. Their importance cannot be over emphasized if it is realized that their use in the teaching and learning of agriculture cuts across very wide areas.

Relevance of training programme

In subject matter areas many of the training programmes attended or offered by the respondents were relevant. It is assumed that training emphasis should be placed in areas that are claimed to be most important.

Table 3: Distribution of respondents by the training programmes that improved them Professionally

Training Programmes	Frequency	Percentage
Crop production	2	2.5
Animal production	15	18.75
Agricultural economics	25	31.25
Agricultural extension and rural sociology	13	16.25
Agricultural chemistry and food nutrition	4	5.00
Social science and farm mechanization	3	3.75
Fisheries and renewable resources	8	10.00
Agricultural business and farm management	10	12.50

Table 3 reveals that 31.25 percent of the respondents indicated Agricultural economics as one of the major training programmes in subject matter areas. About 18.75 percent of the respondents interviewed expressed their preference for Animal production while 16.25 percent of the respondents indicated Agricultural Extension and Rural Sociology. Other training programmes that attracted more than 10 percent are Agricultural Business and Farm Management and Fisheries and Renewable Resources while the training programmes like Agricultural Chemistry and Food Nutrition had 5 percent and Crop production 2.5 percent.

Pearson Product Correlation Coefficient Analysis on the effect of respondents personal characteristics (Gender and Age) on training programmes.

(i) In the case of Gender and Training programme
r = 0.0199 (Negative correlation
N = 80
P = 0.644 Not significant
There was no significant difference between (males and females) respondents expression to the same training programmes.

(ii) In the case of Age and Training programme
r = 0.0127 (Positive correlation)
N = 80
P = 0.7000 (great significance)

There was no significant correlation between the training programmes and the age of the respondent. This can be attributed to the fact that the age bracket of all the respondents falls within the active age range i.e. 15 – 29 years.

Conclusion and Recommendation

The findings of this study indicated major philosophical differences of opinion among the respondents in their rating of the various area of training programmes in the subject matter. This may be due to the fact that most of them have equal agricultural training programmes background.

The four most important training programmes selected by the respondents during the study were Agricultural economics. Animal production. Agricultural extension and Rural Sociology and Agricultural business and farm management. There was no significant difference between gender and training programmes of the respondents. Some basic facilities that are needed for training programmes of Agricultural science are not adequate enough for effective teaching and learning to be enhanced.

Recommendation

(1) In order to improve the efficiency of the respondents, training programmes requirements should be based on individual needs.

(2) Provision of training facilities for Agricultural science should be a joint responsibility of the State and Federal Government as production of high quality Agriculturalist contribute immensely to the well-being and economy of the nation. Funds and equipment for training programmes may come in form of grants from the Federal Government.

(3) Every effort should be made to incorporate all the subject matters identified in this study in all the training programmes of agriculturists.

(4) The production of the high quality agriculturists will enhance the multiplier effect in manpower development, which will support agricultural technology.

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THE USE OF INTEGRATED INSTITUTIONAL AND RURAL YOUTH APPROACHES IN EXTENSION EDUCATION IN NIGERIA

BY

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Abstract

The failure of the various approaches to extension Education in Nigeria has called for an integrated Institutional approach and rural youth as an alternative to improve extension education services in Nigeria. The most recent approach which is the training and visit (T & V) apart from its personal intensive in nature, it is also very expensive to run and in addition till date the ratio of village Extension Agents to the farmer is very low. All these have not made it as effective as expected. The situation has therefore, called for integrated institutional approach such as Non-Governmental Organization (NGOs) Young Farmers Clubs, Traditional Heads, Village Churches, Schools, and Rural Youth clubs for more effective extension services in Nigeria. It is believed that if all these institutions are well integrated and extension worker is able to established a good working relationship with these institution as a vehicle or communication in the rural communities, extension education services will not only be enhanced, but the effectiveness of extension worker in diffusing useful and practical information in community will be highly improved and appreciated in Extension education in Nigeria.

Introduction

A country like Nigeria whose population needs more and better food, the urgent need to disseminate agricultural current developed technologies to its farmers and all connected with agriculture cannot be overemphasized. The efficient dissemination of improved farming practices to the farmers is the basis for an adequate improvement in food production and poverty eradication in the country.

In view of the present problems of manpower shortage poor infrastructure as well as limited funds, the dissemination of improved technology to the farmers is not as rapid as would have been expected in a country like Nigeria where there is an urgent need to educate the rural masses, particularly the farmers who have the key for stepping up our food production to adequately feed the ever increasing population on daily basis.

There are few extension workers to cope with the large population of farmers that need their services, no sufficient funds for executing extension programme and inadequate network of roads through which many of the farmers could be effectively reached in the rural areas.

To overcome some of these problems, there is the need to develop alternative workable strategies. One of such strategies could be an integrated institutional approach to extension education, which the present government rural development programme seems to favour.

The current federal and state government agricultural programmes in the country can hardly make any impact if the farmers on whom the success depends are to adequately informed about the application of the various improved technologies / innovations that have been developed in the field of agriculture.

In this write up, efforts have been made to high light some of the techniques that the front liners in extension services, can use in order to enhance their efforts and performance in the dissemination of information adoption of technology to the farmers. The institutions which needs to be integrated for effective extension services in Nigeria include the following: churches, village schools rural youth clubs, NGOs, Local Government Council, Traditional thread etc

Methodology

The role of village church

Most rural people feel that churches serves as the sanctuary where answers are obtained to life's ultimate problems. In this ground, most people in rural area resort to religion, and magic where more rational and scientific approaches fail to answer important problems.

In rural areas success in certain occupation especially those with high degree of risk and uncertainty are quits often associated with religion. For example to the farmer, farming is still of uncertainty and risk and the adoption of agricultural innovation is full of risk. Faith in religion is a means by which anxiety about important farming decisions is reduced. Occurrences within their occupation that transcends their understanding and explanation are often attributed to the gods.

As long as our farmers still do not fully accept more rational and scientific practices, they will continue to seek explanations to there farming problems from the supernatural powers. The more uncertain the farming problems are the more the farmers tend to look forward to supernatural explanation to events.

In the rural areas, the church aimed at marrying religious morals with every facet of the local community and the church has successfully done this. Its role therefore, has gradually spread to include not only the morality of living but also working morality, the morality of hard work and dignity of labour. In this regard churches in the rural communities are known to have helped in promoting such occupation as farming amongst its rural congregations. In Colombia for instance rural churches are known to have actively helped in the propagation of new idea for improving farming occupation. The same story is also true of some parts of the United States where the rural churches and rural ministers not only play active roles in helping to propagate new idea on farming but also assist with the provision of facilities where needed, to help promote the work of the extension agents.

In Nigeria, the rural or even urban churches have been known to assist in the dissemination of government pronouncements to the members of the congregation. Through announcement such as mass vaccination, health clinic for women etc.

It therefore seems appropriate for the extension agent to utilize the services of the rural churches or mosques through the local ministers, church groups, or organization in

reaching out to more of his clientele. In furtherance of this cooperative effort, the extension agent can organize Pastor/Imam Extension Workers, conferences or seminar or even workshop at the local level to exchange views on the role that the Minister/Imam and their religious establishments can help play in the extension education of the rural people.

The extension service as a public institution should be interested in the moral and ethical standard of life of the communality in which it operates and thus its ought to be involved in supporting and promoting the development of these standards through its cooperation and work with the rural Churches/Mosques.

The role of the rural school

Schools in rural areas are usually well integrated into the community where they exist and the teachers in such schools are often well-accepted and trusted members of the community.

In the village schools, agricultural science and practical agriculture are taught to children many of whose parents are farmers. Some of these schools maintain contact with the ministries of education and agriculture as well as research institute, from where improved farming technology and innovations originate. Such contact does not only help the school to up grade the quality of the subject but also enables it to inculcate the correct knowledge, attitude in the children and skills (ILAS) of whose parents by occupation are predominantly farmers. The efforts of the extension agent will be highly enhanced if he enlists the assistances and collaboration of there schools by utilizing their services in reaching the farmers through their children.

A method by which this could be done is soliciting the support the school authority so that part of his topics could be built into the school agricultural lessons, and the agent visit the schools as a guest teacher to instruct on that aspect of the course, when it comes up on the time table, or the agent makes his extension education programme available to the schools so that a time table could be developed from it and the topics taught at periods that do not seriously conflict with school work e.g. during gardening or practical agriculture. An alternative could be to press for the school to set aside a period per week for the extension agent to deliver a lecture with ample, hand-outs to the children who will pass this on to their parents.

This strategy of programme execution requires adequate planning to ensure that the extension education is programmed into stages and that the children are taught an aspect at a time for easy comprehensive. The programme could be made to cover the upper classes in the elementary and junior classes in the secondary schools. The use of such a communication vehicle will definitely assist the extension agent in multiplying his efforts and maximizing resources.

The role of rural youth clubs

The use of youth clubs to execute extension education programme could be a follow up of the formal instruction in agricultural education given at school. The encouragement of the formation of the young farmers club, young men's Christian association and other youth social clubs and their involvement in planning and executing extension programmes can make it a lot easier to get through to the adult farmer who is more tradition oriented.

The frame work of these clubs makes it possible for the agent to complement his programme through the youth at school and to assist the youth at school and to assist the youth to apply the knowledge acquired at school to practical real life situations for the adults to observe and relate to their own experience. Hence, the extension worker could organize specific projects that will enable him propagate through the youths innovative ideas to the adults. In this regard, extension agents could plan projects in the area of tree crops, arable crops or livestock, which will assist him in promoting his educational objectives for the adult farmer. Such projects could be an outgrowth of the school activity if they agree with his objectives otherwise it could be an independent out-of-school activity. The youth projects should be designed by the agent in such a way, that it is in line with his extension education programme and at the same time meet the needs of the community and the individual home situation. Results from such projects should be widely publicized for the benefit of the entire community in order to get the adults to see the relevance and practicability of the development in the light or their own situation.

The extension agent could develop and promote other youth clubs in specific areas such as fish cultivation, dairying and use these to promote his extension education programme with specific objectives.

Conclusion

The paper conclude that if extension worker is able to establish a good working relationship with the church, school and club organization and integrate all these together as a vehicles of communication in the rural communities, his effectiveness in diffusing useful and practical information will not only be enhanced, but also his status and ability to make contact in the community will be highly improved which will on the long-run improve agricultural extension education services in Nigeria.

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EFFECT OF TECHNOLOGY TRANSFER ON MAIZE JUVENILE FARMERS IN ISOKAN LOCAL GOVERNMENT AREA OF OSUN STATE, NIGERIA

BY

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Abstract
This study was conducted to determine the effect of technology transfer on maize juvenile farmers in Isokan Local Government area of Osun State. Two different types of questionnaires were used for both the extension agents and children farmers. Descriptive statistics such as frequency count and percentages were used in data analysis. The result from the analysis revealed that, respondents that adopted the innovation given to them had positive results in term of yield increase and reduction incidence in pests and diseases. Problems encountered in disseminating Agricultural innovation include, poor attention on youth farmers, lack of effective transportation or mobility for the extension agents, and lukewarm attitude of farmers to adoption. It is recommended that Government should create more extension services department in all agricultural establishments especially to meet the youth needs and micro credit opportunity to be provided to enable them meet with requirements of new technology adoption since most of them are poor financially.

Introduction

The predominance of small-scale farmers and their families characterize the Nigeria agricultural sector. In Nigeria as well as in most developing countries of Africa, nearly 80 percent of the total population had been described as rural inhabitants, with agriculture providing employment and means livelihood for as much as 75 – 80 percent of this population (World Bank, 1981). It had been reported that the small-scale farmers produce over 90 percent of the staple food requirements of the total population (Lele, 1981).

One of the most important means of accelerating national development in economy with large agricultural sector is the identification and development of new agricultural technology that can be adopted by small-scale farmers and the youth alike. The adoption of new agricultural technology could result in high-income generation for the farmers and greater economic efficiency and growth in the national economy. Verification and technology has become an important part of the economic development strategies in many countries (Adewumi, 1983). According to him the intensity of maize cultivation in Nigeria has until recent years, been most felt in the southern part of the country, along the rain forest belt and extending to the derived Savannah zone. However, the bimodal rainfall patterns in the southern parts of Nigeria have permitted the raising of two crops in a year (Fakorede et al 1993).
Furthermore, maize has become important because it has several advantages over other cereals. In that:

- it produces high output per unit of labour in-put.
- it is easy to establish and cultivate
- birds do not attack the grains on the field as it is common with rice and other families of graminae
- it is easy to harvest, store, transport and mechanically processed
- time of harvest, is not critical
- it has a wide adaptation to latitude between 50^0N and 40^0S and altitude of 330m above sea level (Onwueme, 1978).

Technology is defined as the science applied to the industrial arts and it is concerned with practical use. Technology includes the development of tools that permit the specialization of labour according to varying abilities. It embraces mechanization of manufacturing transportation, commerce and agriculture the development of new forms of energy (Walter Buckingham, 1983).

Technology may also be defined as the systematic application of collective human rationality to the solution of problems by asserting control over nature and human processes of all kind. It is not mere intellectual speculation or theoretical modeling but rather knowledge application to practical problems (Guolet, 1985).
Ikechukwu (1990) observed that modernization of traditional agriculture requires not only the promotion of relevant and generation of appropriate production technologies but also the design and institutionalization of effective agricultural extension education delivery system for transferring the products of research on to a specified target population. He stressed further that, by being in sheer majority the small holders and their families constitute a critical farming population whose production problems must be addressed in technology design and dissemination processes. He ascertained that this critical target population who produce the bulk of the food needs of the populace has often been ignored in the process of planning, designing and implementation of various agricultural and rural development programmes.

Fenlye, (1984) observed that good communication does not consist merely of giving information but creating understanding. It does not consist only of imparting knowledge but of helping people gain a clear view of the meaning of the knowledge. The process of communication new technology involved the S-M-C-R-E model. That is the source, message, channel, receiver, and effects.

The source (S) may be opinion leaders, government scientist, minister or commissioner, organization or institution, inventors, change agent or the general manager.

Message (M) refers to an item of information, a directive, or edict or innovation, while channel (C) of communication are the means by which a message gets from a source to a receiver.

The receiver (R) may be any member of the social system such as the employee, farmers, students, traders, drivers, teachers, principal and even government officials. The effects (E) or results are the consequences of the message over time in term of knowledge skill, attitude change as well as behaviour change.
In their own contribution, Little (1970), Rogers and Storey (1987), asserted channel exists when access to receiver (RX) is provided for the transmitter (TX) or Sender. When the

channel is used, the message has to be transmitted by some medium (e.g. spoken or written language). Feedback must be provided from receiver to the source and vise versa. Two-way communication is highly effective and desirable.

For Nigeria to meet up with its food requirements and generate financial resources needed for its overall development programme. It must improve its agricultural programme. The only way to improve this is the provision of these basic farm inputs and development of technology through research.

The objectives of the study are as follows:

(i) To identify socio-economic characteristics of the respondents.
(ii) To investigate the effect of the technology adopted on maize production.
(iii) To determine the extents to which farmers have adopted new technology on the production of maize.

Methodology

The scope of this study covers all categories of youth farmers in Isokan local government area of Osun state, Nigeria. a total of ten (10) communities were randomly selected within the local government area. The extension agents covering these areas were also sampled. The communities include Alapomu, Osa, Alara, Orisunbare, Balogun, Ayepe, Awala, Aro, Akinbode and Alaja.

Data were collected through the use of questionnaires and personal interview. These questionnaires were pretested and validated. The validated questionnaires were administered on the extension agents and the selected youth farmers in the study area.

It has a total numbers of 10 cells. Ten contact farmers were selected from each cell and 16 extension agents were randomly selected from all the cells in the local government, making a total sample size 116 respondents. Descriptions of statistical tools such as frequency count, percentage were used to analyses the data collected.

Results and Discussions

Table 1: Distribution of respondents according to mental status

Marital Status	Frequency	Percentage
Single	46	65.70
Married	24	34.30
Total	70	100.00

Source: Field Survey, 2002

Data in table 1 shows the respondents according to their marital status. Out of all the farmers interviewed 24 farmers representing 34.3% were married while 46 farmers representing 65.7% were single.

Table 2: Distribution respondents according to educational background

Educational Level	Frequency	Percentage
Primary	18	25.7
Secondary	38	54.3
Post-Secondary	8	11.4
Adult Education	6	8.6
No Formal Education	0	0.0
Total	70	100.0

Source: Field Survey, 2002

Table 2 shows the level of education of the farmers. It was observed that 25.7 percent had primary school education, 54.3 percent have secondary education. 11.4percent have post secondary education 8.6 percent have adult education. This shows that majority of the farmers tested had formal education.

Table 3: Distribution respondents according to farm size

Land Area (Hectare)	Frequency	Percentage
Below 1	10	14.3
1 – 2	44	62.9
2.1 – 3.0	12	17.1
3.1 – 4.0	4	5.7

Source: Field Survey, 2002

Table 3 shows that farming on small scale was common among the youth farmers sampled. Only 14.3 percent had one hectare and below, 62.9 percent cultivated between 1.1 and 2 hectares, 17.1 percent cultivated between 2.1 – 3.0 hectares and 5.7 percent of the respondents cultivated between 3.1 and 4.0 hectares. The study reveals that none of the respondents had more that 4 hectares of land cultivated to maize production during the study. And a large proportion (62.9%) had between 1.1 and 2 hectares to maize cultivation.

Table 4: Distribution respondents according to source of farm labour

Source of Labour	Frequency	Percentage
Family labour	14	20.0
Hired labour	46	65.7
Both	10	14.3
Total	70	100.0

Source: Field Survey, 2002

It can be seen in table 4 that 20percent of the respondents employed the use of family labour for farm operation, 65.7percent used hired labour. While farmers who combine both family and hired labour were only 14.3percent.

Table 5: Frequency of visit of Extension agents to Youth Farmers

Frequency	Frequency	Percentage
Weekly	6	8.6
Fortnightly	28	40.0
Monthly	36	51.4
Total	70	100.0

Source: Field Survey, 2002

The table 5 shows that 36 farmers representing 51.4% were visited weekly, 28 farmers were visited fortnight representing 40.0%, 6 farmers representing 8.6% were visited monthly while none is visited on yearly basis. This shows that larger percentage of the farmers is visited fortnight.

Table 6: Channels of dissemination of agricultural innovation

Channels of innovation	Frequency	Percentage
Radio	20	28.6
Television	26	37.1
Extension Workers	16	22.9
Personal Contact	8	11.4
Total	70	100.0

Source: Field Survey, 2002

Table 6 revealed that 28.6% of the respondents received innovation through radio, 37.1% got the information through television while only 22.9% received from extension workers, and 11.4% received information through personal contact.

Table 7: Effect of technology introduced to farmers

Effect of technology	Frequency	Percentage
Increased yield	48	68.6
No increased yield	22	31.4
Total	70	100.0

Source: Field Survey, 2002

From table 7 majorities of the respondents (68.6%) had increase in yields from the innovation introduced to them while 31.4percent had no increased in yield from the innovation introduced to them.

Table 8: Gender of respondents

Gender	Frequency	Percentage
Male	44	62.9
Female	26	37.1
Total	70	100.0

Source: Field Survey, 2002

Table 8 shows the sex of the respondents, it was observed that 62.9percent were male while 37.1percent were female. This denotes that more males were involved in maize production than the females. This might be due to the fact that most of the farming activities are dominated by male counterparts and plausibly farm activities are tedious.

Table 9: Age Distribution of the respondents

Age	Frequency	Percentage
Less and 20	10	11.7
21 – 30	50	57.1
31 and above	20	28.6
Total	70	100.0

Source: Field Survey, 2002

Table 9 shows the age distribution of the farmers interviewed. It was observed that majority of the respondents (57.1%) were between ages of 21 – 30 years, only 8.6percent were between age 20 years and below while 28.6percent were between the age bracket 31 years and above.

Table 10: Income from Maize farm

Income per annum (₦)	Frequency	Percentage
< ₦5,000	38	54.3
₦5,001 – ₦10,000	24	34.3
₦10,001 – ₦15,000	2	2.9
Above ₦15,000	6	8.6
Total	70	100.0

Source: Field Survey, 2002

Table 10 shows that 54.3% of the respondents were in income group of ₦5,000 and below per annum, 34.3% had an income ranging between ₦5,001 – ₦10,000 per annum, only2.9% had an income ranging between ₦10,001 – ₦15,000 per annum while 8.6% had an income above ₦15,000 per annum. This income could be used by farmers to increase their standard of living to alleviate poverty among family members. It becomes therefore profitable to adopt new technology to derive more income annually on maize production.

Conclusion and Recommendations

It was found that majority of the farmers that adopt the new technology has positive result in term of increased yield, reduce incidence of pests, and diseases and improved farming operation which was observed to be due to the enlightenment and use of improved package of recommendation. Few percentage had negative result in term of yield and this is due to lack of technical know how, irregularities of the extension agents visits and materials provided not being enough to go round the respondents.

Based on the findings of this study, the following recommendations are made. That more extension agents should be provided and they should be given a conducive environment to perform their duties effectively by giving them motorcycles and the materials to be used in dissemination of messages to the farmers.

Government should be able to reduce the cost of buying farm inputs like fertilizer, improved seeds and herbicides so that farmers will be above to afford them, which will make their productivities more higher.

Government should be above to rehabilitate all roads leading to villages, so that it will be easier for the extension agents to enter into villages.

Extension agents should train their farmers by practice in order to convince the farmers on the importance of technology given to them.

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A COMPARISON OF FLAT AND BED PRODUCTION METHODS OF FLAVOURING NSUKKA YELLOW PEPPER BY PUPILS IN OZALLA, NKANU WEST LGA, ENUGU STATE

BY

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Abstract

A comparison study was carried out in a field trial between April and September 2003 at Ozalla, to find out pupils' participation level in the production of Nsukka yellow pepper. Two plots with plan population of 480 each in 64m^2 were used. All agronomic practices were employed. Land preparation and watering were manual. 10 out of 16 pupils of elementary six class of Riverside primary school who participated were evaluated. Data were collected on height, leaf area index, yield, fruit size and aroma. Simple percentages and mean values were employed in data analysis. Results showed that more than 80 percent of the people participated actively in land preparation, transplanting, manure and fertiliser application, watering, weeding while a mean 40% of them participated in other activities. The data revealed that bed method performed better than the flat method at 45kg ha^{-1} NPK 15-15-15 and 30tha^{-1} poultry manure. The height, fruit area index, fruit yield and size differed in both methods. However, when harvested, fruits' aroma compared favourable with the popular flavouring Nsukka yellow pepper. Based on findings, it is recommended that bed should be used for production of Nsukka pepper. Manure and NPK at 30kgtha^{-1} and 45kgha^{-1} should be applied for optimum yield. More pupils should be encouraged to participate in pepper cultivation to raise more income for schools and pupils and reduce poverty. Implications for extension were drawn from these findings.

Introduction

Sweet pepper – Capscicum frutescens belongs to the family solanaceae. According to Purseglove (1977) pepper contains the alkaloids piperine ($C_{17}H_{19}No_3$) and pipeline, the latter in much smaller quantity. The pungency of pepper is due to the resin *chavincine*, which is most abundant in the mesocarp and contains a volatile oil with *terpenes*. Heiser and Smith (1953) recognise O. annuum and C. frutescens as valid species because they are difficult to cross and the few F_1 hybrids obtained have been highly sterile. Bailey (1948) recognises one species only as *C* frutescens.

Sweet pepper has good flavour. They are eaten raw in salads and local "Abacha" of African Salads. Peppers are often stuffed with meat ad are also pickled. They are also used as seasoning in cooking. Extract of pepper bye-products – Chillies are used in the manufacture of ginger beer and other beverages; and at times incorporated in laying mixtures for poultry. *Capiscum* from *C. frutescens* is used in medicine. Heiser and Smith (1953) reported that *C. frutescens* is used internally as a powerful stimulant and

carminative; and externally as a counter-irritant. Purseglove (1977) stated that India and Thailand are two largest exporters of *chillies* while Nigeria, Sudan, Uganda, Mexico, Indonesia and Japan export in small quantities.

In Enugu State, Enugu State Agricultural Development Programme (ENADEP) staff (2001) reported that ore than 80 percent of flavouring yellow pepper are produced in Nsukka zone environment and the flavouring yellowing pepper is synonymous with Nsukka. Thus it is popularly known as "Ose Nsukka" in the state and beyond. Empirical studies by Bailey (1948) and others have shown that Capsicums are grown as rain fed crop, with an annual rainfall of $60cm^3$ -$125cm^3$. Too heavy a rainfall is detrimental as it leads to poor fruit set and rotting of the fruits. Abraham (1959) and De-waard (1964) reported that little water logging causes shedding of eaves while light loamy soil is best but peppers can be grown on a wide range of soils that are well drained. Organic manures are also used for best yield both for irrigated and rain fed crops.

Wysong and Handwerker (1989) observed that small-scale operators are unable to purchase, acquire, or maintain assets competitively with larger agricultural operators. However, both in number and n economic returns to the rural community, small farms have the greater opportunity to contribute to the local economy by increasing community income and assets.

The primary tillage operation and its effects according to Eje et al (2001) is to change the soil physical conditions as manifested by changes in soil structures, soil strength, bulk density, moisture content, etc. These changes, the researchers affirmed, result to change in soil air and water distribution, resistance to root proliferation and penetration, erosion and weed control characteristics. Thus, the complex interaction between these parameters to achieve good crop growth and yield at reasonable cost, determines the success of any tillage method. Osubitan, and Adekalu (2001) stated that the use of organic matter on agricultural soil is a common practice in Nigeria; not only to change the soil P^H or add Nitrogen but to reduce problem of compaction, easy penetration of air and water and improvement of soil physical and hydraulic properties. However, in modification of a degraded sandy loam soil by crop and soil management practices which maize was the test crop; Anikwe et al (2001) stated that the different crop management practices used affected seed yield in varying degrees. The application of poultry droppings + NPK fertiliser clearly increased seed yield more than other treatments because it not only supplied nutrients to soil but also increased total porosity and gravimetric moisture content which improve water storage capacity and soil aeration.

Ogedengbe and Fashina (2001) showed that the potential values of organic manure varied according to their sources and rate of application with highest yield coming from poultry manure alone at the rate of $30tha^{-1}$. Very high manure application $90tha^{-1}$ decreased growth and yield irrespective of manure sources. Alimba and Akubuilo (2002) reported that innovations such as inorganic fertilisers, hybrid seeds, and other genetically improved planting materials, improved livestock breeds and agro-processing technologies have been adopted by 60 per cent of farm entrepreneurs but land management practices that are supposed to be resource conserving were only adopted by 17.7 per cent of them in South Eastern Nigeria.

