RURAL CHILDREN AND THE FUTURE FOOD SECURITY OF NIGERIA

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Edited by:
S. FOLA ADEDOYIN, PH.D
D. OLU TORIMIRO, M.SC.

A BOOK OF READINGS
ON THE
FIRST NATIONAL RESEARCH NETWORK MEETING AND CONFERENCE OF THE CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP)

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Editors
S. Fola Adedoyin, Ph. D
D. Olu Torimiro, M.Sc.

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PREFACE

The first national research network meeting and conference of the Children-In-Agriculture Programme (CIAP) was organized by the National Board of CIAP at its headquarter in Ago-Iwoye, Nigeria from Monday 23rd to Thursday 26th March, 1998. The CIAP network meeting and conference was attended by about fifty participants from many states and agencies interested in sensitizing and capacitising children for future leadership in Agriculture. Delegates from Universities, international and national research institutes, Agricultural Development Programmes (ADPs), Non-Governmental Organisations, Community-Based Organisation, in-school and non-school rural children participating in agriculture and representatives of governments with experience in the subject matter, either as researchers, consultants, extension specialists, project managers or members of beneficiary groups also attended.

The rural farm family resources research and development efforts at Ago-Iwoye, Nigeria identified a missing link in the process of ensuring continuity and sustenance of farming as a worthy profession. The missing link was conceptualized and initiated by Dr. S. Fola Adedoyin and Mr. D. Olu Torimiro as the Children-In-Agriculture Programme (CIAP). After a series of research and development activities on CIAP within the Ago-Iwoye enclave, the idea was brought to the notice of research and development personnel in and outside Nigeria. The reactions obtained were encouraging. A common agreement was then reached on the fact that CIAP is not in support of child labour. Rather, it was established to assist the rural children participating in farming activities so that they may resourcefully make use of their farming knowledge, skill and experience to advantage. This will enhance the continuity and sustenance of farming profession.

To spread the CIAP concept across the country and beyond, appropriate networking arrangement has to be put in place. Hence the idea of the first National Research Network Meeting and conference of CIAP which forms the basis for this book of Readings.

The theme of the network meeting and conference, "Rural Children

and the future of good Security in Nigeria" was divided into six sub-themes as follows:-

- The place of rural children in agricultural development.
- Rural children in the Nigerian youth programme.
- Rural children and the continuity and sustenance of farming profession in Nigeria.
- Factors influencing rural children's attitude towards future participation in Nigeria.
- Proposals on methodology for CIAP implementation in Nigeria.
- Children and youth development within the framework of the Federal Economic Advancement programme. (FEAP).

The first network meeting was held towards the close of the conference to accept members formally into the CIAP National Research Network, to evaluate the first network conference, to achieve collectivity on the modalities for operationalising CIAP, to assign responsibilities for mobilizing people to come together to form state Chapters, and to fix date and venue for the next conference and meeting, agreed upon as an annual event.

We wish to thank Professor. O.Y. Oyeneye, Vice-Chancellor, Ogun State University, Ago-Iwoye, Nigeria of the permission to the CIAP National Board to use the University facilities in hosting the first CIAP National research network conference and meeting and for the assistance of the University in publishing this Book of Readings. Grateful thanks are also due to Professors Bola Okuneye, T.O. Ogunfiditimi, A.A Jibowo, O.O. Oworu, O.L. Oludimu, S.O Olaitan, J.A. Alao, B.O. Durojaiye, M.C. Madukwe, T.K. Atala, M.M. Abubakar, L.O. Obibuaka, E.A. Laogun, C.T. Uwakah, O.C Onazi, S.K.T. Williams, C.E. Williams, Voh, J.O. Babatola., Ogunbameru, J.E. Ekpere, Biola Odejide and Ade Akinbode as well as Rev. Fr. John Patrick - Ngoyi for the help we received in planning and running the network conference and meeting. We are also grateful to the management of Scorpio Inn at Ago-Iwoye for granting free accommodation to our Head Presenters as its contribution to the successful organisation of the conference.

The presence of the Honourable Commissioner for Woman Affairs in

the Ogun State Government, Mrs Doyin Ogunbiyi to declare open the CIAP conference is highly acknowledged.

The CIAP national research network, conference and meeting was held at the Main Auditorium and the Main Committee Room of the Ogun State University in Ago-Iwoye, Nigeria and we wish to once again thank the Vice-Chancellor, Professor O.Y. Oyeneye and university management for providing a professional and friendly atmosphere for the CIAP conference and meeting.

Ago-Iwoye, December 1998:
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The Vice-Chancellor of Ogun State University, Professor O.Y. Oyeneye and the other Principal Officers of the University in a group photograph with participant at the 1st CIAP Conference

WELCOME ADDRESS

DELIVERED BY THE VICE-CHANCELLOR OF OGUN STATE UNIVERSITY PROFESSOR O.Y. OYENEYE AT THE 1ST NATIONAL RESEARCH NETWORK MEETING AND CONFERENCE OF THE CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP) HELD AT OGUN STATE UNIVERSITY, AGO-IWOYE, NIGERIA FROM 23RD - 26TH MARCH, 1998.

The Honourable commissioner for Woman Affairs and Social Development,
Permanent Secretaries;
Principal Officers of the University;
Provost and Deans;
Guest Speakers/Professors;
The Chairman and Members of Board of Coordinators of the National Research Network on CIAP;
The Executive Coordinator and Members of the National Research Network on CIAP;
Other Resource Persons and Participants;
Distinguished Guests;
Ladies and Gentlemen.

It is my pleasure to welcome you to Ogun State University, Ago-Iwoye, Nigeria and particularly to the College of Agricultural Sciences. Specifically, we are happy that you shall be guests to our Department of Agricultural Extension and Rural Sociology for the next few days as participants at the 1st National Research Network Meeting and Conference of the Children-in-agriculture Programme.

When our Department of Agricultural Extension and Rural Sociology took the initiative to establish the Children-In-Agriculture Programme (CIAP), we gave our support because of our realisation of the fact that the programme represents an effort to provide a missing link in the

process of ensuring continuity and sustenance of farming as a worthy profession in Nigeria. It is therefore with great joy that I salute and welcome you to this 1st National Research Network Meeting and Conference of the Children-In-Agriculture Programme organised by the Department.

I particularly welcome distinguished Professors and scholars specifically invited to present Lead Papers. We are happy to benefit from your wealth of experience.

Distinguished participants, despite your very tight schedules, endeavour to find time to visit places of agricultural importance like the Apoje Farms, Omo and Area J4 Reserved forests, among others. Tourists centres like to Birikisu Sumgbo Shrine popularly called the "Mecca of Nigeria" at Oke - Eri, is about 15 kilometers away from here while the ancient pot industry at Imope is some 20 minutes drive off here. If resources however permit, you could also visit the famous Olumo Rocks at Abeokuta.

I have the pleasure once again to welcome you to Ogun State University, Ago-Iwoye.

I wish you fruitful deliberations at the end of the conference.

I wish you God's guidance and safe return to your various destinations.

Thank you.

Professor O.Y. Oyeneye, Vice Chancellor of Ogun State University, Ago-Iwoye, Nigeria exchanging pleasantries with some participants.

OPENING ADDRESS

DELIVERED BY THE HONOURABLE COMMISSIONER FOR WOMEN AFFAIRS AND SOCIAL DEVELOPMENT MRS DOYIN OGUNBIYI AT THE 1ST NATIONAL RESEARCH NETWORK MEETING AND CONFERENCE OF THE CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP) HELD AT OGUN STATE UNIVERSITY, AGO-WOYE, NIGERIA, FROM 23RD - 26TH MARCH, 1998.

The Vice-Chancellor, Ogun State University, Professor O.Y. Oyeneye,
Principal Officers of the University;
The Acting Provost, College of Agricultural Sciences;
Guest Speakers/Professors;
The Chairman and Members of Board of Coordinators;
of the National Research Network on CIAP;
Other Resource Persons and Participants;
Distinguished Guests;
Ladies and Gentlemen.

I am happy to welcome you all to Ogun State and I appreciate the opportunity given to the University to organise and host the 1st National Research Network Meeting and Conference of the Children-In-Agriculture Programme (CIAP). In fact, I must say that we are highly thrilled at the original effort of our Department of Agricultural Extension and Rural Sociology to conceptualize and initate the Children-In-Agriculture Programme (CIAP).

The theme of your conference "Rural Children and the Future Food Security in Nigeria" is not only current but also topical, in view of the efforts of the present administration to promote sustainable self-sufficiency in food production in Nigeria. It is when sustainable sufficiency in food is attained that the abundant human resources of this country can be optimally mobilized for rapid socio-economic development.

I am aware that the Children-In-Agriculture Programme (CIAP) is not in support of child labour. It is also not an attempt to compel rural children or farmers' children to engage in farming occupations. Rather, it was conceptualized and established to assist the rural children participating in farming/fishing activities so that they may resourcefully make use of their farming knowledge, skill and experience acquired through socialization process right from childhood to advantage, if they choose to become farmers in future. I see this as a solid and reliable foundation for sustainable agricultural productivity in Nigeria.

Looking through the list of participants at this meeting/conference and the papers listed for presentation, one is convinced that resolutions of very high quality shall emanate at the end of the conference. I therefore wish you a successful deliberation. However, your recommendations must be forwarded to government and all relevant agencies at the end of the conference.

Distinguished professors and scholars, ladies and gentlemen of the press; let me remind you that you are in a very peaceful state where there are a lot of places of interest that you can visit. Do not hesitate to take good advantage of the tourist attractions around here before you go back to your various locations. I wish you a useful stay in Ogun State.

No doubt, your conference is a worthwhile venture which interests the nation and particularly the state. I am therefore glad to declare the conference open.

Thank you all.

From left: Mr. Dixon O. Torimiro (CIAP Programme Officer),
Dr. S. Fola Adedoyin (CIAP National Coordinator),
Dr. (Mrs) Stella William (Osun State Chapter Coordinator)
Dr. Isiaka A. Idowu (Ogun State Chapter Coordinator)

KEYNOTE PAPER

CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP): A MODEL FOR INVOLVING RURAL CHILDREN IN SUSTAINABLE FARMING IN NIGERIA

BY

DR. S. FOLA ADEDOYIN AND DIXON OLU. TORIMIRO

Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago-Iwoye, Nigeria.

ABSTRACT

Children farmers are critically focused and considered as the missing link in the rural farm family resource development and research. This was further established with highlights of some of the research findings from Ago-Iwoye enclave.

Children-In-Agriculture Programme (CIAP) is conceptualized as the programme for filling the missing link without leaving out a proposal for an adequate approach for research - extension - farm family linkages.

Possible considerations for implementing the CIAP in Nigeria are suggested within the framework of the baseline studies and possible recommendation are made for its National network operationalization and integration into the extension system.

INTRODUCTION

Rural dwellers largely constitute the farm families which include the men farmers, women farmers and children farmers. Until recently, the focus of several agricultural and rural development programmes have given priority to men farmers alone, without significant cognisance given to the other members of the farm family. The need to accommodate the

women farmers in these programmes however, were felt when sufficient findings on gender issues in farming have really proven that women too have significant role to play (Dunstan, 1976; Simmons, 1976; and Williams, 1991). Moreso, several expository campaigns among the women elitic folks have bought for their rural counterparts some agricultural and rural development programmes which have greatly had a measurable impact on their development. The most popular among these are the Better Life for Rural Women Programme, Women-In-Agriculture Programme, Family Support Programme, etc.

The efforts to integrate the entire farm families into any agricultural or rural development programmes will not be complete without giving due and appreciable cognisance to the relevance of rural children participating in farming activities. This could be more achievable through conceptualization of well distinct programme that will cater for the needs and interest of this category of children in farming. Such a programme as a matter of fact should be well institutionalized in order to give room for its periodic assessment through research.

Amin (1994) found that the children had been exploited in contributing to the household food production and they are put under exploitative situations in the form of low pay, hazardous and dangerous working conditions, excessive long and continuous hours of work and other types of abusive social and work practices. He further observed that, under these circumstances, the health, physical, educational and intellectual development of the children as well as their lifetime opportunities may be seriously hampered.

Furthermore, the low cognisance given to the rural children is more evidenced in the current operational linkages existing between the research-extension-farm family, which apparently focuses attention on the men farmers and probably, the women farmers.

This paper however, assumes that rural children participating in farming activities have the potentialities and the most tendencies to continue with farming if their needs and interests are justifiably satisfied in the profession. Moreso, all children appear to need to approvals of parents,

teachers and peers; to be loved; to achieve some success; to experience stability of social relationships to have some attention paid to them; to be able to manipulate things and ideas; and to think positively of themselves\s (self-regarding sentiment) (Lovell, 1958).

Against this background, this paper highlights the area of immediate research for understanding rural children participating in farming activities which may further constitute the baseline research for the operationalisation of the children-in-agriculture programme (CIAP). It further conceptualizes the CIAP as an approach to strengthening agricultural development in Nigeria through a more accommodating farm family - extension linkage approach. More so, the methodology for CIAP implementation is proposed.

HIGHLIGHTS OF RESEARCH EFFORTS OF CIAP: PRELIMINARY EXPOSITION

The inception of rural farm family resources research and development in Ago-Iwoye enclave has necessitated the need to outline a series of researchable areas for consideration within Ago-Iwoye and its environs.

The following research works have been conducted in Ago-Iwoye:-

- Socio-economic characteristics of rural children participating in farming activities.
- Infrastructure and social amenities requirement of rural children participating in farming activities.
- Identification of needs and interest of rural children participating in farming activities.
- Level of involvement of rural children in farming activities.
- Role of rural children in farm - family decision making process.
- Rural children's socialization process into farming activities.
- Factors affecting the participation of rural children in farming activities.

However, findings of pilot survey carried out on rural children programme showed that there is no institutionalized National agricultural programme for the rural children in existence in Nigeria. This further

strengths the need for developing and agricultural programme for rural children participating in farming activities.

The various baseline studies conducted on one hundred and twenty rural children between the ages of 6 and 17 randomly selected revealed the following:

- Majority (98.00%) of the rural children have farmer parentage; 90.00% of them are involved in farming activities such as: clearing of farmland, planting, thinning, supplying, weeding harvesting, packing of farm produce and processing; while few (20.00%) were occasionally involved in fertilizer application and storage activities.
- Majority (90.00%) were initiated into farming activities from age 4 through a "socialization
- process" which is the general process by which the human actor acquires the skills and values that enable him to function in a social system (Campbell, 1975). Study conducted on the 100 parent farmers randomly selected for interview further confirmed that the children farmers go through the following socialization process; Mere accompanying their parents to farm, observing the farming activities, talking independent assignments on farming activities, and full participation in farming activities.
- 48.33% indicated that their parents do not have formal education, while the majority (95.00%) of the respondents (i.e, the rural children) are in either primary school or secondary schools. 74.17% were between the ages of 11 and 17 while others were below 11 years of age. Moreso, 80% indicated that they have spent an average of 8 years in farming, which implies that they have invested their early age experience in farming activities in combination with their formal educational opportunity as against the majority of their parents that have no formal education.
- 48.57% claimed to be full-time farmers, while 41.43% claimed to be part-time farmers. Full-time farming is an indicator of a typical rural set-up in the study areas, in which everybody is engaged fully in contributing to the house holds' upkeep, especially during the

formative stage of life. The fill-time young farmers, if encouraged, may later serve as a reservoir for indigenous farm knowledge and replacement for the ageing population that are still engaged in farming.

– Test of the relationship between their current interest in farming activities and their future aspiration in the same profession showed a positive and significant relationship (r = 0.6692) but with 44.785% strength of relationship. This further implies that if their current interest in farming can be sustained through a more organized effort, the entire nation can have a pool of farmers in future who are more educated and can be more susceptible to innovations.

OPERATIONAL CONCEPT OF CIAP

If the entire farm families need to be adequately integrated into the agricultural development programme, then the issues transcend the focus on the men farmers and women farmers alone, but more deserving focus and attention should equally be given to the children farmers. This narrow scope may constitute an important area of research in order to have a complete data on rural farm-family resources research and development efforts.

The rural children through "enculturation and socialization processes" have naturally invested their early life interest, time and energy in farming activities. This is one of the theoretical frameworks upon which the baseline studies are based. The experiences gained by this children need to be critically understood, protected and nurtured. An open opportunity may necessarily be institutionalized for such children in pursuing their interest in farming activities, hence, further need for CIAP.

Therefore, the CIAP is conceptualized as the programme aimed to nurturing the interest of rural children who are participating in farming activities to the level at which they can sustain their interest in the activities, with due regard to the necessary child ethical considerations. That is, the CIAP will focus on keeping, nurturing and maintaining the interest of these children in farming from childhood up to adulthood. In achieving this, consideration will be given to their expressive interest and

needs for effective participation in farming activities.

A PROPOSED RESEARCH - EXTENSION - FARM FAMILY LINKAGES

APPROACH FOR CIAP OPERATIONALISATION.

It is strongly viewed that CIAP will enhance a sustainable agricultural development in Nigeria, since it will constitute a strategy for replacing the retiring aged farmers on the farms; it will constitute a forum of up-dating and linking indigenous knowledge with newly improved farm practices through extension-farm family linkage approach. (See figure 1). This may further enhance the focus of the farm technology researchers by retrospective giving due consideration to the children farmers when developing any improved technology for the use of the farm families.

Figure 1 shows the relationship between the extension and the farm

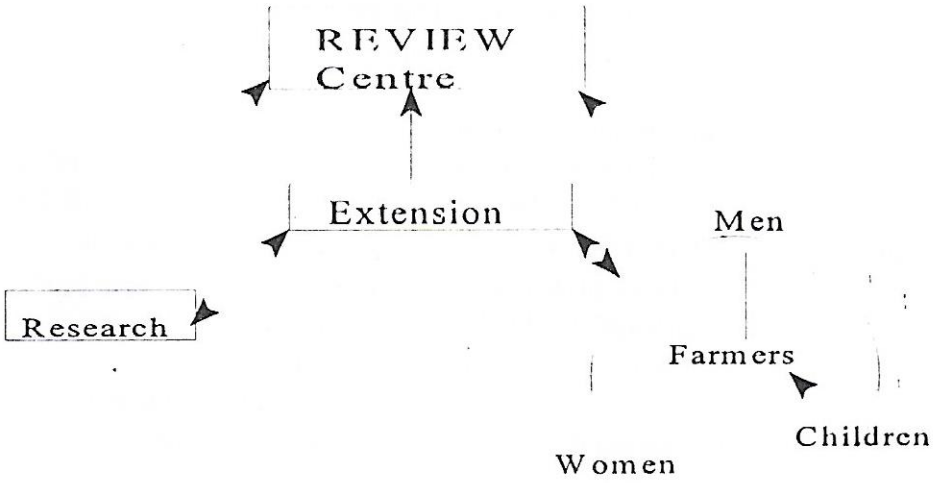

Figure 1: A Model of Research extends - Farm Family Linkages for CIAP Operationalisation

family, that is, with the development of interaction that considers all the members of the farm family, the men farmers the women farmers and the children farmers. Moreso, a common convergent is proposed for review of research operations, extension operations, operation of farm family, treating all members as important.

A METHODOLOGICAL APPROACH TO CIAP IMPLEMENTATION:

The knowledge of baseline information though the various finding highlighted earlier will form the basis for designing the implementation strategy for CIAP.

All the rural children between the ages of 6 and 17 participating in farming activities may be given credence for eligibility. The programme may be institutionally based, such as in schools, churches, mosques, etc. or it may be based in the villages. This is to say that both schooled and unschooled rural children must be involved.

These categories of children can be voluntarily enrolled into programme with the consent of their parents or guardians and their heads of schools and villages. The Agricultural science teachers and the extension agents must be given adequate orientation through an organized CIAP Management workshop of effective implementation for the programme.

An organizational structure may be developed to enhance effective linkage between the National CIAP Network, the various states extensions institutions and locally based programmes.

Some of the activities predominantly available in each CIAP will depend largely on the farming activities predominantly available in each CIAP base, in addition to the following:

- doctrinal agricultural stories.
- field trip.
- setting up various agricultural enterprises.
- farm exchange programme.

- rural children fellowship.
- demonstration plot.
- Audio-visual show.
- Agricultural film show.
- Agricultural show for the children.
- Award of prices, scholarship and grants, etc.

However, the interest and needs of the concerned rural children must be given considerations in line with activities.

RECOMMENDATION AND CONCLUSION

CIAP concept requires an immediate attention through a joint research efforts among the various relevant development disciplines in agriculture and related fields. The research efforts highlighted earlier may be replicated in the various rural environments with different sociological backgrounds. This can further strengthen the basis for establishing the CIAP in schools and villages.

CIAP adequately networked in Nigeria through a well attended academic and researchers conferences will facilitate and generate more ideas for fine-tuning its OPERATIONALISATION.

Finally, the various State Agricultural Development Projects (ADPs). In the country may be effectively involved through an agreeable workable linkage, so that its effect can be likened to Women - In- Agriculture programme recently adopted by the ADPs.

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COMMUNIQUE

The Children-In-Agriculture Programme (CIAP) held its first national research network conference and meeting at Ago-Iwoye, Nigeria from Monday 23rd Thursday 26th March, 1998.

The Conference attracted well-meaning people from all sectors of the Nigerian economy. Among those present at the occasion are professor O.Y. Oyeneye, Vice-Chancellor, Ogun State University, Ago-Iwoye, Nigeria, Mrs Doyin Ogunbiyi, Honurable Commissioner for Women Affairs and Social Development in Ogun State, Nigeria, Professor Bola Okuneye, Chairman, Ogun State Organizing committee of the Federal Economic Advancement programme (FEAP); Professor A. A Jibowo, obafemi Awolowo University, Ile-Ife, Nigeria; Professor, T. K. Atala, Ahmade Bello University, Zaria; Professor T. O. Ogunfiditimi, University of Ibadan, Nigeria; Dr. M.C., Madukwe, University of Nigeria, Nuskka, Nigeria; Mr. J.S. Oluwole, Director, Human Resources Development Component of the Ogun State Agricultural Development Programme (OGADEP) and Mrs Biola B. Phillips, Federal College of Chemical and Leather Technology, Zaria, Nigeria. In all, about 80 distinguished academics from Universities, research institutes and other tertiary institutions; and professional extension and development workers from government, non-government, community-based and independent organization as well as the mass media organizations participated at the technical sessions and the network meeting.

The Conference has as its theme: "Rural Children and the future Food Security of Nigeria" which was sub-divided into six sub-themes as follows:

i. The place of rural children in Agricultural development.
ii. Rural children in the Nigerian youth programme
iii. Rural children and the continuity and sustenance of farming profession in Nigeria;
iv. Factors influencing rural children's attitude towards future participation in Agriculture;

v. Proposals on Methodology for CIAP implementation in Nigeria; and
vi. Children and youth development within the framework of the Federal Economic Advancement Programme (FEAP).

About 75 research and review papers were presented and discussed at the conference.

At the end of the conference, the following resolution were collectively agreed upon:

1. Children-In-Agriculture Programme (CIAP) as a new initiative should focus on the rural children between the ages of 1 to 18 years.
2. The main aim of CIAP is to conduct research on issues relating to farmers' children's participation in agriculture and to empower the children towards sustainable and profitable agricultural production in Nigeria.
3. The working methodology of CIAP is through employment of three key strategies of promoting development (i.e., cooperation, integration and participating) to:
   i. Build agricultural training into the process of child development; and
   ii. Empower children for sustainable agricultural development through integration of CIAP into their normal socialization process.
4. CIAP should formulate and emphasize on specific programmes of specific groups of farmers' children (i) out-of school, (ii) in-school; and school leavers.
5. Teaching of agriculture should be given prominence as a cardinal part of primary school curriculum.
6. Other approached recommended as suitable for implementing CIAP are:
   i. Children Farm Plot (CFP);
   ii. Children Extension Meeting (CEM) - This will facilitate the process of catching them young for training and socialization on

the farm;

iii. Organization of peasant farmers' children into groups for re-orientation towards economic farm operation.

iv. Instituting training in technical agriculture at local level for children.

7. Community school teachers and pupils should form targets for training in technical agriculture so that they can, in turn, be used to teach other community members.
8. Continuous effort should be made towards evolving a practical and workable methodology for effective integration of rural children into sustainable agricultural production.
9. A network of government, non-government, private, and community-based organization, groups and individuals who are interested in CIAP should be organized at national, state and local levels so that a common approach or methodology of integrating children into agriculture could be employed.
10. CIAP should collaborate with the various NGOs, international organizations and other agencies working on children development.
11. CIAP should continuously study the problems and prospects associated with integration of rural children into agriculture and generate appropriate innovation, ideas or strategies for solving the problems.
12. A deliberate move should be made towards integrating CIAP into the ADP/Extension system at states level as was done in the case of the Women-in-Agriculture (WIA) programme.

The following actions are required for effective realization of the above mentioned recommendations of the conference:

1. The National headquarter of CIAP should accelerate its effort to establish chapters in all the States of Nigeria; ensure that CIAP national research network conference and meeting hold annually in rotation among well established State chapters; put in place

appropriate networking arrangement; and solicit/attract collaboration of relevant development Organizations and individuals.

2. Researchers, extension specialists and other development workers are to promote understanding of the CIAP concept at the grassroots level using the most appropriate methodology and influence their organizations to become active participants in the process of implementing CIAP.
3. Governments at National, State and local levels should direct their relevant ministries and agencies to support and participate in CIAP; and to create conducive environment for its fruitful operationalization in all parts of the country.
4. International and national donor/support agencies are to assist with necessary facilities and funding for effective operationalization of CIAP.

SECTION ONE

LEAD PAPERS

Some of the Lead Speakers at the 1st CIAP Conference

RURAL CHILDREN AND THE CONTINUITY AND SUSTENANCE OF FARMING PROFESSION IN NIGERIA

BY

TITUS OLA OGUNFIDITIMI

Department of Agricultural Extension services, University of Ibadan.

INTRODUCTION

Rural development is a strategy designed to improve the economic and social life of a specific group of people such as the small - scale farmers, the rural youth and women. This strategy must recognize. (a) The rate of transfer of people out of low productivity agriculture and related activities into more rewarding pursuits (b) That the mass of the people in the rural areas face varying degrees of poverty and (c) That rural areas have labour, land at least some capital which, if mobilized could reduce poverty and improve the quality of life. This implies fuller development of existing resources, including the construction of infrastructure such as roads and irrigation works, the introduction of new production technology, and more importantly, **The creation of enabling succession environment** for new types of attitudes, institutions, organizations, and occupational frame work that will help to promote enduring sustainability. Against this back ground, the world conference on Agrarian reform and development in 1979 recognized the need for a continuing system for follow-up of farming activity as a prelude to vocational agriculture. This is to say that there is the dearth of need to encourage succession to farming at the grassroots as an occupation within the rural sector of a given economy as practiced in the areas of commerce, politics, religion and so on.

The rapid population growth in Nigeria is a concern. Nigeria's average population growth is about 2.9 percent and its impact on economic welfare is a serious worry. The average Nigerian women has six (6) children and are mostly found in the rural area. With the advent of the "zero illiteracy level" campaign, most of these children will possess

education that will naturally equip them for urban employment, socialization and the neglect of "crude" occupation such as farming. This is why it is appropriate to say that the farming profession in Nigeria has been affected by the "Dutch Disease" (DD) which in turn, affects the rural children.

It is true that attending primary schools reduces the probability of being poor by almost 50% while attending secondary schools cuts the probability of being poor by 20% again. If this is brought to bear on succession to farming as an occupation in Nigeria the rural areas of the country will be a better place to live for ever.

THE RURAL YOUTH

Numerous interrelated choices have to be made in planning the development of subsistence agriculture. Hence, three simultaneous courses of action must be embraced in order to maintain an acceptable level of general welfare of the rural dwellers. These are (a) A stung and focused emphasis on economic growth. (b) Availability of better access for the poor to social services and (c) Provision of adequate infrastructure and targeted group interventions such as the rural youth and women in farming in order to maintain enviable sustainability in agriculture.

The rural children in particular constitutes the pivot around which the future of farming as a profession revolves.

Although most countries like Nigeria have specified national goals and targets in qualitative form, very few national plans have actually established or addressed the issue of rural children as a vulnerable group that will embrace farming as a profession.

As the rural population continues to increase due in part to high birth rates and rising infant survival rates, the child and youth populations are bound to grow faster than the overall population. The net effect is that the overall population of rural children will increase tremendously thus leading to unemployment, under employment and rural - urban migration etc. To arrest this situation, there is the urgent need therefore to take a critical look at a sharp re-distributive focus on the rural children into

institutional integration of farming profession and thus becoming the bedrock of farming and rural transformation.

Within this perspective, rural children will succeed their parents and take up farming as an occupation. This will be in line with the "back to land" policy advocated by some states of the nation. Doing this will reduce poverty, provide employment, check rural-urban migration and enhance sustainability in Agriculture

STRATEGIES FOR ENSURING CONTINUITY OF FARMING PROFESSION AMONG THE RURAL CHILDREN

(a) Enabling National Policy

Nigeria has pursued different approaches in recent time to make the rural sector "attractive". However, the ban of the whole exercise is the lack of "focused target" and what is expected. Politics seem to dominate decision which are more often than not at abeyance arises to specifically set out a policy out fit that will make farming as an occupation for rural children through the tutelage of their parents. Policies aimed at ensuring this could be channelled through the formation of a Ministry of Extension science to ensure proper training and provide critical feed back for policy makers. In addition, this ministry will provide a set of information signals for improved programme management.

(b) The 1978 Land Use Decree

The 1978 Land Use Decree stressed the leasehold of landed property and hence did not encourage the concept of inheritance among offspring. To encourage the rural children to embrace farming as an occupation, there is a need to revisit this decree and allow the rural areas to enjoy free hold enterprises so as to promote and make the rural children embrace farming as an occupation and to kindle in them a sense of undisturbed inheritance.

(c) **Adequate Incentives**

Incentives such as credit facilities, uncomplicated land tenure system, easy access to farm inputs, periodic village farming exhibitions, undisturbed inheritance of farming asset, provision of rural amenities comparable to urban outfit etc., will make the rural children fall in love with farming as an occupation.

(d) **Agricultural Modernization**

The drudgery of agricultural mechanisms of the past makes the profession less attractive to a would be practitioner. The recent development of building on indigenous knowledge of the farmer and the active participation of the rural dwellers in policy issues affecting them will go along way in intimating rural children into taking farming up as an occupation.

(e) **Promotion of Young Farmers Club**

To make rural life more attractive, sustaining and to teach the rising generation to need to adopt farming as an occupation, rural children should be encouraged to join the young farmers' Club for the purpose of fulfilling their educational, economic, social and recreational objectives. Projects must be designed to propel enhanced interest in agriculture and the overall well-being of participants through educational facilities.

(f) **Induction into the Practicing Farmers Association of Nigeria**

The recent move in Nigeria by the practicing Farmers Association of Nigeria headed by Admiral Muritala Nyako is a welcome development. This association will however fall short of achieving its objective if it fails to incorporate and device a means of harnessing the rural children which constitute the bottom line for the growth and development of such association. Their induction should take the form of sensitization that will make them build on their parents occupation within the axiom of "making the best-better".

(g) **Mix activities**

The development of Agro-allied activities such as small - scale farm industries, the like of Tea, Tobacco, poultry, fisheries etc., as an integrated part of farming will kindle rural youth interest in farming as a career. Fulfilment of these activities calls for an expansion of goods and services available to the rural youth and institutions and policies that will enable them to benefit fully from the whole range of economic and social services and thus making such development strategy self-sustaining.

CONCLUSION

Data concerning rural children succession rate to farming as an occupation are very scarce. This therefore opens a new area of research to policy makers, scientists and Extension specialists in the filed of Agriculture and Rural Development.

Nigerian must therefore make a fundamental shift away from policies and institutional arrangements that promote dead-end and rent-seeking ideas to succession policies almost in all sectors of the economy especially in agriculture in order to promote among other things efficient and sustainable occupational growth and development that will stand the test of time.

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RURAL CHILDREN IN THE NIGERIAN YOUTH PROGRAMME

BY

PROFESSOR A.A. JIBOWO

Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife

INTRODUCTION

The issue of providing adequate food for all citizens of any nation is a primary concern of all nations. Nigeria has grappled with this problem since independence, yet the situation has become worse since the commercial exploitation of crude petroleum. Nevertheless, Nigeria has continued to come up with one policy after the other, backed up with prescribed strategies and programmes over the years. Even if these strategies and programmes have not resulted in removing our food deficit, they have demonstrated the apparent desire of the government to tackle the problem of inadequate food supply.

One of the programmes actively pursued in some parts of the country particularly in the 60s was the involvement of youths in agricultural production through the formation of many Young Farmers' Clubs (YFCs) particularly in the Western part of the country. These were built upon the principles of the Young Farmers' Clubs which were first introduced into the country in 1957 by the colonial administration.

However, the activities of the Young Farmers Clubs are concentrated in Secondary schools. Today they are almost non-existing except in secondary Schools where students who take part in farm practical classes are often regarded as members of the Young Farmers' Club. However, the financial support for their activities, regular meetings, possession of scheduled plans, activities and visits by Young Farmers Club Agents are features of the standard YFC which are virtually non-existing in the schools.

Children-in-Agriculture programme is expected to focus on the active participation of children in food and fibre production. The topic of this

paper is expected to examine the above question within the context of youth programme. The problem of definition then creates some conflict. Can children be regarded as youths? Participants at the International workshop on Rural Development in Africa organized by the commonwealth secretariat (1978) decided that,

> . . . one can talk of the role of **children** in rural development. Such reference will cover children up to the age of about 12.

That report further classified the **youth** into

1. In-school: comprising those in primary, secondary/ training and higher institutions
2. Out-of-school: comprising youths with no formal education, school leavers, employed and unemployed. This workshop regarded people in the age group of 12-30 as youths.

The lack of specificity in the above definitions is obvious. This is because the first definition regards those who are up to the age of 12 as children, while the second definition groups those who are in primary schools as youths. Hence children in primary schools could be regarded as youths. During the proposal stage of this programme, this author's first reaction was that the idea is covered by or similar to that of the existing Young Farmers' Club, suggesting that it could not be a fresh initiative. If the intent is to regard it as a fresh initiative, the children concentrated upon have to be clearly defined in terms of age and other features which will make them different from those reached through the YFC programme. The Young Farmers Club focuses primarily on youths within the secondary school age of 13 - 18 . Some organizations regard 0 - 15 or 0 - 18 as the age brackets for children (CODESRIA, 1997).

This paper has therefore conveniently focused on children as those of the primary school age of about 6-12 years.

The remaining part of this paper answers two questions:

(a) What constitutes the Nigerian Youth programme?
(b) What should be the focus of the Nigerian children's programme in facilitating future food security?

Youth Programmes in Nigeria

According to Jibowo (1989), the purpose of youth programmes is to contribute to the development of a self-reliant and egalitarian Nigerian nation, through equipping the youths with the necessary qualities for decision-making and taking effective actions in educational, economic, social and recreational fields, and thereby become useful citizens.

Its specific activities include acquisition of skills, knowledge and positive effect in agriculture, home management, hygiene, record keeping, leadership development, problem-solving, decision-making, use of leisure, cooperation with others, patriotism, work ethic and industrial development.

The youths are normally organized into youth clubs and cooperatives to facilitate attainment of the purpose of youth programmes. The Agricultural Science teacher from the Ministry of Agriculture/Agricultural Development Projects or social Development, Youth and Sports sections of the government , is to organize youth clubs in the schools and in the community outside the school. Training is necessary for the youth leaders who also train the youths in agricultural, other economic ventures, social, cultural and recreational programmes. Financial support is also attracted for youth programmes for established government institutions such as the banks.

Rural children programmes are expected to gain experiences from the youth programmes, if they are not an integral part of the youth programmes.

Rural Children's Programme in Nigeria

This section discussed (a) purpose and objectives of children's programmes, (b) characteristics of children, (c) specific programme areas for rural children, (d) principles of rural children programming; (e) organization of rural children.

Purpose and Objectives of Children's programme

The purpose of rural children programme is to equip them with

necessary qualities for starting to take decisions and action in the educational, economic, social, health, environmental and recreational fields to enable them become useful citizens. The children are to undergo learning experiences leading to:

1. Acquisition of rudimentary knowledge, skill and attitude in agriculture, home management, health and hygiene.
2. Undertaking some profit-oriented farming projects.
3. Developing interest and elementary skill in accurate record keeping.
4. Developing awareness of their leadership and occupational talents, systematic problem-solving and decision-making processes.
5. Developing awareness of, and elementary skills in practicing healthy living, profitable use of leisure through handicrafts, games and other recreational activities.
6. Acquisition of the desire and some skill in working with their brains and hands, cooperating with others, developing work ethic and patriotism.
7. Acquisition of rudimentary knowledge of their culture and society.

Characteristics of rural Children

Children are largely of elementary school age, economically dependent on their parents. They may be within school or out-of-school, male or female. Children are characterized by the following other attributes:

1. Probing propensity: Children eagerly probe into objects in their environment, and have the inclination to dismantle objects in their environment, and try to carry out fascinating activities similar to those carried out by adults. Hence they mould clays and dismantle electronic equipment.
2. Minimal risk aversion. Children have little awareness of risks associated with various decision alternatives, hence convenience is their predominant criterion for taking actions. Hence a child would still go to visit his friend in the house of a hostile neighbour, regardless of the warning against such a move owing to fear of

poisoning by the neighbour which his parents might have hidden in their super-ego.

3. Experiential, imitation and participatory learning are their predominant fundamentals of learning. Children learn to continue with a behaviour pattern when they go through the experience and derive satisfaction from such an experience. They avoid those from which they experience dissatisfaction. Children imitate the behaviour of parents, teachers, and other agents of socialization in the process or learning. Some bright children adopt the handwritings of their class teachers. Participation is an important fundamental of learning at all stages of life, including childhood years.
4. Greater rate of overt action than serious intellectual exercise. Often he acts before he realizes the implications. Hence he makes frequent mistakes. This is because the rate of growth in intellect is slower during the childhood years (6-12), than adolescent years. Similarly, rate of growth in manipulative abilities is faster than rate of intellectual development during the years of childhood and pre-adolescence (13-17).
5. High degree of dependence. Children depend on adult members such as parents, other family members and teachers in carrying out many personal, social and economic activities. They rely on them for provision of food, health-care, water, housing, clothing and cleaning activities. They only provide assistance to parents and seniors in most of these activities.
6. Little tendency to apologise. Children rarely deliberately apologize for their errors. They exhibit temporary avoidance behaviour whenever they are scolded by adults as a result of their errors.
7. Predominantly emotional modality. They react to physical and emotional disturbances through emotional outbursts in form of quick anger and weeping, as means of restoring their sanity. Disturbance in their emotional states significantly leads to disequilibrium in their cognitive and psychomotor modalities. This they express in forms of withdrawal syndrome or sometimes violent reactions to significant

objects and individuals in their life spaces.

8. Development of initial managerial skills. In the early childhood years (6-9), children are exposed to managerial skills possessed by parents, peer groups and teachers. Rural children accompany their parents to the farm to learn farm management decisions and actions. Urban children are exposed to marketing of farm and industrial products and services. Both rural and urban children are exposed to home management and family decision-making. They later practise some of these skills in the late childhood years (10-12), for example, through establishment of small farms by rural children. This initial development of management skills enables rural children to excel their urban counterparts in management skills during the pre-adolescence and adolescence years.

Specific Programme areas for Rural Children

The specific programme areas which rural children could embark upon will emanate from a systematic situational analysis and identification of problems, and resources for their solution, which are accessible to children in a particular rural community. It is expected that the purpose and objectives of children's programmes and the characteristics of children outlined, should be useful in identifying projects which are suitable for children of various characteristics.

Some of the programme areas which children could embark upon are as follows: (1) Agriculture, (2) Processing of agricultural products, (3) Rural industries, (4) Health and sanitation, (5) Community development, (6) Recreation.

Agriculture: Children could undertake:
Crop production in vegetable and fruits production, production of seeds and seedlings, fibre production, stem and root tuber production.
Livestock production could include sheep and goats, pigs, rabbits, snails, poultry and egg production. Fish-farming on a small scale is a viable project.

Marketing of agricultural products is a very promising project for the children. They could sell fresh milk, cheese and butter, fish, beef, pork, and goat meat. They can also sell fruits and vegetables, palm-oil, groundnut oil and kola nut.

Processing of agricultural products: They could cooperate with adults in processing of palm-oil, vegetable oil and groundnut oil, preparation, freezing and packaging of fish and poultry for sale. Production and sale of water-melon, cucumber, pumpkin, carrot, lettuce, spinach, pine-apples, plantain and pawpaw fruits constitute lucrative and challenging projects.

Non-agricultural industries: Children could acquire skills in **blacksmithing** to produce simple agricultural tools such as axes, hoes, cutlasses, simple knots and bolts, to fasten parts of farm machines and equipment; **tailoring** industry. **Handicraft** industries for basket weaving, chair-weaving, electricity globe shade weaving, footmats, calabash carving, sponge production and cloth weaving. Carpentry should be taught for production of household furniture. Pottery and wood carving are other vocations.

Health and Community Development: Children could carry out voluntary cleaning of public facilities such as town or village halls, streets, and post-offices. They can carry out organised sanitation at school and home without compulsion. Cleanliness competition could be organised among schools and communities. They could plant and maintain flowers in public centres and schools. The could assist others in digging community source of water, construction of bridges across local streams and road maintenance.

Sports and recreation: Children could be assisted to develop skills in outdoor activities such as soccer, athletics, wrestling, swimming, music and drama; indoor activities such as dancing, chess, draught and other local games such as 'ayo'. Inter-community and inter-school competitions could be organised.

Organization of Children

To attain the objectives of children through planning and implementation of the children projects, children should be organized into children clubs such as Children Farmers Club, association of Children Farmers, and Children Farmers Cooperative. Individual children can also undertake projects under the guidance of a Children Leader. The Children Leader could be a government employee because of the difficulty in securing voluntary services in this country.

Where children associations emanate from religious groups, it could be easier to get volunteer leaders, as such volunteers would regard their actions as services to God. The children leader should command a positive image in the community. He should also undergo training in technical subject-matter such as agricultural production, processing and marketing; human relations skills; and project management. The training is to take place in a school of agriculture, under a specialized training programme, or a vocational training school. The Leader could also be trained by the Youth Officer in charge of the area. The leader should then organize training for the children.

Children should be assisted financially by government and parents to start practicing their vocation and trade.

Principles of Children programme

In order to improve efficiency, planning of children programmes should adopt some principles:

1. The purpose and objectives must be clearly stated.
2. Project earmarked for implementation must be selected on priority basis, taking into account the needs and interests of children.
3. Children programming philosophy, policies and procedure must be clearly stated at all levels of government.
4. Consent of parents of children must be obtained.
5. Projects and methods must be consistent with local culture.
6. Reliance on local resources is essential to successful children programming.

7. Relevant leader and children training is a pre-requisite to effective programme.
8. Programmes are based on current data about the Farm, the children, their homes, community and nation.
9. Evaluation is continuously carried out in a successful children programme to allow feed back, motivation and modification.

CONCLUDING STATEMENT

The issue of youth programming is a relatively new field, in spite of the various legislations such as the Declaration of the Rights of the Child of 1959, the Charter on the Rights and welfare of the African child of 1979, and International Convention on the Rights of the Child of 1989, which tend to regard children as social rather than passive objects (Codestria, Bulletin, 1997).

The need to conduct a lot of research into the various dimensions of children programmes is obvious. There is little or no information on the contributions of children to family labour and economy, attitude of children towards manual work and working in groups, factors that motivate children to work on projects, effects of participation in children projects on youth and adult life and profession. We are ignorant of the dynamics of effective participation by children leaders, methodology of children research. It is expected that this conference will examine some of these questions.

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THE PLACE OF CHILDREN IN AGRICULTURAL DEVELOPMENT

BY

J. ADE ALAO

Department of Agriculture Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife, Nigeria.

INTRODUCTION

It is a known fact that in many developing countries of the world, agriculture is the backbone of their national economy. Its important and dominant role in the national economy is seen in its contributions. It is the sole or greatest earner of foreign exchange; it is the greatest employer of labour and in fact the employer of the last resort; it provides for the feeding of the nation with adequate food in the right quantity and quality; and it provides materials for the housing construction of the population. Agriculture, should, at certain stage of economic development, supply labour for the emerging urban industrial sector. Therefore as the agricultural sector becomes more and more efficient, it requires less and less of the country' labour force to produce the nation's food supply event increased rate and dimension.

The scenario painted above is more succinctly true of the rural sector of the economy. In Nigeria today, about sixty-five percent of her 100 million population live in small communities that are essentially rural and about 90 percent of these depend on agriculture and agriculturally related activities for their means of subsistence and livelihood.

Rural communities are important in a lot of ways, among which are:

- a high majority of Nigerians including those currently living in urban centres and cities were born, raised and grew up in these rural communities before emigration to their present urban/city abode.
- the rural communities constitute the bedrock of the nations culture. Therefore the most authentic and unadulterated aspect of our culture can only be found in the rural areas.
- The most fundamental institution of the society - the family - and its

values are most preserved and nurtured in the rural communities.
- There is a more delicate balance between the rural family and agriculture in t he rural communities. Infact, agriculture, to a ruralite, is a way of life, rather than a profession.
- The subsistent agricultural production of rural farm families has helped to sustain our country, Nigeria for centuries.
- The rural farm families constitute the foremost and primary agent of socialization of the young in rural societies.
- Agriculture is the predominant occupation of rural dwellers.

ROLE OF CHILDREN IN AGRICULTURAL DEVELOPMENT

There are various ways by which one can define the population cohort popularly referred to as children. Coombs et al. (1973) opined that a child en-route to adulthood passes through four stages:

(a) infancy and early childhood - these are from age 0 - 5 years.
(b) Childhood - these are ages 6 - 12 years corresponding with provision for primary schooling
(c) Adolescence - these are 13-18 years of age corresponding to secondary schooling.
(d) Post-adolescence and young adults - ages 19 to 24 years of age.

These age categories are related partly to stages of biological maturity, but even more to the social economic circumstances in which a child grows up. In the United states of America, Sanders et al. (1966) reported that the mean age of 4-H members is approximately 12.4 years, whereas in one Asian county, the national committee for adult education redefined "adult" to include any person ten years of age or older who is out of school. According to combs et. al.,(ibid) (1973), by 'children' they mean those who have not yet assumed any adult tasks, since there can be no standardized classifications of young people that is cross-culturally applicable to all nations. For instance, the expectations of a ten year old in Britain, or United States will be different from that in Nigeria, Botswana or Mali. Therefore an operational definition of (children' in the

context of this paper and within our own socio-cultural milieu are those young people between the age range of 6 to 14 years which approximates children who are schooling and non-schooling and resident in rural communities is their families of orientation.

THE NATURE AND FUNCTIONS OF SOCIALIZATION IN SOCIETY

Socialization is the process by which the norms and values or a society are instilled into new members so that they can behave as expected in the society. It is the process by which the "barbarian invaders of each new generation" as Ralph Lintion called newborn infants, are turned from uncivilized, ignorant animals into human members of a social system. (Bredemeier & Stephenson) (1967). Socialization always involves and interaction between at least three elements: the "socializee' (i.e. the infant, raw recruit, immigrant, freshmen etc); the 'socializing agent' (i.e. the family, natives, old students etc); and the 'socio-cultural milieu' in which the first tow elements find themselves, and under which they operate, socialization continues in varying degrees throughout the life of an individual as one moves from one social setting to another, learning new ideas, norms and emotions.

In every society, the family is the first social influence on the child. It is the family that lays down the basic and most general ideas, norms values, norms that he will live by throughout the rest of his life. In Nigeria, rural farm families are responsible for inculcating into their young ones, the ideas norms and occupational values into their children. The first occupational experience of a rural child is in farming as he is willing-nilly raised on the farm. In my formative years, even before I was capable of walking to the farm from the village, a distance of three to five kilometers, I was carried on the shoulder to the farm by my father or elder brothers. I learnt to distinguish between different types of crops, yam, vegetables, plantain, pepper, cocoa, kolanut, beans, palm trees etc. on the one hand and all kinds of weeds on other. I also learnt about the various traditional agricultural implements such as the hoe, the cutlass, the

axe, the knife, etc and their uses.

By the time I was sent school at the age of six, I still maintained my attachment to the farm by going to the farm on weekends i.e. after school hours on Fridays, returning home on Saturday evening. During those years I participated in land preparation activities, such as burning and reparking left over burnt refuse to the base of big trees to kill them by firing. I also participated in planting maize and yams, by placing yamsets on top of heaps for those senior brothers and labourers who would finally cover them up in the heap. I participated in setting traps to catch small games and bushrats and also in damming off stream which runs across my father's farm, bailing off the water to collect freshfish. I participated in harvesting cocoa and kolanut and also in conveying the pods to a central location where the fruits are removed from the pods for onward head loading to the tent. I was involved in weeding arable crop farms. The greatest joy came at harvest season when crops such as maize and yam are harvested. We all participated in the cultural ceremonies ushering in the harvest season.

All rural farm children undergo this kind of pleasant socializing experiences which I have related to you of myself. However the experiences vary in degrees, in kinds and dimensions. The socialization of a child of a Fulani herdsman, will be similar in its goal even though there are dissimilarities in content. According to Riessman (1961), societies in the phase of high growth potential are characterized by a vary low degree of social mobility. The parents train the child to succeed them rather the to 'succeed' by rising in the social system.

In modern times, rather than simply training a child to succeed his parents in his farming occupation, the children, while they are still children have a lot to contribute to agricultural development. Several educational programmes can be developed for our children that will promote among other things, agricultural development in Nigeria. The future of any society depends on how well it prepares its young people to make decisions and carry out responsibilities of mature citizen. All countries that has purpose and direction, make adequate provisions for socializing

their children to become useful citizens of the future. In the United States, the 4-H clubs started more than a century ago was programmed to assist the nations children to attain optimum development of each individual boy or girl. The central concern has been with providing educational experiences, which can help young people to be well adjusted, competent and responsible children and Youths at each point of their development.

Similar programmes exist in many other countries. In Asia, Indonesia has a comprehensive locally initiated youth programme for boys and girls under 20; In the Republic of Korea, there is a highly developed 4-H type programme; Malaysia has a well organized 4-B clubs. I can recall now, that a young Nigerian American graduate was imbued with similar idea when on returning home from the US, started what he christened 4-F clubs in Ilesha but it died a still birth due to officialdom and lack of finance.

However, given the right political climate, logistic, organisational and financial support Nigerian children has tremendous potential contribution to make to Nigerians agricultural development. During the process of socialization several agricultural programmes can be incorporated into the children school curriculum which will be very stimulating to them. Examples are Rabbitry, snailery, Vegetable gardening, bee keeping, fisheries, poultry, piggery, etc. Others include canning, sewing especially for the girls, home making, basket weaving. Each of these projects can be organized in small groups and as individuals. These programmes will further complement the formal teachings of the school by providing opportunities to apply the knowledge of school education to practical, real-life situations.

All the crops and livestocks related projects have the potential of:

- substantially raising the income of rural farm families,
- improving their general well-being - a healthy mind in a healthy body.
- achieve personal and economic independence.
- achieve socially responsible behaviour.
- develop a sense of pride in themselves for early acquisition of achievement motivation.

- develop a self-reliant attitude in life.
- generally contributing to agricultural development focus of the nation.
- realize satisfaction and dignity of work.
- Develop leadership talents and abilities.
- Engage in healthful living and constructive use of leisure time
- Inculcate in themselves the desire and ability to cooperate with others.
- Appreciate in early life the contribution an individual can make to the welfare of his family, his community and his nation as a whole.

ORGANISATIONAL STRUCTURE FOR CHILDREN IN AGRICULTURE AND POLICY IMPLICATION AND RECOMMENDATIONS:

It is my belief that a programme of children in Agriculture in Nigeria must be properly conceived and thoroughly conceptualized. Hitherto, there has been some misgiving as to the actual import and the direction of the proposed programme. Every new idea or notion is always suspect. However, in order to ensure that this kind of innovative idea do not die summarily, I would suggest that it has to be placed within the existing organisational structure.

First is has to be seen as a new educational programme and designed to meet the particular need of children of age 6-14. It has to be incorporated into the objective principles and policy directives of governments at all levels in the country - Federal, State and local governments.

It is a programme which cuts across several government ministries - education, agriculture, science and technology, commerce, industries and cooperatives. Each of these fostering ministries must see clear-cut roles for their respective ministries.

The programme will also require the input of NGOs e.g. the International Labour Organisation (I.L.O.), United Nations Children Fund (UNICEF) and several others.

The various faculties of Agriculture and especially the departments of Agricultural Extension and Rural Sociology should act as the midwife and

nurse for the new programme. They should provide the conceptual framework and energiser of the new programme.

At the initial stage, few primary schools in a few states should be selected for pilot execution of the programme. This will enable the organisers to correct any mistakes and logistic problems.

Funding of the programme should come from all tiers of government and the national and international agencies.

Participation by children is any of the pilot schools should be absolutely voluntary so that only those children who are highly motivated should be made to enrol in the programme.

Membership of CIAP should not extend beyond six years. In other words one should not expect the average age of children participating to be more than twelve years.

Surely, not all children who went through in this programme will go ahead to secondary school, and subsequently to tertiary institutions. These drop outs should be encouraged to continue, perhaps on a larger scale to expand their projects of crops or livestocks since a foundation of economic incentive and motivation has been laid. For this category of children and youths, adequate supervised credit should be given to them so that they can be able to sustain themselves from their income.

Conclusion I belief that there is tremendous scope and potential for children in Nigeria to be involved in agriculture production and contribute meaningfully to the nation's agricultural development. They will afford the children an opportunity to have all-round development of their intellect which will make them optimally useful to themselves, their family, their community and the nation as a whole.

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CHILDREN AND YOUTH DEVELOPMENT WITHIN THE FRAMEWORK OF FAMILY ECONOMIC ADVANCEMENT PROGRAMME (FEAP)

BY

BOLA OKUNEYE

University of Agriculture, Abeokuta, Nigeria.

INTRODUCTION

In nearly developing countries, poverty, malnutrition and diseases are the order of the day. Those who are mostly affected are the women and to a greater extent the youths and the children. Even in cases of war and natural calamities, these are the endangered persons in the families. The gravity of the incidence varies from one continent to the other and also from one country or part of a country to another. The resultant effects are low level of human development, low productivity in nearly all facet of economic activities and the vicious circle of poverty continues.

Many of these developing countries including Nigeria have attempted to break the circle through some socio-economic programmes meant to alleviate the problems of the affected down-trodden, masses and particularly the rural poor. These actions and particularly so as they affect the children and the youths are in line with the general world interest in the children and Youth development dating back to the 1960s. In particular, the United Nations made 1985 as the international Year of the Youth and 1989 the year of the World Health Assembly.

Reasons informing the importance attached to the Youths and children are numerous and they include:

(a) Youths between 10— 24 years of age make up over 30% of the world population. Between 1960 and 1980, while the world population increased by 46%, the population of the young people increased by 66% (Blun, 1991)

(b) In 1980, 77% of the World Youths were in the developing countries

and mostly in the rural areas with a potential to increase to 83% in year 2000 (Blun, 1991);

(c) In Africa, Youths represent over 60% and in Nigeria today, they are between 55 and 62% of the population. The life expectancy is 48 years in Nigeria and the dependency ration is ..... %

(d) The Youths" level of development and potentials will determine the pace of economic growth and development in the country in future.

(e) Children and Youth development programmes are necessary for the sustainable growth and development of the present and future states of the country.

SOME OF THE CHILDREN AND YOUTH DEVELOPMENT PROGRAMMES IN NIGERIA

As far back as in the 1950s, various governments in Nigeria have evolved policies and programmes that could enhance the development of Nigerian children and Youths. Some of these are educational, social and agricultural in nature.

The Free Primary Educational (FPE) Programme which stated in 1955 was a major landmark in the pursuit of Youth and children development policy. Children of school age, six years and thereabout were allowed and encouraged to start their primary education free of charge. This programme is the bed-rock of the education social and economic development of Western Nigeria.

Similarly, the Farm Settlement Scheme which started in 1959 was another major step towards gainfully employing the Youths on economic pursuits. This can be said to be an integrated programme and a continuations of the free primary Education objectives. Graduates of the FPE programme were trained in basic agricultural techniques and practices at various Farm Settlements scattered all over the western Nigeria (Okuneye (1984) Okuneye (1985). Many of the Farm Settlers still remaining at the various Farm Settlements were products of the free Primary Education Programmes even though some ejection of more matured farmers had taken place (Okuneye, 1984).

Furthermore, Technical Colleges and Trade Centres were introduced specifically to orientate the children (primary School leavers) and Youths to vocational and technical lines. These are commonly found in the Northern, Eastern and particularly western Regions of the country.

Other Youth programmes include Youth Clubs, Back to Land Programme etc. which are designed to sensitise the young ones to take up one form of profession or vocation. Catch them young Games Programmes, for football and athletics are also worthy of mentioning.

Although there appears to be little or no study that can pointedly give the quantitative contributions of these clubs and programmes to the future development of the Youths and children, it is believed that they had the potential to strengthen or modify the lives of the youths at adulthood. It must be stated, however, that the experience of the farm settlement schemes and Technical Education in Western Nigeria corroborates the assertion that Youth development programmes are worthy of prosecution and they can chart a good socio-economic development path for the youths in their adulthood.

THE EMERGENCE OF FAMILY ECONOMIC ADVANCEMENT PROGRAMME IN NIGERIA

Consequent upon the potentials and achievements recorded in previous policies and programmes, attention has been further focused on developing strategies for alleviating and correcting youth and children problems taking advantage of this window of opportunities. Perhaps one of the most significant development is the recognition that the focus on children and youth should be on he development is the recognition that the focus on children and youth should be on ht development of the totality of the Youth including his social development (Friedman, 1993).

An additional issue is that the Youth cannot be total without his/her environment particularly the family set up. The family being a production, social economic and cultural unit needs to be taken as an entity.

This broad approach towards children and youth development in at World rural-urban migration, insufficient access to social and economic

services, limited opportunity for income generation and hence high poverty level informed the idea behind the initiation of the Family Support Programme (FSP) and family economic Advancement Programme (FEAP) bu Her Excellency, the Firs Lady, Dr (Mrs) Mariam Sanni Abacha FEAP. FEAP as a micro-credit scheme is an investment promotion and poverty alleviation programme aimed at stimulation appropriate economic activities in various wards of each local government area of the country in order to raise the level of productivity and economic power of the people, especially the vulnerable one of which women and youth are among, through the establishment of cottage industries.

As presented earlier, before the introduction of family Economic Advancement Programme, the Federal government pf Nigeria and some State governments had employed various strategies for children and youth development in this country. However despite their noble objectives these programmes had their constraints and hence recorded low level of effectiveness. It is in recognition of these constraints that the Family Economic Advancement Programme was introduced in January 1997 to achieve the following objectives.

- Provision of loans directly to people at ward level with the capital needed to establish cottage enterprises.
- Provision opportunities for the training of ward based business operations
- Encouraging the design and manufactures of appropriate plants, machinery and equipment
- Creation of employment opportunities at ward level.
- Improving the living standards of the people
- Encouraging the producers at ward level to form co-operative societies.
- Sensitisation of production and development consciousness
- Utilisation of all available local resources for the benefit of Nigerians through improved production storage, preservation, processing, recycling, packaging and marketing

- Involving the private sector participation in the programme
- Funding and implementation of the programme
- Involving the state and local governments in its funding
- Reducing the rural-urban migration.

The question now arise how can, children and youth development programmes fit into the framework of Family Economic Advancement Programme, since it is a proverty alleviation programme taking into consideration each member of a family? Therefore this paper is going to answer the above questions using the Community Based Vocational Approach (CBVA).

DEFINITION AND PRINCIPLES OF COMMUNITY BASED VOCATIONAL APPROACH

By definition a community has certain characteristics, homogeneity, a common history, informal relationships and bonds that permit and encourage the members to help one another. It refers to those of the population living in a limited geographical area who have similar values and between whom there is regular and frequent contact. In many parts of the world, sociologists, social service institutions and national governments are directing their attention towards strengthening communities in order to help them deal more effectively with their own problems.

The term Community based is so used for situations where resources for rehabilitation are available in the community and the programme has its focal objective on he people as the main actors. The objective of all programme planning, programme implementation and programme evaluation should be based on community needs and the availability of community resources. CBVA involves a variety of services and such services are needed in different qualities and gradings which may range from simple through intermediate to the advanced ones. CBVA is therefore a provision of comprehensive services based on community participation with active involvement of the participants and in this case

the youths, in achieving vocational and social adjustment leading to their self actualisation and total integration into the socio-economic system of the country. In order to provide the necessary services, CBVA requires a co-ordinated multi-sectoral approach. It demands close co-operation at all levels

PRINCIPLES

A number of principles are used in community development programmes which enable the community workers to help communities define their won priorities, formulate plans of action involving as many local people as possible acting under their own leadership and with a minimum in-put of outside resources. These are as follows.

(a) Felt Needs
(b) Participation
(c) Self-Help
(d) Non-directive approach
(e) Local leadership
(f) Co-operative and Harmonious relationships

Programmes undertaken in this way ensure continued support and result in a sense of achievement for the community.

REHABILITATION

Rehabilitation programme includes vocational services (including vocational guidance), vocational training, placement in open or shelter and employment and follow-up.

In helping youth, every effort should be made to enable them to live in their own communities and to support family and community groups who are working with this objective. In planning rehabilitation programmes, it is essential to take into account the custom and structures of the family and community to promote their abilities to respond to the need of the individual. Services to the children and youth should be provided, whenever possible within the existing social, health, educational

and labour structures of society. These include all levels of health, education, general programmes of vocational training and placement in employment and measures of social security and social services. Rehabilitation should facilitate the participation of youth and children in regular community activities, because the best outcome is obtained, when children and youth are integrated with all other people especially members of their family, in school work, in training and educational establishments etc. it must be emphasised that these vocational programme must be agriculturally based since FEAP is centred to improve on agricultural production and processing.

THE ROLE OF PROFESSIONALS

Professional are needed at several levels of service to train rehabilitation volunteers, guide and supervise their work, manage refers maintain communications with all levels of services, delivery of complex rehabilitation services. It is necessary to ensure that professionals are given the necessary orientation in CBVA approaches to prepare them for the additional responsibilities under the CBVA programme and to take care of needs of referral services from the country.

OPERATIONAL DEFINITION OF 'CBV" APPROACH

The community based vocational approach is predicated on the notion that youth integration within their families and their larger communities is enhanced when they are trained within their communities. It also covers when they are encouraged to acquire those skills which are marketable around where they normally reside. As they acquire vocational skills, they also acquire social and inter-personal skills which may be difficult to acquire in regular institutional setting. The family will be actively involved in the training of youth and it will ensure their success in life.

The CBV scheme will be initiated by a group of concerned individuals in the development of youth within a community. Representative of parents within that community, government change agent or social

welfare officer at that community, community leaders and the youth themselves. Meeting regularly to identify vocational skill training opportunities in the community and youth seeking training that could help them become self employed.

Once trained, each youth applies through his or her ward for FEAP loans from the participation bank in the locality. This group can be an existing co-operative or they can form themselves into a co-operative since one of the conditions of getting loan is being a member of a co-operative society. The other alternative is that family groups could be formed and registered at the State FEAP office.

The idea of community Based Vocational Approach for youth development or participation in FEAP is developed out of the notion that it will reduce Rural-Urban migration: provide opportunities for the training of youth in ward based business operations: create employment opportunities at ward levels: promote production and youth development consciousness: improve the utilization of available local resources for the benefit of Nigerian Youths, such scheme will also improve the living standards of they youth and encourage the design and manufacture of appropriate plants, machinery and equipment. All these being the aims and objectives of Family Economic Advancement Programme

THE MERITS OF COMMUNITY BASED VOCATIONAL APPROACH

The approach involves the family to keep the youth in the family surroundings and in the home community. It also influences the attitudes of the other member of the community. They observe the youth developing into useful members of the community. It becomes possible to take up vocational efforts for fifty people within the community at the same cost for one person in an institution. This new approach will provide coverage for the ward at a cost that can be maintained by such ward for the future.

Such programmes also promote awareness, self-reliance, and responsibility for youth in the community and serve the youth in the area

n which he or she lives

It emphasizes a multi-disciplinary approach and integration as well as he utilization of existing committees, available structure or services, acilities in the area and ensures the involvement of the youth, as well as he participation of their families and communities in the implementation of the programme.

It further encourages the use of the techniques based on the appropriate and acceptable local technology and methods

These are the potentials of FEAP and its 'tributaries". These potentials need to be harvested properly through a high degree of seriousness and commitment in the implementation of FEAP. Care must be taken so that FEAP does not go the way of the dead an ineffective previous programmes. Hence sustainability steps must be put in place at the ward, local, State and Federal levels. All Nigerians must team up and make it succeed. FEAP loan must not and should not be seen as a national cake to be shared but as that to be continually baked and maintained by all Nigerians..

ORGANISING A NATIONAL RESEARCH NETWORK CONFERENCE: THE CIAP EXPERIENCE IN NIGERIA

BY

DIXON OLU TORIMIRO AND DR. S. FOLA ADEDOYIN

Department of Agricultural Extension and Rural Sociology, Ogun State University, P.M.B. 2002, Ago-Iwoye, Nigeria.

ABSTRACT

Conference organisation is very germane to ideas development if necessary fine-tuning and wide acceptability are to be achieved. The exposition in this paper shows the Methodological approach explored in organising the first National Research Network Conference of the Children - In - Agriculture Programme in Nigeria, with discussion based on descriptive statistics. The inputs of the responding institutions in terms of recommendations were summarily discussed under the headings of focus; communication; administration and communique.

INTRODUCTION

Rural Farm Family Resources Research and Development is gaining more prominence in agricultural and rural development disciplines in Nigeria. Efforts in this area led to the identification of the missing link in the process of ensuring continuity and sustenance of farming as a worthy profession. The missing link was conceptualized and initiated as the children - In - Agriculture Programme (Torimiro, 1995). After a series of research and development activities on children - In - Agriculture Programme (CIAP) within the Ago- Iwoye enclave, the idea was brought to the notice of research and development personnel in Nigeria through bulletin. The reactions obtained were encouraging.

There is now a common agreement on the fact that CIAP is not in support of Child labour. Rather, it was proposed to assist the rural

children participating in farming activities so that they may resourcefully make use of their farming knowledge, skill and experience acquired through socialization process right from childhood to advantage. It will enhance the continuity and sustenance of farming profession.

To spread this concept across the country, appropriate networking arrangement has to be put in place. Hence, the need for organizing a national research network conference. This paper, therefore discusses the methodology for organizing the first National Research Network Meeting and Conference of CIAP and detailed responses of the various institutions to the conference proposal.

METHODOLOGY FOR ORGANISING CIAP CONFERENCE.

One hundred copies of questionnaire with covering letter titled "A proposal on the 1st National Conference of the Children - In - Agriculture Programme in Nigeria", and CIAP Bulletin No 1, for understanding of the programme were purposively sent to One hundred institutions all over the country.

Of all the one hundred copies of questionnaire, fifty-four copies were returned for analysis as shown in table 1.

Table 1. Distribution of Responding Institutions

Institution	Frequency	Percentage
International Organisations (F.A.O., World Bank, etc)	02	3.70
Ministry of education	04	7.41
Agric. Devt. Programmes (ADPs)	12	22.22
Min of Agriculture	10	18.52
Agric. Research Institutes	04	7.41
Fed. Coll of Agriculture	03	5.56
Universities	10	18.52
Secondary Schools	09	16.67
Total	54	100.00

Some of the items contained in the questionnaire are the following

1. Name of the institution.
2. Official status of the respondent.
3. Rank of the respondent (if relevant).
4. Having read the CIAP Bulletin No. 1, do you appreciate the need for CIAP in Nigeria? Answer by ticking any of the following options: (a) the programme is truly the missing link in Rural Farm Family Research; (b) the programme will go a long way to sustain farming and agricultural profession in Nigeria: (c) nothing new about the programme in Nigeria.
5. If response to 4 is (a) or/and (b), would you like to join in the crusade through the proposed 1st National CIAP conference in Nigeria?
6. If response to 5 is yes, please indicate the nature of support to expect form you for the programme, among the following:
   (a) willingness to attend the 1st National Conference;
   (b) willingness to sponsor the 1st National Conference of CIAP in Nigeria;
   (c) willingness to present a paper at the 1st National Conference of CIAP in Nigeria;
   (d) willingness to encourage the establishment of CIAP in my state;
   (f) willingness to collaborate with CIAP for Research purposes in Nigeria;
   (g) willingness to sponsor CIAP Research in Nigeria.
7. Suggestion of what the "Theme" or "sub-themes of the 1st CIAP conference should be.
8. Suggestion on when and where the conference should be held.
9. Advise for the Local Organising Committee (LOC) regarding the proposed 1st National Conference.

Copies of the questionnaire were sent out in December, 1995 and they were finally returned in February, 1996.

Simple frequency and percentages were used to analyse the data for further discussion.

RESPONSES AND DISCUSSION.

(a) **Appreciation of the Need for CIAP in Nigeria:**
46.00 (85.19%) and 50 (92.59%) respectively indicated that the programme is truly the missing link in rural farm Family Research and that it will go a long way in sustaining farming and agricultural profession in Nigeria; while 4.00 (7.41%) responded that here is nothing new about the programme. This implies that majority of the responding institutions appreciated the need for CIAP in Nigeria.

Moreso, on the issue of willingness to join in the crusade for implementation of CIAP through its 1st National Conference in Nigeria, 54.00 (100.00%) of the respondents indicated their willingness.

(b) **Nature of the Respondents support for the CIAP:**
Table 2 shows the nature of support indicated by the responding institutions for the CIAP in Nigeria.

90.74% and 75.93% respectively show that the responding institutions are willing to attend the first National Conference of CIAP and are willing to present papers at the conference. This further indicated that the programme may enjoy a favourable support if adequately implemented. More than 59.26% are prepared to encourage the establishment of the programme in their States/areas.

Table 2: Frequency of Institution's by their anticipated support for CIAP:

Statement of support	Frequency	%
1. Will attend the 1st National Conference of CIAP in Nigeria	49	90.74
2. Will partly sponsor the 1st National Conference of CIAP in Nigeria	07	12.96
3. Will present a paper at the 1st National Conference of CIAP in Nigeria	41	75.93
4 Will encourage the establishment of CIAP in Nigeria	32	59.2
5. Will love to donate for the CIAP at all levels.	03	5.56
6. Will love to collaborate with CIAP for Research Purposes in Nigeria	29	53.70
7. Will love to sponsor CIAP Research in Nigeria	03	5.56

Source: Field Survey, 1996.
(Multiple responses).

(c) **Suggestions for the Themes or Sub-themes for the Conference; venue and Time:**

Several themes or sub-themes were suggested by the various institution among which are the following:

- Children farmer: A hope for a better tomorrow;
- Continuity of farming in Nigeria (A literate Exposition);
- Involvement of children in farming activities;
- Exploiting the potential of the youth in food production;
- Children and agricultural development;

- Mobilization of youth for sustainable agricultural; production in Nigeria;
- Presenting second - tier farmers in Nigeria;
- Agrarian reform: Educating the young minds;
- Towards agricultural sustain ability in Nigeria;
- Youth participation in agriculture;
- Prospects and benefits of farming to youth and the nation;
- CIAP and future food security for Nigeria;
- Today Children: Power of enlightened farming of the 21st century;
- Future farmers of Nigeria: A way out in achieving positive results;
- The place of children in farming operation;
- The role of children in agricultural development in Nigeria;
- The place of children in Nigeria agriculture;
- Youth sustainability in Agricultural production in Nigeria;
- Farming: Our legacy;
- Sustaining agriculture in Nigeria;
- Focus on practicing farmers' children in agriculture;
- Farmers' children in Agriculture as future farmers of Nigeria;
- Children and agricultural development in Nigeria;
- The handicapped children and agriculture;
- Role of adolescent in farming: Extension strategies for rural youth;
- Family influences in the attitude of children in the study of agricultural science in secondary schools;
- Sustaining agriculture as a profession amongst farmers' children;

In all, the one suggested by food and Agriculture Organization (F.A.O) i.e. "Rural Children and the future food security for Nigeria" was considered to be the most accommodating theme, while the remaining ones ware categorized into six sub-themes as follows:

(i) The place of rural children in agricultural development;
(ii) Rural children in the Nigeria Youth Programme;
(iii) Rural children and the continuity and sustenance of farming

profession in Nigeria;
(iv) Factors influencing rural children's attitude towards future participation on Agriculture;
(v) Proposals on Methodology for CIAP implementation in Nigeria;
(vi) Children and Youth Development within the framework of Family Economic Advancement Programme;

Diverse venues were suggested by the respondents, 54.81% preferred the conference to hold in the state of origin of the programme, that is Ogun State and more specifically, Ogun State University was suggested: 18.51% preferred Northern part of the country; 11.11% and 5.56% preferred Abuja and Ilorin respectively.

Most of the respondents also conceded the venue to the decision of the Local Organizing Committee:

(d) **Recommendations from the Responding Institutions:**

The advices given by the responding institutions must be taken seriously because of the statuses and ranks of the category of respondents among which are ten (18.52%) academic staff ranking from Senior Lecturers to Professors in the capacity of Heads of Departments, Deans of Faculties and Deputy Vice-Chancellor (administration); Programme Managers of ADPs, Chief Agricultural Officers; Directors; and Commissioner.

The advices were however summarized as follows:

- **Focus:** It was advised that the conference should focus its attention to all categories of farming and the sub-themes must be addressed by experts in the field. Children of non-farmers who are interested in the programme must be fully accommodated, and consideration must be given to the young farmers Club; schools agricultural programme, school leavers programme; graduate farmers scheme; etc. Moreso, the age range of the children must be specified.

- **Communication**: Adequate logistics must be put in place to facilitate smooth communication and to enhance wide publicity of the conference among the interested participating individuals through their various institutions.

- **Administration**. For effective administration of the conference and subsequent implementation of the conference decisions, adequate networking arrangement must be instituted across the country through an organised National Research Network of CIAP with membership solicited from the institutions of relevance across the country. In amending the CIAP Board's policies, there must be adequate linkage of the Board with the local subsidiaries.
- **Communique**: The ideas gathered during the conference must to thoroughly synchronized to evolve a workable communique to be issued by the Board after the Network meeting.

CONCLUSION

Evidence gathered and the experiences gained right from the initiation of this concept through the conduction of baseline researches to the point of calling for conference have shown that conference by consensus in always the best through which a new concept can be deliberated upon.

However, in organising an academic and or researchers conference of any national outfit, various inputs must be critically examined and consequently integrated into the planning of the academic forum (Adedoyin, 1996). The socio-economic, political and ethical considerations of the prospective participants of the conference must be given preference in making decisions on issues bothering on choice of theme, sub-themes; conference fees and location; and even on who to be commissioned to present the lead papers.

Finally, the exposition contained in this paper will go a long way in serving the interest of similar initiatives, and it will also serve as guide for organising academic or researchers forum for deliberation on new concept.