Nwagbo (2000) observed that the degradation of agricultural land poses a long-term danger for crops and livestock production. Nigeria lacks an aggressive land management practice, except those that come as component of recommended technologies for farmers and the land use act. Asiegbu (2000) also agreed that the farmers have recognised the efficacy of the use of inorganic fertilisers and are ready for adoption. However, the fertilizer, which was heavily subsidized, has suddenly become very costly as a result of Structural Adjustment Programme of 1986 that resulted in the removal of subsidies. Thus, when available, optimal use of these fertilisers, manure and lime should be adequately adapted from research findings to obviate wastes and ensure economic return. Poor yield have also been reported by Zheng (1999) and other authors on farmers field due to poor land management practices.

The study problem is the ENADEP staff (2001) observed loss in flavour quality of Nsukka yellow pepper in some trials conducted in Enugu State. There is increased demand for the spice crop and inorganic manure is costly. It therefore, becomes imperative that a study be carried out to find out suitability, husbandry methods and participation of children in production of Nsukka flavouring yellow pepper in Ozalla Nkanu West LGA of Enugu State based on the prevailing ecological variable.

The broad objective of the study is to compare two methods used by the pupils in Nsukka flavouring yellow pepper (NFYP) production; while the specific objectives are to determine the level of participation of pupils in NFYP production techniques, examine the best method of land management for higher product and yield, investigate the suitability of he retention of the flavour quality of NFYP in Ozalla Garden.

Methodology

Ten pupils of the sixteen in elementary six class of Riverside primary school, Ozalla were randomly selected for participation in the production methods of Nsukka flavouring yellow pepper. The land area was manually prepared with traditional tools. Two plots marked A and B were measured out. Plot A measured 8m by 8m as flat method ($64m^2$) while plot B contained 8 beds measuring 8 m by 1m ($64m^2$).

Planting

Oba super 2 hybrid yellow maize seeds were planted on 16th April at 2m x 1m and 2cm deep at 2 seeds per hill on the two plots to serve as shade crop for the pepper seedlings. Four weeks old seedlings were transplanted from a nursery in Akwari Eha-Alumona Nsukka report Local Government Area to the prepared filed at Ozalla on 1st May 2003. The garden was located 8m away from the *Ufam* perennial river, Ozalla. Two seedlings of pepper were planted at 50cm and 100cm to give a plant population of 75, 000 ha^{-1}. There were two rows of planting in 8 beds (240 x 2 = 480). Each bed contained 15 hills in two rows i.e. 30 hills x 8 = 240 x 2 = 480 plant population. In plot, A which was flat method, 8m x 1m were also marked and planted as plot B but was separated from it by 2m gaps.

Manual watering of the seedling started on the day of transplanting with 35cl measure of water per hill for 3 weeks when the rains have stabilised (i.e. 1st – 22nd May) at alternate days in the evenings. Each of the two plots received 45kg NPK ha^{-1} and 30tha^{-1} poultry droppings of two split applications at 1 WAP and 5 WAP. The poultry manure was sourced from Alpha poultry Emene and Fertiliser from Ministry of Agric, market garden, Enugu.

Quality of Application

Standard application implied that 6 bags of 50kg NPK 15-15-15 and 30 tonnes of poultry manure were used for plots ($64m^2$). This implies applying 40gms NPK and 400gm poultry manure per hill in two spilt applications of 20gm NPK and 200gm poultry manure. The application was done in ring method of 5cm away from the hills and 3cm deep and soil were covered. All maize used as shade crops were harvested on 17th july and their residues used as mulch in their respective plots. There was no fertilizer application to the maize crops. Weeding was manually done with traditional tools at 5 and 13 WAP i.e 5th June and 31st July. Hilling up method was used.

Data was collected on plant height and leave area index at 4,8,12 and 16WAP, and at 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21 WAP for fruit yield. Data on fruit size was collected at 11, 13, 15, 17, 19 & 21 WAP. Data analysis was achieved by use of simple percentage and means values. The sensory attributes of taste and aroma were done by the ten pupils (4 out of the pupils are females) by comparing the fruit produced at Ozalla and Nsukka as marked 'O' and 'N' respectively.

Result and discussion:

Participation levels of the pupils were as shown in table 1.

S/N	Activity	No of Participant	%
1	Land clearing and preparation	10	100
2	Transplanting	10	100
3	Watering	8	80
4	Poultry manure & NPR fertilizer application	10	100
5	Weeding	9	90
6	Measurement of height	5	50
7	Measurement of leaf area index	4	40
8	Yield measurement	6	60
9	Recording of other observations	3	30
10	Harvesting of fruit	7	70
11	Aroma and taste	10	100
	Activity level	Total = 82	74.5

Source: Field data (2003).

Results Indicate Multiple Responses

The table showed that 100 percent of the pupils actively participated in land clearing and preparation, transplanting, poultry manure and NPK fertilizer application, sensory evaluation for aroma and taste. The table revealed that 90 percent of them took part in weeding of the farm while 80 and 70 percent others were involved in watering and harvesting activities. However, 60 percent of them took part in yield measurement and 40 percent others were involved in measurement of leaf area index (LAI). The least activity was in the recording of other observations as only 30 percent of them recorded observed difference in growth pattern of the two plots. At the end of taste evaluation, which involved the use of peppers from Nsukka market and peppers obtained from Ozalla farms in cooking of jollof rice, the two dishes compared favourably as there was no observed difference in taste and aroma by the 10 pupils.

Table 2. Mean height of pepper plants in plots A and B at 4 intervals (cm)

Treatment	Wk 4	Wk 8	Wk 12	Wk 16
A	16.4	30.4	31.0	52.8
B	20.7	33.5	65.6	78.0

Source: Field data (2003).

Table two showed the mean height score of the pepper plants in two plots at intervals of 4, 8, 12 and 16 WAP. Plot B outgrew plot A in all four the periods. At 4 WAP and 16 WAP, 20,77 cm and 78.0 cm were greater than 16.4 cm and 53.8 cm respectively.

The mean leaf area index (LAI) was displayed in table 3, plot B also outgrow plot A with 0.690 cm and 1.050 cm in 8 WAP & 12 WAP over 0.625 cm and 0.860 cm scored by plot A respectively.

Table 4: Mean fruit size of pepper in plots A & B at 4 periods (cm)

Treatment	WK 11		WK 13		WK 15		WK 17		WK 19		WK 21	
	L	W	L	W	L	W	L	W	L	W	L	W
A	4	2.5	4.5	2.8	4.8	2.9	4.6	2.8	4.1	2.9	3.9	2.3
B	4.5	2.8	5.1	3.2	6.2	4.0	6.4	3.9	6.5	3.8	6.5	3.8

Source: Field data (2003)

Table 4 showed the mean fruit size in length and width, with plot B doing better than plot A. fruit size of plot B in 19 WAP did not differ with 21 WAP (6.5 x 3.8cm) while plot A differed in the two period with 4.1x 2.9 cm and 3.9 x 2.3cm respectively. In addition to size, it was also observed that the fruit numbers in plot A decreased and leaf colour also changed from dark green to pale yellow suggesting hunger signs.

Table 5: Mean fruit yield of pepper in two plots at intervals (tha^{-1})

Treatment	WK 12	WK 13	WK 14	WK 15	WK 16	WK 17	WK 18	WK 19	WK 20	WK 21
A	0.63	0.50	0.87	1.00	1.07	1.05	1.01	1.02	0.98	0.88
B	0.93	0.76	1.03	1.08	1.21	1.28	1.49	1.79	1.98	2.01

Source: Field data (2003)

Table 5 showed data on yield. Plot B also did better with least yield of 0.76t ha^{-1} in WK 13 and highest yield of 2.01t ha^{-1} in WK 21 while in the two period plot A had as lowest $0.50th^{-1}$ and highest 0.88t h^{-1} in 13 WAP and 21 WAP respectively.

Table 6: Leaf Area Index Calculations

Leaf Area Index = K x L x W

Where K Adjustment factor
L = Length
W = Width

K value of 0.75 was used at flowering stage (WAP) while 0.67 was used for seedling and ripening stages (12 and 16 WAP). LAI was therefore computed in this way, sum of leaf are $hill^{-1}$ of sampled hill (cm^2) divided by Area of hand covered by n hills.

Source: Adapted from IRRI (1991)

Conclusion:

Based on the results, it was concluded that the participation level of the pupils was high with a mean of 74.5 percent in eleven activities. The use of beds or ridge for pepper production is better than flat and fertilizer application should be 45kg ha^{-1} NPK and 30t ha^{-1} poultry manure in two split applications of 1 WAP and 5 WAP for increased production of pepper. The aroma/taste or flavour of flavouring Nsukka yellow pepper was retained in Ozalla, which is the permanent site of University of Nsukka Teaching Hospital (UNTH).

The implication for extension services, is that there is need for increased dissemination of these findings to the wider society by teachers of Agriculture and Agric Science extension staff in the state and beyond for adoption. The authors therefore, recommend that more pupils should be encouraged to participate in pepper cultivation to raise more income for both schools and pupils and reduce poverty in their families.

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STUDENTS' PARTICIPATION IN SCHOOL FARMING ACTIVITIES (SFAS) IN IKORODU AREA OF LAGOS STATE, NIGERIA

BY

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Abstract

Agricultural self-reliance can be achieved through revitalizing the desire of youths for farming and regenerating the interest of the adolescent in farm work.

The study was conducted to determine the level of participation of secondary school students in farming activities. One hundred Senior Secondary Students were sampled and the data analyzed with descriptive statistics. Sixty (60%) percent rated themselves as having enough knowledge and mastery of the subject matter to succeed in Agricultural profession. Consequently sixty-three (63%) percent were motivated to offer the course by their teachers while others were influenced by their parents, friends and farmers around. Nevertheless, sixty-two (62%) percent have their own farms at home only twenty-eight (28%) percent were interested in taking up farming as a career. Agricultural Science teachers were urged to show more dedication to the practical agriculture to motivate students and develop their interest in agricultural profession as a career.

Introduction

Nigeria is blessed with vast land resources, about 71.2 million hectares of cultivable land out of which only 6.34 million hectares were cultivated (Shiamoya, 1985). This means that less than nine (9%) percent of the total agricultural land was cultivated. More human resources need to be mobilized in addition to the existing 15 million farmers to make effective use of these vast land resources in order to attain self-sufficiency in food production. In recognizing the population of the Nigerian youths and the role they play in Agricultural development, Akpan (1985) asserts that the neglect of the contribution of the youths in Nigeria will amount to ignoring 80percent of the human resources. He contends that if our present leader in agriculture can put down their manuscripts briefly and help to organize a truly Nigerian youth movement, the long-term solution to the country's food shortage would have been found. It was against this background that the school-to-land programme was launched in 1984 by the Federal Military Government for the mobilization of young school leavers and a necessary appendage was the school agricultural programme started by the various State Governments through the State Ministry of Agriculture and National Resources with these objectives (Mohammed, 1985).

(i) To make the youths appreciate the dignity of labour.
(ii) To enable the school children contribute to food production.
(iii) To develop the interest of youths in modern techniques of agriculture.
(iv) To enable the youths appreciate the problems of the Nigerian farmers.
(v) To foster a desire in the children to improve agriculture in Nigeria.
(vi) Lastly to enhance rural development.

The youths played a very dynamic role in agricultural production as a major source of farm labour available to the farm families in Western region before the introduction of free primary education in 1955. Through their exposure to farming, majority of the youths had taken up farming as full time profession. With the introduction of free primary education,

many parents sent their wards to the primary school. They finished and went to bigger towns and cities to attend secondary and tertiary institutions. Their long sojourn in schools resulted into shortage of farm labour, scarcity of food and general decline in agricultural production. On the completion of their studies, they drifted away from the farms as they found it difficult to return to the farms because they no longer see agriculture as a profession that fits into their educational qualification but a profession for their illiterate parents, a dirty job, destined for the poor. This fueled their negative attitudes towards agriculture as a course of study and they never considered taking it up as a profession. Attitudes formed by an individual about an idea is a learnt thing which can be positive or negative and can be changed through knowledge, further learning and participation in the activities over time. Hence this study was conducted to determine the extent of the students' participation in agricultural activities in school and the effects on positive attitude formation towards agricultural career.

Methodology

The area of study was Ikorodu Local Government Area, one of the five LGAs of Lagos State that were created under the 1976 Local Government reform. It is situated in the Northern part of the state bordered by Ogun State, in the south by the Lagoon and in the West by Somolu and Kosofe Local Government Areas. The Local Government Area had about twenty-five secondary schools from which ten schools were randomly selected. The Local Government Area was zoned into five and two schools randomly selected from each zone. These zones are Odogunyan, Ikorodu, Bayeku/Oreta, Igbogbo and Ijede/Igbokuta. From each of the school, ten agricultural science students were randomly sampled from the senior secondary class three (SSIII). Questionnaire was used to collect information from the students. The data were analyzed with descriptive statistics.

Results And Discussion

The respondents were sixty-eight (68%) percent to thirty-two (32%) percent female. Their ages ranged from sixteen (16) to twenty-four (24) years, while the average age was eighteen (18) years. Their parents' occupation was mostly farming with few artisans. Most of the schools did not have enough agricultural teachers. Few (10%) schools did not have land for agricultural practical. Also some (30%) schools did not have the young farmers club.

Knowledge and skills gained by students

None of the schools had enough agricultural teachers to go round the students' classes. The highest number of teachers in the schools was four which is grossly inadequate for any school having six classes to teach from JS I – III, and SS I while some (10%) schools have just one teacher for six classes. The average number of teachers was about two and a half (2.5) teachers.

The period of practical classes in each school ranged from none in some (10%) school to once monthly 40% twice in 10% of schools. Four and eight times monthly in twenty 20 percent of schools. These practical periods were grossly inadequate for meaningful skills to be imparted to the students for them to gain the confidence of wanting to start a farm after their course of study.

On the knowledge and skill gained from the school farming activities the students did not acquire enough skill to be able to start a farm of their own after schooling. Nevertheless,

they have enough knowledge to be able to pass their examinations on the average though some students (15%) rated themselves below average in knowledge, while some (25%) of the students rated themselves above average in knowledge. Forty-eight (48%) percent rated themselves as adequate while only twelve percent (12%) rated themselves as very adequate.

Participation of students

Ninety (90%) percent of the students have school farms and participated in the practical agriculture in their schools. They operated mostly mixed cropping according to sixty (60%) of students. Some twenty percent (20%) operated mono-cropping system. Though only thirty four percent (34%) of the students were farmers' children, sixty two percent (62%) of the students have personal farms of their own at home; twenty three percent (23%) visited their private farms once a week. Thirteen percent (13%) visited theirs twice weekly while twenty six percent (26%) visited their farms daily to carry out one operation or the other. They engaged in all the cultural operations ranging from land clearing to harvesting. Fifty-five (55%) percent of them worked on inherited land by their fathers while seven percent (7%) percent claimed that the land was bought.

Stimulation of Students' Interest in Agriculture

Their parent's occupation ranged from farming by thirty four percent (34%), Teaching by thirteen percent (13%), Trading by nineteen (19%), Civil service by fourteen percent (14%) and Artisan by twenty percent (20%). Nevertheless, twenty eight percent (28%) of the students were stimulated to offer agriculture by their parents that means not all the farmers would want their children to be farmers. Sixty three percent (63%) of the students were influenced to offer agricultural science. This must have been due to the students' personal likeness in the teacher himself and probably not in the subject nor the profession. Six percent (6%) of the students were influenced by their friends to offer the course. This can be regarded as peer influence for they were likely to be among those that confessed that they have no knowledge to be able to succeed in the subject nevertheless they still offer the course. Three percent (3%) were influenced by farmers around. This group could have been properly motivated to take farming up as a profession, for they have been influenced by either the products or the success of these farmers in their vicinity as they watch their activities day in day out.

Career aspiration of students

Twenty eight percent (28%) of the students were prepared to take up farming as a career in future. Sixteen percent (16%) prefer civil service while forty one percent (41%) wished to further their studies and the remaining fifteen percent (15%) did not respond.

Conclusion

The Students' participation in school farming activities had not in any way influenced their interest to take up farming as a professional career more so when some schools do not have agricultural land for their practical. The teachers were not enough in those schools while the practical classes were not effectively handled to stimulate students adequately enough.

The government should provide the schools with more agricultural science teachers, preferably university graduates who will be more dedicated and experienced in practical aspect of agricultural science.

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MASS LITERACY CAMPAIGN AND RURAL INDUSTRIALIZATION PROCESS FOR CHILDREN'S DEVELOPMENT

BY

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Abstract

The paper examined the problem of mass literacy and rural industrialization process for children's development. This was for the purpose of determining the relationship between literacy and sustainable rural industrial development in Nigeria. The paper adopted contextual analysis of mass literacy as weapon of rural industrial development in an unstable economy. The paper revealed that literacy education is an essential factor in industrial development at the rural level. Also, the paper established the intercollaborative efforts among the government, agencies as push factor for effective planning, implementation and evaluation of the industrialization programmes at the rural level in Nigeria. It was therefore being recommended that collaborative approach, which tends to integrate efforts of governmental and non-governmental agencies, should be encouraged in order to create room for sustainable industrial development at the rural level in Nigeria making education of the child a focus.

Introduction

Today's job takes all the executives' time as a rule, yet it is seldom done well' few managers are greatly impressed with their own performance in the immediate tasks. They find themselves caught in a "rat race" and managed by whatever the mail boy dumps into their "in" tray. They know that crash programme which attempt to 'solve' this or that particular 'urgent' problem rarely achieve right and lasting results. And yet, they rush from one crash programme to the next. Worse still, they know that the same problems recur again and again no matter how many times they are 'solved'. Omolewa (2002) asserts that: "Before an executive can think of tackling the future, he must be able to dispose of the challenges of today in less time and with greater impact and performance. For this he needs a systematic approach to today's job".

There are three dimensions to the economic task:

- The present business must be made effective
- Its potential must be identified and realized
- It must be made into a different business for a different future

Each task requires a distinct approach. Each task has different questions. Each comes out with different conclusions. Yet they are inseparable. All three have to be carried out with the same organization, the same resources of men, knowledge, and money and in the same entrepreneurial process. The future is not going to be made tomorrow; it is being made today and largely by the decisions and actions taken with respect to the tasks of today. Conversely, what is being done to bring about the future directly affects the present. The tasks overlap. They require one unifies strategy. Otherwise, they cannot really get done at all. (Gidado, 1987). The issues of Mass literacy campaign and Rural transformation have common goal with common problems. Effective management of one directly affects the success of the other. The tasks of mass literacy and rural industrialization have common

goals with common problem. Effective management of one directly affect the success of the other, otherwise they cannot really get done at all.

This paper examines the problems of mass literacy campaign possible alternative strategy for the achievement of the set goals of this rural industrialization through teamwork, an element of management by objective. The paper identifies the common problem of the two programmes. Scarce resources. Also the concepts and objectives or rural transformation and mass literacy as being synonymous with one another in terms of the set goals of the two programmes, the source of financing and the problem of management were carefully discussed.

The paper suggests possible unified strategy for the task to be accomplished through 'team work' an element of management by objective.

Illiteracy and Rural Industrialization in Nigeria

The increasing number of illiterates in our society reflects the failure of development policies that are indifferent to man and the satisfaction of his basic needs. In spite of the progress made in some countries as a result of far-reaching social change, there are still over 50 million illiterates in this country even though the figure is still based on 'guess work' since we still rely on the 1963 National census to project our population by 2.5 per cent annual growth rate (Akintayo, 1997). Successes could be achieved if the concept of literacy is linked to meeting main fundamental requirements, ranging from his immediate vital needs to effective participation in social change.

Gidado (1987) contends that this country can have a 100% success in its mass literacy campaign if only it considers literacy to be not just the process of learning the skills of reading, writing g and arithmetic, but a contribution to the liberation of man and to his full development. Thus conceived, literacy creates the conditions for the acqusitio9ns of a critical consciousness of the contradictions of society in which man lives and of its aims. it also stimulates initiative and his participation in the creation of projects capable of acting upon the world, of transforming it, and of defining the aim of an authentic human development. Literacy should not be seen as an end itself. It is a fundamental human right. But the success of literacy efforts is closely connected with national political and economic will.

The present administration has given a signal of its commitment to the elimination of illiteracy in our society most especially with the introduction of Universal Basic Education and the establishment of the Directorate of Food, Road and Rural Infrastructures by the past administration. The Universal Basic Education programmes coupled with Directorate sets to transform the rural community through its programmes. Traditionally, Nigeria has most of her illiterates in the rural community. Literacy efforts are seen as an integral component of rural development especially in the developing countries like Nigeria, where more than half of the nation's population lives in the countryside (Omolewa, 2003).

Rural Industrialization is defined by the international Council for Adult Education (ICAE 1999) as:

"...a strategy through the development of the rural population and the rural areas is directed towards a total development of the people and their environment through concerted actions."

The International Labour Organization (ILO) (1996) sees rural industrialization as

"... including both the promotion of agriculture and various non-agricultural activities in the rural areas which were necessary to support a growing agricultural economy and a developing agriculture provided a broadening basis of existence for non-agricultural pursuits."

While the ILO emphasized the role of agriculture and various non-agricultural activities in the rural industrial development, the United Nations Economic Commission for Africa (ECA 1993) noted that:

"Rural industrialization should be viewed in an integrated milieu, calling for a set of policies and sustain the standard of the rural population as a whole. As a concept, it should be analysed both from the standpoint of social advancement arising from a higher-level of income and consumption and the satisfaction of human needs above the basic.

From the foregoing, it is observed that the purpose, aims and objectives of literacy education as an integral part of adult education and rural transformation seek to bring public enlightenment, improved occupational skills for greater productivity and participation in community development projects. Thus, like Nyerere (1980) advised that rural industrialization being national development should be tackled in order to attack absolute poverty. But this depends on effective management of the available human and financial resources for the purpose of development and this calls for the challenge of community organizations and governmental agencies.

Management Strategy and Rural industrialization

The management of both the literacy programmes and the rural industrialization programmes through "team work" an element of management by objectives call for integration of efforts among the stakeholders at the community level. Management by objectives (MBO) according to Akintayo (1997) can be applied by the individual manager to his own limited area of work. It also can be applied on a broader scale to total community organizations or large segments of them. To include this wider application of the process, the definition of management by objectives is expanded as follows:

Akintayo (2002) contends that MBO is a programmes for improving organizational effectiveness by the development of a philosophy and system of Management Planning and measurement that clearly establishes:

- The purpose and key objectives of the community organizations
- Clear accountability, enforced through the application of measurement related to each key objectives of rural industrialization
- Goals and action plans for goal achievement
- Feedback on result achievement through appropriate information systems
- Systematic and regular progress reviews using a critical path method of evaluation.

All these are carried out in such a way as to achieve:

- Commitment of all participants accountable for the results and

- Integration of goals, vertically and laterally through the community organizations. This could involve integration of non-governmental efforts towards rural industrialization through mass literacy programmes in Nigeria.

Planning process and Rural Industrialization

One of the aims of the broad application of MBO is the integration of goals and plans through all levels of the community organization and across working groups. Such integration requires considerable co-ordination and communication between levels and within groups.

As Peter Drucker (1994) emphasized:

"Any enterprise must build a true team and weld individual efforts into a common effort. Each member of the enterprise contributes something different, but they must all pull in the same direction and their contributions must all fit together to produce as a whole without gaps, without friction, without unnecessary duplication of effort".

In any sizeable community organization, the need for coordination is usually self-evident. We can all think of examples from our own experience where the failure of a superior and his subordinate to reach advance agreement on goals within working groups has left a manager without the vital resources he needs to meet his targets (Anyanwu, 2001).

George (1997) a leading educationist and consultant to major organizations in the process of managing by objectives, has done some interesting research on the problems of co-ordination between superior and subordinate. On one occasion, he was asked by the head of a large organization to study a subsidiary that was producing poor financial results. The top of the organization consisted of a president, and three vice-presidents. Odiorne asked each of the vice-presidents to put into writing what they thought the president expected of them. At the same time, he asked the president to put into writing what he expected of each of the vice-presidents. When the two lists were compared only 75% of the items matched. He found a 25% discrepancy. It is easy to visualize the cumulative damage of this lack of agreement if it occurs through four or five levels in any result oriented community organization.

Drucker has addresses himself to the need for teamwork, while Odiorne has demonstrated the importance of vertical coordination. The MBO approach is conducive to both. It demands that managers and subordinates at each successive level in the community organization jointly agree on roles, goals and action plans. It requires review of these roles, goals, and plan throughout the organization activities are interdependent. The resultant knowledge and understanding of roles, goals, and plan throughout the organization will provide the prime incentive for teamwork and coordination.

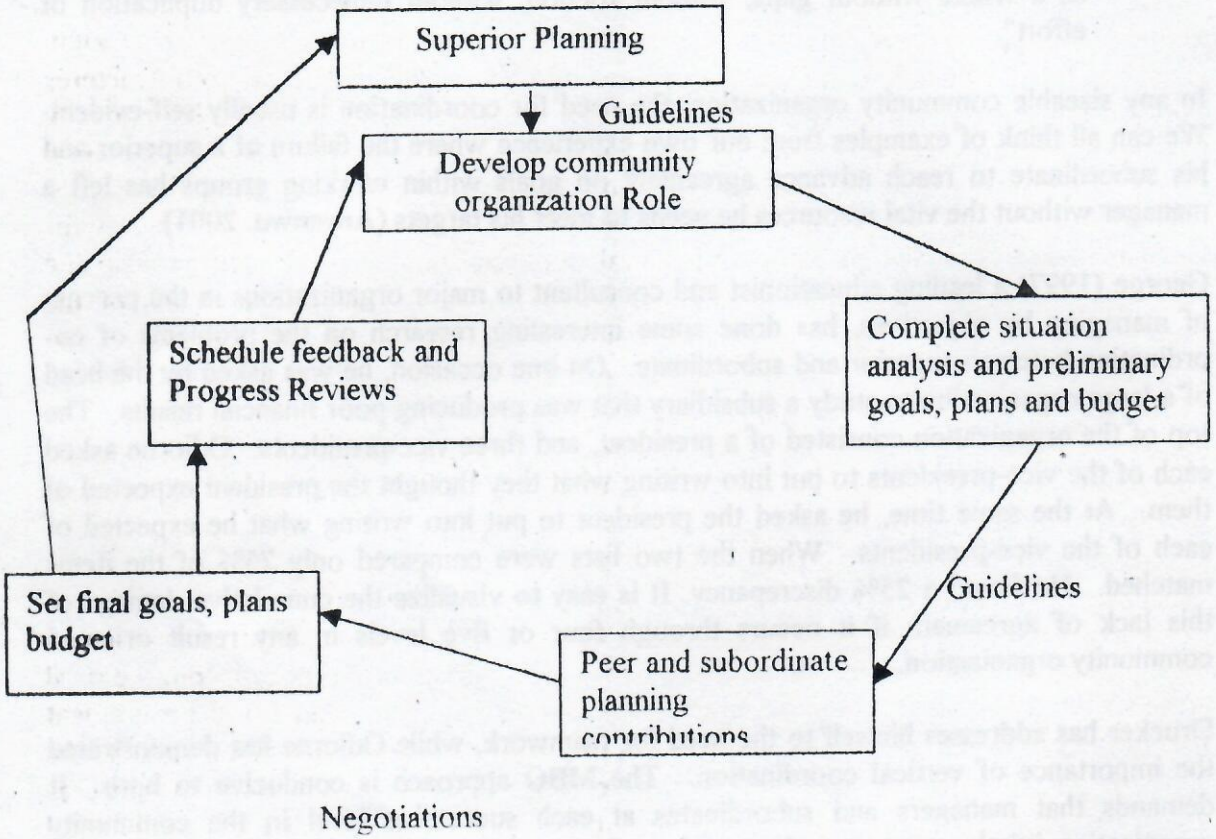
Figure 1 illustrates the extension of the planning process to include points of coordination with other mangers. It will be observed from the chart that contribution with other manager's superior precede any planning work by the Manager. This means that the superior should define his own organizational role, goals and action plans and communicates these to the subordinate as guidelines for his planning. At the bottom of the chart, there is a similar communication to the manager's peers and to his subordinates. This means that after the manager has drafted his preliminary goals and action plans, he should review them with his peer work group too obtains their reaction and contributions

and to ensure coordination with their planning. He should then review them with his subordinates to obtain their ideas and to provide guidelines for their planning.