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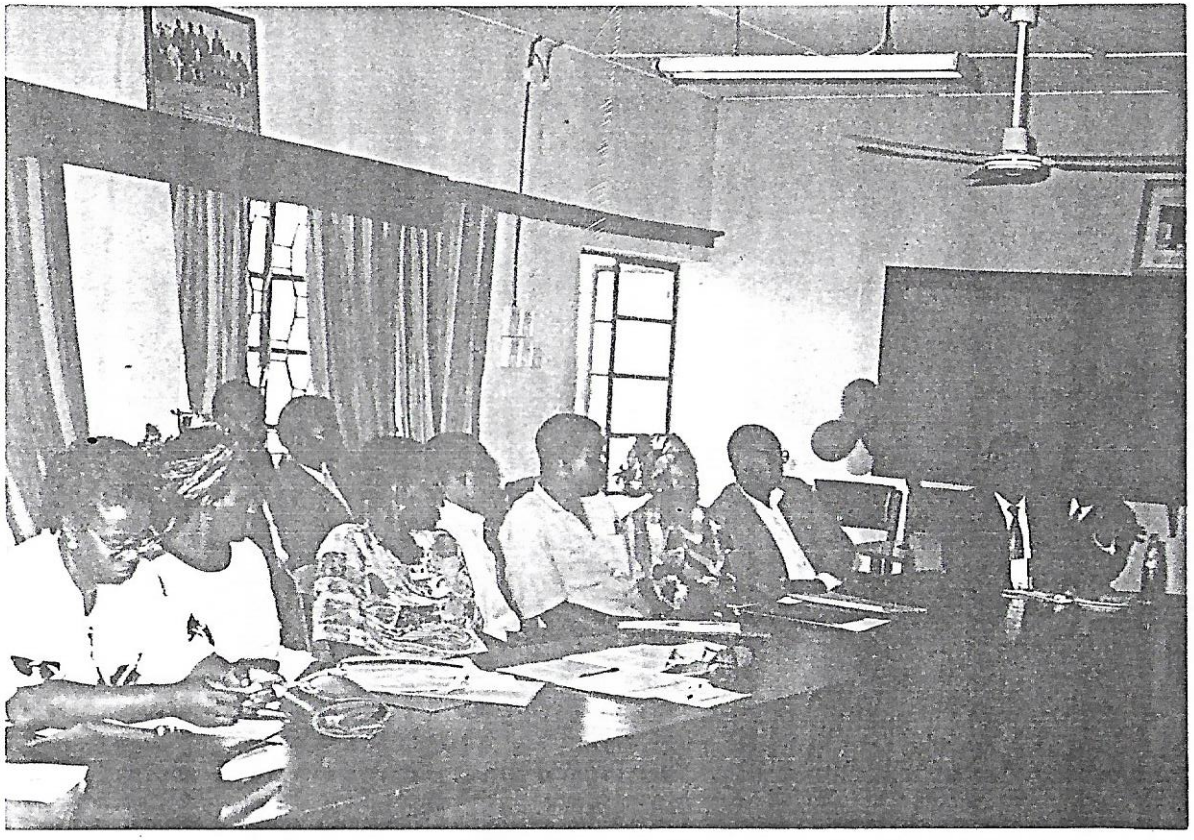
SECTION TWO

PAPERS AT THE TECHNICAL SESSIONS



Some of the Participants at one of the Technical Sessions.

POSSIBLE SUSTAINABILITY OF FARMING PROFESSION IN NIGERIA THROUGH RURAL CHILDREN INVOLVEMENT: OGUN STATE AGRICULTURAL DEVELOPMENT PROGRAMME EXPERIENCE

BY

J. S. OLUWOLE

Ogun State Agricultural Development Programme Abeokuta, Nigeria.

INTRODUCTION

Any visioning development effort, be it agricultural, medical, social, cultural, religious, political, educational, ethical, structural or environmental that does not deeply involve the children from the planning stage may not be meaningfully sustained; thus ending up as an effort in futility at execution.

Plato, a great Greek Philosopher, also compared children's education with a clean slate on which nothing has been written and that whatsoever you want the child to be or do in his later years can easily be written on his heart through education. This is in line with the biblical injunction that admonishes the training of a child in the way he should go; and when he is old, he will not depart from it, as indicated in Proverbs 22:6. This biblical injunction is not only relevant to the children-In-Agriculture Programme but more or less a solid foundation to the sustainability of farming profession in Nigeria.

Yet another biblical injunction explains the importance of children as compared to a strong man who is armed with an arrow as indicated in Psalm.

It goes without saying that if we (Nigerians) are to survive our current excruciating poverty and hunger in the midst of plenty, there is the urgent need to encourage children more than ever before to participate with commitment in farming activities.

The primary objective of this paper is to encourage early involvement

of young rural boys and girls in agriculture in order to sustain their interest and unflinching support for agricultural developmental efforts during their later life. The self-reliance which is an acceptable self employment that provides basic needs for self (individual) boys and girl and their immediate family and by extension to run a business empire that provides employment to others, can only be achieved through involvement of rural children in agriculture.

WHO ARE CHILDREN?

The Oxford Advanced Learners Dictionary of Current English defines children as unborn or newly born human being; boy or girl, son or daughter (of any age).

In the context of this paper children is defined as boys or girls of any age. 'He" will be interchangeably used with 'she' as both sexes are considered.

Children are those very young persons (boys and girls) as described by Plato whose hearts are as clean as a slate on which nothing has been written.

These group of persons are those that will form the solid foundation upon which a meaningful super- structure of developable agriculture can be built.

WHO ARE THE RURAL CHILDREN?

Rural children are non-urban, countryside young boys and girls of any age. These young boys and girls have peculiar characteristics which distinguish them from their counterparts-urban boys and girls. Such distinguishing characteristics include the following:

* The young boys and girls are closer to nature
* They seem to be more sincere than their urban counterparts
* They are less exposed to foreign influence
* They are therefore mostly unspoilt and reserved because they are ruralites they do not have full access to electricity, tarred roads, tap

and purified water
* Poor educational facilities
* Most of their parents are farmers or involved in agriculture related businesses
* They tend to be better fed since their parents produce various food crops
* They tend to imitate their parents by cultivating their own farms

This may be as small as five to ten pseudo-heaps or ridges where they plant what mummy and daddy are planting. They also tend to perform the necessary cultural practices as carried out by their parents.

This observation is in conformity with Hilgard, Atkinson and Atkinson (1975) who noted that an infants first social contracts are normally with his mother. This will later extend to the father and other familiar persons.

Where the rural children imitate their parents or want to show that they can also do as much if not more than what their parents are doing based on their immediate experiences, Children-In-Agriculture programme must not be seen as a violation of Child Labour Act. This will not only ensure continuous and regular provision of the food and fibre needed for the over 100 million Nigerians but ensure agricultural sustainability and the needed self-sufficiency in food production.

OGADEP AND ITS METAMORPHOSIS

The Ogun Agricultural Development Programme (OGADEP) is one of the seven multi -state Agricultural Development Programme (MSADP - I) in Nigeria. It was launched on February 4, 1986 but became loan effective in June 1987.

It is tripartitely funded by the World Bank 66%, the Federal Government 20% and Ogun State Government 14% plus staff salaries and allowances. It must be noted that exchange rate at project appraisal was N1.00 = $1.00 U.S.

The project had the mandate to reach 150,000 farm families with

improved techniques of agricultural production and inputs capable of generating higher productivity, higher output and income for the farmer. It was later found out that the project needs to reach not less than 260,000 farm families with its extension service focussed on food crops - cassava, maize, rice, yam, cowpea, soybean, vegetables and fruit trees.

The primary objective of OGADEP is to assist small-scale farmers at increasing their food crop production, productivity an income in farming and non - farming activities thus improving their standard of living.

Modalities for achieving the primary objective

These strategies adopted to achieve the primary objective have been subject to a number of changes.

They includes the following:

i. implementation of the Training and Visit (T & V) system of Agricultural Extension operated by well trained and adequately motivated staff in strengthening the agricultural extension services of the state with the following seven key features:
   * Professionalism
   * Single line of Command
   * Concentration of efforts
   * Time-bound work
   * Field and Farmer Orientation
   * Regular and Continuous Training
   * Linkages with Research
ii. the development of improved agricultural practices which are adaptable to farmers' local conditions through the conduct of on-farm adaptive research.
iii timely and adequate supply of seeds of early maturing and disease resistant varieties of food crops and cassava cultivars to farmers and planned procurement and distribution of cognate inputs like fertilizer, herbicides, pesticides and equipment
iv. the development of the fruit tree crop-potentials in the state

v. conduct of core and project-specific surveys as a basis for generating a data base for planning purposes and decision making by management.

Some notable changes that have occurred since the inception of OGADEP include the following:

* Re-organization of the T & V system while maintaining the seven key features
* Unified Agricultural Extension System (UAES)
* Inclusion of Women-In-Agriculture
* Termination of the World Bank Loan Portfolio
* Organization of a crucial retreat to discuss and find solutions to problems facing OGADEP
* Linkages with various governmental and Non-Governmental Organizations
* Emphasis on group Farmers training
* Emphasis on Back to Land School Programme
* Training of Agricultural Science Teachers in Ogun State
* Introduction of REFILS
* Training of pupils and students from primary and secondary schools respectively.

WHY INVOLVEMENT OF CIAP

The involvement of Children-In-Agriculture Programme is not accidental, it has been within agricultural extension systems for a long time but because attention was not focussed directly on the "child farmer" but adult farmer and at best on "youth in agriculture programme".

Williams (1995) noted that the extension worker should exhibit an element of friendliness to the farmer and his entire family. The farmer should be made to feel that the extension agent is primarily concerned with improving his socio-economic condition

Farming Living

He, Williams (1995) noted that advances in technology and rapidly changing economy have a direct impact on family living. Housewives now require some specialized education on how to keep abreast of these changes. Our country has embarked upon some aspects of structural Adjustment Programme (SAP) which have brought some instability in many homes. This is turn has called for a change style of family living.

Extension will have to mount a family living education programme to help families adjust to these changes and instability. Family living programme should be conducted in such areas as family budgeting, consumer economics, household management, food and nutrition, clothing, housing, health and physical education. This education should cover the youths, housewives, working mothers as well as elderly people.

Youth Development

According to Williams (1995) extension has a major role to play in youth development. In Nigeria, they play this role in the development of Young Farmers Clubs, which aim at getting the youths to become more interested in agriculture as a career. This aspect of extension work in our country has suffered some set back of late and no meaningful extension work is being carried out any more in this area. We need to revive this aspect of our extension work if we are to get the youths to take up farming as a useful career especially as the older people are the ones left in the rural areas to carry on the farming activities.

Advantages of CIAP

The involvement of children in agriculture prepares the participants for self-reliance which according to Dawodu (1996) defines as an acceptable self-employment that provides basic needs for self and immediate family and buy extension to run a business empire that provides employment to others. Examples of these are farmers, carpenters, petty traders to mention just a few.

It is employment outside Civil or Public Service. However, in a

community, nobody is completely self reliant, hence in a while one needs the services of a doctor, teacher, mason etc. This also refers to nation. No nation in the world is entirely self-reliant but the so called self-reliant nation produces most of her needs.

If our rural children are involved in agriculture, it will form the needed self-reliance and base for our technological take off.

However, just like an individual, no nation is completely self-reliant, she has to rely on other nations to source raw materials, market her finished products or share other nations experiences physically or through Internet or world-web.

The history of man is that of self-reliance since it is life itself. Self-reliance is an instinct that may lie dormant depending on the conduciveness of the environment.

A solitary or harsh environment (like we are currently experiencing in Nigeria) tends to bring out the self-reliant instinct. It must be re-emphasized that while CIAP frowns at child Labour it encourages the age-long involvement of rural children in the activities they normally (consciously or unconsciously) get involved as they see their parents do them.

The Genesis of OGADEP Involvement In CIAP

Consciously or unconsciously, farmers have always been involving their rural children in their farming and non-farming activities. Parents, who for one reason or the other do not involve their children in their trade have discovered to their dismay that their children (rural or non-rural) have perfected their trade even where such children are not formally involved.

A total number of 11,756, small plots adoption were demonstrated by OGADEP Village Extension Agents using the small plot Adoption Techniques while 19,200 farmers were contracted by 126 Village Extension Agents.

As the farmers were being trained, some of their rural children were always around to see what their parents were doing. Some of the rural

children even learn faster than their parents. Furthermore, mass dissemination of extension message was effected through the weekly radio programme "Agbe Afokosoro". On Wednesday at 7.30 p.m and a repeat of the Agbe Afokosoro at 9.15 p. m on Saturday is not only heard by the adult farmers but also by the rural children.

The rural children have often remembered to remind their parents of the educative extension radio programme. Being more inquisitive, the rural children often remember the messages more than their parents particularly where words with no clear 'Yoruba" but English were used.

Because the adult farmers will listen to this programme along with their rural children calls for involvement during the practicals. OGADEP paid special attention to Women-In-Agriculture towards improving the processing capabilities of Women farmers so as to minimize post-harvest losses and enhance their income-generative potentials.

Over 40,000 farmers benefited from the efforts put together to mobilize the women groups. Through the courtesy of the Chairperson of the Family Support Programme (FSP), arrangement were made to distribute fertilizers to women groups for the 1997 planting season. The rural children, particularly girls get involved as their mothers get involved in processing, preservation and other activities.

As women groups were securing loans/financial assistance up to the tune of N600,000.00 from the Nigerian Community Development Trust (NCDT) for doing a good job that need assistance, their rural children were not only watching the process but asking intelligent questions on how they could benefit from the king gesture when they become older.

In order to boost fisheries production two million fish fingerlings were distributed to fish farmers, while assistance were rendered to fish farmers in order to establish 200 homestead (new) fish ponds all over the state. However, rural children were not behind at assisting their parents at pond establishment and stocking.

The skill transfer is very clear as you see the rural children breed maggots to feed the fish for protein intake. Rural Children take joy at test -cropping and separating shooters to avoid cannibalism.

In view of the increasing cost of wheat flour and its attendant implication on baked confectionery products, OGADEP intensified efforts on promotion of cheap and readily available unfermented cassava flour as substitute for the expensive wheat flour.

The rural trying their hands on the various snacks produced from unfermented cassava flour. The rural children are not behind in dry-season vegetables as they watch how their parents are conducting the cultural practices involved.

List of Some Training Programme

As one of the key features of the Reorganinsed Training and Visit System of Agricultural Extension, OGADEP has been involving the rural children even where they are not target group (but their parents) in our training programmes.

Apart from the untargetted training programme at the rural children from which they have consciously or unconsciously immensely benefited the need arose where some children, their parents and teachers saw the need. It is the belief of the older farmers that since their children are going to take over farming from them, they need to be part of the agricultural activities. Following the conscious felt need, some primary school invited OGADEP for various special training programmes.

These schools include:

* St Joseph Primary School Oluwo Odinjo - Dec 1997
* L.G.A. Primary School, Oke Ata - Dec. 1997
* Anglican Primary School, Ibara Orile - Dec. 1997
* African Church Primary School Masa - 1994
* Anglican Primary School Olugbo - 1997

Similarly, some secondary school authorities have also invited OGADEP for special training programmes.

These Secondary Schools include:

* Anglican Grammar School, Ibara 1998
* Oke-Ona and Premier Grammar Schools 1998
* Community Grammar School, Ayetoro 1997
* Anglican High School Abeokuta 1996
* Asakan Grammar School, Ibese 1995

The training of primary and secondary schools pupils and students is informed by the fact that these young farmers will not only adopt the technologies learned but also disseminate the information to their parents on their farms. The sufficiency in food production we are looking for can only come through succession plan to sustain continuous food supply.

Training of Agricultural Science Teachers

Apart from teachers' participation during the process of training their pupils and students respectively OGADEP in collaboration with the State Ministry of Education organised a one week training for Agricultural science Teachers and was held at Abeokuta Grammar School, Abeokuta in 1992.

Early in 1998, OGADEP VENTURES conducted a 3- day training for Agricultural Science Teachers. The objective is to encourage the participants to disseminate their learning experiences to their students, most of whom are ruralities who will eventually disseminate their learning experiences to their parents, brothers and sisters.

CONCLUSION

The importance of sustained involvement of children in agriculture cannot be over emphasized considering the current degree of hunger and abject poverty in which we are in Nigeria.

Man is in the air, water, space, moon, yet man has not been able to effectively reach man in Nigeria less than two years to the twenty first century. With CIAP in place, a better beginning of a systematic way of reaching Nigeria farmer would be paved.

The involvement of children in agriculture will help at stemming the current wave of cultism in our primary, secondary, and institutions of higher learning as the devil work for an idle hand.

The much needed food and fibre and raw materials will be made available for a sound technological take off. The involvement of children in agriculture will as early as possible indirectly involve them in the current and future global trends of data communication.

The new idea of information superhighway based on the principle that every piece of data held electronically anywhere is potentially accessible to any other person with appropriate computer technology, will not be strange to the participants of children in agriculture programme. The participants will not look down on farming and farmer when they grow older like Haryana Village Extension workers.

APPENDIX

SECONDARY SCHOOLS IN OGUN STATE

ABEOKUTA NORTH ZONE

1. Idi Emi High School, Idi Emi
2. St Peter's College, Olomore
3. Premier Grammar School, Abeokuta
4. Olumo High School, School Abeokuta
5. Lafenwa High School, Abeokuta
6. Army Day Sec. School, Alamala
7. Gateway Sec. School, Abeokuta
8. Unity High School
9. Ebenezer Grammar School
10. Ilugun High School
11. Ikija High School
12. A. U. D. Grammar School, Isaga Orile

13. Ilewo -Orile Comm. High School
14. Imala Comm. Grammar School

ABEOKUTA SOUTH ZONE

15. Abeokuta Grammar School
16. Abeokuta Grammar School
17. Bap. Boys High School, Saje
18. Egba High School
19. Asero High School
20. Saje High School
21. Lantoro High School
22. Baptist Girls College
23. Rev. Kuti Memo. Grammar School
24. N. U. D Higher School, Isabo
25. Macjob Grammar School
26. Abeokuta Girls Grammar School
27. Catholic Comp. High
28. Methodist High School, Ogbe

ABEOKUTA SOUTH ZONE

29. Igbore High School
30. St Leo's High School Kuto
31. Ijemo Titun High School
32. Agunbiade Victory High School

ODEDA ZONE

33. Salawu Abiola Comp. High School
34. Nawar-Ud-deen Grammar School Obantoko
35. Orile-Ilugun Comp. High School
36. Egbe Odeda High School

37. Orile Kemta Comp. High School Olugbo
38. Orile Keesi Grammar School Olodo
39. Orile Iporo Comm. High School, Ijemo Fadipe
40. Alagbagba Comm. High School
41. Muslim High School, Isolu
42. Oke Ona Grammar School, Opeji
43. Olokemeji High School, Olokemeji

REMO NORTH ZONE

44. Sapade Grammar School
45. Ipara Comm. High School
46. Ilara Akaka Comm. High School, Ilara/Akaka
47. Iyankan High School, Isara
48. Isara Sec. School. Isara
49. Ode-Remo High School, Ode Remo

YEWA SOUTH ZONE

50. Ebgado College, Ilaro
51. Area Community High School Owode
52. Anglican Grammar School, Ilaro
53. Owode Sec. School, Owode
54. Muslim Progressive High School, Oke Odan
55. Orona High School, Ilaro
56. Emmanual Comp. High School, Ilaro
57. Iyewa High School, Ilaro
58. Itolu Comm. High School, Ilaro
59. Baptist High School, Ilaro
60. Idogo/Ipaja Comm. High School Idogo/Ipaja
61. Iwoye Area Comm. High School, Iwoye

EGBADO NOTH ZONE

62. Comprehensive High School Ayetoro
63. Ajodo High School, Ayetoro
64. Community Grammar School Ayetoro
65. Alaye High School Ayetoro
66. Asakanran High School, Ibese
67. Olu-Aso High School, Igbogila
68. U. N. A High School, Igbogila
69. Egbado High School, Igbogila
70. Comm. Comp. High School, Igbogila
71. Ketu College Igan Alade
72. Owode Ketu Comm. Ketu
73. Compr. High School, Owode
74. Comm. High School, Ijoun
75. Adokin High School Iganokoto
76. Egbado technical Institute, Iboro
77. Obalaju High School Joga Orile
78. Orita Comm. High School Oja-odam
79. Comm. High School Olube
80. Sawonjo High School Sawonjo

IPOLALA ZONE

81. Agosasa Comm. High School, Agosasa
82. Alaari High School Alaari
83. Comm. Sec. School Ipolala
84. Comm. Commercial High School, Mau.
85. Comm. Sec. School, Tube
86 Igiri High School Ijofin
87. Iko Gate Way Grammar School, Idi-Iroko
88. Imotu Community Commercial Academy Ifoyintedo
89. Ojumo Comm. High School, Ihunbo

90. District High School Ipokia

IMEKO/AFON ZONE

91. Mazareth High School Imeko
92. Alaketu High School, Imeko
93. Comm. High School, Idi-Ayin
94. Comm. High School Ilaa
95. Iwoye Ketu Comm. High School Iwoye
96. Idi Emi High School, Idi Emi

IJEBU NORTH ZONE

97. Abobi C. H. S. Ago Iwoye
98. Abusi Edumare Academy Ijebu - Igbo
99. Ago-Iwoye Sec. School
100. Ahmadiyya H. School, Ago-Iwoye
101. Beje High School, Ijebu Igbo
102. Fowoseje C. H. S Ago-Iwoye
103. Ijebu-Igbo Girls Grammar School
104. Itamerin High School, Ijebu Igbo
105. Japara High School, Ijebu Igbo
106. Kegbo H. S. Ijebu Igbo
107. Ladigbo Comm. High School, Ijebu Igbo
108. Maniu Comm. C. H. S. Ago-Iwoye
109. Methodist C. H. S. Ago-Iwoye
110. Molusi College, Ijebu-Igbo
111. Muslim High school Ago-Iwoye
112. Obanta C. H. S Awa
113. Olokine Grammar School Ijebu - Igbo
114. Samusideen Grammar School Ijebu-Igbo
115. Sopen C. H. S Ijebu-Igbo

IJEBU NORTH EAST ATAN ZONE

116. Isonjin Grammar School
117. Ogbogbo Bap. Grammar School
118. Ilese Comp. High School
119. Raluwen High School, Atan
120. Ilugun Central Academy School
121. Alaro Comm. High School Odosenbore
122. Dayo Tubo Comm. High Schol, Odo-deyo
123. Comm. High School, Odogbolu

OGUN WATER SIDE

124. Ilusin Grammar School, Isonyin
125. Ibiade Comp. High
126. Ibiade Comm. High School
127. Ahmadiya Comp. High School, Efire
128. St. Lazito's High School, Efire
129. Efinre Comm. High School, Efire
130. Ode Oni Comm. Grammar School
131. Abigi Comm. High School
132. Ayede Comp. High School
133. Ayila High School
134. Itebu-Manuwa Comm. High School, Itebu
135. Lomiro Comm. High School Lomiro

ODOGBOLU ZONE

136. Anglican Compr. High School, Ikoto
137. Ayepe Comm. High School
140. Ayepe Compr. High School Ayepe
141. Odogbolu Grammar School
142. Odogbolu C. H. S. Odogbolu

143. Olainowa HIGH School
144. Ogbo C. H. S Ogbo
145. Oodua C. H. S Imoru
146. Ososa C. H. S Ososa

OBAFEMI/OWODE ZONE

147. Egba Owode Grammar School
148. Owode High School
149. Orile Igbore Comm. High School, Ajura
150. Ofada Comm. High School
151. Comm. High School, Ibafo
152. Kobape High School
153. Oba Comm. High School
154. Olorunkole Comm. High School Kajola
155. Alapoke Oni Comm. High School Alapako
156. Ayebo High School Ayebo
157. Ogunmakin Comm. High School, Sowunmi
158. Egba Obafemi Comm. Grammar School, Obafemi

IJEBU-ODE ZONE

159. Ijebu Ode Grammar School
160. Ijebu Mushin College
161. Adeola Odutola College
162. Our Lady of Apostles Sec. School Ijebu-Ode
163. Anglican Girls Grammar School Ijebu-Ode
164. Moslem Compr. High School Ijebu-Ode
165. Molipa High School
166. A. U. D. High School Ijebu-Ode
167. A. U. D. High School Isiwo
168. Itamapako High School Ijebu Iloti
169 Christ Church High School Ijebu -Ode

170. Luba Comp. High School Ijebu-Ode
171. Muslim Girls High School

IJEBU EAST ZONE

172. St. Anthony Grammar School Esure
173. St Bredaris Grammar School Ogbere
174. Ajebandele High School
175. Itele High School, Ilele
176. Owu Ikija Comm. Grammar School Owu Ikija
177. Ijebu Ife Comm. Grammar school, Ijebu-Ife
178. Compr. High School, Ijebu-Mushin
179. Comm. Comp. High School Oke Igbaga
180. Comm. Grammar School Terelu Imobi

IFO ZONE

180. Adenrele High School Ifo
181. Ifo High School Ifo
182. Anglican Grammar School Ifo
183. Pakoto High School Ifo
184. N.U.D Grammar School Ifo
185. Egbeda Comp. High School Ifo
186. Coker Area Compr. High Schol Agbado
187. Agbado District Comp. High School Agbado
188. Ajuwon High School Ajuwon
189. Ojodu-Abiodun Comm. High School, Ojodu

EWEKORO ZONE

190. Methodist High School Arigbajo Ifo
191. Papalanto High School
192. United Comp. High School Itori

193. Ifedapo Comm. High school Abalabi
194. Owu Comm. Comp. High School Elere Adubi
195. Owiwi Comm. Comp. High School Owiwi
196. Owowo Comm. Comp. High school, Obada Oko

ADO-ODO OTA ZONE

197. Ado-Odo High school Ado Odo
198. Agbara Comm. High school Eedu
199. Ajogbo Grammar School Agibode
200. Alamuwa Grammar School Ado Odo
201. Anglican Grammar School, Ota
202. Araromi Comm. High School, Orita
203. A. U. D. Compr. High School Lafenwa Ota
204. A. U. D. Compr. College Ota
205. Igbesa High School
206. Iju gbiye High School Iju
207. Local Government Sec. Comm. School Atan
208. Male Compr. High School Sango
209. Sango Ota High School, Sango
210. St. Stephen's Compr. High School Ado-Odo
211. Unity High School Ijoko Ota
212. Unity High School, Isajola Iboro

SAGAMU ZONE

213. Agbele Comm. High School Sagamu
214. Batoro Comm. High School Sagamu
215. Ijagba Comm. High School Sotubo
216. Methodist Compr. High School Sagamu
217. Muslim High School Sagamu
218. Makun High School
219. Ofin High School, sagamu

220. Ogijo Comm. High School Ogijo
221. Odelemo Comm. High school
222. Olomi -meji comm. High school, Emuren
223. Remo Sec. School, Sagamu
224. Sagamu High School
225. Soyinde comm. High School Sagamu
226. St John Ang Grammer School Odelemo
227. Simawa High School, Simawa
228. Remo Div. High School Sagamu

IKENNE ZONE

229. Mayflower, Ikenne
230. Ikenne High School
231. United High School, Ikenne
232. Isanbi Compr. School, Ilisan
233. Irolu Comm. High School, Irolu
234. Ilisan High School, Ilisan
235. Akesan Comm. Grammer School Iperu
236. C. A. C. Grammer School Iperu
237. Ositelu Memo. College Ogere
238. Ogere Comm. High School, Ogere

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CHILDREN PRIORITIES AND ISSUES IN AGRICULTURAL EXTENSION PROGRAMME IN NIGERIA: PAST AND PRESENT EFFORTS AND FUTURE PROSPECTS

BY

I. A. IDOWU AND M. A. JAIYEOLA

Agricultural Media Resources and Extension Centre, University of Agriculture, Abeokuta.

INTRODUCTION

Agricultural Extension Programme has the legitimate concern to educate the farmers and the farm families through organised patterns and systematic methods of dissemination useful information in modern farming practice with a view to improving the farmers in a fast changing contemporary society. To date, such has been the primary aim of the agricultural extension services in both developed and developing countries. In the United States of America, the situation goes beyond that. The Cooperative Extension work of the Universities has broadened its scope of activities to include areas such as marketing distribution , and utilization of farm produce, Community improvement, leadership development, citizenship, legislation and expand youth work (FAO/UNDP/FGN/PROJECT NIR, 1991).

In Nigeria, agriculture still remains a family enterprise as children, women and men of all ages are involved in one way or the other in the agricultural production process. Implication raised by this is that concerted efforts by everybody that has potential contribution to make to agricultural development process is required if Nigeria is to make a realistic and positive step in solving agricultural production problems.

A large percentage of the population of Nigeria is under 18 years of age and majority of the overall population lives in the rural areas (Hansen, 1968). It thus, follows that children make up a considerable

portion of the rural population. Those children represent the farm families of the future and it is essential that extension should do something toward preparing them for the future. The alternative is that a large proportion of the children would probably leave school with unrealizable expectation of urban employment and no marketable skills and are psychologically unadjusted to returning to the rural community. The drift of these young people from the rural areas to join the pool of unemployed or underemployed in the towns eventually lead to growing social and political tension and rising crime rates.

Consequently, the major focus of discussion of this presentation is three-fold; first it gives an overview of major youth programme in Agricultural Extension since 1937; second, it provides some details on current situation and third; it provides relevance and potentials of children Agricultural programme in increasing Agricultural productivity.

Youth Agricultural Programme In Nigeria

For the purpose of this presentation, when talking of rural youth, both boys and girls are intended. Although there are no strict definitions, the boys and girls referred to are between 12 and 18 years of age. These are children who depend on their parents for sustenance.

The idea of Young Farmers' Club was introduced into Nigeria in 1937. The social Welfare Department in the colony area of Lagos introduced it in an attempt to solve the problems of juvenile deligency and as a means of providing community improvement through group activities of boys and girls so that their leisure hours might be usefully employed. The club was latter extended to all the regions with emphasis on agriculture which forms the basis of the country's economy (proceeding of the International Conference of Extension Administrator, US Department of Agriculture, 1965).

The young Farmers' Club was sponsored by the Ministry of Agriculture and Natural Resources in some regions and other agencies in others. It was a voluntary and democratic organisation for boys and girls between the ages of 9 and 18 years. The clubs were organised in schools,

colleges and community depending on the local situation. The Young Farmers' Club organisation was designed to satisfy the needs and interest of the youths in rural life; home economics and to develop their practical farming skill, as well as to make them better citizens in the community in which they live.

The basic objectives of Young Farmers' Club could be summarized thus:

1. Provide an opportunity for youth to develop their interests and to learn by practices about land and its uses.
2. Give the members the aid to develop citizenship
3. Provide a centre for social life of its members i.e., improved community life.

These are two types of Club: (i) School clubs and (ii) Community Clubs. Each is either registered or unregistered, for there are some conditions that a club must satisfy before being registered and presented with the club Registration Certificate.

Club Membership:- A new member becomes registered after six months of Enrolment and fulfilling some conditions for registration.

Club Projects:- Most of the activities of the Young Farmers' Club are in the form of projects based on the needs and interests of the members and one geared towards teaching improved and scientific practices in agriculture and home economics. There are two types of club projects - group and individuals.

Some of the group and individual projects were craft - basket weaving, wood carving, care work and book binding. Crops - mango, potato, yam, and maize production. Livestock - piggery, poultry and rabbit management. Home economics- cookery, knitting, dress making, and home beautification.

Each member is expected to carry out projects and keep accurate

records. In selecting a project, a member will have to consult with his parent, Club adviser and project leader. The basis principle governing the choice of projects is individual interest in a particular vocation.

Club Activities and Events:- There are few club activities and events in most of the club's annual achievement day, Celebrations and Agricultural Shows. It is always the desire of every club member to participate in these activities.

A number of other youth programme have since been tried out at different times in Nigeria. The farm settlement/school leavers and other scheme was inaugurated in 1959 to provide young school leavers and other settlers with employment opportunities, to help in increasing agricultural food production as well as to stem the problem of juvenile delinquency.

Back-to-Land programme, the National Directorate of Employment Agricultural Programme i.e. Graduate Agricultural Self-Employment Scheme (GASES), School leavers Farming Schemes (SLFS) Reactivation of Employment Generating Farm Settlement/Scheme, promotion of Rural Non-Farm Employment Scheme are other examples of more recent youth agricultural programme.

Current Status Of Youth Agricultural programmes

The present status of Youth Agricultural Programmes in Nigeria is far from being ideal in terms of its implication for increase Agricultural Productivity. Sufficient indications have not been given to show that they have .been achieving their set objectives significantly enough. In most recent government programme (The NDE Agricultural Programmes) which to a large extent has focussed on the youth, not so much seemed to have been achieved.

It could noted that while there has been some consistency in the concern of government in involving the rural youth in agricultural development programme in Nigeria, nearly all such programmes have been characterised by deficiencies and lapses in programme design,

resulting in programme ineffectiveness. At present, most of the youth dissipate their energies doing one thing or the other which may not necessarily be of any benefit to them or the society.

Relevance and Potential of Children Agriculture Programme In Increasing Agricultural Productivity.

The relevance of children in agriculture programme in increasing agricultural productivity could be realised if the programme could be modified to suit local circumstances.

Children in Agriculture Programme may serve as a primary contribution of agriculture services extension to children effort in bringing about changes in knowledge , attitude and skills necessary for the adoption of recommended improved practices which consequently may lead to increased agricultural productivity. Considering the significant, population of children, statistics for example indicate that 50 percent of the African rural population were below the age of 18 years (Hansen, 1968). There is indeed, a great potential for a dramatic increase in agricultural production if the youth are properly mobilised to adopt improved practices in agriculture.

Young people are less conservative than older people, and are therefore, more likely to adopt improved practices in agriculture all other things being constant. Furthermore, because children learn faster, the task of extension in promoting agricultural productivity through increase adoption is facilitated. The resultant multiplier effect expected when improved practices tried and adopted through children in agriculture programme is diffused to other members of the society notably parents and peer groups is also tremendous and has implication for increasing agricultural productivity.

In another vein, the useful work experience gained in children agriculture programme would represents some sort of educational investment in the children. These have implications for regenerating the

ageing rural labour force as well as developing children interest in farming in later life.

STRATEGY TO INTEREST CHILDREN IN AGRICULTURE

Agricultural Clubs for children

Clubs have long been used by extension as a means to involve children in rural development and to propose projects for their benefits. The most widespread are the 4H Clubs (hands, health, head and heart) which began in the United States and which have now spread to many countries. The Clubs are important as a first step to bring children together, they give them an outlet to express their views and problems and form a base from which to build for the future. Through them, children may also become used to working with extension services and they established a relationship which will develop when they form their own farm families and need extension assistance.

Children-in-agriculture clubs should have three main purposes:

Education: In a variety of ways both formal and informal, a club can be the means whereby young people can socialize and train for future life. Specific skills, leadership qualities and a general understanding of the problems of rural development can be useful objectives of the club.

Economic: More particularly, a club can be used to instruct the youth in different aspects of agricultural practices, farm management or home economics. The club can also undertake specific projects designed to provide income for the children.

Recreational: Not all activities of the club should be serious. It should also encourage recreational activities and social events. e.g. Sports, Daytrips, and Dances. In this way, the young children will enjoy the club and will see it as an important part of their leisure time.

Projects with Children

Projects work either with the clubs or with children in general, is the means by which children can learn to do something instead of just listening to talks or lectures. These projects can be on an individuals or a club basis and should not be too ambitious initially.

A useful way of beginning project work is to take children on a visit to a farmer or to other agricultural projects where they can see a particular activity for themselves. In addition the extension agent could arrange for talks by other local people or demonstration to explain a project to them. It is important to be enthusiastic about project work and to try to involve children in discussing and deciding what projects to do. Examples of projects that could be done are poultry farming keeping, rabbitary, vegetable production, handicrafts, fish and home improvement.

Essentially, project work should be a learning experience. The projects are not only to provide useful additional income or food supplies, but should also be educational and a way of equipping children with skills and knowledge useful for the future.

Extension agent working with rural children should have general sympathy with their views and feel at ease in working with them. It might been better therefore it the younger agents in an extension services could be deployed to children in agriculture extension work. Children will need to identify with the agents and be prepared to work and trust them if extension work is to succeed.

Conclusion

Most youth agricultural programme in the past have failed to meet the stated objectives, largely as a result of deficiencies and lapses in programme design, even when they appear to be genuine concern by government in initiating such projects.

There is the need to give more consideration to the children as a significant farmer group so that they will be able to contribute more meaningfully to agricultural productivity of Nigeria.

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INTEGRATING RURAL CHILDREN INTO AGRICULTURAL DEVELOPMENT PROGRAMME IN NIGERIA: A REVIEW OF EXPERIENCE

BY

IDOWU, I. A. AND I.A. ADENIJI

Agricultural Media Resources Extension Centre (AMREC), University of Agriculture, Abeokuta, Nigeria.

INTRODUCTION:

Nigerian agriculture is expected to provide sufficient food for ever growing population, supply raw materials for agro-industries and generate export products for foreign exchange earnings as well as providing employment for a sizeable number of Nigerians.

To attain these objectives, governments in the past had put in place many agricultural policies, programmes and projects. Such programmes that were implemented include the National Accelerated Food Production Programme (NAFPP), the Operation Feed the Nation (OFN), the Green Revolution, the Agricultural Development Programmes (ADPs), River Basin Development Authority and the Directorate of Food, Roads and Rural Infrastructures (DFRRI). All these programmes were targeted at adult farmers as their clients.

Another means of encouraging agriculture to achieve its objectives is the involvement of young school leavers and graduates in agricultural production. Thus, programmes such as farm settlement scheme, the National Directorate of Employment - agricultural programme, the Graduate Farmer Scheme and School Leavers Farms were targeted at the Rural youths as their intended beneficiaries.

Records indicate that the implementation of rural youth programmes had not brought about the expected development in agriculture and improvement in the performance of its roles (Ogunfowora, 1989). Perhaps the modalities adopted in getting rural children and young people involved

might be responsible for the failure of such programmes. For example, it has been noted that over the years, policy pronouncements and programmes of Nigeria government on agriculture have not given adequate recognition to the role of children and youths in agriculture (Adewumi, *et, al* 1992). Hence, the formulation and implementation of youth agricultural programmes had not been based on their needs and aspirations.

Adewumi *et. al.* (1992) further observed that the involvement of children as a sub-culture in the society in agriculture has consistently been on adhoc basis or functional approach basis. Each of the youth programmes arose out of the policy-driven need for them to be established and disappeared or become moribund after a while. Youths involvement has been on increase and noticeable only when the country's food problems have reached an alarming situation or at the emergence of pronounced national food shortages, agricultural disasters, severe famine and drought. Such situations and circumstances have often forced the various tiers of government to mobilise the creative and productive resources potentials of men, women, youths and children towards massive food production.

Today rural children are yet to be recognised as a vital group of rural households that needs to be integrated in, and exposed to innovative agricultural practices for the long term realisation of the nation's agricultural transformation.

According to Aina (1991), the effect of ignoring children role in agriculture despite their importance to farm operations has been the refusal of the agricultural sector to witness the much-sought after changes in terms of increased production, productivity and enhanced rural economics. The attainment of food self-sufficiency has remained elusive.

The need to revitalise the country's agricultural and rural development sector has informed the integration of rural children into agricultural production process. As indicated by Auta and Omotayo (1995), early socialisation of rural children into farming activities in Nigeria rural societies has hitherto been an indication of a conscious integrative

approach. Consequently, the foundation of our national policies on children in agriculture ought to be erected on the platform of this consciousness.

The integration philosophy pre-supposes that the design and operation of our agricultural and rural development programmes must identify rural children as a distinct group or sub-culture with role performance, peculiar needs and aspirations and treated as such on a national basis. The effective strategies for the integration of rural children into agriculture programme with a view to making them take up agriculture as a dignified or useful career will be emphasised in this paper.