Each time a manager communicates his roles, goals and action plans and receives ideas and reactions, he should review and modify his planning to incorporate these contributions. Subsequently, he should inform his superior of any significant changes and obtain his approval before implementing his plans.

Figure 1

The Planning Process Using Management By Objectives



Source: Adapted from Management Development Programmes, Federal Public Service Review Unit, Federal Ministry of Establishment. 1977

Intercollaboration strategy and Rural Industrialization

Adebayo (1996) asserts that applying the concept of 'Team work' using MBO to literacy campaign and rural industrialization, the agencies of mass literacy, Universal Basic Education and the Directorate of food, Road and Rural Infrastructures should devise a means of solving the problems of rural industrialization through 'team work'. The roles, goals, expectations, motivation and desires of the three agencies are similar but to avoid elements of 'conflicts', which could jeopardize the laudable goals of mass literacy campaign and rural industrialization. There must be a consensus on how the two agencies could successfully work together, identify their strategies, examine their priorities in relation to the available human and material resources. This will transform the rural communities in Nigeria totally through absence of poverty, ignorance, superstition, exploitation, depression and neglect. Moreso all these could only be achieved if the agencies of mass literacy campaign and rural industrialization apply the concept of 'team work' an element in management by objective to execute their programmes.

There could be no problem of conflict if the agencies for mass literacy campaign, Universal Basic Education and the Directorate of Food, roads and Rural Infrastructures can team up to transform our rural communities. The government has given high priority to the stimulation of agriculture, which serves as the main catalyst of the rural industrialization. In order to ensure a real transformation of the rural communities, the 40 million Naira earmarked for literacy campaign by the government need be utilized for implementation of action plan for agricultural development and rural integration in the scheme of industrialization policy in Nigeria, through the collaboratory efforts of the Directorate of Food, Road and Rural infrastructure, Universal Basic Education Commission and other Non-Governmental organizations in Nigeria.

Moreover, the activities of the Directorate of Food, Road and Rural Infrastructures need be directed towards the planning, execution and evaluation of its programmes of rural transformation and more concern for financing the Mass Literacy Campaign by the Government, if the 2010 target year is to be accomplished.

As a step towards encouraging rural communities using Inter-collaboratory approach to stay on their farms and to accelerate the movement of agricultural produce from the rural areas to the urban centres, the three agencies- The Federal State and Local government Department of Adult and Non-Formal Education, Universal Basic Education agency, the Non-government Agencies and the Directorate of Food, Road and Rural Infrastructures will be required to work closely with each other in order to reach the various local communities throughout the country. Apart from stimulating agricultural production, the success of the three agencies will serves as a vehicle for moving some resources from the urban to the rural transformation in an ailing economy to be guaranteed, there is need for teamwork with integration of efforts among the stakeholders at the Federal State and Local Government levels in Nigeria.

Conclusion And Recommendation

This paper has attempted to look into the problems of mass literacy campaign and rural industrialization process for children's development in Nigeria. The paper looked into the concepts of rural industrialization, rural development and mass literacy focusing on the issue of children's Development as being synonymous with one another in terms of their goals, aims and objectives. These goals and objectives cannot be well accomplished in a

changing economic environment unless intercollaboratory approach is utilized. But since the agencies for rural transformation and mass literacy campaign are of the same economic environment, their programmes could be successfully carried out with the same resources of men, knowledge, and money and in the same entrepreneurial process through the use of one unified strategy of 'Team work' – an element of Management by objectives.

However, the government should allocate sufficient resources for investment in rural industrialization with effective monitoring through governmental and non-governmental agencies in Nigeria. This will create avenue for sustainable industrial development through early children's education at the rural level in Nigeria.

Also, intercollaboratory approach, which tends to integrate efforts of governmental and governmental agencies should be encouraged in order to create atmosphere for children's development through effective provision of literacy programmes at the community level in Nigeria.

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TEACHING PRIMARY SCHOOL PUPILS, AGRICULTURE WITH VIDEO

BY

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Abstract
The study set out to compare the effectiveness of video with other instructional media commonly used in teaching in primary schools – such as chart and realia. The effectiveness was determined by the performance of pupils taught with three instructional media – video, realia and chart. The control group was taught the subject matter without using any instructional media (lecture method). Non-randomized quasi pretest posttest experimental design was used in conducting the study. 80 pupils from one primary school in Badagry local government area of Lagos state were randomly selected and stratified according to gender and class. There were 40 males and 40 females; 40 primary 5 and 40 primary 6 pupils. The instrument used for determining the pupils' performance was the achievement test consisting of 20 objective questions with 4 – option answer on the topic taught – simple farm tools. The 80 pupils, split in four treatment groups – video, chart, realia and no instructional media groups – were administered with the achievement test before and after instruction. The mean net gain of each treatment group was computed. ANOVA was used to compare the performance of the four treatment groups; while t-test statistic was used to compare the performance on gender and class difference. The result showed that there was no significant difference between the video group and realia group. Those taught with instructional media performed better than pupils taught without instructional media. There was no significant difference in performance between boys and girls; and between primary 5 and 6.

Introduction

Primary school education is the bedrock on which secondary and tertiary education are built. The National Policy on Education emphasized that the rest of the educational system is built on primary education and that it is the key to the success or failure of the whole system (Federal Government of Nigeria 1981).

Among the five national objectives stated in the policy, the building of a united, strong and self-reliant nation is a vital key to self-realization through solid foundation in agricultural science like in other subjects. The objectives of introducing agricultural science in the primary school curriculum are:

(i) to develop positive attitude and interest of the pupils towards agriculture
(ii) to expose pupils to modern methods in agriculture
(iii) to enable the pupils appreciate and interpret their environment in a scientific way
(iv) to develop pupils understanding about the contribution of agriculture to the nation's economy
(v) to develop pupils interest in creative activities

Furthermore, the teaching of agricultural science in primary school with an enhanced agricultural science curriculum will like any other science and vocational related fields provide adequate intellectual growth for the pupils. It must be noted that agricultural science expose pupils to knowledge and skill development such as raising of seedlings, poultry keeping and crop management practices. etc. It will also enable them explore their environ and the develop basic process skills of observing, manipulating, communicating, inferring and idea formulation all of which are essential for their effective functioning and useful members of the society.

The main goal of any educational system is to effect a relatively permanent change in the behaviour patterns of the student that are exposed to a set of learning experiences. The teaching method used in effecting the desired change in the learner is dependent on the teacher. The teachers' skill in using any method or combination of method, his communication skills, his rapport with learners and the equipment/instructional aids and facilities at his disposal (Adewoyin, 1998).

Effective teaching results to effective learning. The teaching-learning environment in public primary schools in Nigeria has recently received a boost through the activities of the Educational Trust Funds. Classroom blocks that were constructed has lead to a more comfortable / conducive learning environment. The learning environment for agricultural science is more than a comfortable classroom. Equipment consumables and farmland must be made available for effective learning to take place. Many primary and post primary schools in Lagos State do not have adequate teaching facilities to ensure effective teaching and learning in agricultural science (Nwabuisi, 1991).

At the primary school level the pupils are between the ages of 6 years to 12 years. According to the Piaget's stage of development, the pupils are in the "concrete stage of intellectual development. Demonstration of practices with real objects will ensure effective learning where the equipment is not available other mean should of all necessity be made to ensure effective learning.

The use of video is proposed to act as a "surrogate teacher. Video in this paper refers to relevant agricultural information/practices in videocassette. The content is presented in an audience-specific" style. This implies that the socio-cultural and intellectual peculiarities of the learner must be taken into consideration. Hence, as Kemp and Dayton (1985) put it, thorough understanding of the audience (learners) must be achieved.

The use of video has great potential in teaching primary school pupils agricultural science. It can enhance comprehension, retention and application of the subject matter (Imogie, 1992). The advantages of using video cannot be over emphasized. Real life activities, illustration, demonstration and specimens in agriculture are brought to the pupils in the classroom in a neat package. Learning experience that would have cost much in terms of time, money and logistics could be recorded by shooting with a video camera and the activities shown on a TV through the video cassette at much less cost. Since it is a motion picture in colour, the practice or demonstration or specimen will look as a real life situation. The agricultural practices could be repeated as often as it is required. The pupils involve two senses in learning from video; sight and sound - modal presentation. This aids recall, retention and comprehension (Levie and Lentz 1982). The learning

experience through video could be as effective as real life situation through a teacher (Spencer 1991 and Ahmad, 1990).

Effectiveness of video as an instructional media over others used by the teacher is been examined. Rose (1980) defines teaching effectiveness as the extent to which an instructor enables a learner to understand the subject matter presented. The learning situation is made in such a way that the learning readiness of the learner is determined, his attention aroused and sustained and facts presented are comprehended. According to Ahmad (1980) video can be effective in the sense that it stimulates excitement and catches attention. This improves learning, Video also, to a large extent, can overcome the frailties of human beings. The teacher's shortcomings, such as shift in moods, level of motivation, technical competence, preparedness and interest/enthusiasm could determine how effective the teacher will be. In the case of video, once the instruction is packaged in video appropriately accurately, approved by experts in education, psychology, communication and agriculture, it can be presented to the pupils over and over again without any distortion.

The objective of the study is to compare the effectiveness of video with other media such as charts, realia. The effectiveness was determined by the performance of pupils taught with three methods – video; realia and charts. The control group was taught the subject matter without using any instructional media.

The specific objectives are as follows:

(i) to analyze the performance of pupils taught with video and those taught without any instructional media.

(ii) to find out the comparative performance of pupils taught with video, chart, realia and no instructional media.

(iii) to compare the performance of boys taught with video and boys taught with realia.

(iv) to compute the performance of girls taught with video and those taught with realia.

(v) to assess the performance of male, female primary 5 and primary 6 pupils taught with video and those taught without any instructional media.

Methods

The design of this study is non-randomized quasi-pre-test, posttest experimental design. Pupils in one primary school were purposively selected and stratified into the following: 20 each in four of the treatments/groups video, chart, realia and no instructional media. 20 pupils each were males, females, primary 5 and primary 6. The pupils were selected from Salvation Army Primary School Ibiye in Badagry Local Government Area of Lagos State. This location is a typical rural setting of Lagos state.

The instrument used for determining the pupils' performance was the achievement test consisting of 20 items. The questions asked were based on the subject matter taught to the students – simple farm tools. They included cutlass, knife, basket, wheelbarrow, screwdriver, bolt and nut, spanner, hammer and rake. Identification and uses of each tool was taught to the pupils.

The lesson note was prepared. The pupils were split in four groups (20 each) video group, chart group, realia group and no instructional media group. The video groups were taught with a video clip containing the teaching on simple farm tools. While the chart group were taught with the simple farm tools drawn on a chart. The realia group was taught with the real objects and the no instructional media group taught without any instructional media.

The achievement test was administered to all the eighty pupils (pre-test) before been split in the four treatment groups. After teaching them the subject matter another administration of the same test was done (post test). Both sets of scores were collated for the four groups. The net gain was worked out. This is the difference between the pre test and the post-test for each pupil. The mean net gain score for each group was computed and the mean net gain score for boys, girls, primary 5 and primary 6 for each treatment group was also computed. Total score = 10, Net gain = post score – pre score.

Analysis of variance was used in comparing the performance of all four groups. While t-test statistic was used to compare the performance of male; female; primary 5 and primary 6 pupils taught with video and those taught without instructional media.

Results And Discussion

Table 1: Mean Net Gain Score of all the Categories In Each Treatment Group

Max score	**n**	**Video**	**Realia**	**Chart**	**No Instructional media**
	n	20	20	20	20
Overall	80	7.75	7.60	5.20	3.75
Male	20	7.9	7.65	5.15	3.7
Female	20	7.7	7.58	5.30	3.8
Primary 5	20	7.6	7.55	5.10	3.4
Primary 6	20	7.8	7.62	5.25	4.1

The net gain mean score of the video group is the highest (7.75) followed by realia group (7.60) and the chart group (5.20) and the last no instructional media group (3.75). This result confirms the assertion of Isiaka (2000), Dopemu, (1990), Talabi (1989) and Ahmad (1990) that video can be effective in passing information to wide range of people – adults, youths or children. In view of the fact that the information / practice in the video clip is as real life, it is not surprising that the performance of the video group is a little but higher than the realia group.

Table 2: Test of Significance using ANOVA of the Net Gain Mean Scores of the Four Treatment Group

Sources of variance	Sum of square	Degree of freedom	Variance estimate	Fcal	Ftab	Remark
Between group	225.25	3	75.08	19.4	2.76	S.D Reject Ho
Within group	294.3	76	3.87			
Total	3475					

Table 2 shows that the f-cal of 19.4 is greater than the f-tab of 2.76 at alpha 0.05. This implies that there is a significance difference amongst the four net gain mean score of the performance of pupils taught with varying instructional media. The least significant difference (LSD) was used to determine which treatment group is significantly different from the other.

Table 3: Least Significant Difference Table

Treatment from	Net gain X	LSD at 5%
Video (V)	7.75	0.625
Realia (R)	7.60	
Chart (C)	5.2	
No Instructional media	3.70	

V – NIM	7.75 – 3.75	= 4	Significant
R – NIM	7.60 – 3.75	= 3.84	Significant
C – NIM	5.2 – 3.75	= 1.45	Significant
V – C	7.75 – 5.2	= 2.55	Significant
V – R	7.75 – 7.60	= 0.15	Not Significant
R – C	7.60 – 5.2	= 2.40	Significant

The result above shows that video, realia and the chart groups performed significantly better than the no instructional media group. The realia group did significantly better than the chart group while the video group performed significantly better than the realia and chart group. It was observed that though the mean score of the video group was higher than the realia group, it was not significantly so.

The conclusion from this result is that video as an instructional media is as effective as the realia in the teaching – learning process in primary schools. The use of charts, realia and video are more effective in teaching the subject matter than not using any instructional material at all.

This result has exposed the inadequacy of the lecture method for primary school pupils. It is expedient for the teacher no matter the subject matter he is teaching, to make use of instructional media in passing information to the pupils. Realia and video are instructional media that should be highly used in primary schools in teaching agriculture and other subjects.

Asoga-Alliu (2002) confirmed that the use of realia (the real object) in teaching is most effective. Since video, presents the senses, activities and object of the subject matter as real life, it is as effective as realia. Bamidele (1996) and Benidict (1995) both confirmed this fact. Isiaka (2000) also agrees with the fact that video presentation could be as real as the teacher's presentation with realia.

Analysis of the performance of male, female, primary 5 and primary 6 pupils taught with video and those taught with realia

Table 4: Comparative performance of the video and realia groups and variables

Variables	Video	Realia	t_{tab}	Remark
	n = 10	n = 10		
Boys	7.9	7.65	1.87	N.S.D
Girls	7.7	7.58	0.626	N.S.D
Primary 5	7.6	7.55	0.615	N.S.D
Primary 6	7.8	7.62	0.153	N.S.D

t-tab = 2.10 at alpha 0.05
N.S.D = No Significant Difference
Degree of freedom = 18

Table 4 shows that there is no significant difference in performance of the video group and realia groups among the boys, girls, primary 5 and primary 6 pupils. This implies that gender or class difference does affect the performance of those taught with video or realia. There was no significant difference in performance between boys taught with video or realia. The same result was observed for the girls, primary 5, and primary 6 pupils.

This result implies that no matter the category; boy or girl, primary 5 primary 6 or secondary, the use of video is as effective in the teaching – learning process as the realia. This assertion is supported by Van den Ban and Hawkin (1996) and Ross (1980).

Analysis of the performance of boys, girls, primary 5 and primary 6 pupils taught with video and those taught without any instructional media.

Table 5: Comparative performance of video and no instructional media group among the variables

Variables	Video n = 10	No Instructional media n = 10	t_{cal}	Remark
Boys	7.9	3.7	6.54	S.D
Girls	7.7	3.8	5.76	S.D
Primary 5	7.4	3.4	5.97	S.D
Primary 6	7.8	4.1	6.73	S.D

t-tab = 2.10 at alpha 0.05
S.D = There is a significant difference

The table shows that amongst all the variables, boys, girls, primary 5 or primary 6, the video groups did significantly better than the no instructional media group. This confirms the theory of the Educational technologist who insist that the teaching – learning process in primary and post primary must be done with a heavy dose of varying instructional media in order to insure effective learning (Adewoyin, 1991; Owyer, 1998).

Conclusion And Recommendations

The study set out to find out the comparative effectiveness of video as an instructional media with chart and realia. The control was pupils taught without instructional media. The results show that video and realia are equally effective as instructional media in teaching agricultural science to pupils in primary schools. The net gain mean score of pupils taught with video was highest; followed by realia, chart and lastly no instructional media group. Boys, girls, primary 5 and primary 6 pupils taught with video did not perform significantly better than those taught with realia but did better than those taught without instructional media. The implication is that the teaching – learning process at the primary level must involve variety of instructional media for effective learning to take place.

It is therefore recommended that primary school teachers should make use of realia as much as possible in teaching agricultural science. Where realia is not readily available, the primary school Management Board should establish a unit, which could be VIDEO RESOURCE CENTRE. This centre should produce specific video clips in all areas of agriculture for primary school pupils. These video clips should be sent to each school. Each school should have a VIDEO BANK where the videocassette are appropriately stored and easily retrieved when demanded. Selected number of teachers should be taught how to operate the television/monitor and the video cassette player. Through the PTA in each school a television/monitor be purchased. A classroom be designated VIDEO VIEWING ROOM. Here the pupils in small groups watch the video clips. Maintenance of the video equipment is done regularly.

It is believed these arrangements will argument the efforts of the primary school teachers in establishing a solid educational foundation for the future generation.

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SUB-THEME 4

INVOLVING THE NIGERIAN YOUTH IN AGRO-BASED POVERTY REDUCTION STRATEGY

PARTICIPATION OF YOUTHS IN-SCHOOL IN THE CHOICE OF HOUSEHOLD FOODS FOR DECENT LIVELIHOOD

BY

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Introduction

The causes of child malnutrition are complex, multidimensional, and interrelated. An understanding of the most important causes of malnutrition is imperative if the current unacceptably high numbers of malnourished children are to be reduced. Malnutrition causes a great deal of human suffering both physical and emotional. It is a violation of a child's human right (Oshang et al 1994). A major waste of human energy, it is associated with more than half of all children's deaths worldwide (Pelletier et al 1995).

There are more children of school age and more children attending school now than at any time in human history (Bundy 1998). These children are one of the most accessible population groups from the public health perspective because they are gathered together on an almost daily basis and because trained workforce of teachers supervise them. They are also a group, which can benefit considerably from nutrition and health interventions. According to Bundy (1998) good health and adequate nutrition promote both physical growth and learning, while good health and nutrition education at school age can lay the foundation for life long good health.

Appropriate nutrition is a basic human need that remains unmet for vast number of children, who are thus unable to achieve their full genetic developmental potentials. The nutritional quality of the diets of school children particularly those of secondary school age have been a matter of concern for sometime (Hackett et al 1997).

Programmes have been targeted towards mothers who are responsible for the feeding of the children. Some have failed and some have no much effect.

Other programmes have been targeted towards children to combat malnutrition e.g. school meal programme but have not lasting effect since the children still go back to their different households and are fed with the food put down or provided by their mothers at home. Some other programmes are put in place to sustain the household e.g. food security and poverty alleviation programmes. Therefore, there is a need to re-channel our attention for obtaining a lasting solution to youth under nutrition problems. Youths in school are homemakers in the nearest future. For them to participate effectively and efficiently in domestic Agricultural activities, they need to be well fed.

Good diets do not just happen but they are planned. Children need to be involved in meaningful projects with adults. It is unrealistic to expect them suddenly to become responsible, participating adult citizens without prior exposure to the skills and responsibilities involved. An understanding of participation, and the confidence and competence to participate can only be acquired gradually through practice; it cannot be

taught as an abstraction . We should not underestimate the importance of adult involvement; not only for the guidance they can offer, but also for the lessons they need to learn (Roger 1992).

There is an identified need to study in depth the participation of children in the choice of household foods. Therefore there is need to study the extent to which the Youths in school take part in the selection of choice of foods that will be presented to household members.

The study was conducted determine the extent to which youth in school participate in the choice of household food. Specifically it:

(i) examine the food habits of youth in school in the study area,
(ii) determine factors which influences food choice of youth in school;
(iii) examine the nutritional knowledge of youth in school and
(iv) investigate the socioeconomic characteristic of children.

Methodology

This study was based on 120 youths in Osun State College Of Education, Ilasa, Osun state, Nigeria. The sample was obtained through a simple random sampling method. Data were colleted using structured interview schedules which were designed to collect information about the roles the youths in-school play to effect changes in the type of food the mothers provide at home for consumption, to improve the nutritional status of the children to enable them to participate in agricultural and other programmes for sustainable decent livelihood.

Data collected were analysed using descriptive statistics like frequency counts and percentage chi square was also used to determine the relationship between the dependent variable and independent variables.

Results

Age and Sex Respondents

Table 1: Percentage distribution of respondent according to Age and Sex

Age - years	Frequency	Percentage
16 – 18	46	38.3
19 – 21	32	26.7
21 & above	42	35.0
Total	**120**	**100**
Sex	**Frequency**	**%**
Male	55	45.8
Female	65	54.2
Total	**120**	**100**

Majority of the respondents were between the age of 16 and 18 (38.3 percent), 32 of them were between age 19 and 21 (26.7 percent), 35 percent were 21 and above. 45.8 percent were male while 54.2 percent were female.

Choice of Food/Food Habit of Respondents

Table 2: Percentage distribution of respondent according to choice of food

Choice of food	Frequency	%
Unhealthy foods	89	74.2
Healthy foods	31	25.8
Total	**120**	**100**

Foods that are combinations of sugar and fat are preferred, whereas there is widespread dislike of tastes that are bitter. According to Drenowski (1996), 'Unhealthy' food are foods that contain too much of sugar and fat while 'healthy' food are proteinous, fruits and vegetables foods. 74.2 percent of the respondents consume 'unhealthy foods' while only 25.8 percent eat healthy foods.

Some of the factors that were responsible for the bad eating habits from their responses were as a result of peer pressure, lack of finances (economy), convenience etc.

Likewise it was discovered that these youths lack some basic nutritional knowledge and are not ready to dam the consequences.

Participation at Home in Food Choice

Table 3: Percentage distribution of respondent according to participation

Participation of Youth		Frequency	%
Female	No	22	33.8
	Yes	43	66.2
		65	100
Male	No	8	14.5
	Yes	47	85.5
		55	100
Total		**120**	**100**

It was also observed that out of the 65 female respondents only 33.8 percent of them participate fully in the choice of house hold foods while 66.2 percent do not take part as such. While in the male category, only 14.5 percent participate while 85.5 percent do not.

Discussion

The changing life style of an adolescent has marked effects on his food habits. As he becomes more independent and mobile he eats fewer meals at home, more meals outside the home where there is little guidance on his food choices, shares more food with his peers, learns new food preferences with a discard old food habits.

With a multitude of after school, social activities, they almost inevitably fall into irregular eating habits.

Most of the respondents have developed 'sweet tooth' 74.2 percent go for 'unhealthy food'. Food preferences and food choices of populations are further linked to attitudinal, social, and probable most important-economic variables such as income. Nutrition education and intervention strategies aimed at improving population diets ought to consider sensory pleasure response to foods, in addition to a wide range of demographic and socio-cultural variables (Drewnowski 1997).

Even though females participate more than male in household food choice (Table 1). The nutritional knowledge is still very bad. These are the future home makers and if care is not taken the same set of foods they have been used to will still be transferred down to their own household when they eventually set up their homes. Definitely there will be carry over of malnutrition, which has become a global concern.

With the growth of children's rights we are beginning to see an increasing recognition of children's abilities to speak for themselves. The term participation refers generally to the process of sharing decisions which affect one's life and the life of the community in which one lives. These youths, for them to be able to sustain a decent livelihood, they need to be incorporated into programmes and fully participate and be used to the process of choosing the right foods for the household members.

A hungry mind cannot have a decent livelihood; a malnourished mid cannot perform in agricultural programme and a malnourished soul cannot be empowered for sustainable decent livelihood.

Conclusion and Recommendation

This research paper has shown that the nutritional knowledge of youths in school is poor and that their eating habit is likewise bad. It is suggested that youths in school should be exposed to more nutrition and education and be encouraged to participate actively in food choices at home. It is unrealistic to expect them suddenly to become responsible, participating adult citizens without prior exposure to the skills and responsibilities involved.

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CHILDREN'S PARTICIPATION IN SMALL-SCALE POVERTY ALLEVIATION ACTIVITIES IN IDO LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

BY

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Abstract
The study was conducted in Ido Local Government Area of Oyo State, and a well-structured questionnaire was used to gather information from the respondents (40 male and 40 female children). Finding reveals that an appreciable number of the respondents were involved in farming and household activities. More so analysis results also showed that there is no significant relationship between gender of the respondent and their participation in farming (X^2 = 237, $P < 0.05$) and household activities (X^2 = 1.25, $P < 0.05$) generally. Conclusively, male and female child participation in these activities would go a long way to increase agricultural output and income earnings of their family, hence poverty alleviation is certain.