UNDERSTANDING CHILDREN AND THEIR ROLE IN RURAL HOUSEHOLD

The villages usually consist of farm households in which production, consumption and agricultural investment activities are the results of a simultaneous family decision. In other words, farming is traditionally regarded as a family occupation and every member is involved. This further implies that any programme of development meant for a particular group, men, women, youths and children of a farm household must first seek the approval and support of the other family members to be successful.

Owing to tradition, kinship, locational affinity and need for cooperation for the sake of security and survival, a high degree of social interactions characterises the village households. In this setting, it usually entails a significant cost to violate village rules honoured by tradition. (Yujiro, 1980).

B. The Rural household consists of the husbands, wives, children and other dependants. Studies of rural areas in Nigeria (Akinbode 1971, Ekong 1978) revealed that the average size of a rural household lies between 10 and above and that the larger the family size, the larger the aggregate size farmland cultivated. The implication of this is that rural families engage mainly in farming and each household could be regarded

as a socio-economic unit. Hence, there are divisions of roles and responsibilities in the rural household.

In performing their legitimate role, parents are responsible for the care and rearing of their children, educating them and integrating them into the larger society as responsible members (socialisation process). Generally, the male adults and children are expected to engage in farming activities to produce goods for consumption and sale. The female adults majorly work in the husband's or their own farms for the well-being of the family. Women, substantially, contribute to farm labour and are very prominent in food processing and utilisation as well as marketing of farm products and animal husbandry.

Previous programmes aimed at attracting youths to develop interest in agriculture failed because of the executors' failure to recognise and deeply understand the role of children in rural household economy. Rural household is a basic unit of the village in the rural life of Nigeria. The effective design of rural children in agriculture programme should normally required the understanding of village households and rural life.

Rural children are under the effective control of their parents and other elderly persons in the communities. Rural households and communities are not simply places where people live together but they are communities which mobilise collective action of their own well-being in terms of socio-economic survival and security. Collection of rural household in the village stipulates and enforces rules and regulations to coordinate and reduce conflicts on the use of resource e.g. land, streams, rivers etc. among villages (Yujiro, 1980).

Socialisation of Children into agrarian culture by the rural households starts from their tender age. Children are usually introduced to a number of agricultural activities such as planting, weeding, harvesting, processing, utilization, keeping of livestock and other farm related activities at an early age. This indicates that all members i.e., men, women and children of rural farm families constitute the human resources that are involved in the agricultural process. This aspect of cultural orientation must be properly understood and made use of when planning agricultural

programme for the youth and children. Such programmes must be planned along the culture, habits and leadership pattern of the households and communities to ensure their success. An effective mobilized agricultural programmes for the youth must have a link and cooperation with development agencies, parents, children and the community at large.

Finally, children are regarded as an economic asset given their potential economic roles and productive contribution in the generation of income in the rural community. A typical rural household traditionally thus depends on children for farm labour for most farm activities such as planting, weeding and harvesting. The general norm in an ideal Nigerian society demands that children should give much respect to their parents and be willing to be sent on an errand by their parents and seniors as occasions warrant. In one form or another, men, their wives along with the children proportionately often contribute to decisions that would positively affect the entire economy of their households.

INTEGRATION OF RURAL CHILDREN IN AGRICULTURAL PRODUCTION PROGRAMME

Nigerian agriculture is largely rural based, Besides the fact that 80% of Nigerian reside in rural areas, children and youths constitute a large segment of total rural population in Nigeria (Auta and Omotayo 1995). Predominance of farm families in farming activities affirms the important contribution children could play in the development of the nations's agriculture. The fact that agriculture is the backbone of the Nigerian economy implies that national economic growth depends on the impressive performance of the agricultural sector.

The missing link and failure of many agricultural development efforts in the past have to do with the limited extent of mobilisation and conscious integration of the inputs of various potential contributors and stakeholders.

In the past, little efforts have been made by successive governments towards creating an enabling environment for the rural children and youth to fully participate as substantially active stake holders in agricultural

development programme except their marginal and unsustainable involvement as a result of the deteriorating food situation of the 1970's and 1980's. For meaningful development to occur, active participation of all categories of people is required.

An agricultural development programme which does not mobilise everybody that has potential contribution to make to the agricultural development process is bound to fail.

Children, unlike adults are apparently innovative, less risk-shy and less conservative. They are eager for change, more willing and eager to learn and have faster rate of learning than the adults (Jibowo, 1992). All these favourable attributes of children can be tapped through organised programming to get agriculture improved on a sustainable basis. Inaccurate perception that children are not yet productive members of the society should be discarded. Their positive attribute of being more adventurous has the potentiality of changing the agricultural landscape of this country.

IMPLICATIONS OF AN INTEGRATED APPROACH

The integration of rural children in agricultural and rural development programme through a systematic approach has the following implications for the overall development of the country:

a. A successful integration has the potential of producing an enlightened crop of young and energetic farmers to replace the largely old illiterate farmers who constitute the bulk of the present agricultural workforce. Future agricultural farmers will thus comprise educated farmers, well trained in modern agricultural methods right from the cradle (i.e. Secondary School age).
b. The type of integration here referred to is potentially a perfect instrument for infusing a positive change of attitude in rural school children towards modern agricultural practices and rural living, which in the long run, will help in the overall development of the agricultural potential of Nigeria.

c. Children engaged in agriculture will have the opportunity to develop their entrepreneurship skill and get involved in income-generating activity to earn extra income thereby contributing to the economy of the nation.
d. Children involvement in agriculture afford them the opportunity of becoming economically independent if and when they finish their schooling. Instead of them going into the labour market jobless, they could decide to put knowledge so far acquired into practical use to earn some income for as long as they remain unemployed. They can even take to permanent farming.
e. Integration has the potential of reducing certain negative influence of Urban centres on rural children. Such negative influence include unbridled materialism, love of quick and fast money, disrespect for constituted authority and consumption of illicit drugs. Productive occupation of their minds in agriculture whether at school or at home have the potential of preventing them from all these undesirable tendencies.
f. Involvement of children in agriculture can serve as a catalyst that can activate the modernisation process of agriculture. When properly introduced to agricultural production programme, rural school children can actually be used as an outreach channel to farming communities in the dissemination of agricultural information, knowledge and innovations. Thus, the foundation of the industrial take-off of the country can be established on a sustainable basis.

A PARADIGM FOR EFFECTIVE INTEGRATION OF RURAL CHILDREN IN AGRICULTURAL DEVELOPMENT PROGRAMME

In the mid-sixties, a number of programme were established, to arouse the interest of youths towards agriculture. Such programmes include:

i. Young Farmers club (YFC)
ii. Young Farmers of Nigeria (YFN)
iii. Gardening Club

iv. 4H- Club

Activities of these programme include poultry, rabbitry, vegetable gardening and crop production among others. Some of the factors responsible for the demise of these youth programme included political instability, inconsistent policies and frequent policy changes, lack of fund, inadequate planning and implementation and socio-cultural factors (Adewumi *et. al* 1992).

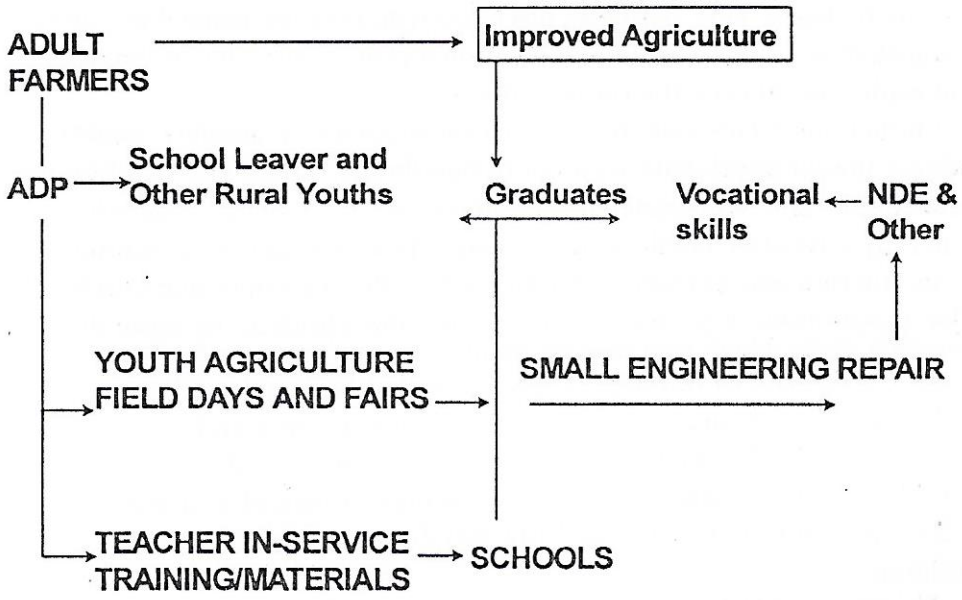
Recently, however, some state Agricultural Development programme (ADPs) e.g. Ondo and Oyo have started some agricultural programme directed towards youths and secondary school students. These activities existed under the "Agricultural-in-schools/youth programme" which itself consists of:

a. School programme.
b. Youth (Young Farmers) Club. The school programme is not being implemented on a state wide basis but has its base in some selected secondary schools. It is aimed at children under the formal secondary school education system. On the other hand, the youth (young farmers) club programme which is out-of-school (extension) system is specifically meant for the school leavers, graduates and other rural youths.

At present, where they exist, their activities include crop and livestock production, fisheries (home-Processing and utilisation. In operationalising the "Agriculture-in-school/youth programme, the ADP provides agricultural services to youth and students in selected secondary schools and upgrading the knowledge and skills of Agricultural science teachers through their participation in fortnightly training programme.

The ADP also links the youths and schools with agencies responsible for credits, inputs and other services in order to accelerate the rate of adoption of technologies and improved farming practices.

Figures 1: Model of Agric-In-School/Youth Programme



Source: Oyebanji *et al.* (1992)

The objectives of the ADP's Agric-in-school programme is to make the school a starting point for getting the young school children involved and inculcate farming habit in them. it is also aimed at encouraging them and getting them to become more interested in agriculture as a career.

While the above programme model can be recommended as it is presently being implemented, it however, shows some deficiencies and hence, is subject to modification.

Up to date, majority of the ADP's expected to adopt this programme model have not started it. The Agric-in-school programme model was recommended by a team of experts commissioned by FAO/UNDP/FGN to look into how youths can be integrated into development programme (Oyebanji *et. al.* 1991). The ADPs' present efforts i.e. education programme, services and activities are directed towards adult farmers,

school leavers/graduates in the rural communities. Their clientele orientation has not been favourable disposed to children or students on a systematic basis. This, perhaps , has to do with peoples' general notion of 'Extension' as an out-of-school educational process directed at the needs and aspiration of only the rural adults.

Further, the ADPs lack the necessary manpower i.e. suitably qualified subject matter specialists who could handle the school age children in educational and vocational programmes. ADPs' extension agents are generally trained to handle adult learners. They lack necessary techniques of instruction and exposure to actually handle the youth and children. The programme objective is to expose the children to agricultural vocation skills which will prepare them to become successful farmers in future. This type of training is better handled by trainers who are well trained in the agricultural science, didactic of education and pedagogical process as well. As practised in USA and developed countries of Europe, subject matter specialists with suitable temperament, effective teaching techniques and interest in rural life should be employed to handle the children.

Finally, the ADPs with their own present mandate already lack funds. They are, therefore, ill-equipped to handle this agriculture-in-school programme. Any additional responsibility outside their mandate may result in inefficiency, conflicts of interest and poor job performance.

Granted the constrains of the ADps in the face of winding resources, one possible way-out would be to experiment with the three universities of Agriculture and some selected college/faculties of Agriculture nationwide to handle this programme in place of the ADPs. This suggestion is based on the mandate given to these institutions. The mandate of the Universities of Agriculture, for example, covers student training, research and cooperative extension with modest production activities. The primary philosophy which guides the training of students is the production of skilled manpower that is adequately furnished with the skill, knowledge and comprehensive information required for engaging in profitable agricultural activities. Such knowledge manpower has to be

produced in an atmosphere endowed with the adequate human material and financial resources through the adoption of effective techniques of instruction, and exposure to the actual practice of agriculture as a business.

To be effective, the approach has to be characterised by the following features:

a **participation:**

The school children must be allowed to have a say in the programme intended for them. When this is allowed, the commitment of the children will be high. This approach could facilities favourable behaviour and attitudinal changes in children, and can thus lead to the establishment of mutual trust and conducive atmosphere for effective interaction. This approach demands that the development programme must focus on identified and recognised needs of the children to arouse their interest. This is crucial as imposed programme are not likely to be successfully accepted and if they are accepted, they rarely last. Therefore, rural children oriented agricultural development programme must be based upon careful analysis of the needs and situation of the rural children. Any decision on a life career imposed upon these children at their age cannot work. Furthermore, vocational guidance principles indicates that, for a career training to be realistic, the incumbent trainee must make the choice of the career by himself.

For children-in-agriculture programme to be taken seriously, it needs to be developed from the bottom-up i.e., children own perspective. The development policy make's attitudes such as "dominance.,coercion and the perception of programme intended beneficiaries as empty vessels, which have to be filled with knowledge and directed on "what to do and how to do it" should be discarded in favour of participatory approach which emphasises interaction of all parties to the development programme (Hangmann, *et al.* 1997). Participation in this context, is considered in terms of holding membership regular attendance at meetings, contribution of money, holding of office in the programme, serving or going out to

actually work for the realisation of the programme's objectives and goals. This approach builds in a feed-back system which helps the change agency, in charge of development programme to determine the target audience's perception of the programme and willingness to stake their resources on the programme

b. **Self-motivation**

This approach pre-supposes that the participant are drawn into programme on their own volition, self -motivated, interested and willing to participate. Experience has shown that "self -motivation is best motivation. The application of this strategy endures the spirit of cooperation, oneness and unity among the participants. For effectiveness, development programme should first start with those who are self-motivated or perceived the programme as theirs and beneficial to them. Consequently, the success story of the participating children and its trick-down effect would elicit further participation of other children later.

c. **Communication**

This entails mobilisation of the target audiences through effective communication. It involves correct identification of the community legitimizers and power brokers and consolations with them to mobilise support for development programme. It has to do with the appropriate reception and transmission of message which could help in the acceptance, participation and implementation of a development programme

Where this approach is effectively utilised programme execution becomes easier as people would correctly perceive the programme's objectives and benefits, and what their own contribution to its success would be. The strategy enhances intended beneficiaries' level of awareness and understanding of crucial issues associated with the programme. This enables the participants to engage their creative energies positively towards the programme.

Communication strategy is vital in determining success or failure of any agricultural development programme. It needs to be thoroughly

planned and executed with credibility for a smooth realisation of development programme's objectives. For this strategy to be effectively used, rural communities must be provided with necessary audio-visual and development support communicating facilities such as television-viewing centres, public address mobile vans, radio phones and subsidized radio sets.

CONCLUDING REMARKS

This paper raised issues on the effects of ignoring or neglecting children role in agricultural development, despite their importance in rural family households. The position was taken that several agricultural programmes have been tried in the past with little or no success.

The missing link perhaps has to do with the extent of mobilisation and conscious integration of the potential contributors such as rural children.

Getting children, along with others, to be actively involved in agriculture through conscious efforts could help the ailing agriculture and rural development sector to become vibrant. The paper suggests a modification to the operationlisation of the existing model for children-in agricultural school programme backed with a number of strategic features for its successful and effective nationwide implementation.

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ROLE OF FARMERS CHILDREN IN THE DEVELOPMENT OF AGRICULTURE IN NIGERIA

BY

T. A. OKEOWO AND L. A. ODEYEMI

School of Agriculture , Lagos State, Polytechnic, Ikorodu.

INTRODUCTION

Throughout the world today, agriculture is recognised as an important sector to the survival of man and the improvement of the living standards of mankind.

More recently however, Nigeria has witnessed an unprecedented concern about the food situation. Food insecurity of the household level is a very common problem. Besides implications for food security, the contributions of Nigeria agriculture to the GDP and the total export are not encouraging. The proportion of agriculture's contribution to total export fell from 67.0% in 1962 to 5.7% in 1988 (CBN, 1994).

The Federal Office of Statistics records suggest an increased number of farming households from 9,425 million in 1987/8 to 10,485 million in 1991/2 (FOS, 1992) without a concomitant improvement in agricultural self-sufficiency index. The reality facing the nation now is that farming activities are dominated in Nigeria by resource poor farmers who represent over 90% of the farming populace and produce as much as 85% of the total agricultural production, but about 75% of the marketable output.

AGRICULTURAL LABOUR INPUTS:

The production of these outputs employed various combinations of the productive resources such as land, capital, labour and entrepreneur. Of all these factors of production, labour is very important which is supplied by both men, women and the children

However, in developing countries (Nigeria inclusive), because of the subsistence nature of farming coupled with the economic problems,

farming activities have not been fully mechanised with majority of the farmers still depending on manual labour for their farming activities. One factor that has encouraged its use to advantage is the practice of polygamy that encourages an average African farmer to have up to 8 to 10 children which helps to alleviate the problem of labour availability.

Thus, it is a common thing to see a farmer and his children going to farm so that they could help with his farm works. Outcomes of research findings on agriculture in recent years has shown a declining state in Nigeria's agriculture which is evident in the drastic reduction in the available products. Reasons adduced to this declining state include: poor transportation system, lack of capital, inadequate storage facilities etc.

While the role of men and women in labour supply has received some attention little or no attention has been paid to problems relating to children in agriculture and their role. Afterall, a typical rural farm family comprises of men, women and children. In the process of creating agrarian society, the youth/children had been neglected over the years (Auta, 1972).

Forty five present of the country's population are made up of youth including children and most of whom lived in the rural areas. By the projection of United Nations to the year 2000 AD, the youth population would have increased to 29, 233, 000. It is therefore exigent not only to mobilise them but also to organise them for agricultural development.

The future of agriculture rest squarely on the children who represents the link between present and future as well as a reservoir of labour. Ogun (1997) observed that this future army of food producers must be well prepared and equipped for the roles they are playing and that they need to play in sustaining agricultural development in the country.

What then is the role or place of rural children in Agricultural Development? It is the intention of this positional paper to highlight the place of rural children in farming activities and to make recommendations that will enhance their effectiveness in the sector.

DEFINITION OF CHILDREN AND FARMING ACTIVITIES:

The definition of child/children is not an easy task within the context of their participation in agriculture. However, there are two schools of thought that assist in the categorization. One believes that any one who is still dependent on his father (parents) for food, clothing, shelter and other social amenities is a child. This is called the dependency category. Another is based on age class and believes that people in the age bracket of 1 to 18 years are children.

Some however believes that children are within the age bracket off 1 to 14 years. To support the latter submission, UNICEF (1991) observed that an estimated 80 million children between ages 10 - 14 years undertakes work which is either so long or so onerous that it interferes with their normal development. While some work factories and workshops, majority work in agriculture or in domestic service.

Throughout the presentation in this paper, children are those that are less than 18 years but are still dependent on their parents for living. Whereas, farming activities are those operations that relate to planning, implementation (production) and marketing of livestock, crops, fisheries forestry and soil conservation.

ROLE OF RURAL CHILDREN: PRESENT AND FUTURE:

Agricultural development, which is a process of modernization rather than the creation of a mere industry would rise from a theory of operation of a traditional agriculture (Southmorth, 1967). Sustainability and continuity are sine-quo-non to development process. The farmers children have always had a key role to play in its process.

Available evidence abounds that these future army of food producers have been engaged in harvesting, watering and marketing (UNICEF), 1991). However, such farming activities are allorted based on their (children) gender. The tendency and fragile nature of farmers female children limits their participation in farming activities to mostly processing, marketing and watering.

In the Eastern and Middlebelt area of Nigeria, females irrespective of

their age are deeply engaged in almost all cropping activities and operations including weeding (Egbugbara, 1993). Whereas within the livestock sector, the younger male children engage in feeding and herding of cattle and small ruminants while their counterparts female engage in processing of cow milk into Fura (cheese) and its marketing.

These children who are not in school or out of school partake in these operations for longer hours than their counterparts who attend school and only participate after school or on weekends. Those who attend schools are not spared the rigour of actively participating in school farm operations as part of the curriculum at the primary and post-primary schools. Apart from being exposed to the science and practice of production of annual crops, they tender small animals such as Rabbits, Broilers and Cockerels.

Summarily, the unique roles and place of rural children in agricultural development are:

i Source of Labour Supply

With the children/youth contributing as much as 45% of the population and with most of them living in the rural areas; they provide a significant source of cheap and steady labour for production, processing and security for farm produce.

The polygamous marriages of old (though reducing these days) allow farmers to have more children who could assist in farming operations. It was Bulcholz (1995) who rightly observed that children are the farmers artisans, small businessmen, trader, entrepreneur and politicians of tomorrow. The contention was that for sustenance of farming education in agriculture should not breakdown or else it will become more intractable than it already is today.

ii. Source of Information/Technology Transfer:

With the advent of universal primary education and its widened curriculum which has Agricultural science integrated as a subject at the primary and post primary levels, its concomitant multiplier effect

cannot be over emphasised.

Through the teaching of the subject, the children hear, see, and partake in the practicals at the school levels of which they pass on to their parents new ideas and technologies. In order to stimulate interest and sustain production in agriculture, some state governments launched programmes such as Schools Agricultural Programme and Back to Land Programme within the secondary schools system. Obamcabor and okeowo (1996) observed a significant technology transfer to farmers interms of extension demonstration effect of schools Agricultural programme in Ikorodu area of Lagos State.

Luckily enough, Agricultural Sciences is one of the vocational subjects in post-primary schools with the following objectives for agricultural education:

- to stimulate and sustain students interest in Agriculture;
- to enable students acquire basic knowledge and practical skills in Agriculture;
- prepare students for further studies in Agriculture;
- prepare students for occupation in Agriculture;

Given the aforementioned objectives; the Sustainability and continuity of the profession is well assured should be necessary governmental agencies and Ministry ensure prompt funding, adequate monitoring and control of the execution of the policy for the sake of agricultural development in Nigeria.

To support the above, it was Wilson (1987) who agreed that there is need for education and awareness about agriculture throughout public schools and that future high school agricultural education programme need to be broad enough to serve the entire career spectrum in agriculture.

*iii. **Determinants of Enterprises and Scale of Operations:***

Large family size encourages bigger farm size establishment since labour is the major constraint to subsistence farming. Therefore, children in the family given their size and number can and often influenced the

type of enterprise and the operational scale of farming.

*iv. **Link Between Present and Future***

Adults farmers as organic beings do age and their productivity declines with age and quantity of hard labour they perform. Farmers children, though they supply cheap labour yet they are by intuition great farmers of tomorrow.

They acquire the necessary skills and knowledge about what and how to produce and they are further improved in knowledge with their interactions with the developed technologies from Extension Agents and the Media.

Such role of the children will facilitate continuity and sustenance of the profession in Nigeria.

*v. **Serve as Informal Farm Secretaries***

The illiteracy status of most farmers have tended to make data gathering for planning purposes and for decision making both at the farm micro) level and macro-level near an impossible task. However, the saving grace is that some farmers children who have had a stinct at school assist their father farmers to write some important notes on date of planting, price at which products are sold, quantum of money loaned and borrowed and quantity of produce harvested.

Despite the crude nature of these records keeping, they serve as back-up information when the need for them arises. faulty data on which the nations plans and programmes are based have been identified as one major problem of our national development.

CONCLUSION:

The man, woman and children are the three key components that make-up a family. They are all supplier of labour (an important production input) for the subsistence farming commonly practised in Nigeria and other LDCS. Too much emphasis have been placed on the role of the father-farmer and women in agriculture to the detriment of the

youth/children as if they never exist.

This paper have focussed on their roles viz-a-viz agricultural development. Although child labour within the international Labour Organisation charter is an offence: there is no way the impact of children within the national economic development will be unnoticed as they constitute as much as 2/5 of the world's population with most of them staying in the rural agrarian villages and settlements.

One would therefore recommend that institutional hindrance in terms of credit, access to land and other factors of production including extension agents should be removed for a better future for agriculture. Furthermore, more research into their activities, more importantly their role in making decisions concerning farm management decisions of what to produce, how to produce among others should be conducted.

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THE USE AND ABUSE OF CHILDREN IN NIGERIA: IMPLICATION FOR YOUTH DEVELOPMENT

BY

ALLIYU NURUDEEN

Department of Sociology, Ogun State University, Ago-Iwoye, Nigeria

INTRODUCTION

The concept 'child-Abuse' in common place in most literature that has to do with children and youth generally. Little or nothing have been said so for about child-user. Perhaps, this is a reflection of the perceived sufferings children are subjected to. All efforts are therefore directed at rescuing the children under such a condition.

While we recognize that children in some situations are abnormally used by adults (parents, teachers, guidance, etc) this paper is of the opinion that children are indeed very useful not only to the parents but also the entire community they are born into. It is this believe that initiated the topic "the use and abuse of children in Nigeria". This indeed has implication for both youth and national development.

The paper attempts to discuss, on the one hand, the use of children and how it can contribute to youth and National development. On the other hand, it discusses abuse of children and how it has affected youth and national development.

WHY DO PEOPLE HAVE CHILDREN?

Perhaps we need to start by asking the question why do people have children? This in our opinion will enhance our discussion as to the use and abuse of children as well as their contribution and non-contribution to youth and national development.

Children, no doubt, are desired by every married couple, indeed it is the sole purpose of marriage in some parts of the world. This is particularly true of the Nyansengo people in south eastern Kenya as well as the Yoruba people of south- western Nigeria. According to Robert and

Barbara (1963) if a woman is childless among the Gusii mothers in Nyansengo in Kenya, she is believed to have been cursed by some evil spirit for promiscuity before marriage. Having children to the Nyansengo therefore, is an evidence of chastity on the part of the woman while she was unmarried.

In addition to the above, there are other reasons that have been advanced why people have children or have preference for a particular number of children on sex. Caldwell for instance argues that there are two kinds of society, one in which it is economically rational to have an unlimited number of children and the other in which it is economically rational to be childless, depending on the nature, magnitude and direction of inter generational wealth flows. The value of children any the propensity to have children by and couple could be said to be economical apart from being psychological and /or cultural. Children in developing countries, have an economic value among rural families and parents are more concerned with practical contribution children can make to the family (Fawcett, 1982). This, indeed, according to Olutayo (1994) seem inevitable to the people because child labour is a method of exploiting the environment.

From the foregoing one can argue that people have children for various reasons which include psychological, socio-cultural, and most importantly economic.

THE USE OF CHILDREN IN NIGERIA.

Children are indeed very useful to parents in Nigeria. They are fondly desired by any couple in Nigeria for whatever reason. Children both in pre and post colonial Nigeria has remained as a special category of worker. Children seem to have been well adapted to the situation through the strict socialization process (Olutayo, 1994). Ramatu Abdullahi states that:

> "Without adequate tools or machinesavailable as in the west, traditional Nigerians have had to till the land with hand tools in order to grow their food, and children have worked side by side with their fathers on the farm, As a child grows older he

> takes the hoe from his father because there is a spiritual blessing attached to this. There is nothing done amongst the tribes in Nigeria that does not have a deeper meaning than what an outsider can see on the surface" (cited in Olutayo, 1994).

The situation described above is indeed the practical use of children for exploitation of the environment for the survival of the family. This is quite common in pre colonial Nigeria and post colonial rural Nigeria.

Children in such situation are not just been used or exploited rather they are being socialized into a way of life fit and proper for such a society. Children in such a setting perceive themselves in relation to their parents. They tend to access themselves in terms of what skill have I acquired from my parents. In essence while they practically contribute to economy of the family, they are, as well preparing and developing their personality for adulthood. According to Fadipe (1970) .

> "A farmer's son from the age of six up to marriage assist him in productive operations on the farm. Usually, in order to stimulate him to industry, a father allots a small plot to a son while he is still young. This is to be worked in his spare time, usually after 3.30 in the afternoon. Anything that may be realized on the sale of products of this plot goes into the son's own account". (P.149).

The use of children among the far ming Yorubas, therefore on the account of Fadipe, can not be seen in the light of child exploitation but work socialization. Moreover this was a period when every human activity for survival was centered around the home. However, to some extent, in rural Nigeria, where majority are still farmers, most activity for survival still centers around the home or kinship. This may not however, be without a mix with some modern valves and desire due to Nigeria's contact with Europe through which capitalism has introduced to Nigeria.

Since the capitalist mode of production became established through colonialism and imperialism in Nigeria, one could have expected that child

labour be replaced by another means of production at least in the labour centers if not rural. Rather, the reverse has been the case. Instead of witnessing individualism and affluence under capitalism in Nigeria, the level of dependency and poverty have rather increased hence the persistence of working children.

The use of children under capitalist mode of production in Nigeria was fundamentally child-labour exploitation and not child- work socialization. This is because the use is not predicated on any stimulation to industry but a coping mechanism against poverty and squalor hence, abuse of children. It is arguable from the foregoing that children were more likely to have contributed more to the youth and community development in the pre colonial Nigeria due to the work socialization process they passed through, than now. The implication therefore is that if some elements of pre colonial ways of life still persist in rural Nigeria, contribution to youth and National development by rural children through government and non-government support can still be achieved.

THE ABUSE OF CHILDREN IN NIGERIA.

The concept 'child abuse' is closely associated with the advent of capitalism in Nigeria. Abnormal use of children in Nigeria did not evolve entirely as a separate phenomenon. It is indeed consequence of capitalism a system rooted in exploitation of workers be it child, youth or adult. Child Abuse is also closely associated with another concept 'working-children such children are more vulnerable to many other forms of abuses from adults in the course of their work life.

Going by the value an average Africans have for their children, no Nigerian parents will want to abnormally use their children. But the present socio-economic condition compelled many Nigerian parents to use their children in ways and manners describable as abnormal.

In a research conducted by Olutayo (1994), he reported that about 80% of the parents interviewed explained that the use their children for the task (work) because of poverty. Were they not to be poor they would not have used their children for such task. The concept 'working

children' as it were today, would not have emerged. Working children amongst many others are more vulnerable to other forms of abuses ranging from rape/sexual abuse, kidnaping child neglect, ritual killings, ignorance and illiteracy. Poverty therefore can be seen as the major driving force for child labour in the present day Nigeria.

Contrary wise the motivation or stimulation for child-labour in pre capitalist Nigeria was quite far from poverty. It was indeed a child - labour stimulated by the drive to entrepreneurial and skillful work life, A complete work socialization process, strictly tutored by the parent to prevent any deviation from the norm. The phenomenon of working children stimulated by poverty have continued to increase over the years in almost all urban or major cities in Nigeria. This phenomenon might have persisted due to rural-urban drifts of young adults that prefer to settle in the urban centers. Preference for the urban centers, more often than not, is based on the assumption that jobs are readily available aside from social amenities present in the cities. No sooner they got to the cities than they often discover that the situation is contrary to expectation. Rather than relocate immediately to the rural areas, they may decide to develop different coping strategies which may include abnormal use of children.

The implication of this is that while the rural areas lose to urban centers their youth mostly in reproductive and productive age, the center do not provide avenues to tap the potentials in these youth. The reason being that most of them are either under employed or unemployed and where the parents migrate with their children, the later become the immediate source of livelihood. The socio-economic condition of these category of people make them very prone to having more children so as to cope now and have their old age secured.

It is the candid opinion of this paper that the socio-economic condition of parents and of course the motivation for having children determines, to a great extent, the use and/or abuse of children.

CONCLUSION

For Dudley (1969), the questions to ask about a country's development are what has been happening to poverty ..... unemployment ... inequality? If all three of these have declined from high levels, then beyond doubt this has been a period of development for the country concerned.

If one or two of these cental problems have been growing worse, especially if all three have, it would be strange to call the result development' even if per capita income doubled.

A cursory examination of the working children situation in Nigeria reveals that parents of working children are poor, most are under-employed if not unemployed and they suffer great inequality in almost all aspects of life. This by extension has implication on the children and in effects the children contribution to any development process. Rather than have children, supposed leaders of tomorrow, contribute more to development in Nigeria now, they contribute more to disorders in the society today. For example, Nigerian youths have contributed more to urban violence in the recent times than before. This can not be far fetched from the fact that development process of Nigeria youths and children are indeed impeded.

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SOME SOCIAL FACTORS AFFECTING CHILDREN'S BIAS AGAINST AGRICULTURE AS A PROFESSION

BY

AKINBILE, L. A. AND M. G. OLUJIDE

Department of Agricultural Extension Service, University of Ibadan, Ibadan, Nigeria

INTRODUCTION

Nigeria is primarily an agrarian society, with about two-thirds of the total population engaged in small scale farming. It is, however, worthy of note that Nigerian farmers now see agriculture as being less rewarding than it used to be. This is thus forcing a negative attitude on those farmers in agriculture as a profession.

Man depends on agriculture and agricultural produce for their well being as it provides him with basic needs such as food, clothing and shelter. It is expected to provide export earning to finance development, supply raw materials to industries and provide opportunities for meeting the basic food needs of the population. It thus becomes an indispensable factor in survival. Agriculture also plays a major role in a country's economy, whether such country is developed, developing or underdeveloped. This is because with the exception of few countries that have mineral deposits, most other nations depend on agriculture not only as a source of food for consumption, but also for the generation of foreign exchange and for its role in capital formation. It is thus important that agriculture of every nation must be put in its rightful position. This will help ensure the effective mobilisation of its practitioners, the farmers.

The farmer's dwindling living standards and the low infra structural development in the rural areas have forced the children, who should take over the nation's agricultural productivity to detest farming as a profession (Olaitan, 1985). This has been noted by observers to be a bad omen for the future of agriculture in the country, most especially, when issues of sustain ability and food security are being discussed. It has,

however, been noted that some social factors are responsible for the negative attitudes of children and thus their bias against agriculture as a profession. It thus becomes important to assess those social factors with a view to defining a way forward for the future progress of the agricultural profession, and every concerned nation and its citizens because of its importance to all.

STATE OF AGRICULTURE IN NIGERIA

Agricultural output in Nigeria is unstable. Household food security varies by the season and is often precarious during a long dry season for a population who relies mainly on rain-fed agriculture. Although access to land is generally good, farm holdings are small and fragmented, between 1.2 and 2 hectares on the average (UNICEF, 1990). Farmers have less assess to institutional credit and few opportunities for expanding their farms' size. When the crops fail due to pests, disease or poor rains in their small scale farms, they have little insurance. Farm technology and management techniques are also simple, with the hoe and cutlass dominating farm cultures. Farm work is therefore extremely labout-intensive with most farmers adhering to crude production techniques.

Availability and affordability has forced farmers to the use of obsolete inputs, and in the absence of intensive fertilizer use, farmers engage either in mixed farming or short fallow or shifting cultivation to raise the carrying capacity of land. In addition, in spite of recent experiments with irrigation-fed agriculture and the application of high yielding variety seeds, farm practice is dominated by the use of traditional seedlings. As a result, output per framer per hectare is low, which partly explains why, despite the large farming population, food supply often fails to keep pace with population growth. In addition to production instabilities caused by poor farm technology, inadequate credit and infra structural support, output delivery households is handicapped by severe transportation bottle-necks. The weak post-harvest storage technology leads to considerable food loss during food processing and distribution. As a result, periodic supply shortages lead to substantial price increases, which reduce both real family

budgets and access to food. Except for the subsistence farmers drastic increases in food prices, not only lead to several privations, but also to the need for fundamental "structural adjustments" of the family budget. In most poor families, maintaining existing levels of consumption is only achieved at the cost of cutting down other costs. All these problems facing the state of agriculture in the nation therefore necessitate examining agriculture as a profession.

AGRICULTURE AS A PROFESSION

In the developing countries like Nigeria, up to 70% of the population are involved in agriculture, either directly as farmers, or indirectly in food processing, marketing and servicing industries. Despite the role agriculture has played and continues to play in the society of tropical countries, those engaged in agriculture are often regarded as little more than illiterates. Agriculture workforce therefore consist largely of an ageing segment of the population.

Since the early 70' S, increasing urbanisation brought about by the oil boom in the country, and its inflationary tendencies, couple with other socio-political and macro-economic factors have resulted in a gradual but consistent drift of the rural youths to the urban areas, looking for white collar jobs. The consequence of this is that the percentage of the population gainfully employed in the agricultural sector has fallen drastically, with a considerable percentage of this, according to Ogunbameru and Adepoju (1997), consisting of aged people. This is further compounded by farmers dwindling living standards (UNICEF, 1990). This is caused by their production instabilities caused by the use of poor farm technology, inadequate credit and infrastructural support, high inflation rate, transportation problems, use of weak post-harvest storage technology, lack of insurance schemes for farmers and their weakness caused by age.

CHILDREN'S POTENTIALS IN AGRICULTURE

Empirical studies have shown that there is a correlation between the age and educational level of farmers and their rate of adoption of improved technologies (Ogunbameru and Adepoju 1997, Olujide 1991). Essentially, the older farmers without education adopt research finding at a lower and /or slower rate than young and literate farmers. Therefore, a nation which neglects its youth will not advance agriculturally. It is also true that Nigerian agriculture is characterised by a low use of improved technologies due to a number of factors as: age of farmers, their poor financial status, aggravated by their poor credit worthiness, and their lack of vigour, energy determinants and vitality, which are good potential that can be exploited in the youths. Youths represent a critical socio-economic group in the farm family set-up. Their numerical strength and key attributes as fast adopters of improved technology and their future leadership potential, makes it important to mobilise them for increased productivity.

CHILDREN'S BIAS AGAINST AGRICULTURE

Most of the children, including those who come from rural farming families now have bias against agriculture as a profession (Olaitan, 1985). This has been observed to be caused by many factors. Earlier studies at getting their attitudes towards farming as a profession have indicated negative responses. This is to the extent that almost every rural children want to migrate to urban centers to secure jobs other than agriculture. According to Olujide (1991), they prefer going to urban centers to learn trades they would have learnt in their rural areas as they do not want to find themselves in farming as a profession either by accident or by design. The situation has become so serious that it now threatens the future of agriculture in the country.

The important ones among the factors that led to their biases include the state of living of their farming parents. They detest such living standards and come to the conclusion that if such living standard can be caused as a result of their taking agriculture as a profession, they better

run away from it so that they do not end up in such conditions. The low status of farmers is influenced by other factors such as their mode of farming, long investment period before farm yields a profit, wealth from oil or minerals, low incentives from agriculture, low incentives from government, and other external factors such as climate .