Introduction

All over the world, agriculture is the main and would always remain as the sustenance of much economy. In Nigeria, agriculture has traditionally been characterized as the main stay of the economy before the advent of oil boom (in the early 70s) with many assigned roles to perform in the course of country's economic development. Among such roles conventionally ascribed to agriculture according to Federal Ministry of Agriculture, Water Resources and Rural Development in 1988, include: providing food adequately for the teeming population, supply of adequate raw, materials to a growing industrial sector, providing employment opportunities, constituting a major source of foreign exchange earning and provider of market for the products of the industrial sector.

In view of the above roles conventionally ascribed to agriculture in sustaining and developing Nigeria's economy, there is great need to appreciate the participation of male and female child in small-scale farming and household activities towards poverty alleviation. Although agricultural production, through the peasant system of cultivation being used by the young ones, (i.e. male and female child) is largely for domestic use in meeting the needs of the families as well as internal sales. Exports of the farm products have held and will still hold a key position in the economy. This could be affirmed by a statement according to Olajide (1972) that exports of the agricultural sector products have been leading in the contribution to Nigeria economic development even though they constitute a small proportion of total agricultural production.

The role of male and female child being identified as crucial however is not only in agricultural production and household activities but also in other socio-economic activities. In this regard, one would emphasize the formation of agricultural youth programmes such as Children-In-Agriculture Programme (CIAP), in the country. The

long term solution to our food shortages would have been found if present leaders in agriculture can put down their manuscripts briefly and help to organize a truly Nigeria Youth Movement oriented towards food production in Nigeria.

The concepts: Child, Small Scale Farming and Household

Child, a special and natural gift from the creator cannot just be neglected. Child can also be described as that person, who can easily be influenced by a lot of factors such as parental influence and environmental factors. Children are the nation's future; therefore we cannot afford to despise them. An international organization, United Nation Children Education Fund (UNICEF), under the auspices of United Nation Organization (UNO), have declared every 27th day of May as Children's Day world wide, consequent upon the importance of children in the society.

Agricultural productions, especially in the area of food and fibre production have reduced drastically due to many factors among which are the labours. This reduction is food and fibre production would not have been so aggravated if not for the neglect, lack of understanding and/or little attention given to the role-played by the children. Children are assumed to be an important source of farm labour in ensuring different food production, therefore, there is need to ascertain the male and female child participation in small-scale farming and household activities. For the purpose of this study, a child would be that able-bodied person, agile and actively involved in both farm and household activities, aged between 11 years and above, not married and still depends on the parents.

Small Scale Farm

Small-scale peasant farmers whose farm average size of 1 – 7 hectares are fragmented into many plots typically does farming in Nigeria.

The definition of small-scale farm varies from individual's perspective and from country to country, depending on the prevalent agricultural scenario and cultural practices. According to Olajide (1980) small-scale farms range from under 0.10 hectare holding to 5.99 hectares and this constituted about eighty-one percent (80.78%) of all farms in Nigeria in 1973/74. in his own view, Babatunde (1992), narrated that small farm operators producing about eighty percent (80%) of the total food production for ever increasing population operate on fragmented farms ranging from 0.5 – 2.0 hectares.

Small scale method of farming is very important in the Nigerian economy in that these small holders are responsible for bulk of food and arable crops produced. Nigeria is a nation of small farmers. The validity of this statement, according to Olayemi (1980) becomes evident when it is realized that over 90 percent of Nigeria's total food production comes from small farms while at least 60 percent of the country's population earn their living from these small farms. It is, indeed, amazing that while these small farmers may look insignificant individually, they collectively form an important foundation on which the nation's economy rests.

Based on the above expression, farm can be said to be small scale depending on its size, types of crops grown (food and/or arable crops) and the labour force required in which the female and male child's efforts can not be ignored.

Household

Households are the centres of economic, social and demographic activities in many countries including Nigeria. Globally household activities are almost the same. Such activities include the washing, sweeping and dusting, childcare and food preparation, fire wood collection, water fetching, livestock keeping, general cleaning of the immediate environment and so on. The term household has various definition based on individuals perception. Household could be referred to as the occupants of a house, which is regarded as a unit. It is also referred to where occupants eat and where they live. Okojie (1986) said household comprises of all persons who generally live under the same roof and eat from the same pot. Due to the progressive breaking up of family systems in Africa, complications arise in defining the family or the household. The problem of defining a decision-making unit in the content of most farming system research has been the focus of discussion where the extended family system has traditionally been prevalent (Norman and Baker, 1983).

The objective of this study is as follows;

(i) to identify the demographic characteristics of the respondents.
(ii) to examine the various poverty alleviation activities the respondents are involved in.
(iii) to determine their extent of participation in poverty alleviation activities
(iv) to compare the participation of male and female child in the poverty alleviation activities.

The only hypothesis of the study states that there is no significant relationship between gender and their participation in poverty alleviation activities.

The information this study intends to produce would be of immense benefit to researchers among others in the field of agriculture and rural development. Over the years, questions on the roles of youth (male and female child) in economic and social development have fostered increasing interests among policy makers and development practitioners. Despite a noticeable involvement of youths in farming and domestic chores world wide, data on their participation and economic contribution have remained far from comprehensive. With the challenges arising from political and economic liberalization process worldwide the demand for gender-specific information is growing as well as other contributors (children) in the community. Conclusively, the information gathered would assist policy – makers, policy analysts, researchers, academics and rural planners to formulate effective and sustainable development interventions.

Methodology

The area of study is Ido Local Government, Oyo State. The basic occupation of the people is farming. The population for the study consists of male and female children actively involved in poverty alleviation activities i.e. farming and household activities. Four villages (Panu, Bode-Igbo, Oloshun and Siba) were purposively selected because the people were predominantly farmers, engaged in various farming activities as well as household activities and their children (male and female child) are also involved. In each village, ten male and ten female children were by chance interviewed. This was due to the absence of meaningful sampling frame. The total sample size for the study is eighty, that is, forty male and forty female children.

Data for this study were collected from primary source using a well-structured questionnaire. The questionnaire consists of various items such as age, sex, and educational status as well as attitudinal items relevant to the study.

The data collected were analyzed using both descriptive (frequency counts wants and percentages) and inferential (chi-square) statistics.

Results and Discussions

Table 1: Age Distribution of Respondents

Age (Years)	Frequency (f)				Percentage (%) (Total)
	Male	%	Female	%	
11 – 15	2		--		2.5
16 – 20	26		28		67.5
21 – Above	12		12		30.0
Total	**40**		**40**		**100.0**

Sources: Field Survey (1995)

The above table shows that 2.5 percent of the respondents were between the age 11 – 15 years, 67.5percent were between 16 – 20 years and 30.0percent were 21 years and above. Hence, it can be concluded that majority of the male and female child involved in farming and household activities were between the age of 16 – 20 years. Consequent upon this, it is believed that agile young ones were involved in these activities, therefore more agricultural output is expected all things being equal.

Table 2: Frequency Distribution of Respondents Educational Status

Educational Level	Frequency (f)				Percentage (%) (Total)
	Male	%	Female	%	
No formal education	4		2		7.5
16 – 20	2		8		12.5
21 – Above	34		30		80.0
Total	**40**		**40**		**100.0**

Sources: Field Survey (1995)

From table 2, four male children and two female children did not have formal educations i.e 7.5percent of the respondents do not have formal education? Two male children and eight female children have first primary school leaving certificate, this represent 12.5percent of the respondents. While 34 male children and 30 female children have secondary school certificate, respecting 80.0percent of the total respondents. Therefore, it can be inferred that majority 92.5percent of the respondents (male and female child) have at least secondary school certificate. This is an indication that male and female child participating in farming and household activities in the area of the study were secondary school certificate holders. Hence it is expected that at least they should be able to read and write.

Table 3: Frequency Distribution of Respondents Participation in Farm Activities

	Farm Activities		Frequency (f)		Percentage (%)
			Male	Female	
1	Farm clearing	Yes	38	22	75.0
		No	2	18	25.0
			40	40	100.0
2	Land preparation	Yes	40	20	75.0
		No	--	20	25.0
			40	40	100.0
3	Planting/sowing	Yes	36	20	70.0
		No	4	20	30.0
			40	40	100.0
4	Transplanting	Yes	30	19	61.3
		No	10	21	38.7
			40	40	100.0
5	Weeding	Yes	38	28	82.5
		No	2	12	17.5
			40	40	100.0
6	Harvesting	Yes	36	28	80.0
		No	4	12	20.0
			40	40	100.0
7	Threshing	Yes	28	20	60.0
		No	12	20	40.0
			40	40	100.0
8	Processing	Yes	20	14	42.5
		No	20	26	57.5
			40	40	100.0
9	Other Activities	Yes	20	16	45.0
		No	20	24	55.0
			40	40	100.0

Sources: Field Survey (1995)

From the above result, it would be observed that female children were more involved in household activities than the male children relatively. This could be attributed to the culture of the society.

The following can be deduced from the above table based on the male and female child participation in various farm activities.

- Farm clearing: Thirty-eight male children and twenty-two female children participate in farm clearing i.e. 75.0% of the respondents were involved in farm clearing.
- Land preparation: Forty male children and twenty female children are involved in land preparation. This represents 80.0% of the total respondents.
- Planting/sowing: Seventy percent of the total respondents participate in planting/sowing on the field. Thirty-six male children and twenty female are involved.
- Transplanting as part of farm activities: That is, majority of the respondents are involved in transplanting.
- Weeding: Thirty-eight are male child and twenty-eight female children representing 82.5% of the total respondents participate in weeding.

- ❖ Harvesting: Majority of the respondents (80.0%) are 36 male children and 28 female) child are involved in harvesting as part of farm activities.
- ❖ Threshing: Forty-eight is 60.0 percent of the respondents participate in threshing. Twenty-eight male children and twenty female children.
- ❖ Processing other Activities: In contrary to other earlier discussed farm activities, majority of the respondents, (57.5%) did not participate in processing as an operation on farm, mentioned above.

Based on the above gathered data, it can be inferred that an appreciable number of the respondents, participated in various farm activities. However, the male respondents were more involved than the female counterparts, thus could be attributed to the nature of the activities.

Table 4: Frequency Distribution of Respondents Participation in Household Activities

	Household Activities		Frequency (f)		Percentage (%)
			Male	Female	
1	Washing clothes	Yes	30	36	82.5
		No	10	4	17.5
			40	40	100.0
2	Sweeping dusting	Yes	26	32	72.0
		No	14	8	27.0
			40	40	100.0
3	Child care and food preparation	Yes	12	28	50.0
		No	28	12	50.0
			40	40	100.0
4	Firewood collection	Yes	28	24	65.0
		No	12	16	35.0
			40	40	100.0
5	Fetching water	Yes	18	34	65.0
		No	22	6	35.0
			40	40	100.0
6	Livestock keeping	Yes	34	30	80.0
		No	6	10	20.0
			40	40	100.0
7	Other activities	Yes	12	24	45.0
		No	28	16	55.0
			40	40	100.0

Sources: Field Survey (1995)

The following can be deduced form the table above.

- ♦ Clothes washing:- Thirty male child and thirty-sex female child were actively involved. It can be therefore be inferred that an appreciable percentage (82.5%) of the respondents participate in clothes washing as part of household activities.

- Sweeping & Dusting:- Thirty-two female children and twenty-six male children were involved. That is, 72.5 percent of total respondents participate in sweeping and dusting activities.
- Childcare and food preparation:- Twenty-eight female children and twelve male children were involved, representing 50.0 percent of the total respondents. However, female child were more involved than the male children, this could be as a result of the fact the culture of the people encourages female participation this activities more than the male.
- Firewood collection:- Male child and female child were involved in this activity, 28 and 24 respectively. This is an indication that majority of the respondents, 65.0 percent participated. However, male child level of involvement could be as result of nature of the activity.
- Fetching water: - Thirty-four female child and eighteen male child were involved. This shows that appreciable percentage, 65.0 percent of the respondents participate in this household activity.
- Livestock keeping:- An appreciable percentage, 80.0 percent of the respondents participate in livestock keeping. Thirty-four male children and thirty female children were involved.

Table 5: Chi-Square Analysis Results of Relationship Between Gender and Participation in Faming Household Activities (n = 80)

Decision variables	Calculated X^2 Value	Df	Tabulated X^2 Value	Sign level	Comment
Participation in farming	2.37	1	3.84	0.05	NS
Farm clearing	15.00	1	3.84	0.05	S
Land preparation	24.01	1	3.84	0.05	S
Planting/Sowing	13.40	1	3.84	0.05	S
Transplanting	6.30	1	3.84	0.05	S
Needing/Thinning	7.10	1	3.84	0.05	S
Picking/Harvesting	3.83	1	3.84	0.05	NS
Threshing/Husking	2.55	1	3.84	0.05	NS
Processing	1.28	1	3.84	0.05	NS
Other Activities	0.45	1	3.84	0.05	NS
Participation in Household	1.25	1	3.84	0.05	NS
Clothes washing	2.16	1	3.84	0.05	NS
Sweeping & Dusting	1.57	1	3.84	0.05	NS
Childcare and food preparation	11.25	1	3.84	0.05	S
Firewood collection	0.49	1	3.84	0.05	NS
Water fetching	12.36	1	3.84	0.05	S
Livestock keeping	0.70	1	3.84	0.05	NS
Other Activities	6.11	1	3.84	0.05	S

The X^2 – Analysis result reveals that there is no significant relationship between gender of the respondents and their participation in farm activities generally ($X^2 = 2.37$, $P < 0.05$) and other specific activities such as; harvesting ($X^2 = 3.83$ $P < 0.05$), threshing ($X^2 = 12.55$, $P < 0.05$) and processing ($X^2 = 1.28$, $P < 0.05$) while there is a significant relationship with respect to other activities such as farm clearing ($X^2 = 15.00$, $P < 0.05$), land preparation ($X^2 = 24.01$, $P < 0.05$), planting ($X^2 = 13.04$, $P < 0.05$), transplanting ($X^2 = 6.30$, $P < 0.05$) and weeding ($X^2 = 7.10$, $P < 0.05$). This is clear indication that there is variation in the level of participation of male and female child in farm activities.

Furthermore, the X^2 – analysis results also reveals that there is no significant relationship between the gender of the respondents and their participation in household activities generally ($X^2 = 1.25$, $P < 0.05$), and other specific household activities such as clothes washing ($X^2 = 2.16$, $P > 0.05$) sweeping and dusting ($X^2 = 1.25$, $P < 0.05$), fire wood collection ($X^2 = 0.49$, $P < 0.05$) and livestock keeping ($X^2 = 0.70$, $P < 0.05$). but there is significant relationship with respect to other household activities such as child care and food preparation ($X^2 = 11.25$, $P < 0.05$), water fetching ($X^2 = 12.36$, $P < 0.05$). the variation in the level of participation of male and female child in household activities could be attributed to the importance attached to the female role in household activities and as well as culture of the society.

Conclusion and Recommendations

Consequent upon the findings of this study, it can be inferred that appreciable number of the respondents were involved in poverty alleviation activities both farm and household activities. However, there is variation in their level of participation with respect to each of the activity. This variation could be attributed to the nature of the activities and the culture of the society.

It order to further enhance the male and female participation in farm and household activities, the following recommendations would go a long to assist policy makers.

(1) Formation of different youth organization with well defined objectives oriented towards agriculture and household chores.

(2) The policy makers should revitalize the farm settlement scheme and provision of standard accommodation that is very essential, so that after the day's work on farm, the youths will have a nice place to rest.

(3) Provision of incentives to the youth farmers so as to encourage their participation in the activities.

(4) Adequate and educative programmes should be designed to assist the youths in self-development; hence, high sense of responsibility and dedication will be developed in the youths.

(5) The policy makers should at anytime consider the youths' welfare during planning and develop a nice package for them. This would go a long way to discourage and prevent youthful exorbitance in the society.

(6) Provision of adequate socio-economic facilities (such as schools, markets, hospitals and other social amenities (such as pipe born water supply, electricity supply, good network roads, and recreational centres where they can enjoyed themselves. The essence of this is to discourage rural urban drifts and as well decongest the over populated urban areas.

Conclusively, economic growth and development of the nation would be better achieved if our policy makers pay attention to the appreciable labour/assistance rendered by the male child and female child in farm and household activities, hence poverty will be totally eradicated in our grassroots. For sustainable economic growth and development and total eradication of poverty, youths participation in farm and household activities should always be considered and give great attention by our policy makers at all levels of planning.

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HOMESTEAD GARDENING: A POVERTY REDUCTION STRATEGY AND SKILL ACQUISITION AMONG RURAL YOUTHS

BY

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Abstract
The increasing level of poverty and untold hardship being experienced in the country by many Nigerians calls for permanent solutions. Children of school age are found roaming about the streets, as drop outs, unemployed or underemployed with consequent increase in social vices. This paper therefore provides an eye opener for the youths (in-school and out-of-school) to make a living and develop interest in agriculture instead of waiting for unavailable jobs. Hence, homestead gardening is recommended as a means of livelihood and poverty alleviation among rural youths.

Introduction

Poverty can simply be defined as the inability of a household to adequately satisfy its basic needs of food, clothing, shelter, education and so on (Aborisade, 2001). In most parts of the world, especially in developing countries, women, children and the aged are the most affected. Lack of adequate care among the youths by their parents often leads to child abuse and various social vices. It can be said that the greatest evil facing Nigeria and the rest of the world today is poverty, as more than 70% live below poverty line, 40% have access to safe water, about 85% of the urban population live in single rooms with about 8 occupants, and about 62% have no access to primary health care (Aliyu, 1998).

In line with this, therefore, successive government in the past decades, have shown and demonstrated abiding interest in alleviating poverty among the citizenry. Each government has had to design one programme or the other specifically targeted at the poor or those living in the rural areas, as majority of Nigerians are rural dwellers. Such programme include opening of business centre, Home economics and agricultural establishments to mention but few.

Many agricultural programmes have been introduced in the country with the aims of improving the lives of the populace, empowering the youths and alleviating or reducing the lives of poverty and hard time. Among these programmes are: National Accelerated Food Production Programme (NAFPP), Operation Feed the Nation (OFN) Agricultural Development Programme (ADP), National Directorate of Employment (NDE) etc.

All these programmes were government policies, which are plans of action pronounced by governments (Akinyele, 1991). But these programmes could not make much impact on agricultural development due to poor execution and interest of the participants in the programmes. Lack of saleable or entrepreneurial skill is one of the greatest problems facing Nigerians as asserted by Olayinka (1989).

Also, it is a common practice in the past that children engaged in various craftworks, such as: basket weaving, cassava sieve weaving, broom dressing, stitching of cloths, farming especially vegetable production and so on to sustain themselves.

However, nowadays because of civilization, laziness, quest for quick money and unwillingness to work, children and youths no longer engage in those practices. Rather youths get themselves involved in prostitution, robbery, cultism and other social vices. B Idle hands are the devil's tools.

In view of the government and non-governmental organizations' efforts at reducing poverty level, it is left for individuals to adopt or change. The situation in the country now calls for self-reliance which according to Odozi (1991), implies regeneration through one's own effort. Among these self-dependent programmes include – homestead gardening.

Homestead gardening involves the growing of arable crops, especially vegetable crops like leafy vegetables – amaranthus, celosia, fluted pumpkin, solanum and fruit vegetables – okro, tomato, pepper and egg plants. This is quite possible in rural areas, as rural areas are always blessed with land, which can be acquired by inheritance or purchased.

Concise Description of Homestead Garden

Homestead garden, which is normally sited close to home, has the following peculiarities:

(i) The farm is usually small with varieties of crops.
(ii) Crops produced are mainly for family consumption.
(iii) Located very close to home.
(iv) Mixed cropping is usually practiced and crops that can easily adapt are grown
(v) Located very close to source of water.
(vi) Refuse from home is used for soil fertility maintenance.
(vii) The land has very high land use ratio because of intensive use of land.

Home Garden Vegetable

As stated earlier vegetables are the most preferred crops as they mature very early and can be grown many times within a year. Among the vegetables cultivated are:

(i) Amaranthus, celosia, cabbage and lettuce
(ii) Fruit vegetables – okro, tomato, pepper and egg plant.
(iii) Flower vegetables – cauli flower and Roselle.

Source of Vegetable Seeds: Seeds for vegetable production can be procured from National Seed Service, Ministry of Agriculture, open market and local farmers.

Husbandry of Vegetables

A successful vegetable production requires intensive care both in the nursery as well as on the field after establishment, although vegetables can be planted directly without going through nursery, depending on the types of seeds, cost, ease of establishment and materials available to the farmer, more intensive care is however given in the nursery.

Nursery Management: This involves raising seedling under intensive care. Seedlings can be raised on vegetable beds or seed trays.

Soil Preservation: Involves mixing of good topsoil and preparation of beds with the aid of nursery tools.

Nursery Sowing: Seeds could be sown by broadcasting or drilling. But drilling is preferable to ensure proper germination and facilitate weeding.

Field Preparation: When the seedlings are still in the nursery, land clearing, stumping and bed preparation can be done. Sizes of beds depend on area of land and shape. Could be 1m x 10m or 1m x 20m bed sizes. The beds should be well manure using organic or inorganic fertilizer before transplanting or thereafter.

Transplanting: Transfer of seedlings to the well manure beds takes place two to three weeks after sowing. This is for optimum field establishment, uniform maturity and to remove uncertainties in weather and climate.

Watering: This is very important especially during the dry season can be done daily or alternate days. Therefore, regular source of water like borehole, dam, stream, or ditch is inevitable in vegetable production.

Weed Control: Weeding is important and can be controlled manually or with herbicides.

Harvesting: Majority of vegetables are due for harvesting 4 – 8 weeks of planting and are harvested gradually be hand picking (fruit) and cutting or uprooting for leave vegetables.

Contributions Of Homestead Gardens To Youths

Homestead gardening has the following contributions for the well being of youths.

Regular Source of Food: There is provision of food for the youths, the family and even others in the society. Food is very vital for the supply of energy.

Regular Source of Income: Youths engaging in homestead gardening will have the opportunity of having regular income, however meager. Since they usually engage majority in horticultural crops, which mature within few weeks of planting and are done on regular basis. The money can be used for many purposes including furthering their education, clothing, buying books, pairs of shoes and other important items.

Skill Acquisition: Through involving in homestead gardening, youths can develop skills in vocational agriculture. Although, they can acquire knowledge in the classroom in several areas – crop productions, forestry, soil conservation, livestock management, fish farming, agric business etc. the farm serves as agricultural laboratory through which acquired classroom knowledge can be put into practice. This is in line with the primary/secondary/colleges of education curriculum, which emphasize practical involvement for skill acquisition (National Commission for Colleges of Education, 2000).

As a Transfer of Knowledge: The experiences gathered from farming activities can be of tremendous help to the youths in their academics, especially those who are science oriented. Garden serves as laboratory for research in Biology, Agriculture, Mathematics, Physics, Chemistry, and Genetics.

Furthermore, it can stimulate youths' interest in farming. Their experiences on the farm unveil what farming entails and therefore allay their fears that farming is a very difficult task. They latter develop a wholesome attitude to agricultural activities. This can even arouse their interest in pursuing agriculture as a field of study.

Also, homestead gardening can distract the attention of the youths from evil vices. If youths can take up this as a means of getting food and income and occupying their time, there will be no time to spend on evil things or engage in ungodly practices that can run their future.

More importantly, their involvement in homestead gardening can lead to poverty eradication or alleviation. Through provision of food for immediate personal consumption or sales, the youths contribute to development of the nation's economy, reduce joblessness and hence reduce level of poverty, which has tom apart many homes.

Conclusion and Recommendation

There are evidences that various government and non-government organizations have made frantic efforts at alleviating poverty among the citizenry. But these, due to one reason or the other, have not had much impact on the people, rather unemployment, underemployment and poverty continue to be on the increase.

Therefore, any occupation or activity that encourages capacity acquisition and trains individual to acquire skills in creativities and services should be embraced. Hence, homestead gardening is recommended for the youths. This will not only help to sustain the youths and reduce poverty but also enhance national development.

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INVOLVING THE NIGERIAN YOUTHS IN AGRO-BASED POVERTY REDUCTION STRATEGY

BY

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Abstract

Poverty may be defined as the scarcity of human basic needs, or the inability or society to acquire human basic needs for existence. Unemployment is rife in Nigeria especially among youths. White-collar jobs are no longer easy to come by. This has led many Nigerian youths to take to crime and other deviant behaviours like cultism, prostitution, robbery, etc. Involving the youths in agro-based poverty reduction strategy is an excellent way of lifting them out of the viscous cycle of poverty in which many of them have found themselves. A number of agro-based poverty reduction strategies have been listed, analysed and discussed. Appropriate recommendations have been made.

Introduction

The incident of poverty is presently given attention more than ever before. According to Akubuilo and Akubuilo (2000) even religious fanatics who have been made to believe that poverty could earn them an automatic ticket to Heaven are inclined to rethink when it becomes evident that most of the clergy today try to live in affluence.

The term poverty reduction, as far as Nigerian is concerned, remains a cryptic phrase uttered for the benefit of a large audience. This presupposes that many poverty reduction schemes put forward by the Nigerian Government in the past have not really succeeded in achieving their aims and objectives. Poverty at all levels is real. Youth unemployment is pathetic and this has led many to of them to take to crime and other deviant behaviours such as armed robbery, prostitution, cultism, street begging etc.

Ironically, according to World Bank (1996), Nigeria presents a paradox. The country is rich but the people are poor. Per capita income is around the same level as in 1970. It is also estimated that at least over $200 billion has been earned from the exploitation of the country's oil resources. It would therefore appear that the country has not been judicious in the management of her oil resources. Otherwise, the level of poverty in Nigeria ought to have been minimal.

According to Ubabukoh (2000), poverty glitters uninterrupted in Nigeria because of over the years, the country never sustained any policy, be it educational, moral, agricultural, health, economic or financial. According to the author, hardly did any social policy survive more the government that initiated it. It is not surprising therefore that the World Bank report (2000) rated Nigeria as the 12th poorest country in the World with a Gross National Product (GNP) per capita of $740 as at 1998. According to Olaitan (2000), the study used the Nigerian purchasing parity method to arrive at its conclusion. In the same

study, Nigeria was rated as the 21st poorest nation whose GNP was $300. In the study, Naira was converted to dollar at the prevailing exchange rate.

Table 1: Poverty Level in Nigeria (1980 – 1996)

Year	Estimated Total Population (millions)	Estimated Total Population (millions)	Percentage of Poverty
1980	65	17.7	28.1
1985	75	34.7	46.3
1992	91.5	39.2	42.7
1996	102.3	67.1	65.6

Source: Federal Office of Statistics – National Census Survey (Abuja, 1996)

The Special Role of Agriculture

It is estimated that 70 percent of the Nigerian population live in the rural areas and are engaged in one form of form of agricultural activity or the other. Therefore, it would appear that any genuine attempt to uplift the social and economic conditions of the rural poor has to start with agricultural transformation. Today in Nigeria, a more sustainable agriculture is likely to provide the long benefits required to achieve sustainable development and poverty reduction. Agriculture is an effective means of reducing poverty if the correct enabling environment is provided.

Luckily enough, a large percentage of Nigerian youths are educated and there is research evidence to show that there is a positive correlation between formal education and adoption of improved agricultural technologies (Akubuilo, 1982; Lionberger, 1960).

Poverty Reduction Initiatives

Poverty reduction strategies in Nigeria are many and varied and Nigerian youths can easily be involved in many of them. These include:

Subsistence Farming

As the name implies, this is farming on a small scale to produce agricultural products for domestic consumption. It is usually not capital intensive and involves mostly family labour. Excess produce is usually sold for cash, which is used for cash, which used by family to pay children's school fees, hospital bills, taxes and so on.

Local Craft Making

If properly developed, local craft making can prove to be a viable poverty reduction strategy. This involves the making of brooms from palm fronds, basket construction, weaving of foot mats, bed mats, woodcarvings, leather works and so

Keeping of Livestock

Various types of livestock are kept in Nigeria. Some of these include cattle, pigs goats, sheep, poultry, horses, and donkeys.

Cattle keeping are very popular among the Fulanis. Cattle are also kept in various Research Institutes. Universities and other establishments spread across Nigeria. Sheep and goats are reared all over Nigeria both on small and large scales.

Pigs are reared in many parts of Southern Nigeria. Poultry is very popular in Nigeria ranging from backyard poultry to large-scale poultry establishments. Nigeria youths should be properly involved in the keeping of livestock. In addition to private sector livestock establishments, every post-primary and tertiary institution in Nigeria is expected to keep various types of livestock and Nigeria youths should be gainfully employed in most of them.

Dying of Textile

This is a popular and financially rewarding activity in Kano State of Nigeria. Kano State youths and others from the rest of the country should be fully involved in this venture.

Weaving of Akwete Cloth

In Delta State, weaving of Akwete cloth is a popular venture. Youths in Delta State should take the advantage of this and be fully involved in this activity.

Oil Palm Processing.

The oil palm industry is a very important one in Nigeria. Nigeria has been importing most of the items she used to export including palm oil. This trend has to be reversed. Our aged palms should be gradually replaced with improved early maturing and disease-resistant varieties. The oil palm industry produces palm kernel oil, palm oil, palm kernel, palm kernel cake, palm wine, and raffia. Wine tapping is very popular among the Ibos and Yorubas. Oil palm processing is an important activity among the Ibos and the Urhobo's while raffia works are important activities by the people of Ikot Ekpene in Akwa Ibom State. Nigerian youths should be fully involved in these ventures as means of poverty reduction.

Fishing

Traditionally, fishing has been associated with the riverine dwellers such as Arugungu. In order to combat the acute animal protein deficiency among the Nigerian populace, there is an urgent need to intensify fish production in Nigeria. This can be done by the establishments of fishponds across the country. Nigerian youths should be taught how to fish in riverine areas as well how to establish and manage homestead fishponds.

Calabash Making

Calabash making is an important revenue yielding activity associated with Oyo, and Osun States. Youths from these states could be involved in this activity.

Bead and Leather Works

Bead making and leather works are popular among the Haussa. Youth can take advantage of such activity.

Blacksmithing

Blacksmithing is an important for the production of assorted agricultural implements such as hoes, cutlasses and so on. The art is very popular among the people of Bida, Awka, Umana (Enugu State) and Ekpedos. Youths should be integrated into these activities.

Herbalism

Herbalism involves use of herbs for the treatment of ailments. It has been proven that herbalism is effective in the treatment certain diseases. In fact, in some cases, it has proved to be a reliable alternative to orthodox medicines. The only snag is that herbal practice in Nigeria is still shrouded in secrecy and since the present practitioners are mostly not properly educated, the issue of dosage and other allied matters call for concern. Educated Nigerian youths should be encouraged to study the art of herbalism as a poverty eradication strategy.

Hunting

In some parts of Nigeria, hunting is a popular game. This involves the killing of wild animals with guns, bows and arrows or by trapping. This is an important revenue yielding activity, as well as a very good avenue of combating animal protein deficiency. Nigerian youths should be taught the art of hunting.

Some Government Poverty Reduction Initiatives

In the last three decades several programmes were initiated at national, state and grass root aimed at poverty reduction. Some of these include the Operation Feed the Nation initiated in 1976 to improve food self-sufficiency and increase the earning power of the average Nigeria; the Green Revolution initiated in 1980 to replace the Operation Feed the Nation. Also the National Directorate of Employment (NDE) was set up in 1986 to cater for graduate and non-graduate farming scheme, vocational training of school leavers and also the release of loans to them for business purposes; the Directorate of foods, Roads and Rural Infrastructures (DFRRI) established to co-ordinate the opening of the rural areas, supply them with infrastructural facilities and empower them for rapid rural transformation. The People's Bank was established to empower the rural dwellers and urban poor with finances to manage business and alleviate their sufferings as regards getting credit facilities. Loans and advances meant for small-scale businesses were given on long and short-term basis to individuals in urban and rural areas and some others notably, Community Banks, Better Life Programmes (BLP) and Family Support Programme (FSP).

It is regrettable to note that most of these schemes failed to achieve the purpose(s) for which they were set up. One of the reasons that led to failure is corruption. Sometimes funds channeled into these schemes for distribution to the participants never reached to them. Corruption must be eradicated from all facets because poverty cannot be effectively reduced in an economy where corruption is endemic.

Agricultural Extension Service

It is evident that most of the resent Nigerian farming population is ageing and there is an urgent need to replace them with educated Nigerian youths. Today, in Nigeria, a more sustainable agriculture is more likely to provide the long benefits required to achieve sustainable development and poverty reduction.

Nigerian youths including young graduates should be motivated and encouraged to take to farming as an occupation. The agricultural extension services must be overhauled to be more functional and goal oriented. The foundation for sustainable agricultural extension

service is adequate and steady funding so as to ensure effective transfer of technologies and continuous support of smallholder farmers through the extension services.

Recommendation

Any sincere attempts to involve the Nigerian Youths in Agro-Based poverty reduction strategies should take into consideration the following

- Strengthening the agricultural sector since it employs about 70percent of the population
- Reactivation of ailing agro-based industries and establishment of new ones to offer needed employment to millions of unemployed youths
- Provision of apprenticeship training ins some poverty reduction schemes earlier on mentioned in this paper.
- Developing micro-credit schemes and making them functional for granting of loans to Nigerian youths.
- Provision of rural infrastructure to arrest the exodus of youths from rural to urban areas. These should include, rural electrification, pipe-borne water, storage and processing facilities, educational institutions, markets, craft training centres, village and farm roads, telephone and communication facilities, and so on.
- Involving or encouraging non-governmental organisations (NGOs) to participate in institutional programmes for the reduction of poverty targeting the youths.

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SUB-THEME 5

THE NIGERIAN CHILD AND LOW LEVEL OF HEALTH CARE DELIVERY, RECREATIONAL AND TOURISM DEVELOPMENT IN NIGERIAN

ANALYSIS OF THE NUTRITIONAL STATUS OF PRE-SCHOOL CHILDREN AMONG FARM HOUSEHOLDS IN AGO-IWOYE, OGUN STATE, NIGERIA

BY

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Abstract
This study examines the nutritional status of pre-school children in farm households in Ijebu-North Local Government Area of Ogun State, Nigeria. A random sampling technique was used to select sixty farm households on which structured questionnaires were administered to collect data on height, weight, age, sex, frequency of visits to clinics and other relevant characteristics from the sample households. A regression analysis technique was used to analyse the data collected. The findings of the study revealed that two of the variables; income of the parents, source of drinking water were deemed to be of policy relevance. The two variables were found to be significant at one percent level. A present situation of low income constitutes a disincentive to the households. A farm income improvement policy is thus recommended since this will serve as an incentive to the households to improve the nutritional level of the farm household.

Introduction
The nutritional status of children and other members of the farming households in developing countries have in recent years, received fresh attention from government and developmental agencies alike. Malnutrition, a public health problem is as common in Nigeria as elsewhere in Africa, Asia and South America but it is not universal within each country or continent. Goldsmith (1975) has no doubt that throughout the whole country, the incidence of malnutrition among rural farm households is high although the exact nature and extent is yet to be totally determined. As it became apparent that growth benefited various segments of society among farmers unevenly, and in some countries failed to elevate the poorest classes altogether, the distributional aspects of development came to the fore, and in turn ushered in a "basic needs" approach. The consideration of basic needs highlighted the trade-off between present consumption and investment for future growth among farm households, which is usually implicit but important in development planning decisions. Nutrition objective may bridge this dichotomy, however, since food consumption may be viewed as an investment in human capital; and a well-nourished population may be more economically productive.

Nutritional status of the population of pre-school children especially in the family setting has come to be generally accepted as indicator of nutritional status of the community (Akinlosotu and Hussain, 1988) Severe or moderate malnutrition of children among under 5 years is inconsistent with building the long-term future generation of a country, protecting malnutrition status of children is not "just welfare" it is economic investment of the most fundamental sort related to economic production in the long term and in term have direct relationship on the production of the farm households. Several factors determine the nutritional status of people. According to Chanhurry (1986) income is a

mirror image of a household's resources and determine how much and what kind of food is available. Guillati (1980) also noted that high significant differences exist in income class of food consumption among farming household data in developing countries. In 1980, World Bank maintained that the sources of extensive nutritional deficiencies that exist in developing countries are largely a reflection of poverty; people don't have enough income for food.

Davidson et al (1975) have shown that food consumption at the household level and pre-school is positively and significantly related to pre-scholars' anthropometry. In a survey conducted in Southern Mali on women's income versus family income as a definition for food security of the farming household (Gazinski (1987), the analysis of the data indicated that in contrast to the family total income, the family's assets and women's income have a positive effect on the nutritional status of pre-school children in the pre-harvest season. It was also noted that insufficient money to buy the necessary food was the biggest single factor causing malnutrition and retarded growth in children of the urban population studied.

Loewenson (1986) noted in his work in comparative health status of farm labour in Zimbabwe that, the health status of children was poorest in the commercial farm areas. Poor health status was associated with other unfavourable factors including overcrowding, poor housing, and poor access to water supplies and in sanitary conditions. Prevalence of malnutrition varies considerably among socio-economic groups. There were strong associations between variables. Generally malnutrition is more prevalent in rural setting than urban areas, so is overall food insecurities.

The physique of pre-school children has been found to be related to nutrition. For instance among faming households in some parts of Nigeria, cassava consumption has been found to be associated with malnutrition (Ekpere, et al 1986). It is believed that kwashiorkor due to protein deficiency is more common in young children weaned into cassava rather than millet or maize among farm households (Tylleskar and Tylleskar, 1988). Anthropometry studies evaluate children's weight. Heights, age, chest and head as determinants of their nutritional status. Children with poor anthropometrics indices are more likely to be either over-nourished or suffering from diseases.

The broad objective of this study is to analyse the nutritional status of pre-school children among farm households, in Ago-Iwoye area, Ogun State. The specific objectives of the study are to:

- identify the various factors of the nutritional status of pre-school children in the study area;
- examine statistical association between the nutritional status indicators of the pre-school children and other households characteristics, health and socio-economic variables;
- make policy recommendations based on the findings of this study.

Methods.

For the purpose of this study, structured questionnaire was prepared and administered on parents of pre-school children living within the study area. Information were collected on

the height, age, sex, frequency of visits to hospitals/clinics, outward health appearance of the children between zero and 5 years in the farming household of the study area.

Data were obtained on the composition, income, religion and occupational status of respondents farming households, sources of drinking water, type and incidence of epidemic within the last two years. Measurements were also taken of the heights and weights of the children.

The data were analysed using Base III EPI (Epidemiological Investigations) programmes language and use to determine the effects of socio-economic variables on the nutritional status as expressed with respect to weight-for-age,, height-for-weight, height-for-age. A student's t-test was used to assess the children's valid and invalid responses correlated with the anthropometrics measurements.

The regression analysis was used to evaluate the effects of certain indicators on the nutritional status of the children. The explanatory variables include household income, size of the family, educational status, living condition of the family and access to drinking water etc. Double logarithms function was used to fit the data collected.

Findings and Discussions

The findings indicated that most of the respondents (over 95%) earn less than fifteen thousand monthly. Thus the respondents can be classified as mostly belonging to the low-income class. The table presents the result of double logarithms functions of height-for-age measure of nutritional factors indicator.

The result of the analysis indicates that farm income (X_3) and source of drinking water (X_6) have negative but significant influence on the nutritional status of the children. Age of children (X_1), education attainment of father (X_2), farm size (X_4), household size (X_5), incidence of epidemic on household (X_7) and incidence of amelioration (X_8) have positive influence on the nutritional status of children. The result reveals that income of the farmer and source of drinking water were negatively related to height-for-age measure in nutritional factor indicator. Nutritional status of their children was found to be very low considering the type of food available for consumption within the farming household due to low level of income and source of drinking water.

It should be noted that a positive sign of a parameter indicates that higher values of the variable tend to improve the nutritional status of the children. Similarly a negative sign of a co-efficient implied that higher values of the variable would reduce the rate of malnutrition of children in the study area. Overall, two of the variables significantly influenced the nutritional status of the children.

Table: Double Logarithms Functions of Height-for-Age Measure in Nutritional Factors Indicator

Variable	Estimated Parameters	Standard Error	Parameter Standard Error
Age of children (LX_1)	0.9828	1.0979	0.8952
Education attainment of household head (LX_2)	0.3767	0.53793	0.7002
Income of household head (LX_3)	-6.9433	1.6969	-4.0918*
Farm size (LX_4)	0.4298	0.7286	0.5899
Household size (LX_5)	0.1105	0.88068	0.1255
Source of drinking water (LX_6)	-0.8044	0.3039	-2.6470*
Incidence of epidemic on household (LX_7)	0.5027	0.5027	1.0000
Incidence of amelioration (LX_8)	0.0919	0.6486	0.1447
Intercept	2.6696	3.8348	0.6962

$R^2 = 0.85129$, $F = 0.71558$
Significant at 1%, $t_{0.01} = 2.575$

Conclusion and Recommendations

The following conclusions could be drawn from the findings of this study. Firstly, the survey suggests a low socio-economic status of the parents as evident by their educational attainment and monthly income, which has a negative effect on the nutritional status of their children. Improving the quality of the water supply by installing hand pump well would certainly impact positively on the health status of both the parents and children.

Secondly, improvement in the level of productivity and production technologies in agriculture in the study area through vocational training or adult education would alleviate economic situation of the women and enable them to cope well with their current situation. Nutritional status of children in the study area, would also improve if the women, can train for empowerment for appropriate production decisions and income generating activities.

A good nutrition is an economic investment towards building a virile and healthy future generation.The present situation of low farm income constitutes a disincentive to the household's nutritional status. A farm income improvement policy is thus required. This will serve as an incentive to the households to improve the nutritional level of the farm household.

Provision of adequate food supply, through increased food production, portable water supply, good market access infrastructure, and primary health centres etc through communal effort or governmental services to the study area, will minimize the consequences of malnutrition.

It is also recommended that these women are empowered by encouraging them to form groups, cooperative that will enable them have access to production resources such as land, other farm inputs and which would help in improving their present level of

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It is also recommended that these women are empowered by encouraging them to form groups, cooperative that will enable them have access to production resources such as land, other farm inputs and which would help in improving their present level of

agricultural productivity. Vocational training should be made available to the women to improve on their level of educational attainment and present low socio-economic status.

Farm productivities would be achieved through expansion of farm acreage increased, which would in turn result in economies of scale and increased returns to investment so as to improve the nutritional status of children and the family in the study area.

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CHILD LABOUR PRACTICE: HEALTH AND POLICY IMPLICATIONS

BY

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Abstract

Child labour refers to all work that harms children and keeps them out of school. 70 percent of child labour activity around the world is in agriculture. Poverty, lack of job opportunities and the paucity of health and education opportunities are believed to be among the reasons responsible for this high incidence. Exposure to chemicals, bites and cuts, long work hours and physical abuse are some of the harmful effects of child labour practices. It is recommended that improved education practices, restricting the access of children to chemicals and the constant monitoring and sanctioning of errant child labour employers could well help in stemming the incidence of abuse that are associated with child labour in agriculture.

Introduction

Child labour is used to refer to all work that harms children and keeps them out of school. These by implication deprive them of time to learn and play. Child labour does not include chores done around the house before or after schools, helping out at a family farm or business so long as it doesn't keep them from going to school or doing homework, supervised apprenticeships or internships and is not dangerous or hazardous.

Of nearly 250 million children engaged in child labour around the world, the vast majorities – 70 percent or some 170 million – are working in agriculture (Stancil, 1993). Child agricultural workers frequently work for long hours in scorching heat, haul heavy loads of produce, are exposed to toxic pesticides, and suffer high rates of injury from sharp knives and other dangerous tools. Their work is grueling and harsh, and violates their rights to health, education, and protection from work that is hazardous or exploitative.

It is noteworthy that the number of children working in agriculture is nearly ten times that of children involved in factory work such as garment manufacturing, carpet-weaving, or soccer-ball stitching. Yet despite their numbers and the difficult nature of their work, children working in agriculture have received little attention compared to child labour in manufacturing for export or children involved in commercial sexual exploitation.

True, children are better off in school but parents often cannot afford school fees for their many children so the children often drop out of school or do not enroll at all. Traditionally also, it is common for families to send boys to school while the girls are kept at home to look after the house and younger children, or are sent away to work as domestics. Oftentimes also, where free schools are available, the quality may be poor and parents think their children will survive better if they work and learn a skill. Finally, some children are migrant workers, or in migrant worker families. They travel from place to place in search of work, and do not live in one place long enough to go to school (Gabbard et al, 1994).

Several reasons have been adduced for the existence of child labour. Foremost among these is economic necessity. 46 percent of all farm workers in the US live below the poverty line (Mines et al, 1993). With average annual earnings of $6,500, many farm workers do not earn enough to keep a family of four out of poverty even when both parents work (US Commission on Agricultural Workers, 1992). Among migrant farm workers (i.e. those who travel more than 75 miles from their home to work), the median income is even lover, only $5,000 per year, and 57 percent live in poverty (CSCE, 1993).

Other reasons given for the incidence of child labour are:

- A lack of decent jobs for adults
- Few health or education services for families
- Little or no support from the government to help raise people out of poverty
- Many poor families also face a poverty of options; they feel their only choice is to send children to work. Society has failed these families, forcing them to make awful choices that no parent wants to make for their children.
- Some unscrupulous employers take advantage of the situation and hire children illegally because they can pay the children less money and the children are not likely to complain.
- On many farms, workers are paid by the amount they pick each day, not by a fixed daily rate or minimum wage. This system only encourages families to bring their children to the fields to help them in the harvest.
- Many families think sending their children to work is acceptable. They view child labour as child work, not hazardous, and as a way to learn a skill when there are no decent schools around.

Health Implications of Child Labour Practices

Child labour is a problem principally because it involves so many children. The vast majority of child labour is in agriculture, accounting for seven out of every ten working children. Because there are more than 170 million underage workers in the fields and farms, this type of activity is too often regarded as traditional and routine in many countries. Children work long hours, are often exposed to hazardous chemicals and are made to use dangerous tools and machinery that are inappropriate to their mental and physical development.

Child labour in agriculture is not just in the developing world; it exists even in the United States and Europe. In most countries children assist their families in small-scale fishing, family farms and subsistence agriculture. Girls are often kept away from schools to work as domestics. These girls work very long hours, have no chance to go to school, and are isolated from family and friends. Often they are treated like slaves and sexually and physically abused.

Additionally, agricultural child workers face many serious health risks (US General Accounting Office, 1992). They are known to pick crops still dripping with pesticides and even spray the chemicals themselves, they could be bitten by poisonous snakes and insects and cut themselves on tough stems and with the dangerous tools they use. Also, they get up early to work in the damp and cold and being barefoot and inadequately dressed, they develop chronic coughs and pneumonia. As child workers work very long hours in the fields – sometimes 8 to 10 hours a day – they get sick working unprotected in the hot sun, rain, and the cold. Some children experience nausea, vomiting and fainting and

continuous heavy lifting and repetitive strains permanently injure their spines (Wilk, 1993). They could also fall down from high ladders while trying to pick tree crops.

Conclusion

The extraordinary numbers of children working in agriculture – some 170 million worldwide – and the severe abuses they endure demand that governments, employers and trade unions prioritize protections for child agricultural workers as part of their strategies to end child labour.

It is recommended, among others that:

- All workers, including children receive full information and training from their employers about occupational illness and injuries related to agricultural work, including those associated with exposure to pesticides. Such training should be conducted regularly and be understandable by children. Employers should also provide all workers, including children, with appropriate protective equipment and train them in methods of protecting themselves from workplace hazards.
- Comprehensive surveys be undertaken to determine the scope and scale of child labour in the agricultural sector, the number and nature of injuries or illness suffered by children working in agriculture, and disaggregate the data by sex and age.
- Provision of free compulsory primary education. School fees and other associated costs of education, including costs for books and uniforms should be waived, or scholarship programs developed for children whose families are unable to afford them. Special educational or vocational programs should be developed for child farm workers who have dropped out of school.
- Establishment of mechanisms to monitor the treatment of children working in agriculture and ensure that effective complaint mechanisms are available to children and their families.
- Ensure that children's human rights are respected on all directly owned and supplier farms and plantations by adopting effective monitoring systems to verify that labour conditions on these facilities comply with internationally recognized child labour standards and relevant national child labour laws, reporting annually on compliance, and where the facilities fall short, by providing the economic and technical assistance necessary to bring them into compliance.
- Ensure that pesticides and other chemicals potentially harmful to children are neither sanctioned for use nor applied in practice on directly owned or supplier farms and plantations.

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SUB-THEME 7

THE NIGERIAN CHILD AND THE SOCIO-ECONOMIC PROBLEM

AN APPRAISAL OF YOUTHS UNEMPLOYMENT IN A DEPRESSED ECONOMY: EMERGING POLICIES AND PROGRAMMES

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Abstract
This paper tends to examine the factors relating to youths unemployment in Nigeria as well as the policies and programmes that Federal Government has so far formulated to combat the problem.

Introduction

Unemployment refers to situation where able-bodied youths excluding institutionalized groups have no gainful employment. And the Oxford Advanced Learner's Dictionary defines unemployment as amount of unused labour, a state of being unemployed which is probably the most widely feared phenomenon of our time. While the term depressed economy describes the situation in which the economic activities do no longer provide for the well being of the people in a given locality, it is more or less a case of under-utilization of physically able bodies Oranu (1990).

The term youth refers to young people between age group of 16 to 24 year and for description and analytical purposes, youths of ten are subdivided into two groups: teenagers (age 16 to 19) and young adults (age 20 to 24).

Unemployment is a problem of tremendous proportion in Nigeria today and it remains a challenging issue in the developing agenda of all countries the world over. Due to its cyclical nature, unemployment is likely to be a problem of the future, presenting one of the most challenging tasks to the sustainability of farm children development programmes and to vocational educators. The fall out of unemployment in the society includes rise in crime, social frustration etc. For the purpose of this paper it may be necessary to define or explain such term as youth, unemployment and depressed economy.

One can simply describe economic depression as the expression of economic advancement which is due to inadequate economic activities which invariably result in poverty and unemployment which can e likened to a cankerworm which has eaten deep into the country (Okorie, 2001). The psychosocial effects of unemployment on the youths and the populace at large have become an unbearable situation in the developing countries.

In the 70's Nigeria economy was buoyant. This was due to petroleum production and the subsequent exportation of the product. The realized revenue from the source has further improved the economy due to the increase in the price of crude oil. However, the economic prosperity of the 70's was terminated due to the glut in the international oil market and the recession in the major oil importing countries of Europe and North America Oranu (1990).

The poor growth in the industrial and construction sectors of the economy has provided a very high rate of unemployment for the skilled and semi-skilled workers. It was further aggravated by the problems of unrealistic educational policies that make youths to depend on white-collar jobs.

There was shortage of skilled technical instructors in Nigerian schools, which contributed to unemployment among youths. The students therefore lacked the psycho productive skills necessary for self-reliance.

However, today the unemployment situation in the country cannot be adduced to the oil glut and lack of skills among youths alone. The failure of last civilian and military dictator administrators were identified in four major areas as follows: mismanagement of Nigerian economy, lack of public accountability; intolerable suffering, (general deterioration in the standard of living of the poor masses and insensitivity of our political leaders.

The unemployment of Nigerian youths is a serious issue that focuses on need to consider the individual includes lack of education, i.e. general and specific-to-work, lack of work experience, lack of resources, lack of resources to support the family, friends and relation etc. The need to understand the characteristics of the environment which implies focusing on changes in the environment concerning youths and work which include: inadequate labour demand, that is, the number of youths waiting to be employed outnumbering the existing job. Another point here is competition from adults, which embraces discrimination and hiring, based on age, sex, state of origin, religion etc. which are tied to educational qualification, unrealistic job requirement, and negative pressure from individuals, peer group and nature of work. Need to understand the characteristics of institutions; which implies the services rendered by institutions and organizations, which assist youth's transition from school to work, included under this are lack of service such as preparation for work, career guidance, job placement and employer education, limited service inadequate access to service – meaning people in need of the service are deprived of it due to factors such as geographical location, cost and admission requirement.

Policies

As stated by Oranu (1990), the measures taken within the frame work of the policy to correct the economic anomalies were streamlined into four broad areas, namely: (i) austerity measures (ii) fiscal measures (iii) import control and (iv) combating smuggling. All these are subsets of the indigenisation policy and the structural adjustment programme whose objectives have been interpreted as follows:

(a) To create opportunities for Nigerian indigenous businessmen
(b) To maximize local retention of profit
(c) To increase local participation in ownership, control and management of large commercial and industrial establishments (Oranu 1990).
(d) To increase Nigeria's economic independence through increase in industrial production and local resource content of manufactured products.
(e) To create a congenial and attractive atmosphere for foreign investors, (Fourth National Development Plan 1981 – 1985 pp 32).
(f) To ensure a reasonably equitable spread of participation among Nigerians.

All these are adaptable to suit youths empowerment through creation of employment opportunities. If the first three objectives listed above are to be achieved certain business activities listed within the decree should be reserved for Nigerians especially the youths. There should be indigenous equity participation rates of 60 and 40 percent in foreign owned businesses (Oranu 1990).