ANALYSIS OF THE SOCIAL FACTORS.

1. Low status of farmers is dehumanising to the extent that farmers engage in fundamental"structural adjustment" of the family budget. Often, maintaining existing levels of consumption is only achieved at the cost of cutting other costs. In several families, good health care and child education suffers.
2. Mode of farming - the current mode of farming involve tilling the soil with hand tools. Shifting cultivation is also very common and many young people are not prepared to engage in such an energy-consuming venture yielding poor returns. The social effect by agriculture is that changes in agricultural practices are very difficult to bring about. The adult farmers resist change, while the young people leave school and drift to towns and cities to look for office jobs.
3. Long investment period - it takes several years to start to realise profit from agricultural enterprises, especially crop plantations. Any farmer who hopes to profit from farming must be prepared to delay gratification until his farm starts to yield results.
4. Wealth from oil or minerals - this greatly helped in changing the attitude to agriculture of both the government and the people. There appears to be more money for people to spend, and a belief that they can easily obtain money in occupations other than agriculture with comparatively little effort.
5. Low incentives form agriculture - village farmers produce the crops sold in the markets in urban towns and villages and are usually very poor. In contrast, the middle-men derive more benefits from agricultural produce. It thus encourage people to want to sell rather than produce.

6. Low incentives from government - Government has often failed in providing enough support services for the farmers to help increase their production and assist them in time of need. These have forced many farmers off farming as a profession.
7. External factors include climate such as drought, excessive rainfall and intensive heat, which are beyond human control. The situation of glut is also pathetic. So also are pests and diseases infestation of farms. The fluctuation between glut and scarcity is so great that rural children will not risk going into farming until a better balance can be achieved between the two extremes.

THE WAY FORWARD

The way forward for effecting a positive attitude in children about agriculture as a profession is to help the farmers in all ways to close the wide gap between situations of glut and scarcity on their farms. This is because at the two situations, the farmers do not significantly derive benefits that are commensurate to their efforts. This can be better done by the government which has enough machineries at its disposal to help the farmers in the interest of the nation.

SUMMARY AND CONCLUSION

Children have a serious bias against agriculture and a profession. This bias is due to some social factors that make farmers continue to wallop in abject poverty. It has continuously reduced the agricultural productivity in this country and thus need serious redress.

Part of the social factors that affect children's attitudes or bias include mode of farming, long investment period, wealth from oil or other minerals, low incentives from agriculture, low incentives from government and some external factors which are beyond the control of an average farmer.

The government should thus use its vantage position to assist better the lot of farmers through provision of support services such as credit, insurance schemes, storage facilities, helping in effective distribution of

produce, providing effective storage facilities and ensuring efficient processing and preservation of farm produce. Also importance are rural infrastructure to reduce migration. It is believed that all these will help induce positive attitudes in the children about agriculture as a profession and will remove their bias against it.

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FACTOR INFLUENCING RURAL CHILDREN'S ATTITUDE TOWARDS FUTURE PARTICIPATION IN AGRICULTURE

BY

BIOLA B. PHILLIPS (MRS)

Federal College of Chemical and Leather Technology, PMB 1034, Zaria, Nigeria.

INTRODUCTION

Children are basically dependant. When we talk in terms of labour supply for the present, they are essentially excluded. They are however very crucial for the future. A 13 year old this year will be an adult in the year 2005. This being the case, they are a veritable feature of future plans and development.

This paper analyse the factors that can influence children's attitude towards future participation in farming. A child (here) refers to individuals that are less than or equal to 14 years of age. A lot needs to done by government and the individuals that make up the society to ensure that the next generation of farmers are better equipped to farm.

Factors:

The impression individuals have about certain issues or situations are influenced directly or indirectly by their environment. As adults, most of such impression build up over time. To this end, the factors that independently and interdependently influence the attitude of children towards farming do not develop overnight but rather builds as they grow. As the children observe and learn in society, opinions are formed about issues and such later develop into attitudes. The factors are diverse. Some affects their attitude directly, others indirectly, but collectively they influence the way Nigerian children feel either negatively or positively towards agriculture. Some of these factors are:

Land:

By law we know that the government has control over land ownership. Land is a critical input into farming. The perception of children with regards to easy assess to farmland can affects their attitude to farming. In Hausa land, assess to farm land could be through inheritance, loan, pledge, rent or government (hired). Of these, the most reliable is inheritance (Koran, 1975). In most cases agreements on land rented, pledged or loaned can be revoked without warning and even government land that are hired could be taken if she has need for it (usually without prior warning). If these conditions operate, there is a tendency that prospective farmers (in this case the children) will be discouraged and hence give a less than positive attitude to farming. If however there are concerted efforts to ensure that farm land is readily available at subsidized prices, then a basic aspect of the problem is met.

Demography:

Another area of concern is demography. According to a recent publication (as of 1991) about 62.5 of the estimated 112.2 million Nigerians are less than 16 years of age. This is more than 50% of the population.

TABLE 1. Population (Million) Year (1991)

(a) under (6)	62.5
(b) under (5)	23.4
(c) Total adult	112.2
Life expectancy	52
% of pop (rural)	66
% of pop (urban)	34

Source: Compiled From UNICEF, 1993.

Of this population an estimated 60% live in the rural areas. From available literature (Norman, 1966; Longhurst, 1984) the major

occupation of the rural population is farming. A sizeable number of these people depend on family labour to work on the farm. Infact a lot of them take it as a norm to work on the family farm. It is possible to deduce that such children would have a positive attitude toward farming. Since there is ample population, the rest of the battle would be against the low level of life expectancy.

Health and Nutrition:

This is very critical for the future of agriculture. The number of farmers in the future is a reasonable function of the children that make it to adulthood. According to Unicef publication (1993) about 35, 000 children under five die everyday in the developing world. About 60% of this is due to preventable diseases like measles, pneumonia, etc. According to UNICEF rating Nigeria is listed among the countries which have very high under 5 mortality rates. The parentage of Nigeria children immunised against such childhood diseases is 44%. If the children are healthy and a greater percentage of them are able to make it to adulthood perhaps that would influence their decision for a profession and they might end up deciding positively for farming.

Closely linked with this is the level of nutrition of the Nigeria child. About 54 percent of children less than 5 years of age were found (between 1980-1991) to be moderately or severely stunted in growth. This supports the findings in an earlier work in Northern Nigeria (Longhrust, 1984). The implication of this is that they may not be able to exert sufficient energy to actively engage in farming except some measures are take to correct this. A direct attack on malnutrition is needed because a major cause of infant mortality is due mainly to illness and malnutrition.

TABLE 2: Percentage of Children (1980-91) Suffering From:

Underweight	(0-4 years)	Wasting 1-2 years	Stunting 2-5 years
Moderate and Severe	Severe	Moderate & Severe	Moderate & Severe
36	12	16	54

Source: Compiled From UNICEF, 1993.

Education:

Education is probably one of the most important factor that attitude of children towards farming in Nigeria. The primary preoccupation of children (as from 6 years of age) is education. Most schools open 8:00 a.m and close 1:00 p.m. This is a critical problem because that very time is when farmers are supposed to be on the farm. Among the Hausa in Northern Nigeria, school aged children are defined as 6-14 years old (Koran 52, 1975). In that same study, 72 percent of sons of wage - earners help their father in field compared with 47 percent of sons of farmers and 35 percent of sons of craft-trade farming occupational groups.

Daughters in this study group are less likely to help in the fields than are sons. Most fathers send their children to school so that the "Children could better understand the world".

Quite apart from the competition that arises for the time slot between 8:00 a.m and 1:00 p.m (i.e. allocation of that time for education or farmwork) the major threat is what happens at the end of the educational training. For some parent, the children are allowed to attend school in the morning and after closing return to the farm. The extent to which a family involves children in farmwork depends on amount of work necessary to provide for the family is subsistence needs. With a primary school enrolment ratio of 77 for male and 63 for females in the country, this is an attempt to introduce improved possibilities for the next generation. We also know that formal education is the broadest channel for the dissemination of new knowledge. Education will better equip the children for the role and responsibilities they will assume in future. This

will help the children (especially offsprings of farmers) to make a clear professional choice.

State of Technology:

To ensure the future of farming as a profession, a lot need to be done on the state of technological development (or use of implements) in agriculture. Hitherto, the capital items (tools) are the hoe and cutlass that has been in use for generation (Norman 37, 1972). More recently a few farmers engage in tractor mining service and some use is now being made of animal tradition especially for ridging, harrowing and weeding. The other aspects of farming like harvesting are manually done. The energy sapping nature of these activities is likely to be a disincentive to children. If however, concerted effort is made in the development of farm implements that will ease farming, increase productivity and reduce the length of man-hours spent on the farm, one would be more certain about the future of farming in this country.

Income:

In a capitalist economy, the choice of resource allocation is determined by the price mechanism. Resources are supposed to be put in their best use. In addition, any form of enterprise is profit motivated. Farming is not an exception. For a child to go into farming as a profession, the returns must be appealing. It must also be comparable to other alternatives that are available in the economy. The crux of the matter is that the income derived from farming must be comparable to other professions. Even though the practice before is that most farmers produce for subsistence, it is important to note that in this age children have ambition of choosing a profession that would provide comfort, i.e. something beyond subsistence. In essence, their mental computation of choosing farming as a profession affect their attitude to farming.

Psychological:

The socio-status (stigma) associated with the profession also affects the attitude of children. The perception of the children as to the important role of farming in the economy is very crucial. Most people have the

impression that farmers are poor, have low status in society and are illiterate. Convincing the elite to go into it as a profession will need more work than talk.

CONCLUSION

The government and individuals need to recognise the important role of farming in the economy. Apart from providing income, it supplies the food necessary for feeding the nation. It is very important therefore that the media, career guidance and counsellors, and parents be involved in reorientating our children towards realising the need to record growth in the number of farmers. The potential benefits of providing raw materials for industrial take off, food for the nation and foreign exchange earnings are important enough for us to focus attention on the programme.

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POPULATION FACTOR IN SUSTAINABLE AGRICULTURE AND NATIONAL FOOD SECURITY

BY

ADEWALE AJADI OYEKUNLE

Department of Sociology, Ogun Sate University, Ago-Iwoye, Nigeria.

PRELIMINARY CONSIDERATION

The issue of how to achieve food security at the national level and in particular among the household members cannot be more appropriate at any point in the nation's history than now. This observation becomes especially germane if account is taken of the fact that the introduction of the structural adjustment programme 12 years ago has led to the pauperization of many household members because of the excruciating effects of public policies which involve cut in social services' expenditure notably health and education; and the increased unemployment rates in the formal sector of the economy. The problem is compounded by the high rate of population growth (3.1% per annum) and the consequent youthfulness of the Nigerian population.

The combination of the faulty implementation of the structural adjustment policies and the ineffectiveness of the population programme has led to myriades of social problems which include high divorce rate, teenage pregnancy, malnutrition, parental neglect and child delinquency. As a matter of fact, more than ever before in the history of Nigeria as a nation, there has been a phenomenal growth in households being headed by female members of the communities. What can logically be deduced from the foregoing is that the most vulnerable group-women and children - are at the receiving end. An increased cases of malnutrition, low birth-weight (those below 2.5kg.) And stunted growth have, in fact, been reported among the Nigerian children (see for instance, FGN/UNICEF, 1990; United Nation, 1997.)

Hence, one of the important consideration in efforts at enhancing the welfare of the Nigerian masses cannot but to centered on how to achieve

national food security. This question becomes relevant if account is taken of the fact that "inspite of the large farming population, food supply often fails to keep pace with population growth" (FGN/UNICEF,1990). This, in effect, suggests a situation where the food insecurity as being presently experienced has both demand and supply causality: low income by the generality of the masses reduces the purchasing power and the amount that can be spent on good, nutrition food; and the unsustainable farming practices lead to low output. What is required, therefore, is an agricultural practice that will not only minimize the use of external and non-renewable inputs that damage the environment but will also emphasize a greater productive use of local knowledge, practices and resources. This will definitely require the services of every household member in order of ensure an increase in self-reliance amongst farmers, their households and the general \Nigeria population. In essence this paper is advocating for a sustainable agricultural practice that will take the youthfulness of our population as a challenges (and even an opportunity) for the achievement of a national food security.

SUSTAINABLE AGRICULTURE AND FOOD SECURITY: CONCEPTUAL CLARIFICATION AND LINAGE

The question of how best to achieve food security in the face of unbridled growth in population of developing countries has led to the consideration of the best agricultural practice that will ensure increased production. Therefore, it is common to distinguish between the traditional, rained agriculture typical of most of the developing countries and the modern or conventional high external-input agriculture of the industrialized world.

While it is true that the former do not contribute greatly to the degradation of the environment, it has been observed that they are relatively unintensive, unchanged or unimproved (pretty er al., 1996). Therefore, the prevailing idea particularly before the 1990s has always been that the achievement of increased agricultural production by the developing countries depends largely on the extent to which they can

copy the practice common in the West.

However, observation by scholars in the field have indicated that agricultural practices that are not adapted to the fragile soils of the tropical regions significantly degrade the land and reduce its productivity. El-Ashery (1992), for instance, has contended that "Indiscriminate transfer of technology from temperature zones to tropical regions has seriously accelerated soil erosion and the conversion of forest into grass-savanna and sterile steppes". The solution to the problem faced by the developing countries therefore lies in agricultural practice that is sustainable both in physical and socio -economic terms.

Sustainable Agriculture

According to the Consultative Group on International Agricultural Research (CGIAR, 1988), "Sustainable agriculture should involve the successful management of resources for agriculture to satisfy changing human needs while maintaining or enhancing the quality of the environment and conserving natural resources" implicit in the foregoing is the fact that a sustainable agricultural practice will not only ensure that the present generation of human beings are adequately fed and remain healthy but that the situation does not lead to the prevention of the future generation to achieve same. In fact, Cocks (1992) has revealed that amongst the indicators of sustainability are whether or not farmers (and their children) wish to continue farming, and whether or not farmers' incomes and welfare (health and education) compare favourably with other sectors of the economy. It is probably this line of thinking that made Pretty *et. al.* (1996) to conclude that a more sustainable agriculture pursues:

a. A minimization of the use of external and -renewable inputs that damage the environment or harm the health of farmers and consumers.
b. The participation of farmers and rural people in all processes of problem analysis, technology developments, adaptation and extension, and monitoring and evaluation;
c. A more equitable access to productive resources and opportunities;
d. A greater productive use of local knowledge, practices and resources

e. The incorporation of a diversity of natural resources and enterprises within farms; and
f. An increase in self-reliance amongst farmers and rural communities.

Food Security

Food security as a concept implies the availability of good, nutritious food to every member of a particular locality or a nation. It means the ability of a people to get the food needed to be healthy and active, wherever they are obtained and however it is provided.
It also means people being confident that adequate food will be available at all times (Hubbard, 1995).

Having said that, it needs to be realized that distinction is always made between food security at the national level and that at the local level. While the former tends to focus on supplies of food within the country, the ability of the nation to import as required and ability to distribute supplies to areas of need, the latter is concerned with the household and the individual having access to sufficient food for an active and healthy life. Although it might be analytically useful to make such a distinction, the position in this paper will be to focus attention on household food security since "the household is the basic earning and decision-making unit on which the most nutritionally vulnerable people (infants and small children, pregnant and nursing women) depend" (Hubbard, 1995). An added reason is the observation by the same author that the way forward to better national food security is improved household food security (p.3).

Sustainable Agriculture and Food Security Linkage

In examining the issue of food security vis-a-vis sustainable agriculture, it has been noticed that food security is not only a function of increased production but also of the ability of a large number of people to have access to food through and enhance purchasing power. While it is true that sustainable intensification of agriculture is known to offer significant opportunities to improved find production, pretty et al. (1996) have observed that "food security cannot be achieved without significant improvements to people's entitlements and access to food" and that this

requires the addressing of broader political economic forces that shape local farming practices and access to food. It is this line of thinking that has made the authors to assert that food security depends on three key conditions namely:

i. *Sustainable food production:* through the use of regenerative technologies, the full participation of farmers in the process of planning, research and extension;
ii. *A conserved natural resources base:* through approaches, practices and technologies that build upon the enhance the health and diversity of available natural resources without depleting them;
iii. *Entitlements or access to food:* through approaches which strengthen local capacity and build strong diversified rural economies.

The pictorial representation of the model as suggested is done in Figure 1 below. All the three areas are inextricably linked and the achievement of sustainable food security depends on conditions being met within all three areas. It also shows that meeting these conditions depends on a supportive policy environment.

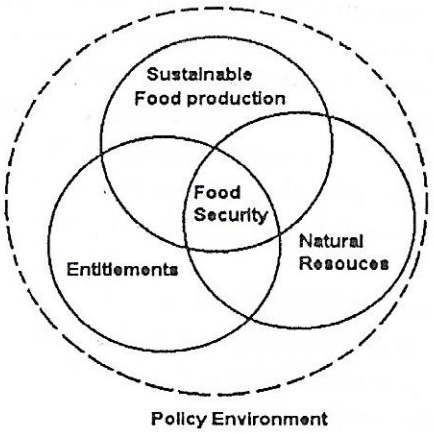

Fig. 1. Sustainable Agriculture and Food Security: Making the Link
Source: Pretty, J.N; J'Thomposon & F. Hinchcliffe (1996) *Sustainable Agriculture: Impacts on Food Production and Challenges for Food Security, International* Institution for Environment and Development, Gatekeeper Series No, 60 p. 14

NIGERIAN POPULATION AND THE PRESENT STATE OF AGRICULTURAL PRODUCTION

There is no gainsaying the fact that Nigeria's population is large by every available standard. The country is the most populous in Black Africa and is about the tenth among the countries of the world. The population is growing at the rate of 3.1% per annum and this requires only 22 years to double itself. As a result of the high growth rate, the population is youthful and the November 1991 Census indicates that close to 45% of the population are below the age of 15 years.

In terms of agricultural production, although recent years have witnessed a lot of governmental efforts towards increased agricultural production, UNICEF/FGN (1990) have identified the simplicity of farm technology and management techniques and the weak post-harvest storage technology as some of the factors responsible for the instability of the country's agricultural output. Hence, it is said that farm work is not only extremely labour intensive but "household food security varies by the season and is often precarious during a long dry season for a population who relies on rained agriculture" (p.83). Table 1 presents a 10-year report of the country's food situation in terms of the imports and exports. It can be seen that food imports as a share of total imports rose to 12.5% in 1978 and climbed to 15.2 in 1982. As a result, per capital availability of imported food rose, after a brief fall in 1979, to 20.8 in 1981. This increase notwithstanding, note should be taken of the fact that there was spatial disparities between the urban and the rural sector as a result of weak distribution network in the latter.

Another important thing to note is that the past five years have witnessed the dwindling in the resources of the government and consequent reduced expenditure on food importation. This coupled with the fact that the purchasing power of an average Nigerian has been considerably reduced asa a result of unprecedented galloping inflation has meant that a larger proportion of households than before are insecure as far as food is concerned.

Nigeria children, Sustainable Agriculture and Household Food Security

In this section, we want to demonstration that sustainable agriculture holds that key for the country's food insecurity and that children have important contribution to make towards the achievement of this worthy objective.

Table 1: Food Import- Export, and Share of Food Imports from Total Imports (in ₦ millions)

Year	Food Exports (Fx)	Food Imports (Fm)	Export minus Imports (Fx- Fm)	Total Imports (Tm)	Food Share of Imports (Fm/Tm)	Per Capital Imported Food Availability
1978	444.7	1027.1	-582.4	8211.7	12.5	12.7
1979	306.4	952.4	-646	747.5	12.7	11.5
1980	221.1	1049	-827.9	9095.6	11.5	12.3
1981	214.8	1820.2	-1605.4	12919.6	14.1	20.8
1982	184	1642.2	-1458.2	10770.5	15.2	18.3
1983	273.9	1296.7	-1022.8	8903.7	14.6	14.1
1984	234.7	843.2	-608.5	7178.3	11.7	9
1985	243.8	940.6	-696.8	7062.6	13.3	9.7
1986	442.6	802	-359.4	5983.6	13.4	8.1
1987	850.9	1646.4	-795.5	17861.7	9.2	16.2

Source: 1. Federal Office of Statistics.
2. Figures on Total imports are from CBN Annual Report and Statement of Account 1980-87.

While it is true that a youthful population like that of Nigeria presents a problem when it comes to the provision of social services like education and health, it has been noted that the availability of more people could contribute to the generation of new technologies. Simon (1987), for instance has argued that " the interaction of more people with the existing large stock of ideas and technologies would spark off new technologies and improvements so that resources could be improved, substituted, or economized". What is being said therefore is that given the necessary policy intervention, Nigerian children can be a source of economic development rather than burden which they are seen to presently constitute.

Table 2 presents the distribution of Nigeria's labour according to age and sector for the 1991 headcount. While close to 45% are said to be in the agricultural sector, it is particularly worthy of note that 1,178,978 (9.84%) of those in the age-group 10-19 are said to be in agriculture and other related activities. Considering the fact that recent years have witnessed the entry of many children into the labour force as a result of the need to augment family income in the face of biting economic hardship coupled with the fact that the age of entry into the labour force (10 year) may not necessarily correspond with the actual situation in our rural areas, the figure for 1998 must have become very large indeed. Given this scenario therefore, the question that will come to mind is: To what extent can Nigeria children contribute to the achievement of agricultural sustainability? This is particularly of importance if it is realized that Perry and his colleagues have identified this phenomenon to be important for food security particularly on the supply side.

TABLE 2: Distribution of Population in the Labour Force according to Age and Sector, Nov, 1991.

Age-Group	Sector				
	Agricultural		Non- Agricultural		Total
	No.	%	No	%	
10-19	1,178,978	9.84	1,211,663	8.27	2,390,641
20-29	2,354,692	19.66	4,756,986	32.47	7,111,678
30-39	2,635,977	22.01	4,197,161	28.65	6,833,138
40-49	2,200,206	18.37	2,369,747	16.18	4,569,953
50-59	1,563,407	13.05	1,133,399	.7.74	2,696,806
60-69	1,132,409	9.46	597,703	4.08	1,730,112
70 +	910,782	7.61	381,816	2.61	1,292,598
Total	1,197,6451	100	1,464,8475	101	26,624,926

Source: National Population Commission (1991) : *Nigerian Population Census Summary.*

Based on this fact, account needs to be taken of the fact that the unsustainability of the present agricultural practice is multi-dimensional. However, poor management techniques, unwillingness to take risks and lack of motivation to adopt innovations are important factors. The contention here is that the present involvement of children in agriculture, if backed by appropriate policy environment, cannot but ensure the achievement of increased agricultural output and access to it by the generality of the people.

In the first place, the children have the advantage of being exposed to the traditional knowledge and skills through early contact to with farming

activities . This is particularly of importance because it has been observed that 'farmers everywhere have considerable skills and knowledge and it is important to familiarize oneself with them before attempting a development endeavour' (Beets, 1990). Secondly, the children's relative high of Western education means that they will not only be motivated to adopt relevant management techniques but it will be very easy for them to adopt innovations. Thirdly, the diversification of rural economies is only possible under a condition that goes beyond mere subsistence production. Because of the possession of necessary qualities, young Nigerians are better placed to do this and therefore make agriculture more attractive.

Having said all these, it is necessary to understand that a conducive policy environment is a sine-qou-non. While it is true that the Federal Government has divorced itself from direct involvement in agriculture but limits itself only to the provision of relevant infrastructural facilities, the State and Local Government agencies need to realize that encouragement needs to be given to the young farmers so as to ensure continuity in production. Additionally, the Non-Governmental Organizations (NGOs), because of their heavy involvement in rural development at the grassroots level, have activities that are characterized by better guidance of development process. This calls for proper working relationship between them and the governmental agencies for necessary involvement of the children in this all-important task.

CONCLUSION

The work has examined the relevance of population in sustainable agricultural production and food security. It in our contention that although the Nigerian population is youthful, the youthfulness can be taken as a challenge since the Nigerian children are not bereft of necessary qualities for increased agricultural production. Their relative high level of education compared with their parents make it possible for them to adopt sound management techniques, to readily adopt innovations and help in the diversification of the rural economy.

While this observation is unassailable, it is our considered view that there is the need for a conducive policy environment for its realization. In fact, we assert that there is the need for collaborative efforts between the various government agencies and the non-governmental organizations.

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FARMERS PERCEPTION OF THE SOCIO-ECONOMIC NEEDS OF THEIR CHILDREN PARTICIPATING IN FARMING ACTIVITIES IN AGO-IWOYE, OGUN STATE, NIGERIA

BY

SODIYA, C.I. (MRS); TORIMIRO, D.O. AND A.F. OLUBORODE

Department of Agricultural and Rural Sociology, Ogun State University, Ago-Iwoye, Nigeria

ABSTRACT

A study was conducted to examine the perception of farmers with regards to the socio-economic needs of their children participating farming activities in Ago-Iwoye, Ogun State. The study covered Mamu and Ago-Iwoye cells which were randomly selected from four cells in Ago-Iwoye block. A total of one hundred and twenty farmers were randomly selected and interviewed for the study using structured questionnaires.

Descriptive statistics was used to describe the data, while regression analysis was used to determine the relationship between the variables.

The results of the study revealed that there is positive but non-significant relationship between the need perception and the level of participation of the farmers children in farming activities. Also, the need perception has positive but non significant relationship with the socio-economic characteristics of the farmers except for age which had positive and significant relationship and the marital status and occupation of the farmers both of which had zero relationship with the need perception.

However, among the key factors which militate against the participation of these farmers children in farming activities includes lack of assistance from the government, high taste for the cities and poor living standards.

INTRODUCTION

The objectives of rural development programmes in Nigeria as stated in the 3rd National development plan are to increase rural productivity, diversify the rural economy, and enhance, generally the quality of life in the rural areas. To achieve these objectives, successive Nigerian government have embarked upon a number of projects including the World Bank - assisted Agricultural Development projects (ASPs). In addition to these programmes, Institutional provisions were also made including the People's Bank, and of recent, the Community Bank established to take care of the financial situations of rural communities.

Despite these efforts and the massive resources bestowed on Nigeria, the rural areas in Nigeria remain largely undeveloped. Instead of rural transformation, it is rural marginalisation. This is in part because there is a missing link which is lack of effective mobilization, organization and proper training of rural youth to be able to take their proper place in the rural transformation process. Following from this neglect also, is the massive drift of rural youths to urban centers with tremendous consequences on the rural transformation process.

The youths, still bubbling with life, vigour and ideas, constitute a potent force in a society, because they are endowed with a number of characteristics, which if nurtured and utilized, are invaluable assets to rural development. These characteristics include innovation proneness, minimal risk aversion, faster reaction time, less fear of failure and higher social propensity (Jibowo, 1989).

However, the above assets are rarely utilized in agricultural extension work for rural development in most developing countries. That is, the potentials of rural youths have not been fully explored and exploited to maximum advantage: particularly in Africa. The Food and Agricultural Organization of the United Nations (FAO/UN) once noted that before Africa can solve its economic problems, it must raise and educated the more than three hundred million young people, most of whom are in the rural areas (UN Task Force on Rural Development, 1986). This followed a realization that the most basic problem of African nations is not poverty

of natural resources, but the underdevelopment of human resources. Hence, a need to build up Haman capital. This means that economic progress depends more on the fertility of the mind rather than fertility of the soil.

In order to fulfil this requirement and realizing that the human capital referred to, is more other than the youths, Africa, and most especially Nigeria, has to effectively harness and motivate her youths for active participation in the development process studies in Nigeria (Oyeyemi, 1990, Oyebode, 1989) have shown that youths, generally regarded to be people in the age bracket of fifteen to thirty years, constitute about forty-seven percent (47%) of the active labour force the country. They form a large reservoir of labour which the country cannot afford to ignore.

The position of this paper therefor is that rural youths should be greatly involved in rural development efforts, this is because the household is closely linked to the farm as suggested by Araceae (1992) that, there is need to harness the rural youth resource for any meaningful level of rural development to be achieved.

The forgoing therefore, suggested the need to study some of the socio-economic needs of farmers' children participating in farming activities in Ago-Iwoye, Ogun State. This study purposively focused on the socio-economic needs of the farmers' children from the perception of their parents.

MATERIALS AND METHODS

This study was conducted in Ago-Iwoye, using structured questionnaires on contact farmers selected with the help of the organizational chart of Ogun State Agricultural Development project (OGADEP) Ago-Iwoye block.

The four cells of the block were randomized to select two. The two cells selected were Mamu and Ago-Iwoye cells. Six sub-cells were randomly selected out of every eight sub-cells in each of Manu and Ago-Iwoye cells selected from four cells in the block. This gives a total of twelve sub-cells selected for the study ten contact farmers were contacted

from each of the twelve sub cells selected. This gives a total of one hundred and twenty contact farmers interviewed for the study.

Pre-tested structured questionnaires were used to elicit information from respondent on some of the socio-economic needs of their children as perceived by the parents, reasons why farmers' children quit farming profession, problems confronting farmers in getting their children to remain in farming profession, the socio-economic characteristics of the farmers and their level of cosmopolitans. The data for this study were collected between December 1995 and January, 1996.

Descriptive statistical technique was used to describe the data collected while regression analysis was conducted at 0.05 level of significance to show the relationships between the need perception and the level of participation of the children, and between the need perception and the socio-economic characteristics of farmers.

RESULTS AND DISCUSSIONS

(a) *Socio-Economic Needs of Farmers' Children As perceived By Their Parents.*

Majority of the respondents (52.50%) indicated that their children participate in farming, while 47.5% indicated that their children do not participate in farming. The respondents further indicated that 48.33% of their children participate more in storage of farm produce, 49.17% participate in harvesting, while 48.33% of the farmers' children participate in processing of farm produce. The farmers' children also participate in planting (11.67%), 46.67% participate in supplying, 45.8% participate in thinning, while 15.83% participate in fertilizer application.

The farmers were asked to rate the needs of their children as perceived by them as either: fairly needed, moderately needed and highly needed. And majority of the farmers (98.33%) perceived the highly needed needs of their children to be government assistance to pursuit of their education, 95.83% perceived their children's need to be educational institution close to their farms and villages, 99.17% perceived their children's needs to be

assistance from government to invest informing, while 88.33% perceives their children's needs to be rural infrastructure, and 95% considered agricultural programme for their children to be most highly needed.

About 30.83% and 28.33% of the farmers perceived Audio-Visual centers and social relaxation centers respectively to be less important needs for their children to remain in farming.

(b) Satisfied Level of Participation.

Majority of the respondent (46.67%) of the farming were satisfied with the level of participation of their children in farming activities while 10.83% of the farmers were not satisfied with the level of participation of their children in farming activities. The farmers further indicated that 42..5% of their children do not participate at all in any of the farming activities.

(c) Reasons Why Farmers' Children Quit Farming Profession.

Majority of the farmers 94.17% observed that most of their children after acquiring knowledge and skill in farming, still don't remain in the profession later in life while 5.88% indicated that they do not make any observation in the respect.

On reasons why farmers' children quit farming profession, 11.41% of the farmers indicated that their children quit because of lack of assistance from the government, 5.31% indicated that the job is not lucrative, 29.18% quit because of the poor living standard of farmers, 3.45% quit because of their high taste for the cities while 1.86% quit because of lack of rural infrastructures, and 3.45% quit in search of white collar jobs outside the rural setting.

On problems confronting farmers in getting their children to remain in farming, 8.86% indicated that most of their children preferred to go to school, and after schooling, they can't remain on the job, 7.60% signified that they don't receive enough co-operation from their children in doing the farm job, while 13.92% said they don't have enough capital to encourage their children to continue to continue in farming and 3.80%

indicated that most of their children wants to be like other children in the cities thereby, they cannot stay in the village to practice farm work.

(d) Regression Analysis Showing The Linear Relationship Between The Need Perception And The Level Of Participation of The Farmer's Children.

The regression analysis between the need perception and the level of participation of the children shown in Table 6 below revealed that the need perception had positive but non-significant relationship with the level of participation of the farmers children (P = 0.06).

Table 7 further establish the relationship between the need perception and the socio-economic characteristics of the farmers and the findings showed that, the Age of the farmers had positive and significant relationship with the need perception (P = 0.05). While the farmers numbers of children, Religion, Education, method of farm land acquisition, farm size, years of farming and their cosmopolitans had positive and non-significant relationship with the need perception (P = 0.9), 0.86, 0.28, 0.89, 0.15, 0.40 and 0.49 respectively). Also there is a zero regression between the marital status and the need perception of the respondents and also between occupation of the respondents and the need perception.

CONCLUSION AND RECOMMENDATION

The main concern of the Federal government of Nigeria is to revitalize the Agricultural sector which has continued to experience decline in its contribution to Gross National Product (GNP) of the Country. One way of doing this, is to incorporate the rural youths, especially those that have farming background (farmers' children) in the revitalization process. It is therefore important that the socio-economic needs of the farmers children participating in farming activity as perceived by their parents be known so that efforts can be made to satisfy these needs and to encourage the rural youths to continue to remain in the farming profession.

In order to explore the potentials of these youths, the following

recommendations are therefore made:

- Government should intensity efforts to direct the interest of the rural youths back to farming, by providing adequate social, educational and basic rural infrastructural facilities in the rural areas; and intensity efforts to uplift the technological standards of farmers.
- Efforts should be intensified to enlighten the rural youths on the opportunities and prospects in farming.

Parallel research efforts should however be conducted on the socio-economic needs of farmers children using these youth categories as the respondents because, they will be in a better position to state the needs that could enhance their level of participation rather than their parents who could have wrong perception of their needs.

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APPENDIX

Table 1: Distribution of Farmers by their Children Participation in Farming Activities.

Children Participation	Frequency	Percentage
YES	63	52.5
NO	57	47.5
TOTAL	120	100

Table 2: Distribution of Farmers by their Rating of the Level of Participation of their Children in Farming Activities.

Farm Activities	No	Low	Moderate	High
	Participation			
1. Clearing	56 (46.67)	57 (47.50)	7 (5.83)	-
2. Planting	59 (49.17)	14 (11.67)	11 (9.17)	36 (30.00)
3. Thinning	55 (45.83)	16 (13.33)	25 (20.83)	24 (20.00)
4. Supplying	56 (46.67)	11 (9.17)	22 (18.33)	31 (25.83)
5. Weeding	58 (48.33)	37 (30.83)	18 (15.00)	7 (5.83)
6. Fertilizer Application	65 (44.17)	19 (15.83)	15 (12.50)	21 (17.50)
7. Insecticide/ Chemical Application	12 (93.33) 108	5 (4.17) 5	2 (1.67) 2	1 (0.83) 5
8. Spraying	(90.00)	(4.67)	(1.67)	(4.17)
9. Harvesting	59 (49.17)	1 (0.83)	4 (3.33)	56 (46.67)
10. Processing	58 (48.33)	2 (1.67)	5 (4.17)	55 (48.33)
11. Storage	57 -47.5	2 -1.67	3 -2.5	58 -48.33

Table 3: Distribution of Farmers by their Satisfaction with the Level of Participation of their Children in Farming Activities.

Farmers Satisfaction	Frequency	Percentage
Yes	56	46.67
No	13	10.83
Do Not Participate	51	42.5
Total	120	100

Table 4: Distribution of Farmers by their Rating of the Need Perception of their Children Participation in Farming Activities.

Need Perception	Fairly needed	Moderately needed	Highly needed
1. Government Assistance to Pursue their Education	-	2 (1.67)	118 (98.33)
2. Encouragement From Government	1 (0.83)	1 (0.83)	118 (98.33)
3. Educational Institution Close to their Farms and Villages	2 (1.67)	3 (2.50)	115 (95.83)
4. Social Relaxation Center	37 (30.83)	56 (46.67	27 (22.50)
5. Audio-visual Center	34 (28.33)	60 (50.00)	26 (21.67)
6. Rural Infrastructure	-	14 (11.67)	106 (88.33)
7. Government Assistance to Invest in Farming	-	1 (0.83)	119 (99.17)
8. Agricultural Programme For Their Children	1 (0.83)	5 (4.17)	115 (95.00)
9. Recognition	1 (0.83)	4 (3.33)	115 (95.83)

Table 5: Distribution of Farmers by Their Reasons Why their Children Quit Farming Profession

Reasons	Frequency	Percentage
No Assistance	43	11.41
Not Lucrative	20	5.31
Need For Schooling	110	29.18
Drudgery	102	27.01
Equipment	20	5.31
Poor Living Standard	30	7.96
High Taste for Cities	13	3.45
Love For White Collar Job	13	3.45
Not Interested	5	1.33
Lack of Rural Infrastructures	7	1.86
No Capital	7	2.92
Labour Intensive	3	0.8
Total	377	100

Table 6: Regression Analysis Showing the Linear Relationship Between the Need Perception and the Level of Participation of the Farmer's Children

X - VARIABLE	P - VALUE
Level of participation	0.06
Degree of Freedom = 118	
Level of Significance = 0.05	

Table 7: Regression Analysis Showing the Linear Relationship Between the Need Perception and the Socio-Economic Characteristics of The Farmers

CHARACTERISTICS (X - VARIABLES)	P - VALUE
Age	0.05
Marital Status	0
Number of Children	0.91
Religion	0.86
Occupation	0
Education	0.28
Farmland Acquisition	0.89
Farm size	0.15
Years of Farming	0.4
Cosmopoliteness	0.49

Degree of freedom = 118
Level of significance = 0.05

SOCIO-ECONOMIC PERSPECTIVE OF THE "FARMERS" CHILDREN FARM PLOTS' IN THE SUSTENANCE OF YOUTH INTEREST IN AGRICULTURE

BY

AGUNBIADE J. B. AND S. F. ADEDOYIN

Department of Agricultural Extension and Rural Sociology, Ogun State University, P.M.B. 2002, Ago-Iwoye, Nigeria.

ABSTRACT

The idea of farmers' children's farm plots has gained considerable ground as a rural farm enterprise system of socializing rural farmers' children into Agriculture in most parts of South - Western Nigeria. For rural children who do not have the opportunity of formal schooling the allocation of small plots of arable land near the farm house could be likened to putting the children up for a period of apprenticeship for becoming future farmers which rural children mostly do become.