In the case of self-sufficiency: a derived function of the fourth objective is to be achieved through increase in local production of manufactured products, discouragement, establishment of local raw material-based industry, and progressive substitution of expatriate manpower for local human resources with emphasis on youths.

After proper assessment of the objectives of the economic stabilization act is became obvious that there is sufficient improvement of the balance of payments position. And in the same vein it has created some economic problem such as:

(i) a higher rate of inflation
(ii) a higher rate of unemployment
(iii) reductions in domestic industrial production due to restrictions placed on importation of industrial inputs
(iv) encouragement of smuggling which has become more profitable because of higher domestic prices and shortages.

Cash flow met some hitches in the Federal Government purse, as the revenue generating impact of the policy has not been particularly significant. The common man (mainly the youths) is the hardest hit up till today, the prices of basic consumer goods have risen drastically, parents could hardly afford school fees for their children and the Federal State and some Local governments have schools indefinitely close down because of the inability of the treasury to pay teachers salaries. This trend still continues till today where some states still own their workers salaries.

Manufacturers experience extreme difficulties in securing raw materials. This led to many industries including Automobile Assembly Plants, Food Processing and Electronic Industries folding up or experiencing drastically curtailed production. This trend affected the employment atmosphere. Hence, youths in the country are not able to secure employment while those working were retrenched.

Emerging Policies

In Nigeria, the Federal and State governments have been initiating major efforts towards alleviating youths unemployment. These efforts have been directed at formulating three prong approaches viz educational, institutional and employment programmes.

Educational Programmes

Educational programmes of the Federal and State governments include establishment of more Technical colleges, Polytechnics, and Colleges of Education. The ultimate aim of establishing such institutions include among others to provide training manpower in applied science, technology, commerce at sub-professional level and to provide the youths with skills which will enable them not only to be government employed but also to be able to develop their own business and industries.

Institutional Programmes

In 1977, the National Board for Technical Education (NBTE) was set up as a statutory body under Act No. 9 with the responsibility of advising the Federal Government and coordinating all aspects of vocational and technical education falling outside the universities. NBTE was also mandated to develop the national technical syllabuses in polytechnics and technical colleges in line with national needs and the setting of minimum standard. Presently, National University Commission (NUC), and National Commission for Colleges and Education (NCCE) develop the courses and programmes for universities and colleges of education.

In 1971, the Federal government established the industrial training fund (ITF), which was to inculcate variety of skills in the youths. The ITF was to collect levy, pay training grants and develop training advisory services as a means to promoting and encouraging the acquisition of skills of industry and commence with a pool of indigenous trained manpower sufficient to meet the needs of the Nigerian economy.

Some of the contributions of ITF to ameliorate the problems of youth unemployment include, advanced courses for training personnel (ACT) in plant training and industrial productivity workshop, organization and control of industrial maintenance system, occupational health and safety workshop, vocational training centre and instructional training centre and students industrial work experience scheme (SIWES).

In order to reduce unemployment among Nigerian Youths, the Federal government in 1987 launched the National Directorate of Employment (NDE). NDE was directed to concentrate its effort on the re-activation of public works, promotion of direct labour, promotion of self-employment, organization of artisans into co-operatives and encouragement of a culture of maintenance and repairs.

And in order to achieve these objectives the board adopted the following approaches; National Youths employment and vocational skills development programmes, small-scale industries and graduate employment programme, agriculture sector employment programmes, and special public works programme. Under the national youth employment and vocational skills programme, lots of youths that lack psycho productive skills in the economy benefited from the programme through their attachment as apprentice to companies, universities, government ministries and parastatals, and professional craftsmen with units such as the national open apprenticeship scheme, the school on wheels scheme etc.

While on other hand, the small-scale industries and graduate employment programme were designed to aid and encourage unemployed Nigerians to set up and run their own businesses. Under this programme beneficiaries were conducted on courses in entrepreneurship before loans were made available to them, which was under the job creation loan guarantee scheme etc.

Moreso, another programme was designed to provide self-employment in agriculture for school leavers and graduates with Degrees, HND, NCE and OND in agriculture or related disciplines. The programme include graduate farming scheme where graduates were given farmland, ploughed and planted at subsidized rate, and the programme also include the reactivation of dormant farm project.

Finally, under the special public works programme, immediate and temporary employment was provided for a large number of the unemployed with the objectives of utilizing the large number of manpower for labour intensive jobs which include the construction and maintenance of roads, building, tree planting, farm support services and environmental sanitation etc.

In 1999, the democratically elected government of president Olusegun Obasanjo in attempt to reduce the rate of youth unemployment in Nigeria launched a programme tagged poverty alleviation which involved keeping the youths busy by training them on psycho productive skills. They can thus be self and gainfully employed and given a source of livelihood by training them in various enterprises such as auto mechanic, agriculture, aluminum fabrication, hair dressing, vulcanizing and agriculture programmes include the setting up of farm settlement schemes and schools of agriculture.

Conclusion

In order to minimize the social malady of unemployment of Nigerian youths, there is the need for government effort to be complemented with active participation of the private sector.

There is the need for vocational and technical education programmes at the various levels of the nations education system to be positively supported so as to reduce the cost of after school training.

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THE NEGATIVE EFFECTS OF POULTRY PRODUCTION ON CHILDREN, YOUTHS AND ADULTS: A CASE STUDY OF AKURE METROPOLIS, ONDO STATE, NIGERIA

BY

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Abstract

The study investigated the negative effects of poultry production on children, youths and adults making Akure metropolis in Ondo State, as a case study. Data were collected from 31 poultry farmers and 31 respondents (who were a mixture of children, youths and adults), living close to the poultry farms in Akure metropolis. Data collected were analysed with the use of means, percentages and regression analysis. Results showed that the farms have average mortality of 5.34percent generate 8432kg/day of waste. The farm gave average discount rate of 11.8percent to the people living close to the farm. Majority of the farms (48.78%) burnt their waste and that 39.02percent dump their waste into stream. About 47percent of the people living around the poultry houses complained of offensive odour, 23.40percent complained of increased presence of flies and 22.34percent complained of excessive noise. The major determinants of the number of complaints of the people are the nearness to the living quarters and discount rate. The study recommended odour control supplement in the feed, processing of the waste into organic fertilizer and establishment of about 1.14 hectare of fishponds per farm. The distance between the living quarters and the poultry farm should be more than 0.412km. This will mitigate the negative effects of the poultry production on children, youths and adults who are in close proximity to poultry production units.

Introduction

Poultry has high priority rating among the other types of livestock because of its high energy and protein conversion rate. The fact that poultry has short generation interval, relatively high net return on investment and relatively low land requirement, makes it attractive to urban and city dwellers (Ruthenberg, 1979). According to Mosha (1991), livestock population in and around Dar es Salaam increased drastically between 1985 and 1989, with poultry production going from 500,000 to 800,000 birds. National statistics quoted by Bliek (1992) show that 83percent of 420,500 livestock kept in Nairobi is poultry. Baah (1994) indicated that poultry not only contributes to be protein need of the city and urban dwellers, but also benefited them economically.

Jesdapipat (1998) reported that intensive poultry production is located in proximity to city because of consideration for delivery and supply to urban markets. There is also reduction in transportation cost to the market if poultry production is located in peri-urban or urban than, if its production is located in the rural areas. Marketing opportunities are high if

poultry units are located nearer cities. Moreover people living close to livestock production may enjoy discount benefit on their purchase and will be saved the cost of transporting to open market for their purchases (Jesdapipat 1989).

Despite the economic advantages enumerated above, poultry waste is potential contributions to environmental pollution of air, watercourse, and its presence leads to increase in presence of flies (Hodge 2000, Bullock er al, 1995). Poor air quality translates into health damage. Annual estimate of damage due to air pollution in California was between 3.6 – 11.6 billion dollars in 1992 (Kazimi, 1997 hall et al, 1992, Krupanick and Portney, 1991).

Cummings and Schulze (1986) and Viscusi (1991) reported that environmental pollution lead to high risk of chronic Bronchitis, a central type of chronic obstructive pulmonary disease alleged to be a major adverse effect of ozone pollution exposure. Therefore, livestock production should also consider how to improve quality of life. In order to achieve this end, various scholars have suggested that particular attention should be given to environmental protection (Gotts et al, 1992, Hodge 2000, lowe and Baldock 2000 and Whitby 2000). Haigh (1987) stated that effective environmental protection is predicated on awareness and education. Producers must be educated on the adverse environmental impacts of their production activities (Karen et al, 1997). They suggested that social, economic and environmental impact evaluation of livestock production activities should be continuous exercises.

Asch and Seneca (1978), Bajer and Hall (1992), Freeman (1997) have reported that socio-economic variables of the people living in proximity to pollution generating unit determine their response to environmental pollution. This study was designed to examine the negative effects of poultry production on the people in close proximity to poultry farm. This is measured by the number of their complaints. Hodge (1978) assumed that the people are best judges of the negative impact of poultry units close to them. The production and waste disposal systems of the poultry farms were investigated. The types of the complaints given by the people living close to poultry production units were also ascertained. The amount of waste disposed per day, monthly rate, discount rate, distance between the farm and the next residential building and frequency of ailment by the people working on the farms were estimated.

Methodology

The data for this study were collected from poultry farmers in Akure. Poultry farmers in Akure metropolis were purposively sampled for this study. Two sets of questionnaire designated A and B were prepared for the respondents. Questionnaire designed A were distributed to the 35 managers of the poultry farms (who can be owners of the farms or employed supervisor) in the metropolis.

Thirty-five sets of questionnaire B were distributed to the adults, youths and children in the households living close to the poultry production units. 31 questionnaire designated A were found useful. The appropriate information in the two sets of questionnaire was coded and analyzed using tables, percentage distribution and multiple regression analysis.

Results And Discussions

Table 1: Economic And Environmental Parameters Of The Poultry Houses

Parameter	Mean
Discount Rate	11.84%
Quantity of waste produced by the farm	8432kg/day
Mortality Rate	5.34%
Complaint of Sickness by poultry workers	45.16%

Source: Field Survey, 2002

Table 1 reveals that people living around the poultry houses enjoyed discount rate of 11.84%. This may be a great economic benefit for them, considering the fact that they have even been saved cost of transportation to the free market to buy their eggs and poultry products. It is also assumed that the discount rate being enjoyed by the residents in proximity of the poultry houses may diminish their awareness of environmental impact of poultry production activities close to them, hence minimized complaints.

The major source of environmental risk on poultry farm is the waste generated per day. Table 1 shows that on the average the farms produced more than 8 tonnes of waste per day. If 8432kg of waste per day is combined with annual mortality rate 5.34percent the amount of odour that are coming from poultry farms can be best imagined; especially if they are not properly disposed of. The low mortality rate of 5.34percent may be as a result of the facts that the poultry farms are located in the city where they can have access to good veterinary care. This is an important advantage of the urban livestock farming and that may explain the reason for their increased attractiveness to the towns {Mosha, 1991}.

Another indicator of environmental hazard of poultry farming is the rate of sickness among the poultry workers. About 45percent of the workers complained of increased sickness since they joined the farms. It is note worthy that 45.16percent of the sickness complained of catarrh which may be as a result of ammonia and methane generated from poultry waste when they were not properly disposed of shows.

Table 2: Waste Disposal Systems

Systems	Frequency	Percentage
Burning	20	48.78
Incinerator	2	4.88
Washing into the Stream	16	39.02
Dumpling on Land	3	7.32
Composting	--	0.00
	41*	100.00

Source: Field Survey, 2002

*Multiple Responses

Table 2 shows the waste disposal systems used by the farmers. Majority {48.78%} burnt their wastes. Burning has been associated with air pollution (Asch and Seneca, 1978). Decreased air quality will affect the will being of the people living around the burning

point About 39 percent washed their wastes into the stream; which may result in water pollution, only 4.88 percent used modern incinerator. From the result none of them compost their waste into organic fertilizer. About 7percent dumped the waste on the agricultural land, the excess, which has been proved to be dangerous to the soil {Bough, 1992}.

Table 3: Types Of Complaint By The People Living Around Poultry Farms

Complaints	Frequency	Percentage
Odour	45	47.82
Noise	21	22.34
Pollution of water course	0	0.00
Dumping of waste agric land	3	3.19
Dumping of waste on the road	3	3.19
Increased flies	22	23.40
	94*	100.00

Source: Field Survey; 2002
*Multiple Responses

Table 3 shows that 47.87% of the respondent complained of offensive odour. This odour; which consists of methane ammonia and carbon dioxide are injurious to the people. The next major complaint is increase in number of flies since the establishment of the poultry farm (23.40%). Flies are transmitters of different diseases and their presence is a great nuisance to the people living around the poultry house (Bough, 1992). The results further indicate that 22.34percent complained of excessive noise. Noise has been categorized as "invisible pollutant". As result of environmental pollutants from poultry house, the environmentalists in developed countries have classified poultry as offensive enterprise (Bullock et al, 1995).

Table 4: Regression Results of Exponential Function

Variables	Coefficient	S.E.
X1 Waste system	-0.0092	0.0135
X2 Mortality rate	3.4060	6.0806
X3 Distance from the nearest house	-6.5050**	0.0035
X4 Education	0.0007	0.0007
X5 Discount rate	-0.01591**	0.0092
Constant	0.4532	0.1875
R2	0.13	
R-2	0.11	
F	0.77	

**Significant at 1%

The exponential functional form of the equation was selected as lead equation. The adjusted R2 of 0.11 show that 11percent variation in number of complaint is accounted for by waste disposal system, mortality rate and distance from the nearest building, education

and discount rate. It should be noted that measurement of environmental pollution through number of complaints is subjective. The complaints can be affected by the disposition of the respondents. The lower adjusted R^2 is due to the fact that other factors that affect number of complaints of the respondents are not included because they are difficult to measure. They are exogenous factors like wind direction rainfall and disposition of the respondent. Hodge (1978) estimated adjusted R^2 of 18%'. The other reason for lower adjusted R2 is the fact that the respondent were their brothers keepers; a factor of importance in Africa that may be responsible for their lower number of complaints. They may not also want to be seen as somebody that is against the success of their brother's business: hence may be suffering in silence. It is on this basis that Table 4 is interpreted. The table shows that waste disposal system and number of complaints were negatively related. It shows that people that dump their wastes into the stream received less number of complaints than those that do otherwise. Mortality rate and number of complaints were negatively related, the higher the mortality, the higher the number of complaints especially if they were not properly disposed of. Waste disposal system and mortality rates were not statistically significant.

Distance of the poultry farm to nearest house is negatively related to the number of complaint: it is elastic and significant at 10percent. It means that if the distance of the nearest living quarters increases by 6.5 metres, the number of complaint will decrease by one. Education is not significant but positively related to the number of complaints. Educated person has been claimed to be sensitive to environmental impact of the activities close to them, especially the ones that threaten the air quality (Kazimi, 1997).

The measure of economic benefit of location of poultry farms near living quarters is the discount rate enjoyed by the people living in the quarters. It is significant at 1percent, and negatively related to number of complaints. This may explain the reasons why many of them may not be complaining of the environmental impact of the livestock production going on around them. Table 1 shows that they enjoyed average discount rate of 11.84percent, the value that may be significant to them if it is coupled with the fact that they were saved of the transport cost, and the enjoyment of fresh poultry farm product.

Conclusion

The study confirms that locating poultry production unit in the city and close to the people has negative impacts on the people if measured by their number of complaints. The poultry farmers must therefore find ways of mitigating the affects of these environmental pollution. This can be done by incorporating odour-minimizing supplement in poultry feeds. The waste should be processed and can be sold or used on the farm as organic fertilizer. Another important way of disposing this waste is through integrated farming. It has been shown that one hectare of fishpond can make use of waste generated by 3,500 birds. The poultry farmers in Akure metropolis need just 1.14 hectare of fishpond on the average to mitigate all the environmental complaints of the people living around the poultry house. Moreover the distance between the living quarters and poultry farm should be more than 0.412km.

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THE SOCIO ECONOMIC EFFECTS OF CHILD ABUSE ON DECENT LIVELIHOOD IN NIGERIA

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Abstract
This study examined the causes of child labour and its effect on the child, the school environment and the Nation at large. It aims at examining how the sphere of our life that this societal menaces affects most. It is the objective of this study to know whether parental level of education and family type is responsible for child involvement in child labour. It is also the objective of this study to know whether people in general have the same perception towards child labour. Hypothesis were formulated on the study, questionnaire was of two types, one for the child labourer and the other for the people who engage the services of child labour. The result of the hypothesis on parental level of education and child labour depicts that there is a significant relationship. This result also shows that there is no significant difference in the perception of people towards child labour.

Introduction

Child bearing is an important thing in the society and it is generally believed that children are the gift of God, and a thing or bundle of joy to their parents. Hence, when a child is born, the parents and other relatives lavishly welcome him or her. When a child is born, he is supposed to be well taken care of by the parents, so that he can grow and then become a useful person not only to the parents but also to the society in general.

Parents neglect their children and do not see anything bad in sending their children on unnecessary errands talk less of turning them to a working class citizen of a sort. The children that should be seen as the leader of tomorrow have had their hopes and aspirations dashed even right from infancy.

Child labour as an aspect of child abuse can be described as the use of the children not up to 18 years under law for the purpose of sourcing for money or revenue. According to the Random house dictionary, child labour is work performed by children that either endanger their health or safety: interferes with or prevent their education or keeps them from play and other activities important to their growth and development.

The issue of child labour operate today in Nigeria in various forms (Oklaham, 1990) example are children who work as house help, baby sitter, bus conductor, errand boys and girls in residence of Nigerian higher institutions and those who work on farms.

Kassal (1987) opines that the society is not aware of problem of child labour because there has been a clear deviation between strict home training and child abuse. Many illiterates have to use their children the way it pleases them consequently a lot of people resort to severe child battering illegal fostering of children and the like.

Opebiyi (1989) opines that the reason for child labour and neglect in this part of the world is poverty and ignorance. In his own contribution, Fasole (2003) noted that in the developed societies the greater portion of abused children is from poorer homes. Although, it is by no means a problem restricted to the poorer households, it is more conspicuous among the rural and urban population. Due to the economic depression in the country, many parents could no longer afford the increasing cost of books and help was coming from nowhere. Hence, their wards are being turned into working-class citizen.

Methodology

The target population for this study consisted of all child labourers in Oyo and Ogbomoso Towns of Oyo State. However, the study samples include randomly selected 100 children used for data collection. Stratified Sampling method was used in order to include only those within the age bracket of 10 and 17 years.

A structured interview schedule was used for the collection of data and questions were administered to get information from the families or individuals engaging the service of child labourer and children who actually engage in child labour.

The reliability of the structured interview for the families or individual and that of the child labourers were also determined with the use of test retest method. Thirty children were selected out of the subject used in this study to determine the test reliability using Pearson product moment correlation (PPMC) to determine the reliability, the parents perception questionnaire gave 0.68 while that of child labour questionnaire gave 0.70 as correlation co-efficient.

The data was summarized in frequency while chi-square test was used to analyze the frequencies of responses.

Result

This aspect has four hypotheses to present.

Hypothesis 1: There will be no significant difference in the perception of people in Oyo and Ogbomoso towns.

Table 1: Observed and expected frequency of people response in Ogbomoso and Oyo.

People response (Observed)	**Ogbomoso**	**Oyo**	**Total**
In favour of child labour	19	13	32
Not in favour of child labour	31	37	68
Total	**50**	**50**	**100**
People response (Expected)	**Ogbomoso**	**Oyo**	**Total**
In favour of child labour	16	16	32
Not in favour of child labour	34	34	68
Total	**50**	**50**	**100**

Source: $X^2 = (0 - E)^2 = 1.66$

There is no significant difference in the perception of people in Ogbomoso and Oyo town on child labour. Degree of freedom (df) = $(r - 1)(k - 1) = (2 - 1)(2 - 1) = 1$

Critical region X^2 c < xr ---- accept HO

X^2 T (0.05) (1) = 3.84
Since X^2cal (1.66 is less than X^2tab then HO is accepted i.e. there is no significant difference in the perception of student in Ogbomoso and Oyo on child labour.

Hypothesis II
There will be no significant relationship between the parental level of education and child involvement in child labour.

Table 2: Observed and expected value of child response on their parental level of education

Child's activities (Observed)	No formal Educ	Primary	Secondary	Tertiary	Total
Hawking	28	10	1	2	51
Menial jobs	15	19	14	1	49
Total	**43**	**29**	**25**	**3**	**100**
Expected					
Hawking	21.93	14.79	17.75	1.53	51
Menial jobs	21.07	14.21	12.75	1.47	49
Total	**43**	**29**	**25**	**3**	**100**

$$X^2\text{cal} = \Sigma (01 - 1)^2 = 6.36$$

There is a significant relationship between parental level of education and child's involvement in child labour.
HO_2 : There is no significant relationship between parental level of education and child's involvement in child labour.
df = (r – 1) (k – 1) = (2 – 1) (4 – 1) = 3
Critical region: if X^2cal < X^2 reject HO_2
X^2Tab (0.05) 3. = 7.81
Since X^2cal (6.36) is less then X^2tab (7.81) then the null hypothesis is rejected and alternative hypothesis is accepted i e. there is a significant relationship between parental level of education and child's involvement in child labour.

Hypothesis III
There will be no significant relationship between family type and child labour activities.

Table 3: Observed and expected value of child's response on their family type

Child's Activities (Observed)	Monogamous	Polygamous	Total
Hawking	25	29	54
Menial jobs	25	21	46
Total	**50**	**50**	**100**
Child's Activities (Expected)			
Hawking	27	27	54
Menial jobs	23	23	46
Total	**50**	**50**	**100**

$$X^2 = \Sigma(01 - E1)^2 = 0.644$$

H0: There will be no significant relationship between family type and child labour activities.

df = (2 – 1) (2 – 1) = 1

Critical region X^2 cal < X^2 accept HO

X^2 (0.05) 1 = 3.84

Since X^2cal (0.66) is less than X^2tab then HO is accepted that there will be no significant relationship between family type and child labour activities.

Hypothesis IV

There will be no significant difference in the perception of male and female child labourer towards their work.

Table 4: Observed and expected value of child labourer perception towards their work

Perception (Observed)	**Male**	**Female**	**Total**
Really enjoyed	36	25	61
Rarely enjoyed	22	17	39
Total	**58**	**42**	**100**
Perception (Expected)	**Male**	**Female**	**Total**
Really enjoyed	35	25	61
Rarely enjoyed	22	17	39
Total	**58**	**42**	**100**

Source: $X^2 = \frac{(01 - 1)}{6} = 0.66$

H0: There will be no significant difference in the perception of male and female child labourer towards their work.

Discussion and Conclusion

There is no significant difference in the perception of people of Ogbomoso and Oyo, which implies that the people in these communities have the same perception toward child labour. We also conclude that there is a significant involvement in child labour, which implies that the higher the level of parental education the lesser would be the probability of their child being engaged in such activities. One can submit from the research findings that there is no significant relationship between the family types of child activities. Also, it is found that there is no significant difference in the perception of male and female child labourers towards their work this means both female and male child labourers in Ogbomoso and Oyo towns really enjoyed their work and find it difficult to leave the job as indicated by the research findings. Both male and female that engaged in child labour enjoyed their activities as a result of material things attached to it. It is also discovered that these children do this work as a result of their parental level of education and income. It was confirmed that poverty has a significant relationship with child labour activities because majority of the subject used in this study stated that the major reason for their engagement on child labour is as a result of financial incapacity. The research revealed that most of these children are from polygamous family, which has a negative effect on these children. Research also revealed that majority of these children labourer engage in menial jobs while small fraction of the total children investigated engage in hawking.

Child labour therefore exists and persists in Oyo state. The researcher now concludes that child labour should be totally eradicated in Oyo State.

Recommendations

The study recommended that government at National level in acted a law for building child labour most especially among primary school age children.

Training of more social workers and parents could also be of help and increasing education of para-professional including both volunteers and parents in general can prevent abuse.

A community development activity is another recommendation, which would increase local opportunities for job training, employment, access to social and health services and other support, which reduce family stress.

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POVERTY, STREET TRADING AND THEIR IMPLICATIONS ON THE NIGERIAN CHILD

BY

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Abstract

Poverty incidence is on the increase in Nigeria. The country has intensified worsening poverty situation in the 1980s and 1990s. For instance, the incidence of poverty rose from 46.3percent of the population in 1985 and 65.6percent in 1996. The situation has not improved. This has led to a desperate search for means of livelihood. Though street trading and a practice has been on for decades, the trend and dimension are becoming alarming with children being the major victims. This paper examines the hindrance of poverty in the country, the prevalence of street trading as a means of livelihood intensified by high incidence of poverty and the consequences on the future of Nigerian child. It will also proffer measures for improving this unwholesome situation.

Children and Poverty Incidence

The issue of poverty is a very critical one. Talking about poverty, one is examining "a multi-dimensional phenomenon, encompassing inability to satisfy basic needs, lack of control over resources, lack of education and skills, poor health, malnutrition, lack of shelter, poor access to water and sanitation, vulnerability to shocks, violence, crime, lack of political freedom and voice (World Bank 2002). With this expansive definition of poverty, it is not difficult to see the connection between the state of poverty and the woes of children in all ramifications. Again, in absolute term "poverty is a condition where a person or group of persons is unable to access the most basic and elementary equipment for human survival in terms of food, clothing, shelter, health, transport, education and recreation". Again, the devastating impact of poverty on the welfare of children going by above definition could be imagined. The various aspect of the physical and psychological welfare of the children is affected by poverty incidence.

As further observed by Taiwo (1999), poverty is a living condition in which an entity is faced with economic, social, political, cultural and environmental deprivation. In this regard, the impact of poverty on children would be monumental considering the fact that they are dependent on their parents and guardians for survival. It is clear that the state of the well being of the parents and guardians has a great link or consequence on the health, nutritional status, education and economic well being of the mothers in particular and their parents or guardians in general. Thus, in a situation where the mother is poor, the children are prone to being seen as a means of improving the family well being. This may be through their involvement with child labour in general and street trading in particular. The degree of poverty in turn has serious impact on the growth and development of the children. Again, chronic malnutrition contributes to the death of 6.5 million children per year around the world (Save the Children Organisation, 2003). Besides, the mortality rate, chronic malnutrition of children under age 2 could be damaging as it often results in

stunting which negatively impact on the health and productivity of present and future generation.

With this serious implication of poverty incidence on children, one is worried about the growing incidence of poverty. According to Willy (2000), of the world's 6 billion people, 2.8 billion (about a half) live on less than $2 a day while about 1.2 billion live on $1 a day. Again, in Africa, the proportion of the population below 2/3 of national mean per capita income between 1991 – 1999 was 37 per cent, while those who were living under US$1 a day between 1984 – 1999 in Nigeria constituted 31 per cent (World Bank 2002). The proportion of non-poor as indicated in table 2 fell from 72.8 per cent in 1980 to 34.4 percent in 1996 while the proportion of the core-poor rose from 6.2 per cent in 1980 to 29.3 per cent in 1996 (FOS, 1999).

Table 1: The Poor and the Core Poor in Nigeria

Year	Non-Poor	Moderately Poor	Core-Poor
1980	72.8	21.0	6.2
1985	53.7	34.2	12.1
1992	57.3	28.9	13.9
1996	34.4	36.3	29.3

Source: FOS, Poverty Profile in Nigeria, 1980 – 1996

Table 2 further indicates that the proportion of the poor in the urban centers rose from 17.2 per cent in 1980 to 58.2 per cent in 1996, while in the rural areas, the corresponding proportions were 28.3 per cent and 69.8 per cent respectively.

Table 2: Poverty Trends by Sector (%)

Year	Urban	Rural
1980	17.2	28.3
1985	37.8	51.4
1992	37.5	46.0
1996	58.2	69.8

Source: FOS, Poverty Profile (1980 – 1996)

The high rate of poverty incidence expose children to various forms of child labour in a bid to augment the meager income of their parents. This further erodes the little energy they have and further exacerbates their poor health situation. For instance, as observed by Ashgrie (1998) about 250 million children (5 – 14 years old) are toiling in economic activities in developing countries, about half of who (120 million) work on full time hours. The remaining half, combine working with schooling, or other non-economic activities. The rate of participation of children in economic activities is highest in Africa (41 percent) where more than two children out of every five are involved. Children in this category constitute 29 per cent in Oceania, 22 per cent in Asia and 17 per cent in Latin America.

The situation in Nigeria is not different. For instance, Achoyamen (2001) observes that the increasing poverty rate in the country has made families to use their children as a means of augmenting their needs. Such children under the age of 18 are mostly and usually engaged in domestic services, work on family farms, street hawking, bus conductors and even in factories and restaurants. They are also found at markets and motor parks as head porters while bricklayers engage them as labourers in construction works. Their situation is always pathetic as they appear shabbily and malnourished.

Street Trading

Highly visible along the major streets of our urban centers is the bustling of people of various categories displaying articles of trade along the streets or clutching them with one hand, holding one or two articles to passengers in the moving vehicles. According to Adeagbo (1989), this practice is primordial. He stressed the fact that street trading is not new, that it is a generation-to-generation practice. However, he was of the view that the way and manner it is being practised nowadays reflects the influence of some socio-economic parameters that have changed over time. Some of these parameters include the degree of incidence of poverty, which is more pronounced now than ever. In the past, street trading was not offensive unlike now, this may be due to the population size then, and the fact that the means of transport were not as many as to cause stiff competition among traders for space on the roads. Now it is a different ball game. The situation on most urban roads is chaotic and displeasing. Safety, aesthetics, peace and order have been thrown to the winds. The problem is that children are also involved in this, and they struggle both for space and customers alongside adults. Aside this it is not too clear that parents involved with street trading have enough time to attend to the needs of their children. Thus, street trading is not highly hazardous to children either directly by their involvement or indirectly due to the fact that their parents do not have enough time to attend to them.

The fact remains that the confusion, frustration and wanton disregard for people's safety that characterizes street trading should not be allowed to persist and increase. Similarly, the positive sides also need be examined in order to maximize them through appropriate measures. Hence the need to examine the socio-economic impact of street trading on children in order to have sound basis for proposing corrective measures.

According to McGee (1979), street trading has two sides, that is it has advantages and disadvantages. He identified some of the disadvantages as including: traffic congestion, due to the fact that street trading is predominant in areas of the road where pedestrian and vehicular traffic is heavy. Also the congestion could be due to the encroachment of these traders on the roads. Resulting from the congestion is an increase in travel time along those roads, and sometimes transports use that as an excuse to hike transport fares. The passengers also face higher level of discomfort. Street trading also poses problems of hygiene and sanitation, this is because traders dealing in food items usually expose them to flies and they display their goods under unsanitary conditions, and as such transmit disease like diarrhea and cholera. In addition there is the serious problem of risk of life. On the positive side, according to him, the advantages of street trading include provision of goods at cheaper prices than retail stores, offering of cheap meals to residents in crowded living areas

The main aim of this paper is to examine the possible consequences of street trading on the child. The paper benefits from data on a study title 'Physical and Socio-economic impact of Street Trading. They study focused on Ibadan Metropolis, the respondents consisted of street traders, drivers/cyclists, passengers, neighbourhood residents and pedestrians.

Table 3 shows a distribution of the respondents by selected background characteristics. About 53 per cent of the respondents interviewed are females. The data also show that half of the respondents are married and as such may have children. Most of the respondents are young and energetic; they are within the age 18 to 45 years bracket. About 48 per cent of the respondents have a minimum of secondary level of education.

Table 3: Background Characteristics of Respondents

Characteristics	Categories	Percentage
Sex	Male	47.5
	Female	52.5
Marital Status	Single	50.0
	Married	50.0
Age	Under 18	7.5
	18 – 45 years	57.5
	46 – 55 years	30.0
	55+	5.0
Education level	None	27.5
	Koranic	5.0
	Primary	17.5
	Secondary	45.5
	Post-Secondary	2.5
Religion	Christian	60.0
	Islam	40.0

Source: Adeagbo, 1997

Operational Characteristics of Street Trading

It is important to examine issues relating to the operations of street traders in order to understand the likely consequences of the practice on the operators themselves and on their children/ward. Table 4 shows the operational characteristics of the respondents. The results show that 60 per cent of the respondents are engaged in street trading due to the fact that they were unemployed and have to look for a means of sustaining themselves. Half of the respondents sell food, the state of hygiene among these people cannot be guaranteed. For majority (57 per cent) of the respondents they do not have any particular period of the day that they engage in street trading, this has implications for their health and that of their children. The result in table 5 shows that there are still some traders who despite the fact that they have shops, are still engaged in street trading. For those not owning shops, about 73 per cent reported that their not owning shop is due to the fact that the number of shops in the various markets is inadequate, while for other they do not own a shop because they cannot afford to pay for such shops. Thus suggesting that poverty may induce or enhance street trading.

Table 4: Operational characteristic of Street Trading

Characteristics	Categories	Percentage
Reason for engaging in the practice	Unemployment Primary occupation	60.0 40.0
Articles of trade	Food Spare parts (technical, mechanical etc. Electronics Shoes Clothing materials	50.0 12.5 12.5 10.0 15.0
Period of occupation	Morning Afternoon Evening Anytime Others	2.5 2.5 2.5 57.5 5.0
Ownership of Shops	Yes No	22.5 77.5
Reason for not owning shop	Inadequate shop Cannot afford	72.7 27.3

Source: Adeagbo, 1997

Perception about Street Trading

Table 5 shows the perception of respondents about street trading. About 63 per cent of the respondents believe that street trading is improper, while about 68 per cent of the respondents are not satisfied with the operators of street trading. This may be due to the inconveniences attributable to street trading. The result show that about 53 percent of the respondents are not satisfied with the level of patronage that street traders receive. About 63 percent of the respondents are not satisfied with the income derivable to street traders, thus implying that the practice may not have the means of bringing people above the poverty line, do not satisfy about 63 percent of the respondents with the income derivable. The result show that, 65 percent of the respondents reported not being satisfied with the security available to them, this may be due to the fact that pilfering and all sorts of vices will be predominant.

Table 5: Perception of Street Trading

Characteristics	Categories	Percentage
Propriety of Street trading	Alright Improper	37.5 62.5
People's attitude to street traders	Satisfactory Not satisfactory	32.5 67.5
Level of patronage	Satisfactory Not satisfactory	47.5 52.5
Income	Satisfactory Not satisfactory	37.5 62.5
Security	Satisfactory Not satisfactory	65.0 35.0

Source: Adeagbo, 1997

Table 6 shows the respondents' perception of the impact street trading has on the health, social life and on children. A cursory look at the table shows that a good majority (91.7 per cent) of the respondents are of the opinion that street trading impacts negatively on the health of the operators. Apart form the tediousness of the practice, they are susceptible to rainfall or wind/stand storm. About 53 per cent are of the view that street trading affects their social life negatively. About 72 per cent of the respondents reported that street trading have negative impact on the children of the operators, this may be due to the fact that majority of street traders are virtually engaged in the practice for a good part of the day. There are many negative consequences of street trading on the operators. The results in table 6 show that about 68 per cent of the respondents reported that street traders experience loss of goods, and about 42.5 per cent reported that street traders are involved in numerous forms of accidents.

Table 6: Socio-economic impact of Street Trading

Characteristics	Categories	Percentage
Impact on Health	Positive	8.3
	Negative	91.7
Impact on social life	Positive	46.7
	Negative	53.3
Impact on children	Positive	28.3
	Negative	71.7
Incidence of loss of money	Yes	67.5
	No	32.5
Incidence of loss of goods	Yes	45.0
	No	55.0
Incidence of accidents	Yes	42.5
	No	57.5

Source: Adeagbo, 1997

Conclusion

Finally, it appears as a cycle in that poverty could induce being involved in street trading and being involved in street trading could also worsening the poverty situation of the perpetrators. For the results of the study shows that most people are engaged in street trading because they could not pick up an employment, but the operators of street trading do not have satisfactory income. The reality is that the cost of training a child continues to be on the increase as each day passes bye, the consequences of low or unsatisfactory income on the education, health and the general welfare of the children of those involved in street trading. The respondents attested to this when 70 per cent of them reported that street trading has impact on the child. The situation is even worse when it is the child that is engaged in street trading, for such will have impact on the child's health and education. When this happens such a child is further entrenched in the poverty cycle, the child would not have the potentials that may make him or her get out of poverty in the near future. Thus government should endeavour that shops are provided at affordable rates to reduce the proportion of people engaged in street trading, by doing such, the number of Nigerian below poverty line will be reducing.

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ASSESSMENT OF PROBLEMS FACED BY CHILDREN IN ARTISANAL FISH PRODUCTION IN WATERSIDE LOCAL GOVERNMENT, OGUN STATE, NIGERIA

BY

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Abstract

The study examines problems faced by children in their involvement in fishery activities in Water-side Local Government, Ogun State Nigeria. The study covered 104 respondents selected using multi-stage random sampling techniques. Data were obtained with the use of structured interview schedule. Data analysis was carried out with the use of descriptive and inferential statistics such as means, percentage, chi-square and correlation analysis. The results revealed that the major problems faced by children in order of severity include proneness to accidents, inhalation danger, respiratory infection, health hazards, proneness to snake –bites, and physical abuse by adults. Based on the findings, it is recommended that constituting the children into a formidable club through which they can receive adequate advisory and educational services, which could help them to prevent or solve most of the identified problems, should solve the identified problems institutionally and educationally.

Introduction

There are two categories of problems influencing the role(s) of children in fish production in small – scale riverine fisheries. These are the groups' problems and individual problem (Anbarasan, 1985). The group problems could be economic or technological while individual problems involved personal socio-economic characteristics such as age and educational level.

As stated by Williams (1998) in the past, the significant contribution of children in supporting the socio-economic well-being of their families had been neglected and taken for granted. This has resulted not only in gross under estimation of children's socio-economic contributions to solving food security problem but also under utilization of children's tremendous socio-economic potentials in small-scale fisheries.

The subject matter of this study, which mainly concentrates on children's supportive contribution towards fishing activities and problems faced in the process requires highly intellectual research to obtain relevant facts that will lead to enhancement of socio-economic status of the children.

Children all over the world constitute part of the 90percent of fish workers that are involved in artisanal or small-scale fisheries. This percentage is so significant because according to Mba (1983), these people contribute about 24 million tones of fish for human consumption. There are also about 15 million traditional small scale fisher-folks including children in the third world, perhaps half of whom have taken fishing as a profession.

Another 15 million traditional people, mostly children and women are involved in fish preservation, marketing and distribution.

Generally, as stated by Edwards (1986), artisanal fishing is carried out by a large number of people who live a humble independent life in numerous countries along oceans, lakes, lagoons and rivers. Their fishing method is basically rudimentary and labour intensive with minimal mechanization. They are low-income fisher folks who use canoes and local fishing gears for fishing in rivers and shallow waters along the coast and other inland waters. In addition to these problems, in spite of the advantages of fish production system, certain socio – economic factors still threaten the sustainability of the system. It is in view of this that this study will examine problems faced by children in fish production, making Water Side Local Government, a case study. It is hypothesized in this study that there is no significant relationship between involvement of children in fishery activities and the problems faced by the children in fishery activities.

Methodology

The study was carried out in Water Side Local Government of Ogun State, Nigeria. The local government is bounded in the West by Ijebu – East Local Government, in the North and East by Ondo State and in South by Lagos State and the Atlantic Ocean. This natural endowment thus makes fishing the predominant occupation of the inhabitants especially those living in the coastal and riverine areas of the local government. The study areas comprise of ten wards out of which two were purposively selected based on the fact that they were exclusively wetland and riverine in nature. The two wards are Makun-Omi and Iwopin.

Makun Omi comprise of 24 villages and Iwopin 36 villages. Ten percent of there villages were randomly selected making 2 villages in Makun Omi and 4 villages in Iwopin. The average population of a village in Makun Omi is 96 and that of Iwopin is 213. This implies a total of 192 inhabitants for 2 villages in Iwopin and 852 inhabitants for 2 villages in Iwopin area. Ten percent of these inhabitants were randomly selected from each area. This implies randomly selecting 19 respondents from Makun Omi and 85 respondents from Iwopin making a total of 104 respondents for the study.

Information was obtained from the respondents with the aid of pre-tested structured interview schedule. Data were analyzed with the use of descriptive statistics such as means and percentages, chi-square was further used to explain relationship between variables in the study.

Result and Discussion

Demographic Characteristic

Table 1: Distribution of respondents according to their demographic characteristics (N – 104)

Variables	Frequency	Percentage
Age		
7 – 12	36	34
13 –17	68	66
Total	104	100
Sex		
Male	62	59.7
Female	42	40.3
Total	104	100.0
Religion		
Christianity	52	50.00
Islam	42	40.30
Traditional	10	9.70
Total	104	100.00
Education		
No formal education	8	7.4
Primary	34	31.5
Secondary	54	53.7
No response	4	7.4
Total	104	100.0

Source: Survey Data, 2002.

Majority (66.7%) of the children were between the ages of 13 – 17 years while 34 percent were between the ages of 7 and 12 years. (Table 1) this indicates most children involved in fishery activities in the area of study could be said to be matured enough to take part in the activities in which they were involved.

The study also indicates that most of the children (62%) were males. This could be because they were more involved in fishing (fish catching) which children found very exciting especially at their youthful ages.

The findings also revealed that most of the three major religions – Christianity, Islam and traditional were well represented by the children. This may imply that the children's involvement in fishery activities may not be influenced by their religion.

Most of the children were literate since just 7.4 percent had no formal education. This implies that most of the children would be very responsive to extension teaching and innovations.

Involvement in Fishery Activities

Table 2: Distribution of Children According to their involvement in Fishery Activities in Ogun Water side LGA N = 104

Fishery activities refer to all activities that children are involved in from catching the fish to marketing

Activities	Frequency	Percentage	Total score	Rank
Fishing	58	55.1	475	1
Water fetching	34	32.6	269	7
Fire wood gathering	34	32.6	320	3
Fish marketing	18	17.3	297	6
Fish processing	24	23	308	5
Netting	34	32.6	434	2
Paddling canoe (off shore)	10	9.6	309	4
Fish transportation (inland)	32	30.7	163	9
Equipment maintenance	32	30.7	240	8
Fish storage	66	63.4	127	10

Source: Field Survey, 2002

Table 2 reveals the activities performed by the children and their frequency of performing the activities. The table shows that the most performed activity by the children is fishing with a score of 475 and ranking first among other activities. This relates to the larger population of male children as revealed in table 1. Fishing is followed by netting (43.1); fire wood gathering (320); paddling (309); fish processing (303) and fish marketing (297).

The least performed activity is fish preservation and storage. These are mainly the role(s) of parents.

Problems Encountered by Children in Fisheries

Table 3: Distribution of respondents according to the problems faced (N = 104)

Activities	Frequency	Percentage	Total score	Rank
Accident	42	40.3	518	1
Drowning	34	32.6	464	3
Inhalation	32	30.7	444	4
Respiratory infection	28	26.8	514	2
Health hazards	24	23	413	6
Long sea distance	24	23	419	5
Snake bite	34	30.7	166	9
Harassment	24	23	170	8
Adult exploitation	15	12.6	300	7

Source: Field Survey, 2002

As indicated in table 3, almost all the problems faced by children in fishery activities were those of hazards encountered in the process of fishing. Top on the list is accident with a score of 518. Accidents occur, according to the respondents when canoes cap side as a result of storm or sea currents. Children as kids may not have the strength of paddling the canoe in current situation leading to accidents. This is closely associated with the problem of drowning with a score of 514. Drowning occurs when children fish very far into the water body (sea, river or ocean) and accidents occur. In the process, there could be inhalation problem with a score of 444. When drowning occurs it leads to inhalation leading to breathing problem. Associated problems include respiratory infection, which comes second in the order of ranking. Respiratory infection may occur through cold encountered while fishing or accidental inhalation of water. All the problems so far mentioned result in health hazard, which is also recognized as a problem with a score of 413. Health of children is exposed to danger while on the sea, river or other water bodies for fishing, hence the need for their protection. Children from this study were also exposed to the danger of snakebites. This could be from the bush around water bodies (swamps, mangrove and still rooted vegetation) in which they fish or through snakes that reside in the water body.

Another set of problems that are of significance from this study are those that has to do with child abuse. They claimed they suffered from unnecessary harassment especially when they were forced to fish against their wish. They claimed at times, they even fished in the mid of the might which exposed them to more dangers. Also related to this is the children's claim of exploitation by adults. The children revealed that they were not adequately compensated for their fishing activities as the revenue from their fishing activities were often accrued to their parents.

Testing of Hypothesis

The only hypothesis tested in this study is stated in null form as indicated below

Children ≠ fishery activities = 0

Ho: There is no significant relationship between problems faced by children and their involvement in fishery activities.

Table 4: Test of Hypothesis

Variables	X^2 Value	df	Level of Significance	Remarks
Accident	1.324	3	0.036	Significant
Drowning	0.187	3	0.046	Significant
Inhalation	6.406	3	0.811	Not Significant
Respiratory infection	0.846	3	0.731	Not Significant
Health hazards	5.194	3	0.025	Significant
Long sea distance	0.094	3	0.624	Not Significant
Snake bite	0.640	3	0.714	Not Significant
Harassment	0.650	3	0.943	Not Significant
Adult exploitation	2.134	7	0.483	Significant

$P < 0.05$

From table 4, problems of significance are accidents ($X^2 = 1.324$; $P < 0.05$); drowning ($X^2 = 0.187$; $P < 0.05$), Health hazards ($X^2 = 5.195$; $P < 0.05$) and adult exploitation ($X^2 =$

2.134; $P < 0.05$). These problems, because of their significance to involvement in fisheries, should be critically examined. By this, methods of protecting children against these problems should be determined to encourage their involvement in fishery activities.

Conclusion and Recommendations

This study has exposed the major problems that may hinder children's involvement in fishery activities. They were faced with problems that have to do with their health and in critical situation, death. Such problem as drowning, accidents, respiratory infection are very dangerous and may lead to termination of life. Others such as respiratory problems and long sea distances may lead to acute diseases. The other set of problems constitute child abuse. When children are not adequately rewarded for their activities, they may see fishery activities as punishment rather a way of livelihood, which they have to be involved in as a career. Based on the identified problems, the following recommendations are proffered:-

- Children alone should not be allowed to fish without being accompanied by adults. They would this way be protected in cases of accidents.
- Special Children Clinic should be established in riverine areas to take care of the health needs of the children when the need arises.
- Children's clubs should be formed in riverine areas that will serve as a forum for educating children on safety measures while on fishing exercises.
- Parents need to be educated to treat their children with love and adequately reward them for their fishing activities so as to encourage them in the business.

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SUB-THEME 9

URBAN AGRICULTURE AS A STRATEGY FOR ELIMINATING SOCIAL VICES IN THE METROPOLIS IN NIGERIA

UTILIZING HIGH RISE BUILDING (SKYSCRAPERS) IN CENTRAL LAGOS BY YOUTHS TO REAR BEES .

BY

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Abstract
This paper focuses on the possibility of utilizing high rise buildings in Central Lagos for rearing Bees (Api-culture) by youths such that the buildings serve dual purposes i.e. used as offices and at the same time, used for rearing bees. Bees hate noise, hence the location of the hive at the highest point in the building away from noise, people and animals. Bee keeping could provide employment for many jobless youths and also provide essential raw materials like honey and bees wax, used in the pharmaceutical, automobile and textiles industries.

Introduction

Central Lagos consists of Lagos Island proper extending from the foot of the old carter bridge or 2nd mainland bridge (Idumota/Isale Eko, via Broad Street, Campos Square, Lafiaji, Onikan, Obalende, Ikoyi etc). Early post-colonial Lagos was characterized by beautiful parks adorned with beautiful flowers, shrubs and trees e.g. the famous Ikoyi park; Love Garden (now occupied by Muson Centre, Onikan), and apart from the Boulevards at Ikoyi and Victoria Island, most of major streets of Lagos Island such as the popular Race Course; Campos square; King George V Road; Igbosere Street etc. to mention a few were all lined with fruit and shade tree such as Terminalia catappa (Indian almond); Mangifera indica (Mango) velvet tamarind (Awin), Ato carpus incisa (Bread fruit) etc.

Until recently, most of these trees had been cut down to pave way for parking lots, shops, petrol stations, residential blocks and high rise office blocks. Lagos Island has remained the commercial nerve Centre of Nigeria, despite the relocation of the national capital to Abuja city. The skyline of Lagos Central are dotted with tall, high rise buildings such as NITEL towers, independence building, Royal Exchange Assurance (REA) building, NEPA, NPA, UBA, First Bank, etc. (Fernandez – Elegbede, 1992).

It is instructive to note that high-rise buildings are prevalent in land-locked areas such as Lagos, Warri, Port-Harcourt, Onitsha etc. The high-rise buildings are mainly used as office blocks, by government ministries, parastatals, multinational companies and private liability firms. Their clientele are mainly civil servants, merchants, traders and business executives such as managers, clerks, salesmen etc.

The buildings are usually inhabited and very busy during the day, with business gathering momentum late in the mornings and peaking at 4p.m in the evenings, after which the

entire work activity declines thereby giving it a solitary nature until the following day when work resumes again in earnest.

The less busy periods of early morning before business resumes fully and the late evening periods when work decline in the office and also during the week ends could be profitably utilized to rear bees in the high rise buildings top most floor (Arseneault, 1995).

Bees are probably the oldest of domesticated animals, bees are a source of wealth to man. The rearing of bees is known as Api-culture of Apiarism. Their home is called hive, and a collection of hives consisting of several colonies of bees is known as Apiary. Bees are characterized by the habit of gathering plant nectar, pollen and waxes. Bees may be social and live in colonies, like the honeybee and humble bees, or solitary, like many small wild bees (American Peoples Encyclopedia, 1965).

Bees are kept on farms, in gardens and even on the roofs of sky scrappers in larger cities high up so that they will not be disturbed and hence would not sting people. Although the most desirable location for the Apiary is at the rear of a village lot or, on a farm, in an orchard. This paper focuses on the possibility of setting up an apiary on the roofs of sky scrappers in central Lagos.

Apart from providing opportunities for multiple land use, it will provide job opportunities for hitherto jobless youths; ensure the availability of cheap industrial raw materials such as honey (used in the pharmaceutical/cosmetics industries) and bees was (used in the automobile and dental industries). Even more important, bees are pollinators of blooms (flowers) of plants. Most food crops with the exception of cereals and few others are dependent upon bees for pollination; also the suggestion could help to invigorate the estate management sector that is already in a state of comatose since the movement of federal ministries and other business sectors to the new federal capital in Abuja.

The ramps in the high-rise buildings also serve as point through which the products of the bee farm can be easily evacuated to safe points. The uses of lift cannot be over-emphasized as this is an electro mechanical device used to move human and material resources in high- rise buildings (Akeju, 1999).

The writers of this article are of the opinion that the flat roof of high-rise buildings can be recommended for the rearing of bees and would not constitute any danger to the human occupants of the said buildings.

Care of Bees

Persons, animals or vehicles should not interrupt the flight path of the bees to their nectar producing plants. Therefore, care must be taken to keep the apiary away from road, paths, or fields in which there are animals. The hives should face away from high prevailing winds and must be protected from high winds; they should be shaded, especially during the hottest periods of the day. The walls of the hive should be of sufficient thickness to protect the bees from extreme cold and excessive heat. It is considered best to limit the number of colonies in a single apiary to 100 and to have the apiaries at least two miles apart.

During the period of drought, the beekeeper should provide sugar syrup or granulated sugar candy and fresh water within the vicinity of the hive. These help to enhance survival of the bees (Obong Asamoah, 1990).

Handling: In obtaining the honey from the hive and also in performing any other necessary manipulations the bees should be handled gently so that they will be disturbed as little as possible. Precautions against stinging include the wearing of protective clothing such as veils and gloves. A few puffs of smoke from a smoker (smoke generator) directed into the entrance of the hive just before opening will cause the bees to gorge themselves with honey and they may be handled without great danger. Undue crowding or rough handling should be avoided. The smoke also serves to irritate the bees respiratory tract and in this way it directs their actions to defense rather than aggression. Also bees are very sensitive and launch attacks wherever their hive is approached by anyone wearing clothes/overalls with either colour red or black. The ideal colour bees tolerate is simply white colour.

Conclusion

Since the movement of the federal capital from Lagos to Abuja, there has been a lull in the estate management business sector. Several Government Ministries, parastatals has shifted based to the new federal capital, thereby leaving many office blocks vacant and empty. Rather than creating "wastage" in government, such abandoned high-rise buildings could be utilized for the rearing of bees (apiarism) to produce honey and bees wax. This will no doubt provide raw materials for industry and generate employment opportunities for the Lagos youths.