This paper however, tries to examine the phenomenon whereby rural farmer's children, even, after being apprenticed in peasant farming still do not proceed to adopt agriculture as their main employment later in life, their further exposures to Agriculture in primary and secondary schools notwithstanding. Instead, children seem to simply dump agriculture holding on to some -collar jobs as mainstay. Authors recommended that the research network on Children-In-Agriculture Programme (CIAP) should articulate its research efforts at identifying the class of children schooling or non-schooling) on whom to concentrate extension educational activities and at determining the nature and areas of emphasis.

INTRODUCTION

The concept of children's farm plots within the frame-work of family farm enterprise system remains one of the most long-standing practice in family farming especially in most parts of South-Western Nigeria. Under

the old traditional rural farming system, the value of children labour cannot be underrated. It is believed to constitute a high percentage in value terms of the implicit labour cost of family farming.

One main way by which rural farmers' children are socialized into rural peasant farming is by parents allotting land to their children, as from the age of, say seven years, to up to 20 years for the children's own farms. The main features of the children's farm plots are that it is relatively small i.e ranging between 1/15 and 1/5 of the parents' total farm, depending upon the age of the child his level of commitment and interest, the amount of parental motivation and the total amount of arable land over which the parent has use right.

Nearest to the huts, children's farm plot is located, deliberately designed to reduce rigour, motivate and sensitize the rural farmers' children to commitment and dedication to their farm plots. The crops grown on the children farms are similar to those being grown on their parents' bigger farms except for the size of farm and the mix of crops. This facilitates the socialization of the children into the agronomy of the various crops including their harvesting, storage processing marketing of the crops grown. The farmers' children are usually not encouraged to prematurely harvest and consume their farm harvests since the concept of children's farm is designed to inculcate into them the discipline of resource conservation, economic self-reliance and profit maximization from farming.

The aim of this paper is therefore to:

a. Analyze the main features of rural children's farm plots
b. Estimate the income generating potential of the plots and the percentage contribution of children's farm income to overall net farm income of the parents' farm.
c. Assess the actual and potential influence of rural children farms for sharpening their future career in farming.

THE PRODUCTION FUNCTION FACING FARMERS' CHILDREN'S PLOTS

In the absence of the use of latest Agricultural Technologies in the production exercise, the usual "shift variable" which shifts the production function positively or vertically is absent because of the absence of modern inputs of biological, chemical and mechanical technologies. This state of affairs usually affects the children's crop yield negatively.

The rural children's farm plots' inputs consist mainly of free supply of leftovers of planting materials of maize, cowpeas, leaf and fruit vegetable seeds as well as yam and cassava sets provided by the children's parents. Land is usually allotted free, deliberately near the farm huts to children as from the time they are about seven years of age and as long as they remain dependent.

The size of land allocated to children is usually influenced by the amount of interest shown and also by the assessment of the parents regarding their children's physical ability to cope as well as the children's understanding of the technical requirements for the crops selected for cultivation.

The production scenario agrees with David Hopper's (1972) labelling of Nigerian peasant farmers as conservative, resistant to charge as though in a lamentation, saying

> "I know of no country where highly productive and profitable technology that is tested and proven is available to cultivators along with their requisites for use and yet languish unadopted because farmers are traditional".

Olayide (1972) put the average farm size of small farmers at a range between 2.45 and 2.97 hectares and for medium-sized farms, at 6.66 hectares. The percentage contribution of family labour to mixed and sole crop farms was put at between 98.74 and 100.00 percent.

Table 1 presents and estimated farmland allotments to different ages of children as follows:

Table 1: Allotment of cropping farm land to Rural Children According to Ages.

Age Stratum (years)	Proportion of Allotment as % of Patents farm	Children's farm size (Ha)
7 - 10	36174	0.198
11 - 14	36169	0.297
15 & above	36164	0.594

Source: Computed from Olayemi's researched farmer's farm sizes.

ARABLE LAND ALLOTMENT TO CHILDREN BY PARENTS

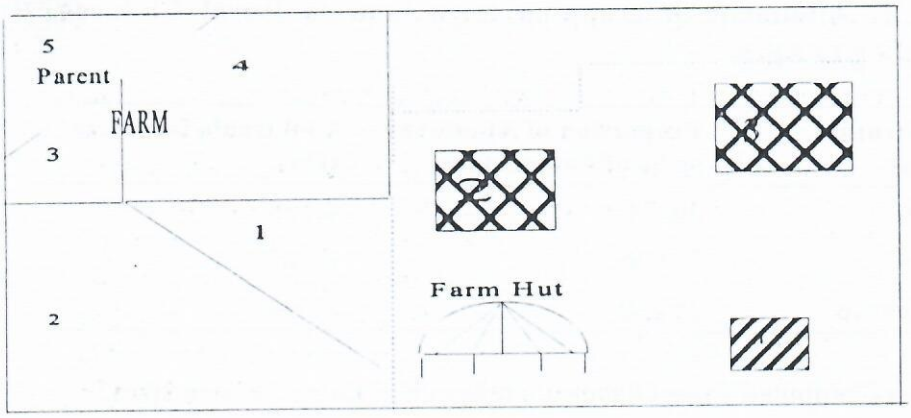
In recognition of children's differing physical abilities, and upon their ages and interest, parent usually allot arable lands for crop cultivation, the furthest allotment from the hut being made to the eldest and the nearest plot to the hut being made to the youngest child as diagram 1. depicts:

FAVOURED ARABLE CROPS BY CHILDREN FARMERS

It is simpler for rural farmers' children to grow crops the agronomy of which are easily understood. For this reason, farmers' children usually plant maize, cowpeas, yams, and cassava. Some children, like their parents, do plant leaf vegetables, pepper and fruit vegetables and horticultural crops in the margins of their farm plots. From the yield of such marginal crops which mature first, the children do make their pocket money, but they also harvest for personal consumption.

Income From Children's Farm:

Any income accruing to the farmers' children from the proceeds of their farms is not viewed as part of the total farm income. Rather, parents oftentimes motivate the children to save such farm income and add the proceeds as seed-money to the parents' subscription to the cost of buying new Easter, "Ileya" or Christmas dresses and shoes for the children.



Key: 1 - Childs Age 7 - 10 years
2 - Childs Age 11 - 14 years.
3 - Childs Aged 15 & Above.

Fig. 1. Allotment and Location of Children's fam plots in relation to the farm hut.

In terms of the actual contribution to the overall farm income, the income from children's plot is minimal and is usually saved or else used as pocket money. Such self-generated pocket money saves the parents of the burden of providing pocket money to their children. The children's farm plots therefore serve;

a. As an "apprentice workshop" for the practice of peasant farming.
b. To provide moderate income from the mixed-crops planted in the children's plots.
c. To optimize the use of marginal lands near and around the farmers' huts, thereby helping to keep the surroundings of the farm huts weed-free.
d. To inculcate in the children the spirit of self-reliance, hardwork and personal initiatives necessary for the possible sustenance of youth interest in agriculture as a main employment.

2.4 Children's Farm Output and Impact on Aggregate Farm Output

Table 2 presents the estimated crop yields from farmers' children farm plots. From surveys carried out in parts of the South-Western Nigeria, the size of rural children's farms which varies with their ages, was found to be 1/15th of the parents total cropped land for children between the ages of between 7 and 10 years. For children between the ages of between 11 and 14 years, about 1/10th of the father's cropped land areas while farmers' children of between 15 and 20 years of age are allotted about 1/5th of the parents' total cropped area. The estimated crop yields form the different crops on children's farm plots are as indicated in Fig 2.2.

Table 2. Computed Crop Yields form Children's Farm Plots.

Crop	Average Crop Yield Farms kg/ha	1/15th of Parent's Cropped land in (0.198 ha) kg	1/10th of Parent's Cropped land in (0.297 ha.)	1/5 of Parent Cropped land in Kg. (0.594 ha)
Maize	901.9	60.1	90.1	180.4
Cowpeas	243.4	16.2	24.3	48.7
Yams	9293.32	929.3	1858.3	1858.7
Cassava	8611.52	574.1	861	1722.3
Leaf & fruit vegetable	-	-	-	-

Source: Computed from Olayemis researched average crop
* Just planted at the land margins and harvested for home or farm consumption (yields form peasant farms) .

ISSUE OF PRODUCTION EFFICIENCY ON CHILDREN'S FARM

It is a difficult task trying to determine the production efficiency on rural children's farms because of the different objective and subjective

aims of establishing the farms. However, Johnson state that balancing of objective and subjective values is not so easy to do with peasant small farms as in larger commercial farms. This, according to Johnson, is because even the physical resources for farm production are often poorly balanced as evidenced by the abundance of land and labour and shortage of capital often experienced by peasant farmers whether adult of children farmers.

As earlier enunciated, the children's farm plots are usually not established to make profit as such or even to meet the food needs of the family., rather, they are often established to provide a sort of opportunity for apprenticeship for children in peasant farming and for any little financial gain that may come out of the exercise that could put the children on the path of socio-economic self-reliance.

The view of Chayanov, which is consistent with the peasant stages of agricultural production (which children's farm plot concept coincides with) are that economics of peasant agriculture is one of combination of production and consumption. According to Chayanou, the farm family only tries to maintain a labour-consumer balance between the satisfaction of the food needs of the family and the drudgery of labour, subject to the constraints of lack of necessary resources and technology.

Unfortunately, the production experiences of the children in this whole apprenticeship period in peasant farming seems to persistently remind the growing children of a day when they would find themselves in the corrected trade" outside rural peasant production.

The Fate of Rural Children's Crop Yields

Although crop harvests of maize, cowpeas, yams and cassava from rural children's farms have reasonable market values if sold, the crop harvesting from the farm plots of children between the ages of 7 and 14 years is often done by their mothers. The children's mothers, oftentimes, negotiate with their children to allow them to harvest and sell the products on their behalf to save the money. The mothers, on their own part exercise a lot of personal discretion on how to treat their children's crop

harvests - process all and keep half of the output at home and sell the remaining half or else, sell the whole farm produce from the children's farm plots and keep the proceeds, depending upon the total home food requirements and how much of the total requirement is met by harvests from the fathers' farms.

The farm harvests of the more elderly rural farmers' children is not that easy to handle as those from the farms of younger children. At 15 to 20 years old, the children have begun to be more self and money-conscious. Rural children, at this age sometimes arrange for someone to buy their farm harvests, either "in situ" or after harvesting on a "cash and carry" basis.

Such money they keep and use part for their personal upkeep. They are also encouraged to save some to supplement the soct, borne by parents, of buying clothes and shoes for children during festival periods. It is often quite difficult to correctly estimate the Naira value of the harvest as it may vary significantly among children depending upon whether they make "distress sale" or sell during the period of general scarcity. However, where production is made more market-oriented by processing, the harvests into finished farm products, the children operating about a half of a hectare of land are estimated to earn between ₦5,000.00 and ₦7,000.00 on all crops at the current unit prices in the average market in a cropping season. Farming children who keep small-stock items like poultry, goats sheep, Rabbits etc, usually make additional income.

The produce from children's farm plots therefore , usually ends up partly being sold, with part being used to supplement the household stock of food items which are mainly produced by the parents. Although, there is clear evidence that the children have been socialized into the techniques of peasant farm practices, it is very doubtful whether many children have been socialized enough as to want to adopt farming as their future profession.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The concept of rural farmers' children farm plots is one classical way of socializing the farmer's children into their fathers' practice of agriculture. No doubt, the children would socialize into large-scale, more revenue-generating farming if that was what the father was involved in. However, about 75 percent of rural farmers are peasants and according to Olayemi (1980) only about 15 percent of rural small farmers are market-oriented. They use about 70.0 percent of their own farm harvests to satisfy their own household needs. Through the mother-son relationship, most of the harvests from the younger children's farm plots add on to the family food pool to make up for part of the balance of 30 percent home food deficiency.

The rural farmers' children are given leftovers of planting materials of maize seed, cassava, yam sets, cowpeas and vegetable seeds. Where the parents use some agro-chemicals like fertilizer materials and improved seeds of certain crops, the fathers usually, do not consider it necessary to give, part of such improved technologies to their children for use on their farms.

Besides, as rightly observed by Patel (1980) the rural farmers are educated through series of village educational/ demonstration meetings. However, such education meetings which are mostly commodity-oriented, expressly, exclude the farmers' children who are considered as intruders when they find their ways to the venue of such meeting.

Compared with their counterparts who are engaged in non-farm employments like barbering, road mechanics work, welders, motor drivers, the rural farmers' children naturally consider themselves less rewarded for the labour input into not only their parents' but also their own farm plots.

Given all well-known features, hazard, uncertainties, risks, drudgeries and low societal status associated with small-scale/peasant farming, many rural farmers' children mature into thinking not of staying in Agriculture as practiced by peasants but into other more rewarding and probably less risky enterprises. This is probably because peasant agriculture provides

no allurement to children as a main source of employment, at least, not for the future.

RECOMMENDATION

The writers' recommendations do not necessarily involve the conventional ones. Instead, the following research network actions are recommended which should aim at studying farmers' childrens' participation in farming in greater detail with a view to making more far-reaching and specific recommendations in this connection that:

a. A detailed socio-economic survey of farmers' children's plots should be carried out by researchers particularly among the non-schooling farm-based rural children to assess the extent of their interest and their unmet expectations that could sustain their interest in farming.

b. The extension organizations country-wide should from now onwards revive the Young Farmers' club concept but deliberately scout for there all practicing, non-schooling rural farm children to avail of the direct educational benefits of farm-based clubbing activities.

c. The extension systems either by the agricultural Development Programmes, ADPs and the Non-Government Extension Organization, should form now onwards arrange regular village or farm-based informal extension training sessions/meetings of the type similar to the adult farmers where farmers' children could learn in more formal ways latest and improved agricultural practices .

d Irrespective of the size of the children's farm plots, the extension system should, from now onwards make the necessary farm input provisions for the use of children's farm plots, after all, the crop yield response arising from the use of modern biological and chemical technologies is neutral to the scale of production.

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ATTITUDE OF CHILDREN TOWARDS AGRICULTURAL PROFESSION IN NIGERIA: A CASE STUDY OF ONDO STATE

BY

OKUNOLA J.O.

Dept. of Agric. Econs & Extension, Federal University of Technology, Akure.

INTRODUCTION

Nigerian economy in the last decade and half have shown only marginal growth. The population continue to grow at a rate between 3% and 5% while the domestic food growth rate is about 2% (FAO, 1996). The growth rate of agriculture has continued to be determined by the natural fluctuations of good weather conditions. Application of improved modern technologies with marketing strategies and increased transportation facilities have on the while have magical impact on the production of agriculture and forest products (Kalu, 1996).

The attendant effect of above phenomenon is decline in agricultural production and its contribution to the country's economy. In recent time a lot of attention is being given by the 3 three tiers of government to the development and transformation three (3) tiers of government to the development and transformation of the rural section. This is to allow agriculture make significant contribution to the overall economic growth of the country while fulfilling the traditional function of providing adequate food for the growing population, raw materials for industrial section, and supplying labour to the developing industries (Ogunfowora, 1981).

It is unfortunate that while there is clamor for structural transformation of the rural area through agro-industrialization there is an increasing problems of rural-urban migration most especially by the young ones.

The rural-urban migration could be attributed to the issue of human interaction as it relates to individual attitudes and interaction process, on the basis of individual attitude most young ones have goal centered

motives such as education and improved social life. The psychological and behaviourial activities as it relates to interacting process between individual have a lot of influence on the young ones, most especially when their mental development in is considered.

As children between ages of 6 - 14 years, their interest begins to differ while within their group, the influence of companionship is also great (Darvile, 1978). The emotional development of children also depends mostly on their contemporaries. At this stage he is able to understand abstract ideas that may influence his attitude. The children who are brought up in the farming communities/rural areas are more susceptible to changes in behaviour as it relates to their environment and farming occupation. This is because in most cases their parents are farmers and they too have been exposed to some aspect of farming. However, with interaction and exposure to other factors such as education there cold be changes in the children attitude. Nigeria as a developing country, cannot afford not to have its young ones taking to agriculture (and farming) as a professions. The educational programmes are supposed to help develop the knowledge and skill of the children so as to have a technological oriented and large scale agricultural production system that will help develop the country as experienced in developed countries.

It therefore become important of this paper to ask the questions such as: are children interested in taking to agriculture as a career? What are the factors influencing children participation in farming activities in future? Which aspects of farming are the children interested in? And does youth club influence the attitude of children towards taking to farming? The general objective of the paper is to examine the attitude of children towards agriculture as a profession in Nigeria using Ondo State as a case study. Specifically, the paper has the following objectives.

1. To ascertain the personal characteristics of respondents.
2. To examine the factors influencing children attitude towards choosing agriculture as a career.
3. To determine the factors affecting children participation in farming activities.

4. To identify which area of agriculture the children are mostly interested in participating.
5. To examine the effect of youth club on children interest towards agriculture as a career.

METHODOLOGY

The study population were children randomly selected from five villages in Akure North Local Government Area of Ondo State. Twenty children from each village who in one school were randomly selected, thus making a total of 100 children.

DATA COLLECTION

The primary data were collected through the use of structured questionnaire with both close and open ended questions. The questionnaire contained both demographic and an non demographic questions.

DATA ANALYSIS

Descriptive statistics was used to process the raw data.

FINDINGS AND DISCUSSION

From the study, the following results were obtained.

TABLE 1: Distribution of respondents demographic characteristics

Characteristics	Frequency	Percentage
Sex		
Male	60	60
Female	40	40
Total	100	100

Characteristics	Frequency	Percentage
Age		
12 years	22	22
13 years	42	42
14 years	26	26
15 years	10	10
Total	100	100
Religion		
Christian	90	90
Muslim	10	10
Total	100	100
Highest Educational Level		
Junior Secondary School	100	100
Senior Secondary School	0	0
Total	100	100

Table 1 shows that 60% of the respondents are male, most of the children (42%) were also 13 years, 26% were 14 years old, 22% were 12 years old while about 10% were 15 years. Ninety percent were Christians while all of the respondent had Junior Secondary School as the highest educational level. The reason for the result of educational level and age of the respondent could be because children in school were purposively sampled for the study. From the study about 90% of the respondents have been going to farm while all the children (100%) reported that they are offering agriculture as a subject in their school as shown in Table 2.

TABLE 2: Distribution of Respondents

	Frequency	Percentage
Visit farm regularly		
Yes	90	90
No	10	10
Total	100	100
Offers agriculture as a subject in school		
YES	100	100
NO	0	0
Total	100	100
Like agriculture as a subject		
YES	98	98
NO	2	2
Total	100	100
Would like to take agriculture as a career/profession.		
YES	44	44
NO	56	56
Total	100	100

Table 2 has shown that 44% of the children will like to pursue agriculture as a career/profession despite the fact that all the children take agricultural subject in school. Those who are interested in agriculture as a career gave the following reasons. One of the reasons is that they are interested in producing food for the country to help alleviate poverty (23% of the respondents) while 38% reported that their parents/guardians are farmers and as such are interested in having more knowledge and develop their skill in agriculture so that they can farm in a better way and help educate their parents, 19% stated that it is a good source of income while 20%

reported that they want to be self reliant.

Most of the respondents (26%) do not want to take agriculture as a career because they desire white collar jobs while 18% stated that it is due to the problem of inadequate capital as they will like to take to large scale farming. Five percent stated that is meant for illiterates while 11% reported that it is for rural people and won't like to live in the rural area. This is shown in figure 1.

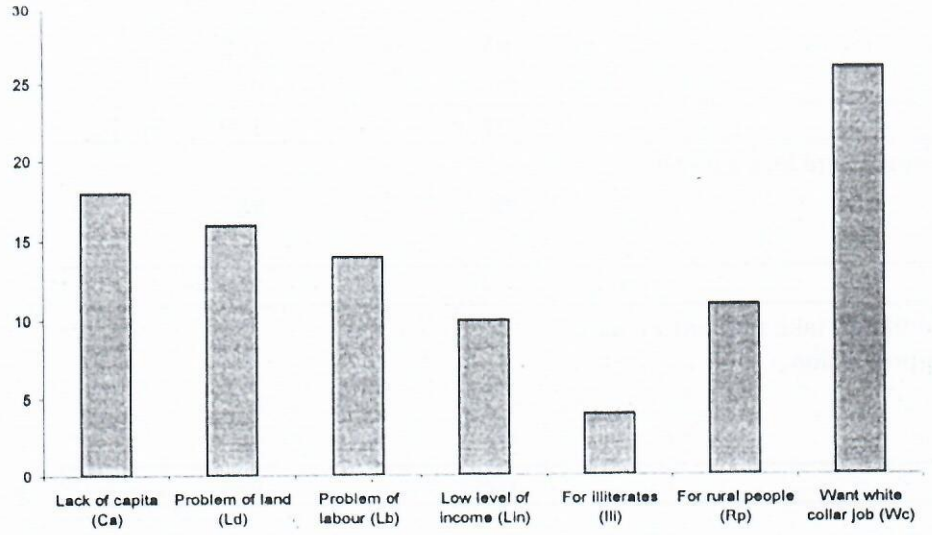

Fig. 1 Reasons Why Children Do not want to Take Agriculture as a Career.

However, from the study 88% claimed that they will like to take to farming. Out of which 50% are interested in part time farming, 36% in full time but 14% are undecided. The result analysis showed that some of those who are interested in agriculture do not want to take to farming but prefers other aspect of agricultural profession. Some of the respondent who are not interested in agriculture as a profession stated that

they are interested in part time farming.

Out of those who re interested in farming, 4200 wants to be involved in food production and animal rearing, 16% wants only crop production, 32% will like to take to animal production only, 10% prefers only poultry, while 10% will like to continue poultry and to crop production. The reason why most of the respondents prefers combine various production section in agric is because of enterprise consumption and to generate income and minimize risk.

Table 3: Respondents Membership of Youth Club

	Frequency	Percentage
Member of farmers club		
Yes	58	58
No	42	42
Total	100	100
Youth club membership has increased		
YES	47	47
NO	53	53
Total	100	100

Fourth five percent of the respondents do not belong to any farmers club in their school or community, but 58% are members. About 53% of the respondents claimed that, the memberships of the club has not increase their interest in agriculture. This could be attributed to the fact that most of the farmers club are no more sponsored by government unlike the past, while the non governmental organizations have not given adequate support too. Hence some of the activities of the club such as excursions, field trips etc. have to be shelved. In most cases inputs are not available

with adequate finance.

CONCLUSION

The study has shown that most of the children do not want to take to agriculture as a profession, while not all those who want to pursue agriculture as career wants to take farming. Ineffectiveness of young farmers club due to reasons such as lack of adequate funding, inadequate attention by government and an non-government organization also blocked avenue that could have been used to create awareness among the children and arouse their interest in agriculture.

There is the need to orientate and education the children towards taking up agriculture as a career if agricultural production is to be sustained in Nigeria.

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EFFECTS OF SOME PSYCHOLOGICAL FACTORS ON RURAL CHILDREN'S INVOLVEMENT IN AGRICULTURE

BY

S.D. YOMI ALFRED

Department of Agricultural Economics and Extension, Federal University of Technology, Akure.

ABSTRACT

The quest for sufficient food production in Nigeria has not just begun. Efforts of the past have not however, yielded the anticipated dividends. The feeding ability of the populace is still low and so high is the state of malnutrition.

The future hope to curb these deficiencies is in the serious involvement of children in farming, not only to perpetuate farming among the people but because the present farmers are ageing fast and loosing forms. Children involvement in farming depends on certain factors that influence their attitudes towards it. This paper therefore zero in on the psychological factors as they influence the children's attitude. Some of these psychological factors were identified as the interest of the children in farming or lack of it, sentiment formation, stimulus generalization, impression from career representations and psychological needs. Suggestions were made to ameliorate the effects of the factors.

INTRODUCTION

Food shortage is one of the greatest threats to many developing nations, including Nigeria. To curb this intimidating force, governments embarked on several policies and projects to ameliorate the saddening effects of this phenomenon. However, these policies and projects failed in varying degrees. The failure to a large extent, may be attributed to the frequent change in administrations, whereby past efforts were shunned by successive administrations, and also to the near neglect of agriculture in favour of oil and other economic and social sectors.

More terrifying to the already gloomy future of agriculture is the mass exodus of strong able bodied men and women to urban areas in search of paid jobs even including menial jobs to the detriment of agricultural development. Among these migrants, is a large percentage of youths who not only abandon agriculture but have developed strong apathy towards it. Ekong (1988) reported that Udo (1978) found that 73% of the migrant farmers in Nigeria were between 15 and 44 years. The youths see agriculture as not providing for progressive future and by the virtue of drudgery inherent in farming especially as it is being practised in rural settings among the small farmers. Of course, farming among the small scale farmers is characterized by the use of local tools which requires a lot of exertion of human energy to accomplish. This itself is repulsive. It is by this that most youths become scared. That simply, is the present state of Nigerian agriculture vis a vis children's involvement.

The United Nations defined youth as individuals from 1 to 24 years of age (World Bank, 1983), anyone less than this category is a child. Youths comprise 20% of the world's total population. In 1980, there were 857 million youths world wide and over 75% of this were from developing countries. By the year 2000, 33% of youths or 893 million will live in the developing countries (FAO, 1984). FAO (1985) confirmed that 80% of the Nigerian population will fall within the "youth" range in they year 2000. These millions of young people living in rural areas are a significant and untapped resources available to assist in the rural development process.

In every sphere of life, there is need for continuity, agriculture is no exception. If perpetuity mut be ensured in agriculture, then there is the dire need to make the children conform with the practices of farming. Not only to conform alone with the practices but to develop strong interest in it. A Nigerian musician once sang thus "Kosagbe mo loko 2x. ara oko ti dari wale, Omo baba agbe ti josi ti mu baba re wale o jare (in Yoruba) (interpreted thus, there are no more many farmers on the farm, the old farmers's child has brought his father home). The truth in the song is that, the present farmers are ageing and losing forms. The children who could

have been substitutes are migrating for white collar jobs. More seriously is that the parents do not pray, favour or advocate that their children should take after them in farming, yet farming must persist.

Therefore, many factors abound that may influence the involvement of children in agriculture. Some of these are social, some are economic while some are psychological.

This paper will however consider the psychological factors affecting children's involvement in agriculture and suggest how the effects of such factors can be alleviated or enhanced.

PSYCHOLOGICAL FACTORS INFLUENCING CHILDREN'S INVOLVEMENT IN FARMING

Psychological factors are those factors that come through the individual's behaviour and thinking. These factors emanate from the development of thought and behaviour of the individual from babyhood and the effects which changing environments have on such development. Some of these factors that influence children's involvement in agriculture include:

1. Interest:

One of the most veritable tools of getting children form positive attitude towards agriculture is by making them interested in the progression. Lovell (1978) opined that children will work harder at tasks when they feel the result is important to them, or that in some ways the task measures their real worth as persons. However, the questions to be asked remain; does agriculture measure the real worth of persons, relative to other fields such as medicine, law, engineering, etc. Can one stand up in a gathering of others to introduce himself as a farmer? Can the lives of farmers be a source of inspiration? Solution to these questions would either make children to develop interest or not in farming. One, by instinct, does not do a thing he is not interested in (either by direct or indirect interest). Telling children, for instance, that certain task is likely to contribute to success in life is likely to stimulate them. Success, of

course must be interpreted widely and most include both social and occupational life.

At school level, children can be made to develop interest in agriculture as a subject and as a profession. The teacher must be seen to be interested in the subject and must use relevant teaching material in his lessons while at the same time making the children to realise that farming does not necessarily has to be operated with local tools which result in drudgery. The children should be exposed to available technologies for the ease of operation and should be allowed to use their hand to do some work.

2. Sentiment Formation:

This is similar to interest. Once a child has formed a sentiment for something, then this sentiment will make him take a certain attitude towards that thing. The term attitude according to Derville (1978) describes the ways in which one is prepared to act toward something. If a child has a sentiment of respect for someone, for instance, his attitude towards that person will be respectful, that is, he will be prepared to treat this person with respect. If he has a sentiment of dislike for someone, he will have an unfriendly attitude towards that person. Once a person has formed strong sentiments for certain standards of behaviours and ideas of character, he will want to live up to those ideals and standards.

In the same vein, sentiment of dislike towards agriculture by children because of what they see, do or told about farming may make participation by such children difficult to secure.

Helping children to form a true sense of values in agriculture consists of teaching them to value things which are basic for survival such as provision of food, raw materials for industries, materials for shelter and clothing and a very rich source of employment. This may create a new orientation in the children's mentality toward farming. Debates comparing agriculture with other professions may be encouraged among the children. Those are ways through the right attitude may be formed towards farming by children.

3. Stimulus Generalization

A child who has been conditioned to respond in a certain way to a person, object or situation, is likely to make the same response to anything which resembles that persons, object or situation (Derville *op cit.*)

In schools, farming related activities are often given to children as a form of punishment for wrong doings. Not only that, most agricultural science teachers double also as the labour master. As a result, children have come to associated farming to punishment or something that inflicts pains, they therefore develop apathy towards farming.

Stimulus generalization by children extends to the poor state of the farmer. Children see farming as a profession that is likened to poverty because those who practise it, especially in the rural areas lives in abject poverty.

This phenomenon can be helped by the school, by making sure that farming is not done as a form of punishment. Children should also be exposed to the opportunities that abound in farming through which they can prosper.

4. Impression from unbalanced Career Talks

In many career talks to the children especially at school, there is much imbalance in the representations. For instance, in career talks where professions like medicine, law, accountancy, engineering, surveying, police force, etc. feature prominently, farming rarely has a place. This phenomenon creates in the children some elements of inferiority complex towards farming. It is therefore never considered as a noble profession.

Planner of career talks would do farming a lot of good if it is always accorded equal recognition as other professions such as pharmacy or architecture so that children would also view it as equally important.

5. Psychological Needs

Children's needs may be categorized into two, mainly, primary (basic) needs and psychological needs. The primary needs which are also referred

to as basic needs have to do with organic requirements such as food, water, rest, mating and defecation, while psychological needs (secondary needs) include the need for security, stability, achievements, acceptance, attention, self expression and the need for status.

Children are more likely to embrace those task that would lead to the satisfaction of the psychological needs. That being so, children look at farming with disdain and are skeptical of its being able to give them status, achievement and acceptance withing the contemporary events. The inability of farming, in the thinking of the children, to satisfy their psychological aspirations may not make them to accept farming as a career.

FURTHER SUGGESTIONS FOR CURBING THE EFFECTS OF PSYCHOLOGICAL FACTORS ON CHILDREN'S INVOLVEMENT IN FARMING

In addition to the suggestions made under each psychological factor, there is the need to suggest further that, incentive is an objective an individual is willing to strive. Incentive is the term which applies to anything which arouses indirect interest. If children are rewarded for efforts shown they will want to work hard to receive the reward.

Farming can be made attractive by rewarding efforts given to it. For instance, if children are made to be aware that for seeds sown, harvest is obvious and in their individual plots on the school farm or on their parents' farm they are given a percentage of the total yield, this can motivate them and cause interest towards farming been aroused. Schools can organise to reward the best student farmers of the season as its done in the larger society where "best farmer of the year" is usually rewarded.

Furthermore, farming professions must be made attractive for the large number of young people if the developing nations are going to be able to feed themselves (Belloncle, 1992). Children should be made to realise that it is not only tilling of land that agriculture entails; other opportunities such as animal production or processing should be revealed to them.

Again, since children have great interest in grouping this can be used

as a means to get them involved in group activities such as Young Farmers Club at school level. Pur (1997) explained that Young Farmer Club (YFC) members are usually involved in a variety of activities and projects and, as a result, acquire skills and experience that other students do not have. He stressed further, that, to create interest in and develop respect for agriculture as an honourable profession, thus stimulating an increasing number of youths to consider farming as possible career, require proper planning by the Ministries of Agriculture and Education for the YFC.

The agricultural science teachers in the school, can help people especially through club activities in taking the very crucial first step towards a career in agriculture related fields.

CONCLUSION

For the continuity of farming in Nigeria from one generation to another, children must be involved. Children's involvement in farming may not be as forth coming as one would want it to be, this is because certain factors abound that may influence it.

This paper has concentrated on the factors that are psychological that influence the children's attitude. For instance, persons by instinct, would embrace a task that he has interest in and will jettison that which he has know interest. Again the sentiment a child forms towards farming would to a long way to determine the level of his involvement. So also, stimulus generalization, as exhibited by a child towards a situation or an object, depending on whether or not the generalization is rewarding or not may determine level of participation in farming. For instance, a child who has always served punishment by working on the farm or cut grasses may soon associate anything that has to do with farming as a form of punishment and this may infact affect his attitude towards farming.

In addition, impression on the mind of the children, due to imbalance in representation at career talks, where agriculture is poorly represented or not at all represented, may arouse some inferiority complex towards farming in relation to other professional fields.

Furthermore, the more far reaching its is that farming can satisfy or appear to be able to satisfy the psychological needs of the children, now and in the future, the more it may determine the level of their involvement in it.

One may therefore conclude that making children involved in farming, requires joint efforts of all and sundry. Government policies for instances, must be seen to making farming lucrative and attractive while at school, teachers and school administrators must assist the children to develop interest in agriculture as a subject and as a profession. Parents must equally be involved, as the deciders of children's choice for career, and must not be seen to be portraying farming in a bad light. The percentage of children is high and to toil with their involvement in agriculture can certainly spell disaster in the face of the present high level of unemployment.

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EDUCATION: A VERITABLE TOOL TO MOBILIZE RURAL YOUTH FOR ACTIVE PARTICIPATION IN AGRICULTURE

BY

AFOLABI J. A

Department of Agricultural Economics and Extension, Federal University of Technology, Akure, Nigeria.

ABSTRACT

Nigeria with its abundant natural and human resources is expected to be self reliant in food production but the reverse seems to be the case. Many factors have been attributed to this, one of which is the lackadaisical attitude of youth toward agriculture because the society itself viewed that agriculture is a "poor man's job". This often result in mass exodus of rural youth to urban centers in quest for white-collar job . Hence, there is the need to change this bad orientation and education could be an appropriate tool. Also, many Nigerian farmer are old (usually more than 40 years old), relying on energy-sapping traditional implements to carry out their farming activities. It is however, hypothesized that they younger farmers are generally thought to be more adventurous and less wary of undertaking new risks and thus be willing to adopt innovation in order to enhance their economic position. It is therefore pertinent to mobilize rural youth for agriculture and this can be achieved through education.

INTRODUCTION

There is no denying that many African countries have had periodic national development programmes, usually designed to be completed withing a specific period of time and within a financial limit. Agriculture has featured prominently in such plans. But whatever the constraint of time and money available, it has to be said that a very serious area of neglect has been in agricultural education. Moreover, the agricultural component of development in Africa has often focused attention on the

adults and has failed to address (any or sufficient) agricultural educational efforts a young men and women effectively. But unfortunately these farmers in these countries are old and illiterate and hence less enterprising in the adoption of innovation. This was supported by Brown (1972) in his study on some aspects of adoption of innovation in Atebubu and Lawra, Agricultural districts of Ghana (see table 1).

Table 1: Age of farmer and Adoption of Innovative Practice

Changes in Farming	Age of Farmers			
	Below 35 years		35 years and above	
	Number	%	Number	%
Yes	17	44.7	32	20.1
No	21	55.3	127	79.9
Total	38	100	159	100

Source: Brown, 1971.

Youth involvement in agricultural development takes place at a minimal level in some countries there are Young Farmer Clubs and there has been some introduction of agriculture into school curricula, but it is not sufficient. The teaching of agriculture is not comprehensive enough: Young Farmer Club (YFC) are to be found in few schools and their scarcity begs the question whether agriculture is seen as a serious subject for the pupils.

ROLES OF YOUNG FARMER CLUBS (YFC)

The role that YFC members can play in channeling new ideas into development programmes cannot be over-emphasized, particularly where many rural adults are illiterates. In this situation parents and other relatives rely on their young people as a channel of communication

Indeed, it has been observed among the majority of farmers that they tend to trust messages on agricultural innovations from their children more than from official extension agents.

Well-organized YFCs provide excellent opportunities for conducting method-and-result' demonstrations, either on school ground or on farms of pupils parents. In such cases there can be very rapid adoption of new techniques or varieties by farmers.

YFCs also provide the opportunity for arousing an interest in agriculture can be a satisfying and economically rewarding occupation. There have been examples where YFC members have been encouraged under guidance to raise small livestock (goats, rabbits) and fish in ponds, or to grow vegetables and fruit for sale. Experience has been gained of budgeting costs, of managing finance and of putting theoretical mathematics to practical use. But to reap the benefits of YFCs, a widespread participation of the youth in a country is necessary, the organization and administration of YFCs must be good and YFCs are best integrated into the school system.

TYPES OF EDUCATION

Two levels of educational institutions are particularly relevant to the formation and sustainable conduct of YFCs. These are the post-primary and post-secondary school levels.

Formation of YFCs should be compulsory at the post-primary level in order to give all young people an introduction to agriculture and to provide them with the opportunity to put into practice what they should be learning about agriculture in the national curriculum.

At the post-secondary level YFC memberships may be voluntary, since by this stage some pupils will have decided on careers not connected with agriculture. Yet even these will have learned enough to understand better national rural development policies during their adult life and to tend home gardens in order to supplement income.

A typical YFC should assume a simple organizational structure but should involve members in participative management of the Club. YFCs

should also develop linkages with support service organizations including agricultural research, supply industries and credit institutions, and members of research stations, agro-input supply companies and banks should be invited to speak to YFCs from time to time. The role of extension agents readily come to mind.

EXTENSION TEACHING METHOD

Getting the farming audience to receive, understand and act upon technologies recommended by extension agents requires setting up learning situations. In these learning situations a variety of extension teaching methods are available for imparting knowledge and skills. This variety of teaching methods can be classified into three broad categories based on the number of individuals reached simultaneously with specific messages or innovations. The methods are.

- *Individual Method:-* Individual methods involves the extension agent interacting with the youth farmers on one-to-one basic. Generally, this method is most important when the objective of the extension programme calls for a change in behavior of farmers.
- *Group Method:-* A group is made up of two persons interacting with each other in such a way that each person is influence by the other. The interaction is a deliberate attempt to communication ideas and feelings (attitudes). This strategy aim at reaching two or more persons simultaneously.
- *Mass Media Methods:-* The mass media methods consist of techniques that can reach a large audience simultaneously. These include the print technique (newspaper and pamphlets) and broadcast techniques (e.g. radio and televison).

CONCLUSION

From the above discussion, one can unequivocally say that sustaining the interest of youth in agriculture is very important and this is only possible by enhancing the teaching of agriculture in schools: and by developing new generation of young people knowledgeable about

agriculture and even motivated to take up agriculture as a career.