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EFFECT OF PROCESSING ON THE NUTRITIONAL COMPOSITION OF THE VELVET BEAN SEED (*MUCUNA RURIENS*)

BY

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Abstract
The effect of local processing methods on the chemical composition as well as on some of the antimutritional factors was investigated. Raw unprocessed Mucuna seeds were divided into five batches. The first batch (Control) was ground raw (RMSM: raw Mucuna Seed Meals, the second batch was toasted (TMSM: Toasted Mucuna Seed Meal) and the third was cooked (CMSM: Cooked Mucuna Seed Meal). The fourth batch was soaked for 12 hours, dried and milled (SMSM: Soaked Mucuna Seed Meal) while the fifth batch was soaked for four days, dehulled and milled (SDMSM:Soaked dehulled Mucuna Seed meal). The various processing methods affected ($P<0.05$) the nutritional composition of Mucuna. The SDMSM gave the highest crude protein value of 36.96g/kg DM. A decrease in the levels of Ca and P contents as a result of processing with the exception of Ca in CMSM was observed. RMSM contained the highest levels of the toxic components determined (HCN: 86.31g/kg DM; Phytic acid: 4.02g/kg DM and Tannin: 3.68g/kg DM) but these were drastically reduced in the processed batches.

Introduction

The food deficit situation in Nigeria is indeed more serious with protein deficiency when compared to the availability of calories and the micro -elements. Shortage of protein intake is prevalent in parts of Africa. The average daily protein intake per capita is below the minimum stipulated by Food and Agriculture Organisation (FAO) and World Health Organisation (WHO). According to Ene (1987), protein available in Nigeria is 45.5g/caput/day whereas FAO and WHO recommend a daily minimum intake of 65.0g/caput/day. Low level of protein intake usually leads to many diseases e.g. in children it results in the condition called kwashiorkor. In order to augment protein intake in Nigerian diets, locally available under-utilized plant protein sources must be studied

Several legumes, especially groundnut (*Arachis hypogaea*), cowpeas (*Vigna spp*) and soybean (*Glycine max*) are produced in Nigeria. These are being widely used in the country in human and animal nutrition although there is a serious competition between man and his animals. There is the need to turn attention to the exploitation of other promising legumes e.g. Mucuna beans. About 100 spp of Mucuna had been reported to occur throughout the tropics (Bodgan, 1977).

The seed of *M. pruriens* had been described to be black and glossy when mature (Skerman, 1987) and although available in Nigeria, it is not widely consumed. Afolabi *et al* (1985) reported that the beans are consumed in some parts of the country. The beans are usually subjected to common processing methods before they are eaten. In Ghana, the beans are boiled for at least 40 minutes before they are used in preparing stews and soups and only small quantities, about 10-15Mucuna beans, are consumed per person during a

meal per day (Osei-Bonsu *et al*, 1996). In Stri Lanka, the seeds are usually soaked overnight and later subjected to long cooking before being used in various local food preparations (Ravindran and Ravindran, 1988). Like all legumes, Mucuna bean contains antinutritional factors like trypsin inhibitors, cyanogenic glycocides, tannins. phytates, L-3, 4-dehydoxyphenylalanine and lectins (Ravindran and Ravindran, 1988; Josephine and Janardhanan, 1992; Siddhuraju *et al*, 1996; Iyayi and Egharevba, 1998) which limit its use.

The nutritive values of legumes have been known to be improved by various processing methods (Ologhobo, 1980; Siddhuraju *et al*, 1996). The present investigation was designed to determine the effect of some local processing methods (toasting, cooking and soaking (with or without dehulling)) on the proximate composition, Ca and P contents as well the antinutritional factors (HCN, Phytic acid and Tannin) of Mucuna beans.

Materials and methods

Preparation of Mucuna samples

The raw Mucuna beans obtained from local farmers in Ibadan, Nigeria, were divided into five sets. The first set was ground raw (RMSM: Raw Mucuna Seed Meal), the second set was toasted for 20 minutes and then milled after cooling (TMSM: Toasted Mucuna Seed Meal), while the third set was cooked in boiling water for 60 minutes, drained, sun dried and later milled (CMSM: Cooked Mucuna Seed Meal). The fourth set was soaked in water for 12 hours, sun dried and milled (SMSM: Soaked Mucuna Seed Meal) and the fifth batch was soaked for four days, dehulled, cooked, sun dried and milled (SDMSM: Soaked. Dehulled Mucuna Seed Meal).

Analytical procedures

All these sets were analysed for their proximate and mineral constituents according to A.O.A.C. (1984). The hydrocyanic acid (HCN) contents were quantitatively determined according to the method of ISO (1975) while phytic acid and tannin contents were analysed according to the procedures of Young (1936) and Price *et al* (1978) respectively.

Statistical analysis

All data obtained were subjected to analysis of variance (ANOVA) and significance of the difference of means was determined (Steel and Torrie, 1980).

Results and discussion

The chemical composition of the raw and processed Mucuna seed meals is presented in Table 1. The crude protein values ($P<0.05$) obtained for the raw and processed Mucuna indicate that it can be an important contributor of plant protein supplement to cereals and roots and tuber crops consumed by Nigerians. The crude protein value of 30.29g/kg DM for RMSM is in agreement with the value reported by Emenalom and Udedibie (1998) but slightly lower than that reported by Siddhuraju et al (1996) and Iyayi and Egharevba (1998). The different processing methods employed with the exception of cooking enhanced the crude protein content of Mucuna. The reduction in crude protein value (29.74g/kg DM) of CMSM agrees with the results of other researchers (Iyayi and Egharevba, 1998; Emenalom and Udedibie, 1998). The 1.82 %(CMSM) decrease in the crude protein content is attributed to the loss of soluble or proteinous parts of the seeds during cooking (Mbajunwa, 1995; Nestares *et al*, 1996, Emenalom, 2004). The higher crude protein value (36.96g/kg DM) recorded for SDMSM could have been due to the

resulting germination of the seeds as a result of soaking. Similar reports had been observed and researchers attributed the increase in crude protein contents of germinated seeds to be as a result of losses of water-soluble components during soaking and in dry weight through respiration (Ranhotra *et al*, 1977; Lee and Karunanithy, 1990, Iyayi and Egharevba, 1998). The ash contents decreased when the Mucuna seeds were processed with the exception of TMSM.

Table 1: Nutrient content of raw and processed Mucuna seeds (g kg^{-1} DM)

Coponent	RMSM	TMSM	CMSM	SMSM	SDMSM
Crude protein	302.9^{c}	323.6^{b}(6.83)*	297.4^{c}(-1.82)	318.0^{b}(4.99)	369.6^{a}(22.02)
Ash	58.8^{b}	63.9^{a}(8.67)	42.9^{e}(-27.04)	36.7^{d}(-37.59)	35.5^{d}(-39.63)
Ether Extract	61.5^{a}	29.0^{d} (-52.85)	52.0^{c} (-15.43)	55.8^{b} (-9.6)	63.4^{a} (3.09)
Ca	1.10	1.36(23.64)	1.33(20.91)	0.69(-37.27)	0.66(-40)
P	0.75	0.73(-2.67)	0.51(-32)	0.45(-40)	0.45(-40)

^{a,b,c,d}Means on the same row with different superscript differ significantly (P<0.05).
*Figures in parentheses are percent change over control.

The HCN, phytic acid and tannin contents of Mucuna as influenced by the different processing methods (P<0.05) are shown in Table 2. RMSM recorded the highest values of 86.31g/kg HCN, 4.02g/kg phytic acid and 3.68g/kg tannin while the least values of 24.44g/kg HCN, 1.15g/kg phytic acid and 1.02g/kg tannin were obtained from SDMSM. Dehulling significantly (P<0.05) enhanced the rate of removal of the antinutritional factors.

The reduction in the values of both phytic acid and tannin shows that when Mucuna seeds are processed, it enhances protein digestion and utilization by human beings. Phytic acid has the ability to form a complex with proteins and inhibit the enzymatic digestion of ingested protein (Nolan and Duffin, 1987). Tannins affect the availability of amino acids (Rostango, 1972).

Table 2: Effect of processing on HCN, Phytic acid and Tannin Contents (g kg^{-1} DM)

Antinutritional Factor	RMSM	TMSM	CMSM	SMSM	SDMSM
HCN	86.31^{a}	26.15^{b}(69.70)*	26.65^{b} (69.13)	25.86^{b} (70)	24.44^{b} (71.68)
Phytic acid	4.02^{a}	1.67^{bc} (58.46)	1.87^{b} (53.48)	1.98^{b} (50.75)	1.15^{d} 71.39)
Tannin	3.68^{a}	1.28^{c} (65.22)	1.57^{b} (57.34)	1.26^{c} (65.76)	1.02^{cd}(72.28)

^{a,b,c,d} Means on the same row with different superscript differ significantly (P<0.05).
*Figures in parentheses are percent change over control.

The results suggest that processed Mucuna could be used greatly in human nutrition. However, further detailed research on its level of combination with energy-based diets should be investigated.

Recommendations

It is evident that the protein content of SDMSM compares favourably with the convectional grain legumes and its contents of HCN, Phytic acid and tannin can be drastically reduced due to the processing pattern. Just like the Federal Institute of Industrial Research, Oshodi, Nigeria developed the Soy-Ogi, a fermented weaning food, Mucuna-Ogi can also be formulated. Detailed research on SDMSM's level of combination with energy-based diets should be a major focus of investigation.

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THE GIRL CHILD AND DENIED REPRODUCTIVE RIGHTS

BY

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Abstract
Right is an entitlement of every child and fundamental to his/her decent living. In spite of the continued efforts of federal government to create awareness about the rights of every child, abuse of these rights especially the female child has persisted. This paper is an attempt to provide an overview of the female reproductive rights while highlighting common areas of abuse. It also reviews the socio-economic implications of the reproductive rights abuse on the society and suggests ways by which violation of these rights could be discouraged and the rights protected.

Introduction
Rights are fundamental principles, which every human being is entitled to enjoy and have to protect. These principles are to be respected in daily relationships with all children. In other words, RIGHTS are interests recognized and protected by the law, respect for which is a duty and the disregard of which is wrong.

Reproductive rights line with the meaning of RIGHTS are those rights of individuals to control their bodies, to have sex that is consensual, free from violence and to enter into marriage with the full and free consent of both parties. They include the right to comprehensive, good quality reproductive health service that ensures privacy with the parties involved fully informed and free consent, confidentiality and respect. Reproductive rights embrace certain human rights that are already recognized in national laws, international human rights documents and they rest on the recognition of the basis of all couples and individuals to decide freely and responsibly the number spacing and timing of their children and to have information and means to do so (Paris, 1994). Reproductive rights are taken but not limited to those rights relating to gynecological health, child bearing, contraception, abortion, childcare and sexuality. Reproductive right means respect for women's bodily integrity and decision making, the right to express their sexuality with pleasure and with out fear of abuse, disease and discrimination.

Reproductive rights cannot be enjoyed or enforced in the absence of other basic social and economic rights such as food, shelter, health, social security, livelihood and education, elimination of poverty and remuneration of inequitable and discriminatory development.
In some societies today in Nigeria, girls are still being given out to early marriages and to certain circumstances as forced marriage and pre-planned marriages. Trafficking of girls and some forms of forced prostitution still exist in Nigerian society and all these negate the fundamental reproductive rights of females. The most dehumanizing practice of female genital mutilation is still being practised in Nigeria despite the law prohibiting it that is the treaty against torture, which Nigeria is a signatory to (Shirkat, 1996).

Female Reproductive Rights In Nigeria
In the Penal code of 1990, applicable in Northern Nigeria, the husband is permitted to chastise his wife if offended. Such offences include refusal of sexual advances. As long as the chastisement does not amount to grievous bodily harm which according to section 24

of the population convention is defined as permanent deprivation of power of sight, hearing, speech, disfiguration of the head, face, or cause the woman to be no paw for 21 days.

The customary practices also allow a man to have multiple sex partners and this has some adverse effects on the reproductive health of the woman because of the risk of transmission of sexually transmitted infection. The law that prohibits pregnant schoolgirls from continuing their education is some- how discriminatory, more so, when this is not applicable to the male students who are responsible for the pregnancies. Very few cases of rape are reported or even get to courts of law. This is because Nigerian culture frowns at exposing victims and perpetrators as known people and family members commit most cases of rape.

In some communities in Nigeria, whenever a man die's the wife is usually suspected and accused of knowledge of the death or complicity in his death. But such accusation is never made when a wife dies. In some communities, the wife will go through some ordeals, such as asking her to drink the water used to wash the corpse of the deceased, husband. In many communities in Nigeria, when a man dies, the wife is subjected to dehumanizing funeral rites. Her head is shaven; she sleeps on bare floor with small cloth to cover only her nakedness. Some are made to eat with broken plates and a time with their hands not washed for days. On the death of a wife, the husband is not subjected to all these experiences. In some Nigerian cultures the man is allowed to sleep with another woman in the night of the wife's burial on his marital bed for the fear that the dead wife may return in spirit to share the bed with him.

In some areas in Nigeria, girls as young as 11 years or below are given away in early marriages. The incapability of such girls to resist exposes them to various categories of reproductive and psychological health problems. Female genital cutting is another infringement in the reproductive rights of women and this is still rampant on most parts of the country. This is often done under dirty and unhealthy environment. The instruments used are usually not sterilized. This resulted in some cases, in serious gynecological and obstetrical complications and transmission of HIV infection in others (IRRRAG, 1995).

Common Areas of Abuse of Female Reproductive Rights in Nigeria

Right from childhood, a female child is meant to see the differences between her and her male counterparts. She's made to feel and belief she's of the weaker sex. Her experience of the reproductive rights abuse starts from birth to death. Below are the issues of abuse and the effects on the reproductive health of a female Nigerian.

Sexuality

This has to do with the total expression of "who we are as human being". The general lack of information about sexuality has made its expression to be exploitative thus causing a great abuse of female reproductive rights in Nigeria. In some areas in Nigeria, strict adherence to some cultural values does not permit agitation for respect of some reproductive rights as this is always seen as non -conformity.

Some reported cases of early sexual initiation, sexual abuse and harassment resulting to early pregnancies are generally due to lack of factual and comprehensive information,

education and communication on sexuality issues This negates the international decisions and agreement on human rights.

Virginity
This is seen as a way of preventing sexual promiscuity and maintenance of pride among female genders, whereas no one frown at young male Nigerians having series of sexual exposures especially with different girls before marriage. This has resulted into uncountable number of unwanted pregnancies leading to induced, unsafe abortion and transmission of infections.

Menstruation and Menopause
Menstruation is an aspect of growing up that is maturity, which occurs at puberty, while menopause is that of ageing occurring, at about 45 years of age and upward. The Nigerian society, despite being party to the endorsement of Reproductive Health Rights at the various international fora has not done much in the areas of educating people about menstruation and menopause.

Some cultures do not permit woman to touch what the husband eats during menstrual period. To some, sex during menstruation is a taboo, as it is believed to result in giving birth to albino child and killing the manhood in some areas. None of these is in actual fact true. The menstruation period is most safe period that no conception can occur (Agbelemoge and Taiwo, 1997).

Early / Forced Marriage
Some customary practices in Nigeria allow for giving out young girls away in marriage in most cases as young as 10 years, against their wishes. These poor innocent girls hardly know what the tasks ahead are and cannot possibly cope with the problems of childbirth and motherhood. The resultant effects range from physical and psychological traumas to maternal mortality. VVF and RVF are so common in areas where this is being practised. Early and or forced marriage has resulted in reduction of number of years these girls spend in schools or learning a vocation. Also, this great violation of right has led to many cases of infant and maternal morbidity and mortality.

Contraception and Abortion
Contraception is a way of preventing unwanted pregnancy while abortion is the termination of pregnancy before the 28 weeks of gestation. Methods of birth control are targeted mostly at the woman, but the power to make decision on this by them is not granted.

Criminalisation of abortion continues to present the risks of unsafe induced abortion with resultant incidence of post abortion complications and death. Despite the illegality of abortion under the Nigerian Criminal code of 1990 section 228, quite a number of unwanted pregnancies are still been aborted in various health institutions and mostly by unskilled personnel.

Female Genital Cutting (FGC)
Despite the fact the Nigeria is a signatory to the universal Declaration of Human Rights in which article 5 states that "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment" under which one can argue the dehumanization of

FGC, some communities in Nigeria still practise this as a custom. Apart from the dehumanization effects of this practice, the immediate effects range from pains, excessive bleeding, infection, shock, damage to bladder and other surrounding structures.

Long-term effects include various fistulae leading to urinary and rectal inconveniences and psychological trauma of sexual frustrations. This practice is considered as one of the greatest violation and abuse of female reproductive rights.

Rape

This is a forced sexual activity against the wish of the victims. It is a violation of the victims' reproductive right. It is an act of violence, aggression and over powering. Rape is punishable under the law of the land; maximally by life imprisonment but this law does not grant anonymity to rape victims during prosecution. This exposes them to psychological complexes of radiance and pittance apart from the traumas they went through in hands of the rapists during the ordeal such as physical abrasion and brutality resulting into psychological nightmares. As illegal as rape is under the Nigerian law, there is no accommodation under this law for prosecution of maternal rape.

Women themselves in Nigeria see the sexual satisfaction of their husbands as a critical part of their marital obligations. Some think refusing their husbands advances can make them step out. Given this, the question of marital rape is treated as a non-issue, even by women themselves.

Other Reproductive Health Problems

Still under the customary practices in Nigeria a woman is not supposed to take decision on her own without the consent of her husband. This makes it virtually impossible sometimes for women to take decision on their health especially those relating to their reproductive life.

In most cases, sexually transmitted infections are blamed more on women than men. The attending complication of infertility is also blamed more on women. This subordination of female gender to the opposite gender makes refusal of sex to infected partners somehow difficult, so with denial of sex to a partner with high risks of contracting infections. This shows low level of information of Nigerian woman regarding her sexual reproductive health rights. (IRRRAG, 1995).

All these and many more others are the various ways by which the reproductive rights of Nigerian women both young and old are being abused. Despite being a party state to the signing of international documents on reproductive rights, there is still no specific law in Nigeria made mainly to address reproductive rights of women (IRRRAG, 1996).

The social economic implications of reproductive rights abuse on the society

The socio-economic implications of the aforementioned issues of abuse of female reproductive rights in Nigeria include very low self-esteem, lack of skills of assertion and negotiation of sexual limit and communication of these with sexual partners.

These are also undue compromise of health by Nigerian women for the wishes of their male counterparts. These often result in unwanted pregnancies leading to abortion and the attending social ostracizations, in other cases maternal mortality.

Forced/early marriage have resulted in early sexual initiation, teenage pregnancy early parenting with the psychological implications, school drop out, unemployment and under employment due to lack of skills. All these have devastating effects on the economy of the nation because of lack of skilled manpower.

The attendant consequences of FAC causes a lot of social problems to sufferers and this in turn has effects on their economic obligations to the society. The social consequences of rape include social withdrawal and isolation, sexually transmitted infection including HIV/AIDS, which can result into death and reduction of workforce and downturn effects on the economy.

Conclusion and Recommendation

Nigerian woman should make very positive use of the good quality education they now have by developing good mental capacity in preparation for the tasks ahead in fighting the causes of female oppression both formally and informally.

Nigeria woman should strive to have good knowledge of the meaning of fundamental rights, the contents of specific laws and their relevancy to their life. In fact Nigerian women should be prepared to partake actively in politics in order to be in best position of pushing the course of women up to the appropriate quarters /places at the corridor of power.

Vocational skills acquisition must be vigorously pursed to equip Nigeria women with the power to earn more income and thus become less economically dependant on their mail counter ports. Legal literacy programmes should be organized publicly for women to teach them their rights especially those in rural area.

Nigeria women especially those growing up should form organizations and societies to champion the course of woman and lobby governments to provide adequately for the rights of women.

Any form of abuse of women's rights should be reported and prosecuted in order to ensure proper enforcement of laws and written document protecting the rights of women in Nigeria.

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THE EFFECTS OF SOCIO-ECONOMIC CHANGES ON NIGERIAN YOUTHS

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Abstract
Socio-economic factors are essential for human development. This in turn is influenced by government activities. Changes in government policy directives affect human development positively or negatively especially youths, children and women who form over fifty percent of the population. The over dependence on the oil sector made Nigerian vulnerable to external shocks of global recession. Typical example is the policy of structural adjustment programme, which compelled the government to severely cut down spending on social services such as education and health care delivery. The drop in per-capital income of 1,100 U.S. dollars in 1980 to 320 U.S. dollars in 1994 results in severe decline of social resources available to the family as well as decline in quantity of basic needs affordable. The effect of poverty or low income confronting some families had led to many social problems among the youths. These includes teenage pregnancy, child trafficking, drug abuse, high level of crisis in the education sector and mass unemployment to mention a few.

Introduction

The most dynamic and productive group of any country's population is the youths, who are young between the ages of 10 and 29 years. Consequently, responsive government must consciously pay high premium investment on youth development in order to attain sustainable level of development and meaningful economic growth.

However, Nigerian youths are confronted with barrage of political and socio-economic challenges, majority of which they are not the cause or prepare to dare. These national problems are created by political instability, mono-economy, high exchange rates, low per capita income, poverty, unemployment, poor implementation of government policies, incessant changes in government policies, corruption, dishonesty among leaders, etc. It is obvious that the above mentioned enigmatic vices do not create favourable environment for economic growth and the development of human and natural resources of the country (Yakubu, 1996).

Owing to the curious and adventurous nature of young people (young), they are more prone to the outcome of forces of socio-economic problems confronting Nigeria. Therefore, youths are more predisposed to social vices such as: armed robbery, thuggery, cultism, drug abuse, prostitution, fraud, teenage pregnancy, abortion, etc. The environment in which a child grows goes a long way to influence his/her development. Hence, a child that develops in an inimical environment, deprived of basic infrastructure is bound to display the above vices.

Generally, the future of any nation depends on the quality of investment on youth development and empowerment by the government. Nigeria cannot be different if,

education sector is revitalized, manufacturing sector is adequately funded, private initiatives are enhanced by creating enabling environment, and political stability is enhanced. Thus, government at all levels must rise up to this task of nation building by investing in the nations youth development.

Political Impact on Socio-Economic Problems faced by Nigerian Child

The population of Nigeria as put by World Bank (1990) is 117.5 million. Out of the population, 64 percent is below 25 years of age. This is much higher than the global average of 53 percent (Yakubu, 1995). If this group of people who formed the majority of the population are not well planned for. It will have a negative effect on human development and hence on the human resources for sustainable development. Enhancing human resources development is fundamental to increasing productivity of any society and for economic growth (Babu, 2001).

The requirements of enhancing human development are greatly influenced by socio-economic factors, which in turn are under the auspices of government policies. The political instability that the country is known for in the past has favourable or unfavourable impact on the youths who depended on their parents for food, cloth and shelter. Thus, policies that appropriately price and allocate resources efficiently with stable investment in human and natural resources through political and legal institutions are necessary. To achieve this, a more stable government that is honest just and alive to its responsibilities is a prerequisite.

Implications of Political Instability on Youths

(1) Incessant change in government in power has resulted in failure of government in performing it's constitutional roles such as free primary and secondary education and this has led youths to become drop-outs, armed-robbers, prostitutes, vagabonds, unpatriotic citizens, etc.

(2) Use of youths as political thugs during election since they must keep soul and body together and they do not have enough education to get a paid employment.

(3) youths becoming information-deformed due to lack of access to information technology.

Income, Nutrition Security and The Youths

The effect of low income or poverty on nutrition of the child is long-lived. Nutrition is accessed and controlled by income capacity of the household.

Good and adequate nutrition before and during pregnancy has remarkable benefits for the mother and ensures a good start in life for her child (Lewis, 1990). The effect of poor nutrition starts in the uterus and it's consequences extend to childhood. Children who grow up in environment of poverty and malnutrition are confronted with diseases which delay growth, motor and mental development, impaired immunity, competence and increased risk of complications and death (Water, 1992).

It is however, essential for government to ensure economic growth, which in turn increase national income. Essentially, higher per capita income leads to higher level of health of the citizens provided it is equitability distributed. (Yakubu, 1996). Policies that lead to economic growth and reduce poverty make it possible for people to afford better diet healthier conditions and better health care.

Teenage Pregnancy and The Youths

The level of poverty in this country is such that it disadvantaged the female gender directly and the male counterpart indirectly. The rich man often makes use of the level of poverty in homes to woe young girls into having sexual relationship with them which often results into teenage pregnancies and death during abortions.

Evidence has shown that 50 percent of the maternal deaths in Nigeria occur among the adolescents who resort to unsafe abortions (CWRN, 2001). However, if such young mother tries to bring up the child, the under-nutrition that, many occur during the pregnancy, has serous impact on the birth weight of the infant with higher risk of subsequent growth retardation, morbidity and mortality during childhood, adolescence and adulthood.

Sexually Transmitted Diseases, HIVS and Youths

The age of adolescence is marked with high sexual activities. However, a country like Nigeria with low per capita income may have most of the teenage girls engage in sexual activities in order to survive. It is however not surprising that 60 percent of Nigerian youths are sexually active before the age of 17 years. It is pathetic that it is in the adolescent age that most of the cases of HIV are acquired (CWRN, 2001).

Drug Abuse and Youths

Cases of drug abuse with youths are on the increase. The drug trafficking by youths is becoming more alarming. This is an anti-social behaviour, which cuts across all social values and discipline (Yakubu, 1996). The problem of drug abuse by youth may be traceable to some political leaders who use youths as political thugs and encourage them to take drugs.

Education Crisis and Youths

The gross under-funding of educational industry had led to various problems associated with the system resulting in producing violent youths. According to Yakubu (1996), the problems associated with education crisis due to failing economy include:

(i) falling in standard education;
(ii) frequent closures of institutions of learning;
(iii) widespread indiscipline and corruption;
(iv) anti-social behaviour – "area boys" syndrome increase crime rates such as arm robbery, drug pushing etc.
(v) poor staff moral degenerating to sheer corruption
(vi) cultism in institution of learning
(vii) over-crowding in classrooms, poor infrastructural facilities
(viii) poor performance of students and leakages of examinations

Unemployment and Youths

There is high unemployment rate of about 3.2 percent in 1990 with 4.8 percent in urban and 2.8 percent in rural (NUP. 1992). It has been estimated that 65 percent of the overall unemployed are below the age of 25 years. This youths majority of youths that are not catered for in the policy of employment and being adventurous themselves in social decadence and constitute a threat to the peace of the country.

Summary and Conclusion

This paper has attempted to highlight the social economic problems and their effects on youths. These effects have a negative impact on sustainable development. It is worthy to note that various actions of governments go a long way to affect youths either positively or negatively. The effect of poverty and low income confronting many families had led to many social problems among the youths. This antisocial behaviours cut across all social and parental discipline in some of which include drug abuse, prostitution, child trafficking, cultism in educational sector, etc.

It is therefore recommended that the ministry of youth culture and social welfare should live up to their responsibilities by attend to the socio-economic problems of the youths. They could seek multinational organizations participation in youth development and growth. NGOs should be encouraged to participate in youth development in the country, as the youths are the future leaders.

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