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ROLE OF RURAL YOUTHS IN AGRICULTURAL DEVELOPMENT

BY

DORCAS A . ADEGBITE (MRS)

Agricultural Media Resources and Extension Centre (AMREC),
University of Agriculture, Abeokuta, Nigeria

INTRODUCTION

It is obvious that Agricultural production, especially in the area of food and fibre production is not only an economic but a political issue in Nigeria today. This is because, the current problems associated with the high costs of food cannot be separated from the general health of the economy with its attendant adverse effects. This problem is of interest to the Government who will prefer a moderate increase in food prices and also to the consumers whose earnings are being eroded by the high prices.

This food and agricultural problems would not have been so aggravated if not for the neglect and/or lack of understanding and attention given to some of the changes that must have taken place in the agricultural sector, especially those involving the rural youths and the need for agricultural development through them.

Youths in Nigeria are estimated to be over 50% of thee entire populations and a well organised programme that will channel their energy in a productive way will thus yield a benefit in line with the quest for solution to the agricultural problems.

However, while planning a rural youth development programme, cognizance should be taken of the customs and traditions of thee rural societies, especially some of which compel these Youths to work with their parents and not independently. Also the reward they get out of agriculture-oriented activities may not be adequate to give the necessary incentives to carry on with farming. It is therefore, necessary to evolve a scheme capable of enhancing increased productivity in rural youths and to take a close look at their roles in Agricultural development efforts.

It should be noted that improved agricultural development is supposed

to be a cooperative work of both the public and the private sectors ensuring that the goals set by the former are translated into targets that will stimulate and encourage the youth into better productivity.

The intention of this paper is to examine the roles of rural youths in agricultural development. To achieve this objective, it may be necessary to review some view concepts like "Rural characteristics of rural youths" agricultural development, its goals and the need for one in Nigeria as well as the current state of agricultural production in Nigeria. In this connection, the expected roles of rural youths in general and in Nigerian context will be briefly reviewed, and since the entire society differ greatly with respect to the physical and cultural endowment, attention will be placed on their roles towards farmers. Appropriate suggestions towards the way forward for improvement will also be made.

NIGERIA TODAY IN AGRICULTURAL PRODUCTION

Over the past three decades or there about, Nigeria has been passing through some phases of rapid development during which many aspects of her political, social and economic scenes are rapidly being transformed. She has witnessed an era of oil boom which would have had some positive and more meaningful effects on the country's economy, if the resources ensued from it were channeled towards productive ventures in other sectors like Agriculture. However to the detriment of the sector, the oil wealth were being spent on infrastructural development and other social issues. The growth in other sectors tend to change the economy from being predominantly agricultural export based to mineral-export based with an attendant drift of the rural population, (especially the marking-age youths), from the farms and rural setting, leaving the ageing individuals to handle agriculture. This led to a gradual decline in rural life standard of living.

The decline in the standard of rural life, tend to encourage the desertion the more. No wonder, why Nigeria which was regarded as an agriculture oriented country now import a substantial proportion of its

food item requirement from other countries.

The varying natural, physical and human resources in the country offer favourable conditions for economic development. For instance, the climate, vegetation and land use encourage the functioning of the agricultural sector. This is because in the South where the rainy period are long and reliable, tree crops thrive well while grains, fibres and legumes are produced in the North due to the limitations imposed by soil factors and rainfall. With an estimated population of over 100 million people and a land area of 923,768 km^2, its diverse customs ethnicity and tradition confer on it its complex agrarian group in the rural areas where about 90 percent of the working population are employed in the primary occupation of farming. This peasant native of farming imposes a slow pace in the development of agricultural sector. Other reasons for the pace include:

i. failure to practise mechanised farming extensively due to high costs and availability of the machinery;
ii. poor state of Extension Services;
iii. Poor conditions or lack of infrastructures in the rural area;
iv. little contributions made from agricultural research in helping to solve some of the problems of agricultural development;
v. low public sector investment into agricultural development; and even the limited investments are either poorly managed or diverted.

It is evident from all available information that the Nigerian agricultural sector is not achieving its goals with the insufficient production of food, fibre and raw material needs, which had resulted in high prices, increasing importation of food and diminishing volume of export trades. These failures can however be attributed to both exogenous and endogenous factors in which the farmer may include the impacts of other sectors on Agricultural sectors while the latter factor may be due to uncoordinated decisions made by those related to agricultural sectors, part of which are the rural youths.

These Youths often feel unreceptive to formal learning situation and are always looking for and grabbing the opportunities to quit rural settings

and farming in particular, worse still; the custom and the problems posed by the land tenure system and method of land inheritance have always left them with decreasing farm sizes and tendencies to live at poverty. While it is widely recognised that the development of agriculture is one of the crucial requirements for overall economic growth of the Nation, there is still little consensus with respect to the most appropriate set of strategies for stimulating rural youth towards securing increased farm production and productivity in Nigeria agriculture. With improved performance of the agricultural sector as a major concern of every Nigerian; it may be necessary to take a critical look at the expected roles of the rural youth in agricultural production.

CONCEPT OF A RURAL SETTING

According to Jibowo (1992) a rural setting in the Nigerian context is an area with less than three thousand persons (3000) as the population. However Ekong (1988) asserted that a rural community in Nigeria embraces of places with less than twenty thousand (20,000) people or more but the greater percentage of the inhabitants are engaged in farming and are essentially lacking in the essential basic infrastructural needs like electricity, portable water, health facilities, road network social services and industrial stations.

In all a typical rural setting is one which is characterized by:

i. dependence on the non-rural sector;
ii. economic engagement in the primary productive ventures like farm, fishing or mining) using low yielding traditional input;
iii. inability to understand and control the outside world (foreign and local metropolis) etc.

It is usually a place where the serene of the environment impose some quietness and pace unlike the urban setting, a place where traditions, custom and taboos are upheld to the extent that they affect decision making in all aspect of the inhabitants occupation, family and social lives.

More importantly, it is a place where the food baskets and agricultural

resource-endowments are situated for the entire Nigerian populace. A place from where majority of the working age, able-bodied youths have found their ways to towns.

PECULIARITIES OF RURAL YOUTHS

The Dictionary meaning of the word "Youth" refers to the young ones, the state of being young, an individual undergoing an era of existence immediately after childhood, an early period of existence and quest for freedom etc.

The United Nations however defined "Youths" as individuals between the age range of 15 years and 24 years while Jibowo (1992) considered a typical person called Youth as a child (boy or girl) below the age of 18 years. This seems to fall in line with the Nigerian politico-economic policies where individuals at 18 years of age have the right to vote in any election handle civic right and privileges and are liable to conviction at that stage too.

It was however estimated that over 25 percent of the world's population falls within the category that could be considered as youths and over the last one and a half decades; about 750 million young people are estimated to exist in less developed countries (Nigeria inclusive), and out of which over 70 percent (about 525 million) are found in the rural areas. Majority of these are unfortunately disposed to poverty but less formal education or technical training. Many never attended schools; the implications of which are that a typical rural youth tend to have a very low level of functional literacy if any;

b. have compulsory obligations toward on family farms or as casual labourer from his/her very early age and often for too long hours during peak periods of production during the year and idle during the off-seasons.

As the youths grow within the rural setting they will be expected to contribute to the family earnings. This calls for responsibilities and

unemployment at some seasons and boredom at some others. This makes most of them to get married early enough than their urban counterparts; with whom they often feel skeptical to mix.

Any slighted opportunities to get out of the rural areas most of these youth will grab. That informs the rural-urban drifts from time to time and this has some implications on the level of agricultural production as well as productivity of the ageing group left to continue.

Who then is expected to solve some of these problems? The Nigerian Youths of course especially the ones in the rural areas already involved in the farm production for agricultural development.

AGRICULTURAL DEVELOPMENT: CONCEPTS, OBJECTIVES AND THE NEED FOR IT

There are a number of opinions depicting related but separate concepts of "Agricultural development". However, King (1974), defined Agricultural development as "an increased level of farm and other production efforts where the benefits of such production are shared among those who work on the farm and those who otherwise contribute to the increased production.

According to Williams (1989), Agricultural development represent entirely different bundles of opinions:

i. It may take the form of increased production per hectare of crops land or per head of livestock (productivity). This viewed agricultural development as primarily changes in the productive capacity of the land, changes in crops and livestock management practices or a combination of these. It may also involve the use of improved farm inputs that will increase land productivity.
ii. Agricultural development may be brought an expansion of traditional inputs of land capital and labour or the growth that emanates from the production and application of new knowledge about the relations behind the biological processes as initiated and controlled in agriculture.
iii. Furthermore agricultural development may also mean expansion

which occurs in agriculture when traditional lands are brought into production using additional land and capital, without much change in the "State of Arts" of the farm production and agricultural support services.

iv. Agricultural development involves transform in agriculture where changes and improvement in production are envisaged and found to exist in such a way that will allow workers to shift out of agricultural sector into other types of activities.

v. Agricultural development may entail the raising of the income of people employed in agriculture, through increased standards of living. This it is believed, will stimulate production in non-farm activities that will enable the farm workers to purchase goods and services produced in the non-farm sectors, having been able to receive fair prices for their produce.

In all, the concepts of agricultural development as seen in the Nigerian contexts are those:

a. relating to agricultural expansion in terms of increased production using improved technology and extensive farming system;
b. involving increasing outputs provided the inputs can be made available at the right time and costs to the farmers.

From the above exposition to the concepts of agricultural development, it is glaring that the main objective in Nigeria are:-

i. to increase production of food and fibre in quantities that will meet with the demand of the growing population and rising industries.
ii. to increase production and processing of export crops with a view to expanding and diversifying the country's foreign exchange earning;
iii. to expand employment opportunities that will absorb the labour force of the Nation especially for youths;
iv. to evolve the appropriate Institutions and administrative instruments to facilitate the rapid development of the country's agricultural potential.

From the exploration of the current food and agriculture situation in Nigeria, and examination of the objectives of agricultural development; there are a number of needs to improve the sector. These are based on the facts that:

i. the food requirements are increasing daily, due to population increase. The current but conservative population growth rate in Nigeria is assumed to with the urban population growth rate. At this rate, she will end up having many hungry people un-catered for;
ii. in a society which may be considered as predominantly agrarian, failures to take advantage of its resource endowment to meet with increasing food demands, will have severe implications on the entire economy. This will be reflected in:
    a. decrease in agricultural exports;
    b. diversion of the major part of the Nation's foreign exchange earnings to non-productive ventures;
    c. increasing labour costs of production and consequently high food prices.
iii. As the population becomes closely associated with increase in the percentage of total population in the urban areas especially with youths migrating from the rural areas, agricultural workers with time will have to produce food and fibres for increasing numbers of people who has varying range of per capita income and food demands. This implies that increasing population and rising food demand, will jointly heighten the food shortage problems.

Currently Governments involvements in agricultural development in Nigeria is through some service institutions which can be functionally classified into groups as:

Land e.g. through the National Agricultural Land Development Authority production.

Service/Supply - Agro-Services Corporation National Seed Supply and other Institutions.

Research:- Through the various Research Institutes as co-ordinated by

NARP, and

Educational:- Through specialised Agricultural Institutions, Universities, Secondary Schools ADPS and other related Extension Services.

It is important to note that the rate of agricultural development will determine the quality of both rural and urban life. If youths can be sensitized on the need to get involved and improve on their productivity; economic and financial self sufficiency could be achieved as a "stepping stone" to sustained an healthy standards of living. what then should be their expected roles?

THE ROLES OF RURAL YOUTHS IN AGRICULTURAL DEVELOPMENT

Rural Youths have always been known to be the products of the individual farm-families who are predominantly peasants, depending on traditional low-yielding inputs that can only generate small margin of net-income. With increasing social needs; (like children schooling), health, requirements for high cost goods and services from non-farm sectors, there will be less income left to prepare land} hire labour, cultivate weed, purchase of inputs, and construction of infrastructures on their farms. It is the productive effects of each family's children or group work among rural youths that will help to pool human resources together for increased production. This is an index of agricultural development.

Also, the individual farm-family is usually limited by the size, age and composition of its family labour- These limit them to the cultivation of small holdings bearing in mind the demands of the peak periods of production. A large number of energetic youths per family can help to increase the source of labour supplies in the rural areas. This form of assistance by the farmers' children, will not only ensure relatively stable supply of labour but also encourage the growth of farm sizes in the rural areas. This advantage is implicit in the assertion for increased production already made earlier.

Youths in the rural settings who have the opportunities of having

some formal education can so help to enhance their farmer parents literacy status. Enhancement in literacy status will not only predispose the farmers to a better attitude of perception and reception towards introduced technological packages by extension services, it will also enhance their willingness to adopt the packages. The literate farmers will be able to read, write and understand instructions on the use of complementary inputs on new innovations, contribute meaningfully to the socioeconomic issues in their communities, become constantly aware of and have access to credits and financial facilities of any; and be able to promote good health status of their entire household. All these have some implications for increased productivity of the rural areas and eventual agricultural development.

This issue of literacy over time is further enhanced by the state Agency for mass literacy through the:

a. establishment of functional literacy classes in villages through the Local Government Secretariate; and
b. the recently launched operation "Each One Teach One" (EOTO) Club among youths in all the 20 Local Government Areas of Ogun State. The essence of EOTO is to ensure that once the children are taught on improved agronomic practices they will be able to 'discern their parents' needs and teach them at those points of needs, since adults have to be so treated if they are meant to learn.

Enhanced literacy, (not only on farm technologies but also on family living, nutrition and social life) at the rural areas were majority of the residents are predominantly farmers; will go at length in improving the quality of life, nutritional status, production of food and fibres as well as agricultural development of the Nation.

It is believed that there's a correlation between Farmers age, their willingness to learn and receive new ideas and changes and tendencies to averse risks. The adventurous nature of their children as youths will encourage the farmers receptivity to such ideas and exposure to contacts outside their farms that will enhance other opportunities for employment

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and income generation. Such income can be a source of capital that could be re-invested into their productive system for increased production. It may also improve their economic well being and health status.

Rural Youths can also be considered as vehicles of social interaction that can encourage community cooperation among their farmer-parents for subsequent benefits of co-operation in terms of security of loans, outside contacts, team workmanship etc.,

THE WAY FORWARD: SUGGESTIONS TO ENHANCE THE YOUTHS' ROLE

As Agricultural development continues, Farmers are no longer expected to produce at subsistence level, but product for the markets whose prices are dictated by the forces of demand and supply backed up by an efficient information network and extension services that can help in organising such production and marketing. There is a need for complete change of strategies and approach if rural youths are to contribute their quota to agricultural development. The present approach and policy which see rural areas as the source of surpluses for the urban should be instituted with rural development strategies, having the rural youths as the centre-piece.

This new approach should recognise the youths as human beings capable of producing surplus food for the urban centres but also equally entitled to the quantity of life which their urban counterparts have access to; the good roads, clean drinking water, health and medical care, facilities, good schools, rural electricity and other services that will give them a sense of dignity, belonging and respect. This may be accomplished by reviving the rural development programmes through the Rural Minimum Needs Projects (RMNP) aimed at functionally integrating socioeconomic activities with agricultural activities well in place.

Liaison with appropriate state Agricultural Development programmes; (in order to keep abreast with the extent of youth development programmes the discoveries from problems analyses
conducted over years and the probable solutions to the provision of rural

information); will stimulate agricultural production.

Some of the programmes must involve transfer of technology on improved technical innovations on crops and livestock, income generating activities as discovered in post-harvest technologies storage, preservation small scale processing and produce marketing as well as in social development like road construction, drilling of wells, boreholes etc.

The Graduate and Loan Schemes of the Nation Directorate of Employment (NDE) and the Family Economic Advancement Programme (FEAP) recently assisted projects will go at length in encouraging youths (Graduates and School Leavers), towards increased food production.

The ADPs and other related agricultural agencies should also provide agricultural services in terms of technology transfers and information dissemination to School Leavers in the rural areas,
support the youth agricultural field days and fairs that could be organised along with Farmers' days.

Teachers in the rural schools can update their knowledge and skill as they participate in the fortnight Training (FNT) and the monthly Technical Review Meetings (MTRM). This will provide a starting point to get the youths involved in modern way of farming.

The main function of tradition in any society is to ensure stability and conformity. Their existence in the rural areas in most cases limit the degree of freedom of rural youths and make them to operate within a circumscribed environment that will always limit them to a few options. Attempts should therefore be made to select those aspects of the tradition and organisation that can be used to the advantage of the youths as they affect their incentives to produce more.

Preferences and taboos may be altered by improving the transportation and marketing channels so that rural youths can also be disposed to a wide variety of consumer goods that can easily attract them to the metropolis.

The NDE credit facilities through the school Leavers and Graduate Schemes; the Vocational skills in mechanical and wood would have direct implications for youth involvement including performance in

agriculture These and related institution will ensure a form of interaction in technology dissemination, provision of credits and early exposure to modern ways sustainable rural youth development programme.

Extension services also have great potential to improve the future of the rural youths through the development of community based rural Youth through the development of community based rural Youth Organisation that will Serves as a forum for introducing improved technological packages, develop skills for income generation, training on population and family life; for better standard of living; special efforts should be mounted in training young women in Home Management and handicrafts so that their homes can be made attractive and reduce migration to towns.

This can be test accomplished through the Agriculture - in schools programmes.

The various youth development programmes should be resuscitated in line with their stated objectives of teaching the youths informally on improved practices that will impact favourable attitudes towards agricultural development which will eventually raise their living standards. This will make them to appreciate their environment better and instil in them, the willingness to stay and improve on such rather than moving out to a supposedly better one in towns. These programmes may be modified after the 4-H. Clubs of U.S.A., the 4-D of Republic of Benin, the Young Farmers' Club of Nigeria etc.

To get agricultural development moving, there should be creation of rural infrastructures from time to time to provide an array of rural facilities like transportation, roads, markets for disposal of produce and purchase of inputs, storage facilities and effective extension services.

In the face of declining active young Labour Force in the rural areas, there should be a programme that will offer growth incentives to attract the youths to return to rural areas and take up farming as a profitable enterprise.

CONCLUSION

So far, the main objective of this paper is to examine the expected roles of Youths in agricultural development and to offer suggestions on future expectations for improvement. In an attempt to achieve this, review of the objectives of agricultural development and the current agricultural production situation were made. It was however observed that the roles of rural youths in agricultural development have been taken for granted for long and the importance of these roles needs to be emphasized if maximum results are to be achieved in agriculture.

Unless we adopt strategies to stimulate and encourage the youths our farming activities will remain unproductive and unable to contribute meaningfully for development.

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SOCIOLOGICAL ANALYSIS OF THE ROLES OF RURAL CHILDREN IN PEASANT FARM FAMILY BUSINESS

BY

AGUNBIADE J. B. AND S. F. ADEDOYIN

Department of Agricultural Extension & Rural Sociology, Ogun State University, Ago-Iwoye.

ABSTRACT

It is becoming increasingly worrying that rural farmers' children do not show sufficient interest in agriculture to the extent of making it their future employment - and main income earner. Going by the fact that rural farmers' children are deeply involved in peasant agriculture with their parents by being sources of cheap farm labour, farm companions, motivators and fast farm errand runners, agent for farm financing and technology dissemination as well as reliable farm and home livestock attendants for their parents,. most rural children still do not show appreciable inclination towards adopting agriculture as their future main employment.

Being short of a marched study, this paper in three sections undertook sociological analysis to identify the factors that led to the negative attitude of rural children in this connection and prescribed certain corrective measure to this ugly trend to seal off bright future for Agricultural growth in Nigeria. The recommendations centered on government programme of actions on.

a. the rural unschooled children engaged in farming
b. the rural schooling children studying agriculture
c. Reordered government's resource allocation to agricultural training.

INTRODUCTION

In the scheme of peasant farming in rural Nigeria, children are known to have played very significant roles from just-hand knowledge about children in South-Western Nigeria. Children of peasant farmers are known

to feature prominently in virtually all facets of agricultural production, storage processing and marketing processes. For the purpose of this analysis, peasant farmers' children are those that fall within the age bracket of 12-17 years. Beyond the age of seventeen, it is not uncommon to find many female children getting married while their male counterparts either to school or use opt out to other non-agricultural professions.

In rural farm families, children are known to be indispensable farm companions and motivators of their parents work and ever-ready runners of the several and varied farm errands to which their parents send them.

Theoretically, children spend so much time with their peasant farmer parents that any reasonable man would believe that the children themselves should, automatically must take to farming, possible, at a higher level, having regard to the length of time with which they have been closely associated with farm work. Unfortunately, nowadays, most of the children, on attaining schooling ages, if not before, move on their own volition or on the vice of well-meaning family members to live with their brothers, sisters or other relations in towns and cities. There in the cities, they lose contact with participation in farming. Before too long, such children soon outgrow the children's age and because of the nature of urban live, often fail to have any more to do with farming.

The purpose of the paper is to carry out sociological analysis of the roles of peasant farmers' children in agricultural enterprises and to assess the veracity of the commonly-held view that;

a. long association and involvement of farmers children with peasant farming should be good grounds for the children to take to farming as life-long profession,
b. availability of necessary infrastructures and social amenities in rural communities should be enough ground to sustain peasant farmers children's interest in farming as a profession.
c. the establishment of Children-In Agriculture Programme at the village and school levels would do the magic of sustaining the interest of peasant farmers' children and commit them to agriculture.
d. the selective local training in Technical Agriculture of unschooled

children just before attaining the age of majority would sustain rural children interest in agriculture.

The four propositions above would be analysed within the context of the prevailing sociological imperatives in order to shed light on the veracity of the proposals as options to sustain the interest of peasant farmers' children in agriculture.

However, before the analysis, the catalytic roles of peasant farmers' children would be examined in some detail to actually determine the depth of their involvement in agriculture within their farm family framework.

THE CATALYTIC ROLES OF FARMERS' CHILDREN TO PEASANT FARMING

Especially in South-Western Nigeria, peasant farmers play uniquely important and catalytic roles within their farm family ventures. A few of these will be expatiated upon here:

Rural Children as a source of cheap Farm Labour.

Barring the time when the children are too young for certain really hard farm tasks, children are commonly used as cheap labour in farm works such as weeding, seed planting, harvesting, produce carrying into store. processing, fire-making, etc. In traditional rural communities, the size of farm families including those of the children is a key determinant of family farm sizes, parents are usually spared of load carrying to and from the farms and fields because of their children's labour which is not only cheap but also readily available and steady. In this connection the children's labour saves the cost of hired carriers and/or transportation cost on motor vehicles for certain classes of farm commodities

Rural Children As Farm Companions Motivators and Errand Runners

Farmers' children have been found to be indispensable companions of their parents on the farm. They have been reported to serve as invaluable human motivators of their parents while at work when the children serve

as companions to talk to and sent on not-too-distant errands around the farms. Farmers' children are the fetchers of firewood and water from near and far rivers for farm uses. In rural Communities where the children are not around to keep the farmers company, most peasant farmers almost invariable resort to the use of pet dog to serve as companions on the farm.

As Agents In Farm Financing

Under the old rural cultural netting that is now giving way to modernity, in Yoruba Land, Children were made to work on creditors' farms for an agreed period of time which may run to months or even to years in return for a given amount of money which the peasant farmer took for funding certain farm-related jobs or businesses. This is the common practice under the "Ofa" concept, where the money loaned is used for the purpose of paying hired labour for clearing a long fallowed land for a new planting season or for making heaps for planting of yams or for other farm jobs requiring hiring of farm hands.

As Agents For Farm-Firm Information And Agricultural Technology Dissemination.

By nature, children are known to be inquisitive and even from childhood, cherish being innovative and tend more to carry in their heads and in their hands any information or phupical materials which they consider to be new. Such new ides, children almost invariably carry to their parents' farms for possible adoption. Children, as inter farm errand runners have sample opportunities to see and appraise agricultural innovations and technologies in neighbours' farms the accounts of which are given to their parents on their return to base.

It is not uncommon to find children with some sample seeds, cuttings, fruits or other innovative materials from neighbour's farms, even if the materials are not obtained lawfully.

As Farm Produce Processing, packaging, and Marketing Agents

Parents find it most convenient to assign their children to the tasks

produce harvesting, storage, processing, packaging and marketing as appropriate. Specific produce in point include cassava, maize, pepper, cocoyams, fruit and leaf vegetables which rural children market farmer's. In that connection farmer's children are also actively involved in the weaving of baskets of different sizes used as receptacles for maize, cassava, leave and fruit vegetable harvesting and storage.

Farmers' Children as Farm and Home Livestock Attendants

Under the rural farm-family cultural environments, farmers' children are taught early to acquire skills to attend to domesticated avian and ruminant animals both on the farm and at home.

All these farmers' children's assignments were usually done with admirable expertise sometimes better than the adults, presumably because of their early exposure to the various farm-based tasks. However, there are certain socio-cultural factors which must be noted before making pronouncements and recommendations concerning the prospects and possibility that farmer's children would take to farming like-long employment. Some of these socio-cultural factors are examined in the next section of this paper.

SOCIO-CULTURAL FACTORS GOVERNING CHILDREN'S FUTURE VISION ABOUT FARMING

Farmers' children possess certain social characteristics which tend to give expression in the perspectives in which they look at and think of agriculture as future main source of employment.

According to Ekong (1978) farmers' children, below the age of 10 years usually, do not operate as socio-economic groups with defined aim to be future farmers. Instead, this age stratum is one when they dream of being medical doctors, lawyers, Engineers etc. especially where such children are schooling or live near educated groups. They never for once, dream of being big-time farmers. The big question then arises, why?

Secondly, farmers children within the age defined have not attained the age of majority and therefore lack the legal capacity to make valid

contracts with anyone on supplies of important farm inputs like seed, fertilizer, irrigation water, bank or personal loans.

Thirdly, children that are actively and regularly participating in their fathers' farm enterprises are those lacking the privilege of schooling. Those children are those that tend to think of themselves as less-privileged and less-fortunate, relative to their counterparts, males and females who are priviledged to be schooling.

Farmers' children have come face-to-face with the rigours and drudgery wherent in peasant farming, which features are not attractive and infact, repulsive to most farmers' children.

Children's Psychology And Their Future Participation In Farming.

Children are known to be more active below the age of majority but they are less socially organised to significantly influence the course of socio-economic development in their communities (Ekong 1978). The psychology of children learning for the purpose of building a future career made it clear that children show interest to learn anything that.

a. essentially agree with their cultural beliefs.
b. could create rallying ground for children of the same age or interest.
c. gives promise of immediate socio-economic benefits to them or their family of Procreation.
d. Could earn some kind of distinction to their family name, enhanced their status among their colleagues and promote for them great promise of a more prosperous future.
e. is not so difficult as to put them off on account of lack of physical ability to cope
f. the ownership of any materials or deed are not being competed for but something the credit to which they can lay direct claim.

Early sociologists opined that rural community dwellers naturally want to be identified with Professions which command higher status in the community on account of their income-generating potentialities. Peasant farming is not considered as one of those professions; rather, peasant

farming is viewed as a profession meant for marginal survival. For that reason, many rural dwellers even adults who have opportunity to enter alternative professions/jobs like the skilled and semi-skilled professions e.g. carpentry, brick-laying, petty-trading, etc waste no time to do so.

Social Mobility:

This is the movement of people within the social strata vertically and horizontally. In rural Nigeria, according to Ekong (1978) and Jibowo (1992) peasant farmers' parents have formed struggled to create social mobility for their children largely through children's formal education or through some skilled or semi-skilled professions skilled semi-skilled professions.

According to the International Bureau of Education, very little facilities/infrastructures exist in the rural areas beyond the primary exposure and a few semi-skilled trades. Reference is here being made to the type of the 1945 rural education efforts of Austria which was designed to direct government rural education efforts towards adapting children's education to their environment. (4) Peasant farmers' children are not subject to any formal Agricultural education which they themselves did not receive. Farmer's children only learn by doing. This makes farming look to farmer's children merely as a transient occupation meant only to tide them over to a more prosperous employment since their parents think of what better profession their children would get into other than peasant farming. In societies that are reluctantly static, parents had made efforts to prevent formal education from taking away their children from nomadic pastoral life. According to Adepoju (1986) two reasons were given why parents involved in migratory nomadic lives were reluctant in releasing their children for formal education which the Federal Government started in Barkin Ladi kin Northern Nigeria.

The nomads saw in the progressed formal education of their children a conflict considering the man-power needs of traditional pastoral economy. Their children's formal education specifically on mathematics, religion, English and social studies implied permanent separation of the

children from migratory pastoral life of the parents into sedentary lives of tracking, factory or public service work for their children.

Rural Children's Zero and Higher-Order Beliefs.

Dary (1970) writing on cognitive foundations of beliefs , stated that many beliefs are products of direct experience of people. This is even more relevant in the case of farmers' children and their perspective about their continued participation in farming as a major source of employment.

In this connecting, peasant farmers' children are cut in two main orders of beliefs, about their possible future continued stay in peasant agricultural production. First, is the Zero-Order belief while the second is the Higher-Order belief in what agriculture could do or could not do for them.

While still under the age of majority, peasants' children tend to remain band under the zero-order belief which is normally based on their sensory experience as to what socio-economic benefits, peasant farming could being to them. Under the zero-Order belief system, the minds of rural children tell them that their future is guaranteed and that they will make it in peasant farming as their fathers.

This zero-Order belief is consistent with the relative socio-economic needs of children at that age which are simple and so easy to satisfy. There are also the many farm-based allurements to children, like regular eating of bush meat, cheap fruit vegetables, regular breakfast, lunch and dinner which peasant farming guarantees.

However, as the rural peasants' children grow up nearer towards the age of majority, the Higher-Order beliefs tend to take ascendancy because the rural children could now reason beyond their zero-order beliefs realising that their perspectives have been blurred and that their sensory experiences could be potentially fallible the youthful allurement fade away with advancing age, Peasant farmers' children are known to be ruled by Higher-Order beliefs that peasant farming breeds poverty, low income and low societal status. Therefore, they would be poor in future if they cling to farming as practised by their parents. Once held, the Higher-

Order beliefs tend to linger on in children's minds as they mature into adulthood.

The understanding of the socio-economic realities operative in the rural children's environments critical to the correct fashioning of remedial measures to their vision of agriculture as main employment. Any recommendations also have to be cognizant of these realities.

EXAMINATION OF THE FOUR MAIN PROPOSITIONS ON WHICH CHILDREN FUTURE INTEREST IN AGRICULTURE MIGHT BE BASED

The Argument of Long Association With Peasant Farming.

The argument that long rural children's association with peasant farming would serve as a good ground for the children's sustained interest kin farming is fallacious for reasons.

First, it was found that childhood is a period during which children learn fastly and show considerable interest in any undertaking that they consider new and challenging. It is therefore, not surprising that rural children have so much attachment to several rural undertakings of agricultural nature. In addition peasant agriculture is not-worthy for several farm-based allurements to rural children. These include the rare opportunities that peasant farming gives rural children to eat on the farm in one day as many times as they desire. Peasants' children are either eating boiled or roasted yams cocoyams, pounded yams, boiled or roasted maize cobs wall nuts, coconuts, or else, are eating roasted bushmeat on fireplaces. Those quite apart from the different ripened well-growing paw-paw, citrus, guava, managers cashew and other fruits that are available free of charge to children on the farm.

All these allurements notwithstanding, there is the more influential "Higher-Order belief system" whereby it systematically dawns on rural children as they graduate from childhood to the age of majority that peasant farming cannot sustain their socio-economic needs as they grow to think of the good things of life like marrying a wife, having children,

buying latest clothes, etc. Rural children soon begin to define need aspirations, new and more dignifying, profitable professions for themselves.

From the foregoing analysis, it is reasonable to believe that the longer the period of rural children's attachment to peasant agriculture, the more disillusioned they become and the less the likelihood that they will develop more positive attitude and interest in farming.

The argument of Rural Infrastructures And Increased Social Amenities.

Rural development writers like subnruta and Ken *(1984), Olayide and Essang (1975) although agreed that the development of rural infrastructures like rural roads, irrigation gadgets, erosion control devices among others, would revolutionize rural agriculture, the expected outcomes had occurred mostly under the Agricultural Development Project's (ADPs) intensive Training and visit system of Agricultural Extension service with adult farmers as clienteles.

This mens that if the rural children are to develop new orientation nd new positive interest in agriculture to the extent of adopting farming as their mainstay, the ADPs will probably float a new agricultural programme solely for children with inbuilt attractive allurements to rural children.

Rural development experts believe that the "push-factor". prompting rural-urban drifts among both rural youths and adults, infact is traceable to the apparent lack of rural infrastructures and social amenities Children and youths, these days, believe that they are entitled to all the good things of life, namely good health, good food, social and economic satisfaction etc which children believe peasant agriculture is incapable of providing.

It is therefore, doubtful if the rural infrastructures and increased social amenities without the promise of enhanced socio-economic status can bring rural children herer agriculture.

The argument of Children - In- Agriculture programme In schools And Villages.

The children-In-Agriculture programme in say, primary schools and villages, is analogous to the old "Young Farmers' Club" programme. Although, this programme promises considerable re-orientation in agriculture for children to be involved, caution should be taken not to make the children's programme elitist in content.

For instance, the programme content for children on the farm should be designed to differ from that of children in schools. Whiles, In the school based children - In-Agriculture programme should be restructured to expose children to simple and medium-scale drudgery-removing agricultural technologies that can erase the age-long prejudices of children that Agriculture is difficult, they should be introduced to short and medium - term gestation farm enterprises that could meet family's social obligations, practical knowledge of rural peasants indicates *inta alia* that majority:

a. live in house built of mud walls covered either with thatched roof or with galvanized iron sheets.
b. food on maintenance ration and are mostly undernourished
c. are unable either to send their children to school or else if they do, are not easily and regularly able to pay their children's school fess or any dues payable in the schools.
d. are poorly clothes as they often appear in the same kind of dress on most days and peasant farmers's children build new dresses mostly at Christmas, 'Ileya' or other festive periods.
e. operate enterprise (farming) which their fellow men tacitly avoid as major calling in life.

This unpleasant scenario is what rural farmers children dwell and thrive hopefully in. It is therefore not surprising that the children prayerfully live with the situation but with the hope of better tomorrow in another and more rewarding employment.

It is against this background that the following recommendations are made. A three-pronged approach is recommended designed to centre on.

a. the rural unschooled rural children.

b. the rural schooling children.
c. reordered government's resource allocation to Agricultural Training.

Special Vocational Agricultural Training Programme For Unschooled .Rural children.

The old prejudice that rural unschooled children are untrainable should be jettisoned. Experience with rural children showed that they tend to be deeply interested and participate with great enthusiasm in any programme whether recreational, entertainment or educational designed primarily for them.

A return should be made to the old farm Institute days when holders of Primary Six and even lower certificates/Testimonials were trained intensively on specific aspect of Agriculture. The training should also address the correction of the negative attitudes of rural farmers' children to Agriculture, given that the children are not schooled. The existing training facilities in the states should be used to save cost.

The difference between the admission requirements used for the old Institutes and the one being recommended is that interested but unschooled rural children would also be eligible for admission together with others to avail of the training opportunity provided by the scheme. It is expected that the long exposure of the unschooled rural children will sustain their interest in the vocational Agricultural training.

Generous Provision of Agricultural Training Facilities In Schools.

In many secondary schools in South-Western Nigeria, research survey carried out indicted that about 85 percent of schools lack the essential training resources for Agriculture. In Lagos State., for example, the survey on the training needs of target groups in Agriculture 1997, showed that about 5 percent have land on which agriculture could be practised in secondary schools. For that reason, poultry, piggery, arable crops and their agricultural pursuits cannot be practised. This raises serious question as to how the children in their secondary schools can then be motivated to have interest in agriculture.

In this connection, two approaches are recommended:

Motivating the School Children.

It is recommended that it made mandatory for each secondary school offering Agricultural Sciences at the SSCE level to have a minimum of 2 hectare of arable land where practical agricultural training facilities could be set up. The poultry, piggery, Rabbitry, etc, as well as the arable crop units should be established to make profit, and not for the teaching staff to share among themselves at harvest. These enterprises should have a demonstration effect on the young children so that they, in turn, can carry that positive impression about profitable agriculture into the future.

Availability of labour-saving equipment and machinery which students should be taught how to use e.g. Tractor, Milling machine, etc. should dispel from the children the belief that agriculture, necessarily, has to be done by Hoe and cutlass only. It should be made mandatory that each SSCE student from their penultimate year, should offer Agriculture since so much importance has been attached to agriculture as an Engine of growth to our national economy.

It is believed that the children would have had a good foundation about Agriculture on which they can build their future interest. The formation of Children-In-Agriculture or Agricultural clubs or Young Farmers Club, etc. would only be a natural developments if the above proposals are carried out.

Reordered Resource Allocation on Agricultural Training

Most secondary school in may states are poorly funded. The little funds located to schools are spent to purchase science laboratory chemicals and other consumable with little or nothing left to invest on the school's agricultural training.

It is considered an important agenda to motivate a sizeable corps of children, even, from secondary schools, to be interested in Agriculture to the extent of making the subject their main income earner in future whether their parents are engaged in Agriculture or not.

RECOMMENDATION AND CONCLUSION

i. State governments should allocate supervised special school Agricultural training funds to the Schools' Management Boards for direct disbursement to secondary schools. The fund could be for the provision of the necessary agricultural training resources in livestock, arable cropping and crop processing enterprises.

ii. The Principal, in each school, should be made to render a quarterly report of his school's agricultural activities, highlighting the input and output data for each farm enterprise and the level of involvement of school children.

If the federal, state and local government are lethargic about motivating rural children into agriculture, so long will be interest of rural children continue to dwindle until into oblivion.

CHANGES IN THE LABOUR VALUE OF CHILDREN IN AGRARIAN ISOKO COMMUNITY OF DELTA STATE, NIGERIA

BY

PATRICK A. EDEWOR

Departmental of Sociology, Ogun State University, Ago-Iwoye, Nigeria.

INTRODUCTION

The labour value of children has been considered one of the benefits of children especially in agrarian pre-transitional societies. This labour value of children was, among other things, one of the reasons for having large families in these societies. Men tended to be polygynous and also had a large number of children in the pretext that the larger the family, the larger the farm and the wealthier the farmer. This is because more labour is available for work in the farm. Children's labour utility was thus a primary determinant of fertility besides other socio-psychological and cultural factors that played significant roles in family size preferences and fertility behaviour.

The Isoko society is a typical example of the above. It is predominantly an agricultural community in which children play a very significant role in agriculture (by assisting their parents in the farm) and consequently contributing to the household economy. The economic contributions of children to household economy is classifiable into two broad categories: directly productive activities (including farming, fishing, tending animals and other non-farm activities) and indirectly productive activities (such as cooking, washing, cleaning, baby minding, fetching water, collecting firewood, running errands and marketing for household consumption) (Orubuloye, 1987). Our focus in this paper is on the directly productive activities, especially farming. However, it should be added that the participation of children in the indirectly productive activities, sometimes called "children's jobs", releases the adults to participate in the directly productive activities, hence the children are of indirect economic value. We shall therefore make reference to these

indirectly productive activities occasionally in this discourse. This paper is aimed at examining how socio-economic changes, especially the advent of widespread schooling, have affected children's participation in agriculture as well as the changing role of children in agriculture.

THEORETICAL FRAMEWORK: THE WEALTH FLOWS THEORY

This paper draws its theoretical strength from Caldwell's intergenerational wealth flows theory (Caldwell, 1976). According to this theory, there are only two kinds of society: one in which it is economically rational to have an unlimited number of children and the other in which it is economically rational to have a limited number of children. The first example (pre-transitional) typifies primitive and traditional societies of the underdeveloped world while the second (transitional), typifies the developed countries of the world. The fundamental issue, Caldwell contends, is the nature, magnitude and direction of intergenerational wealth flows, between children and parents. The net flow of wealth favours parents in the first society, hence, children are assents whose labour is useful to parents and who also serve as a source of old-age security for parents at adulthood. In the second society, net flow of wealth favours children and they are liabilities to parents.

In the pre-transitional societies, the net flow of wealth continues to favour parents until there is the great economic divide, the point at which there is a reversal in the direction of the flow of wealth from children to parents, over to parents to children and at which high fertility becomes irrational. Caldwell contends that prior to this economic divide, high fertility is rational even in non agricultural urban conditions as long as the net flow of wealth is from the younger to the older generation. Caldwell (1982) has suggested that the spread of mass education produces a decline in fertility by helping to change the direction of wealth flow between generations within families. Thus, education of children is seen as a primary determinant of the direction of wealth flow between generations. This is because a child's schooling reduces his/her potential for work

within and outside the family and education also increases the direct costs of children to parents.

Caldwell's wealth flows theory has received a number of criticisms. In his study of three traditional communities in eastern Paraguay and Southern Peru, Kaplan (1994) came up with findings which contradict the wealth flows theory. He found that even though children were very costly to raise, fertility was high. He therefore concluded that it wouldn't be a surprise to find that under most conditions, humans, like all other known organisms, invest in, rather than exploit, their offsprings, implying that net intergenerational wealth flow is downward in all societies. Also, Olusanya (1988) avers that parents are not necessarily the beneficiaries of the balance of the flows between them and their children in pre-traditional societies because parents' investments in children are so substantial; even the occasional remittances (the so called child-parent wealth flows) made by urban-based adult children to their parents are more than offset by the loads of foodstuff these children receive from their parents in return. To Olusanya, what non-African researchers regard as 'child labour' or a flow of wealth' to parents is merely, a child's contribution to the smooth running of the household, which also, is part of the training required by the child (a socialization process) to prepare him or her for adult life.

THE RESEARCH SETTING

Isoko people inhabit two of the Local Government Areas in Delta State: Isoko North and Isoko South Local Government Areas. The area is located roughly between longitude $6^{0}5^{1}$ and $6^{0}25^{1}$ East and Latitude $5^{0}15^{1}$ and $5^{0}40^{1}$ North in the Delta part of Nigeria. to the North of this geographical area are the Kwale (Ndokwa) people, to the East is Ase River, to the West are the Urhobo and the South, Ijaw people.

There are eleven clans which constitute the Isoko community. These are Aviary, Emevor, Enhwe, Erohwa, Igbide, Iyede, Okpe (Ozoro), Olomoro, Owe, Ume and Uzere (Ikime, 1972). By clan here, we mean a socio-political unit made up of individuals who claim a patrilineal

descent to a common ancestor. This ancestor is usually the founder of the clan and who sometimes names it after himself. The descendants of this ancestor may however presently live in many settlements.

According to the provisional results of the 1991 population Census, Isoko North had a total population of 133,732, spread across 473 square kilometres with a population density of 282 persons per square kilometers. Isoko South, on the other hand, a total population of 142, 663, spread across 653 square kilometre with a population density of 218 persons per square kilometer (Imoroa, 1993). The area falls within the ever-green forest belt of Southern Nigeria with a vegetation dominated by oil palm tree.

The major occupation is agriculture: cassava, yam, plantain and maize being the food crops mainly grown. Rubber is also a widely grown cash crop in the area. In addition, the existence of Ase River, together with other numerous streams and creeks makes it possible for Erohwa, Uzere, Aviary and Igbide clans to have fishing as a major seasonal occupation. There are also numerous local fish ponds which are a major source of fish supply in Isoko land. The abundance oil palm has also made the production of palm oil and palm kernel possible in the area.

The two local Government Areas occupied by Isoko people are basically rural. With the exception of the two local Government Headquarters (Ozoro and Oleh), all other settlements in the area have a population of less than 20, 000 persons each, going by the 1991 population census. As a basically farming community, virtually every one has a farm. Even those who are engaged in other occupations such as teaching, other civil service jobs and trading still supplement their household resources substantially with proceeds from their farms. In other words, those engaged in other activities go to their farms when they close from work on weeks days and on Saturday. But no one is allowed to go to farm on marker days, during Christmas and the day a person dies in each of the communities. People are only allowed to go to farm after the corpse is buried. If the death is by suicide, no one goes to farm within the next seven days. These measures are taken to check some unethical

tendencies in the farm. But outside these days, the whole community is virtually empty and appears deserted owing to the fact that everyone is normally away to the farm. This is usually the case especially in the villages including Aviary, Olomoro, Oyede and Emevor. Agriculture is mainly subsistence with the hoe and cutlass as the major farm implements.

METHODS

The information on which this paper is based was generated from a series of Focus Group Discussions (FGDs) on parents perception of the value of children. These FGDs were conducted in six Isoko settlements in February, 1998. Two of these settlements (Ozoro, in Isoko North and Oleh, in Isoko South) which are the Local Government Headquarters are the only urban areas in Isoko land and they had a population of 41,743 and 27, 250 respectively in 1991. They were purposively selected because they are the only urban areas and farming as an occupation is also widespread in them as in the other smaller settlements. The four other settlements are rural and they were randomly selected from the 1991 census locality lists for the two Local Government Area. The settlements and their 1991 census figures are as follows: Aviary (13,837), Olomoro (11, 393) (both in Isoko South): Emevor (11,168) and Oyede (13,488) (both in Isoko North).

Eight focus groups were constituted in each town or village - four for men and four for women - making a totally of 48 groups altogether. The groups for men include men aged 20-39 years with primary or less education, men aged 20-39 years with secondary education and above, men aged 20-39 years with primary or less education, men aged 20 -39 yeasts with secondary education and above, men aged 40-60 years with primary or less education and men aged 40-60 years with secondary education and above. The groups for women include women aged 15-29 years with primary or less education, women aged 15-29 years with secondary education and above, women aged 30-49 years with primary or less education and women aged 30-49 years with secondary education and above.

Each group was composed of between 6 and 10 persons and each session lasted for about an hour.

The Focus Group Discussion guide contained amongst others, such topics as the importance of children to parents, parents expectations from children in the past and now, advantages and disadvantages of large and small number of children, ideal and desired family size, sex preference, changing perspectives on the education of male and female children, reasons for family size and sex preference and the types of help normally rendered by male and female children both when they are young and when they have become adults. Although a lot of information was elicited from participants on the above topics , in this paper, we are primarily concerned with children's contribution to the household economy, especially their role in agriculture and how socio-economic change, particularly the advent of schooling has brought about changes in the labour value of children and children's role in agriculture.

CHILDREN'S ROLE IN AGRICULTURE

Among Isoko people, the role of children in agriculture cannot be over emphasized. In traditional times, before the advent of widespread schooling, children assisted their parents in the farm all day. Boys were particularly useful in the clearing of bush, felling of trees and other land preparation activities such as tilling and making of ridges for planting yams. Boys were expected to assist their fathers in the more rigorous and strenuous aspects of farming. They also tapped rubber, climbed palm trees and harvested palm fruits for the processing of palm oil and production of palm kernel. Girls on the other hand, together with their mothers did the planting, weeding, harvesting of crops, processing of cassava into *gari* (cassava flour) and marketing of harvested and processed crops. Boys also assisted in harvesting of cassava and yams and they also sometimes weeded. Although children are still engaged in these activities at present, certain changes have occurred and these are discussed in the latter part of this paper.

Farmers in Isoko and have numerous but small farm holdings at

different locations. Allotment of land is done to children in the family only after they have become married. However, preference is normally given to the male child; the size of farmland allotted to the male is normally much bigger than that allotted to the female. This is in the pretext that female children belong to other families after marriage. The larger the number of children (especially male children) in the family, the bigger the amount of land the family would have.

The distance between town and farm is very far especially on Oleh, and in all the studied settlements it ranges between one and twelve kilometres. Because of the far distance, the use of bicycles as a means of transport to and fro farms is common place. Bicycles are used to convey farm products from farm to town.

Those without bicycles (although majority do) resort to trecking the long distance and children are particularly useful in conveying farm products to town.

Aside from the participation of children in directly productive farming activities, children also contribute indirectly to household through their participation in other activities which release parents to do other more productive work in the farm. Children (boys particularly) run errands especially to the farm. Girls are particularly useful to their mothers in the performance of household chores such as sweeping, washing, fetching water, cooking etc. and baby minding. Although these roles are primarily performed by girls, boys also do, especially where there are no girls. However, much depends on the kind of training given to the children irrespective of their sex. Through participating in these activities, children are of indirect economic value to parents in this agrarian community. When children have become adults, their contribution to the household economy is mainly monetary. This point is discussed further under the next sub-section of this paper.

Local ponds and lakes are common in Isoko land and children play a significant role during the dry season when fishing is done in these ponds and lakes. Fishing is mainly a seasonal occupation and boys are particularly useful in baling out water from ponds. They are also

specialists in the use of hooks and nets for fishing.

THE ADVENT OF SCHOOLING

The advent of schooling is a major socio-economic change which has contributed to the decline in the labour value of children in the study area. Before the advent of schooling, children had all the time to assist their parents in the farm. The number of hours children have to take part in farm work are now dramatically reduced owing to schooling. Each Isoko town or village now has at least two or three schools and at least one secondary school and child schooling has become widespread. Consequently, children only assist their parents in the farm after school hours, on Saturday and during holidays. But some who are in school or have been to school become reluctant to participate in farm work.

Parents were initially sceptical of the value and importance of western education for their children and in the past, a lot of parents prevented their children (particularly daughters) from going to school. This was because schooling disrupted children's participation in farming. In addition, girls were not sent to school because it was felt that their education would ultimately benefit their future husbands and not the parents and their kins. Secondly, a lot of girls got pregnant in school and pregnancy terminated their schooling and the money spent on the education of such girls became wasted. Things have however changed. Both boys and girls are now being sent to school. Parents now struggle to send their children to school because it is now widely believed that the educated child is better equipped to care for parents in their old age. Girls have been found to be more sympathetic and more caring for aged parents than do boys. When they are married, boys become saddled with the responsibilities of caring for their wives and children and other household obligations. They are thus hardly able to adequately combine these obligations with the care for their aged parents.

Parents are greatly concerned about their security at old age. The education of their children is thus viewed as a way of investing against the future. And in parental calculations, the decline in the labour value of

children and the higher costs of childbearing due to schooling are counterbalanced by the benefits they would reap from their educated children in future. It is now generally believed that girls's schooling is more advantageous and rewarding than that of boys because of the care female children give to aged parents. Pregnancy no longer hinders girls's schooling. Pregnancies that are not terminated are carried to term and schooling continues after delivery. But many now prevent pregnancy through contraception.

When children have become adults (particularly the educated ones), many build houses and/or buy cars for their parents, although the case of buying cars is not as rampant. Their contributions to parents' farming becomes mostly monetary. They occasionally make remittances to their parents for their upkeep and also for hiring labourers to work in the farm. But many prefer to liberate their parents from the drudgery and poverty associated with farming. Farming is perceived by parents as a profession that entails much drudgery and associated with poverty. Consequently, parents do not desire it as a profession for their children. Conversely, they admire and desire urban-based "office work" for their children - a major reason for sending children to school and for heightened parental aspirations for children's education, more so that educated children are better equip to care for parents' old age. While it is difficult to ascertain who benefits more (children or parents) in net intergenerational wealth flows, it appears that the net flows of wealth is downwards when the children are still young but upwards when they have become adults.

Education remains an avenue for social mobility and a way of securing a better future. There are instances in which, children whose parents could ill-afford the cost of education, struggle to fend for themselves. Such go to tap rubber and in that way, they earn money with which they pay their school fees and also purchases books and uniforms. Many young school leavers (boys particularly) migrate to urban areas in search of white-collar jobs or to pursue higher education or to learn a trade. Those whose performance in school at the lower level was not very satisfactory and who did not learn any trade however remain in the village and

continue to farm. But they normally admire or envy those who have migrated and are "making it".

IMPLICATIONS FOR AGRICULTURE AND CONCLUSION

A situation in which rural farmers prefer other kinds of job for their children has serious implications for the continuity and sustenance of the farming profession in Nigeria. The general perception of farming by parents and children as a profession associated with drudgery and poverty calls for an intervention programme aimed at changing the attitudes of both parents and children. There is need to make agriculture a more attractive profession through creating a more enabling and conducive environment. The provision of portable water, electricity and access roads in the rural areas would be a step in the right direction in this regard.

The changes in the labour value of children as discussed in this paper are the inevitable concomitant of a modernizing society. Child schooling should necessarily undermine the labour value of children. But there is need to use these changes to advantage. Having acquired the knowledge of farming from their parents through socialization, the introduction of agricultural science as a compulsory subject in both primary and secondary school curricula, with emphasis on modern farming techniques especially mechanised farming might be fruitful. Since drudgery and poverty are the things mostly dreaded in farming, if it could be shown that farming can be done without drudgery and poverty, more parents and children would be interested in it, thereby ensuring a future food security for Nigeria. But the crucial thing lies in the commitment to demonstrating this to both parents and children. This is an enormous task for both agricultural science teachers and agricultural extension workers.

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YOUTH OCCUPATIONAL GOAL ASPIRATION/PREFERENCE AND ATTITUDE TOWARDS AGRICULTURE AS A CAREER IN OSUN STATE, NIGERIA

BY

DR. A.J. FARINDE; DR. E.A. LAOGUN AND S. A. ADEYEMI

Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife.

ABSTRACT

The study investigated the influences of parental, peer groups and self occupational aspiration and preference on the choice of Agriculture as a career among youths in Ilesa East Local Government of Osun State, Nigeria. About one hundred final year students of seven Secondary School were administered with copies of structured questionnaire in April 1997.

About 51% of the respondents preferred Agricultural employment while, 49% preferred non-Agricultural employment after leaving school. However, 69% of the respondents has unfavourable attitude towards Agriculture as a profession while just 26% of them had favourable attitude. Significant relationship and contribution existed between respondent's occupational aspiration and parental occupational preference; respondent's occupational aspiration and peer groups occupational preference; father's occupation and respondent's occupational aspiration.

INTRODUCTION

Background Information

The stagnant of declining state of Agricultural development in Nigeria has received concerns from different categories of people e.g. researchers,

scientists farmers, policy makers and the general public. Youth tends to despise Agriculture as a profession because of its attendant problems which ranges from crude methods of farming, use of crude implements, lack of infrastructural facilities, lack of right inputs and untimely delivery to lack of credit and market facilities. All these makes agriculture to be viewed as a profession meant for the old illiterate people which are used to its drudgery nature. Hence, the youth oped for cities where they could get white-collar jobs recreational facilities, and infrastructural facilities. That is why rural - urban migration syndrome is on the increase everyday in Nigeria.

However, Agriculture has been made compulsory in our secondary schools for all students to know what Agriculture is in terms of its benefits to self and the society at large. The major aim of the policy under the 6-3-3-4 system of education was to reverse the negative perception of youths about Agriculture. The technical contents and preference respectively, which form the agricultural education curriculum can only impact knowledge of agriculture with its importance to the students. The motivational aspects which now determines the career goal, expectations and aspirations of the youth cannot be guaranteed. Therefore, the influence of parent, peer groups and self in terms of their occupational goal, aspiration, expectation and preferences which are closely related to their individual background needs to be examined.

Objective of the study

The major aim of the study was to investigate the parental, peer group and self occupational preference, and aspiration's influence on youth decision in choosing Agriculture as a career after their secondary school education in Ilesha east Local government of Osun State, Nigeria. The specific objective are to:

i) know the attitude of the respondents towards Agriculture as a career;
ii) examine personal and socioeconomic characteristics of the respondents (students);
iii) to know the parental, peer groups' and the respondent's occupational

aspiration and preference in the study areas;

iv) to determine the relationship between the respondent's choice of agriculture as a career (occupational goal/aspiration/preference) and parent's and peer groups occupational preference.

Conceptual framework

Choice of career has received different definitions from scholars according to how best the concept had been viewed to individual concerned. Parson (1914) stressed knowledge of self, knowledge of possibilities and limitations in the work world, and realistic reasoning on the relation between self and work, as basic to wise vocation choice. Carter (1940) examined the externalities that influences the choice of vocation. He believed that vocation attitude develops in the attempt to make practical adjustment to environmental condition. The external conditions or realities of individual's familiar and social situation, and his own capacities, needs, and motives limit the possible solutions open to him. According to (Carter, 1940), during the life of individuals, he makes some identifications with a respected group (family-parent and /or peer groups) which lead to an interest in particular vocational activities. If there are no serious discrepancies between his own capacities and the requirement of the vocation, and no serious obstacles, he may continue in his line, but if serious discrepancies or obstacle occur, he must became reoriented towards a different occupational group. Eventually a pattern of vocational interest emerges which becomes closely identified with the self, and form a basis for many decisions and a guide for long time planning.

In the view of Bordin (1943), vocation goal and aspiration form one of the mainspring of action. And that, in filling out an interest blank, what is being expressed is the subject's view of himself in terms of occupational stereotype. Super (1953) identified some factors as determinants of occupational behaviours. He noted that people differs in their ability, interest, and personalities which qualifies each for a number of occupations. Super (1953) also noted that vocational preferences and

competencies, the situations in which people live and work, and her/his self concept, change with time and experience, making choice and adjustment a continuous process. Furthermore, the nature of the career pattern (that is the occupational level attained and sequences, frequencies, and duration of trial and stable jobs) is determined by the individual's parental, socio-economic level, mental ability, and personality characteristics and by the opportunities to which he is exposed.

Gesinde (1983) identified about eight factors influencing choice of career in life. These are one's cultural background, family aspiration, attitude values, social class, sex, religion orientation, place of birth and the kind of educational institution attended. Archibald (1966) also identified personality (trait) as the degree to which the parents stress farming for the boys, and the resources available to boys for taking up farming as factors influencing choice of occupation of rural boys. He was of the opinion that a boy will plan not to farm if his personality gives him a readiness to break out of the characteristics ways of behaviour and though of non-farming job or if his economic resources for entering into farming are quite low. On the other hand, he will plan to farm if the revers of these condition exists. From all indications, the social cultural background which includes parental and peer group influences and personality which is a summary of many psychological factors including mental abilities and capacities forms the major determinants of occupational career choice. However, what influence have the parental, peer group's occupational preference and self attitudinal values on the youth occupational goal/aspiration/preference in Ilesha East Local Government Area of Osun State, Nigeria?

METHODOLOGY

The study was carried out in Ilesha East Local Government Area of Osun State. All the final year students of senior Secondary School in the study ares were administered with structured questionnaire in April and May. 1997. About one hundred students who were offering Agricultural Science were selected using simple random sampling techniques form 850- students identified in seven secondary schools in the study area.

Information on the subjects characteristics, parental and peer groups occupational preference, and subject's attitude towards Agriculture were collected. The subjects personal characteristics include age, sex, place of birth (village/town/city), educational inclination describes the educational lines e.g. science, commercial and /or art which each of the subjects wish to specialize; educational aspiration describes the highest education attainment that each subject wish to attain; father's educational level is the highest school attended by parent, parent occupation is either agricultural or non-agricultural occupation; employment status preference is the type of job preferred by the subjects after leaving school; parent occupational preference is the job mostly preferred for each subject after leaving school by his/her parent, occupational preference is the job mostly preferred by each of the students after leaving school; peer group occupational preference is the job that the subject's peer groups preferred and wished him/her to choose after leaving school. Occupation aspiration is the job that each subject aspired to do after leaving school as a career; occupational expectation is the job each subject is expected to do after leaving the school based on his/her level of knowledge, skill and understanding of the job (i.e. his background and personal abilities). Occupational goal is the job that each subject has set to do and which he/she is striving to develop all necessary qualities required to excel in the job.

Agricultural employment is any job related to agricultural production i.e. on farm jobs while, non-agricultural employment is any off farm job.

Attitude of the subject towards Agriculture was operationalized using a rating scale. Seven strong negative statements of opinion were given to the respondents to rate them on a 5-point liken-type scale thus, strong Agree (SA =5); Agree (A=5); Undecided (U=3), Disagreed (D=2) and Strong Disagreed (SD =1), according to how best each of the statements describe farming as a profession. These statement are;

i. Farming is a poor man's job;
ii. Farmers are the poorest set of Nigerian I know;
iii. Choosing farming as a career is like choosing to be poor all your life'

iv. Of all jobs, farming is the very last I would choose to do;
v. It is believed that those that go to study agriculture are crazy;.
vi. I can only do farming as a part time job;
vii even if machines are introduced into farming, I will not take it as a full-time occupation.

The total score on all the statements per respondents and the mean attitude scores were calculated as respondent's attitude and mean attitude scores, respectively. The maximum attitude score per respondent was 35 while, the minimum was 7.

The attitude class interval was determined using the mean attitude score (16.20) and its standard deviation (1.74) thus:
Below Mean score - standard deviation: Favourable attitude
Mean score standard deviation: Neutral attitude
Above mean score standard deviation: Unfavourable attitude
However, the idea of using the lowest class interval for favorable attitude towards Agriculture as a career was born out of the fact that all the statements of opinion used to measured attitude were negative.

Descriptive statistics like mean, standard deviation, frequency distribution, percentages and non-parametric statistics e.g. chi-square (X^2) analysis were used to analyzed the data.

RESULTS AND DISCUSSION

Personal characteristics of the respondents

Detailed analysis of the data gathered on the personal characteristics revealed that the mean age of the respondents 16.88 with 3.42 standard deviation. Majority of the respondents (65%) were between the ages of 16-18 years. Only 20% of the students were born in the village while, the rest were born from the cities. Majority of the respondents (63%) were males while, the remaining 37% were females. The large majority (74%) were offering science subjects while, 26% were taking commercial subjects. This educational inclination of the respondents might influence

their choice of Agriculture as a career.

On the education of the parents, majority of the respondents's parents (93%) were educated. About 47% of them had University/NCE education; 36% of them had formal education ranging from modern school to Technical Colleges, only 7% of the respondents' parents did not attend any school. About 48% of the respondents' parent were engaged in office work (white collar job), 29% were either Business man or Artisans. About 33% of the parents were part-time farmers while, 23% of them were full-time farmers.

When respondents were asked on the appropriate level of education for a farmer to excel as a modern and professional farmer, majority of the respondents (51%) believed that a farmer should have University/N,C.E. Certificate. About 40% suggested Secondary School education while, 9% preferred primary school education to be enough for intending farmers.

Occupational choice preference

Data in Table 1 show that 51% of the respondent preferred agricultural employment while, 49% preferred non-agricultural employment after leaving school Furthermore, 59% of the respondents said their parents preferred agricultural employment for them after their schooling while, 41% of them said that their parents preferred non-agricultural job for them after leaving school. On the peer group occupational preference data in Table 1 also show that 47% of the respondents peer friends preferred agricultural employment for them while, 53% of them said their peer friends want them to be engaged in non-agricultural employment after leaving school.

Occupational expectation

Occupational expectation is the job that the respondent is expected to do after leaving school considering his background and personal abilities. Data in Table 2. Show that 81% of the respondents would take up professional and executive jobs (white-collar job). Only 10% of the respondents expects that they would take up farming as a profession

while, 9% wished to be going into private business. This findings is a reflection of the respondents occupational aspiration.

When the respondents were quizzed that what other alternative jobs they would like to do if they could not get the job they aspired or expected to do ? Detailed analysis showed that about 58% of the respondent would go into other professional and executive jobs, 33% stated they would go into private business while, only 9% of the respondents indicated their intention to go into farming. The implication of all these is that only very few number of the students believed that farming is a lucrative a and dignified job.

Attitude of the respondents towards agriculture as a Career

The mean attitude score was 16.20 with 1.74 standard deviation. Data in table 3 show that 69% of the respondents had unfavourable attitude towards agriculture as a career, 5% of the respondents were neutral (undecided) while, 26% of them had favourable attitude towards Agriculture as a career. The implication of this is that agriculture is still perceived by the youths as a profession associated with negative and painstaking benefits e.g. energy sappen operations, delay in reaping of benefits, if any, long term rewards, low social prestige, poverty and drudgery. All these will invariably affect the youth occupational goal aspiration and preference in choosing Agriculture as their career in life.

Relationship between respondent's occupational aspiration and preference and parental and peer group's occupational preference.

Data in table 4 show the results of the chi-square (X^2) analysis carried out to establish relationship between respondents occupational choice of Agriculture as career and parental and peer group occupational preference. It was found that there was a significant relationship between parental occupational preference, peer group occupational preference and respondents occupational aspiration. There is also a significant relationship between father's occupation and respondents' occupational asiration and father's occupation and respondent's occupational

preference and fathers occupation and parental occupational preference. However, no significant relationship was found between parent occupational preference and respondent occupational preference; and peer group occupation preference and respondent's occupational preference.

The implication of these findings is that the socio-cultural background of the respondents and their personal abilities in terms of knowledge and skill acquired in relation to the aspired or expected profession; level of understanding or perception of the profession with its attendant benefits and social attachments have a tremendous influence on the choice of Agriculture as a profession in the study area.

The contingency Table score (C) (Table 4 column 8) gives the magnitude of the relationship between the variable investigated. Parental occupation preference had the highest influence on respondent's occupational aspiration with 42% contribution. This is followed by peer group occupation preference with 34% contribution to respondent's occupational aspiration. The father's occupation also had a significant contribution of 21% to respondent's occupational aspiration and respondent's preference respectively. Father's occupation had low contribution of about 14% to respondent's occupational preference.

CONCLUSION

The mean age of the respondent was 16.88 years with 3.14 standard deviation. A little above average (51%) of the respondents preferred agricultural employment while, little below the average (49%) preferred non-agricultural employment after leaving school. About 59% of the respondent's parent preferred Agricultural employment for their children while, 41% of the parent preferred non-agricultural employment for their children. A little below average (47%) of the respondent's peer group members preferred agricultural employment while, 57% of them preferred non-agricultural employment for the respondents after leaving school.

However, significant relation and contribution was found between respondent's occupational aspiration and parental occupational preference; respondent occupational aspiration and peer group

occupational preference; father's occupation and respondent occupational preference.

RECOMMENDATIONS

Based on the major findings and conclusion arrived at, the following recommendations are made:

1. The youth as a member of the basic social unit of the society (family) should be mobilized and organized into functional group or organization where they could be assisted to set attainable, realistic, and feasible goal in life.
2. The influence of parent and peer groups could be properly channeled in relation to career choice aspiration or preference that are in conformity with the societal values and expectations when youth are functioning in a group.
3. Parent must as a matter of commitment encourage their children to develop interest in Agriculture as a profession by emphasizing the benefits rather than negative notion attachment.
4. As a follow-up to recommendation 3, the society, individuals and group, private organizations, policy makers and Government should embark on positive campaign for Agriculture as a profession and backbone of any economy.
5. The curriculum of work for Agriculture at all levels of education should emphasize vocational Agriculture which is practical oriented rather than theory with adequate provision of the supporting facilities. This will erase the negative notions or perceptions about Agriculture as a career in life.

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TABLE 1: Distribution of the respondents by their personal Parental and peer group occupational preference.

N = 100

	Occupational Preference	N	%
i	**Respondent**		
	Agric. Employment	51	51
	Non-Agric. Employment	49	49
ii	**Parental**		
	Agric. Employment	59	59
	Non-Agric. Employment	41	41
iii	**Peer group**		
	Agric. Employment	47	47
	Non-Agric. Employment	53	53

Table 2: Distribution of the respondents by their occupational expectation.

Occupational expectation	Respondents	
	N	%
White collar jobs	81	81
Farming	10	10
Others	9	9
Total	100	100

Table 3: Distribution of respondents by their attitude towards agriculture as a career.

Attitude	Respondents	
	N	%
Favourable (0-14.45)	26	26
Neutral (14.46 - 17.94)	5	5
Unfavourable (17.95 - 35)	69	69
Total	100	100

Table 4: Relationship between respondents' occupation goal/aspiration/preference and Parental and peer group Occupational preference

Variables	Level of Significant	Degree of freedom	Chi-square Tabulated (X^2T)	Chi-square Computed (X^2C)	Conclusion	Remarks	Contingency (C) Table score.
Parental Occupational preference Vs respondents occupational aspiration.	0.05	1	3.84	73	$C^2_c > X^2_t$	S	0.42
Peer group occupational preference Vs respondent occupational aspiration	0.05	1	3.84	51.62	$X^2_c > X^2_t$	S	0.34
Parental occupational preference Vs respondent occupational preference	0.05	1	3.84	1.3	$X^2_c > X^2_t$	N.S	0.01
Peer group occupational preference Vs respondent occupational preference	0.05	1	3.84	0.3	$X^2_c > X^2_t$	N.S	0
Father's occupation Vs respondent's occupational aspiration	0.05	2	5.99	26.78	$X2c < X^2_t$	S	0.21
Father's occupation Vs respondent's occupational preference	0.05	1	3.84	16.28	$X2c < X^2_t$	S	0.14
Father's occupation Vs parental occupational preference	0.05	1	3.84	26.78	$X2c < X^2_t$	S	0.21

S = Significant N. S. = Not Significant.

EFFECTIVE MOBILISATION OF RURAL CHILDREN FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT IN OYO STATE, NIGERIA

BY

OLUJIDE, M.G. AND N.A. AKINBILE

Department of Agricultural Extension Services, University of Ibadan, Ibadan, Nigeria.

ABSTRACT

The issue of achieving food security has led to efforts at ensuring sustainable agricultural development. the roles the rural children can play in achieving this were enumerated. It thus implies that these children should be effectively mobilised if sustainable development is to be achieved. The findings of this research revealed that government welfare packages for rural farmers will go a long way to better their lot. this will thus help in the effective mobilization of their children (the rural children) for farming as a profession and thus achieving a sustainable agricultural development in Oyo State and in the country at large.

INTRODUCTION

Agricultural production in Nigeria has been observed not to be increasing at a rate that can meet with the demands of the increasing population. Also, the percentage of the population gainfully employed in the agricultural sector is falling. This is because since the early 70's, increasing urbanization brought about by the oil boom and its inflationary tendencies, and other sociopolitical and macro-economic factors. according to Ogunbameru and Adepoju (1997), have resulted in a gradual but consistent drift of the rural youths, who are mainly children of farmers, to the urban areas looking for white collar jobs which are no more readily available. The situation has become acute as farmers, who used to be comfortable to live as average citizens are now poor, courtesy

of the galloping inflationary trends. This has put agriculture as a profession in a position of being less rewarding (UNICEF, 1990). Nigeria agriculture is thus characterized by a low use of improved technologies as most peasant farmers are old and traditionist. Their poor financial status also strain them to procure inputs. This is aggravated by the poor credit - worthiness of most farmers which makes it difficult for them to secure production credit, or otherwise, increase their capital base. All these combine with low level of infrastructural development to drive rural children into the urban centres, not even minding to learn a trade when white collar jobs are available.

The roles that rural children can play in achieving sustainable development can not be overemphasized. They represent a critical socioeconomic group in the farm family set-up. Their numerical strength, key attributes as fast adopters of improved technology and their future leadership potential makes it important to mobilise them for increased productivity. It is generally believed that a younger generation of farmers will be better disposed to adopt research findings or improved technologies and be ready to bear the associated "risks" (UNICEF, 1990). The fact that the rural children will eventually replace the aged, retiring farmers informs that they be effectively mobilised as they are dynamic and versatile so that there will be sustainability of agricultural production in the country. This becomes important as earlier studies (Olujide, 1991) have shown that rural children now have negative attitude towards agriculture as a profession. This is because agricultural sustainability implies that a higher level of agricultural productivity should be achieved continually a very long time rather than a decreasing productivity as the aged farmers are retiring. This study therefore, attempts to inquire from the rural children those ways they believe can be effectively mobilised for sustainable agricultural productivity.

METHODOLOGY

Sample for this study was drawn from secondary schools in rural communities in Oyo State. Twelve rural secondary schools were

randomly selected, from which 10 each of the Junior Secondary School (JSS) students were chosen. This gave a sample size of 120. Students in these classes are less than 18 years and are thus accepted as children. Structured questionnaire was used to gather information from the sampled children. The sample was drawn on the premise that most of the pupils who come to schools in rural communities are from rural farm families. They come to school with a detailed knowledge of traditional agriculture gained from parents, however they regard their parents as merely practising inherited skills form their ancestors. They also conclude that the schools with all its amenities and educated agriculturists have nothing further to offer. These students were thus made to divulge their opinions about agriculture as a profession and how they can be effectively mobilised for the profession.

RESULTS

Characteristics of Respondents

Results of the study show that majority of the students (46 percent) were In JSS 1 while 40 percent were in JSS 3. The remaining 14 percent were in JSS 2. It was further shown that majority of the respondents (68 percent) were males, while the remaining 32 percent were females. The age distribution of the respondents is as shown in Table 1.

Table 1. Age Distribution of Respondents

Age(years)	Frequency	Percentage
36538	17	14
15-16	36	30
17-18	67	56
Total	120	100

This shows that the students commenced their education late? with more of them being 17-18 years, while the majority were in JSS 1. This may be a reflection of their engagement in agriculture on their family farms before proceeding to schools.

Attitude of respondents

Almost all the respondents (92%) have been involved in farming, an indication that they are farmers' children. The summary of respondents distribution by their attitude to agriculture as a profession is presented in Table 2, after the use of the 5 point Likert scale.

Table 2 Respondents distribution according to attitude to farming as a profession.

Attitude Scores	Frequency	Percentage
Positive 45 - 60	30	25
Neutral 28 - 44	17	14
Negative 12 - 27	73	61
	120	100

Table 2 shows that majority of the respondents had negative attitudes towards agriculture as a profession. This explains why many of them often leave the rural areas for urban centres. This agrees with the position of Ogunbameru and Adepoju (1997) that farmers' children now have a negative attitude towards agriculture as a profession.

Mobilising the Respondents

On their ambition, none of the students want to become a farmer. Their chosen professions are doctors (41%), engineers (13%), Lawyers (11%), business men (30%), Nurses (3%) and others (2%). This is despite the fact that majority of their parents (96%) were farmers. It thus reflects a

dissatisfaction with the level of living of their parents. All the respondents also agreed that for the nation to be able to develop, they must be able to produce almost all, if not all, the food they will consume, that is. achieving food self-sufficiency.

Respondents gave effective ways of mobilising them for farming as a profession to achieve sustainable agricultural production. This is through efforts being more of the responsibilities of the government as provision of credit facilities (65%) effective storage facilities (62%), insurance scheme for farmers to reduce their losses (70%). provision of infrastructural facilities in rural areas (89%), government purchase of produce in situations of bumper harvest (57%), provision of support allowances in situations of drought (71%) and good policies for agricultural development (74%). It is believed that these will aid sustainable agricultural productivity as it will make many children reconsider their position of choosing agriculture as their future profession. They opined that a substantial part of the nation's oil money should be used to develop agriculture. The respondents also want a situation of incorporating farmers indigenous knowledge into research efforts. This is because they perceive that the agriculture taught by their teachers as not significantly deviating from that practiced at home as the school is seen as being still dependent on the family for the use of traditional and planting materials

CONCLUSION

Attitudes of rural children to agriculture as a profession has been seriously influenced by the living standard of their parents which they ascribed to their professions. They thus do not want to opt for agriculture as a profession. They rather want to move into urban centres to take up jobs other than agriculturally related ones. This is despite their agreeing to the fact that the future of agriculture in the nation is gloomy as the nation will find it more difficult to feed itself as the older generation passes away. They therefore suggested that the youths position about farming will be adjusted if the government puts up welfare packages to

help the poor farmers in the discharge of their duties. All these were suggested as important tools for achieving sustainable agricultural production in the state and in the country at large. The era of government neglect of the farmers should therefore be gone if the nation is to achieve sustainable development.

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ACTIVITIES OF FARMERS' CHILDREN IN AGRICULTURAL EXTENSION INFORMATION DISSEMINATION TO THEIR PARENTS IN OGBOMOSO ZONE OF OYO STATE

BY

OLADOSU, I. O.; ADEWALE, J.G.; AJETOMOBI, J.O. AND E.A. LAOGUN,

Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomosho, Nigeria.

ABSTRACT

This study examined the extension characteristics of farmers children in Ogbomoso zone of Oyo State.

Data were collected on farmer's Children personal characteristics, level of involvement in agricultural practices and extension information acquisition and transfer to their parents.

Majority of the Children (67%) fall within the age range of 15-18 years and about 46-55% of them are in the senior Secondary level of their education. About 19% are either in the primary school or have completed same.

About 65% of the children claimed to have had contacts with extension agents. While about 48% claimed that they have carried extension information back to their parents. The various extension information carried back to their parents include; Use of Agro-chemicals (31%), use of fertilizer (24%), use of feeds/planting material (21%), plant spacing (19%) and treatment of planting materials among others.

INTRODUCTION

Despite the continuing interest in the activities of children in Agricultural and Rural Development, there is little or no evidence to show that children make contributions to the Agricultural sector of the

economy. Farmer's children contribute labor to most of the common activities like Land preparation, Weeding, Planting, Harvesting, Processing, Transportation and Marketing.

The significance of children participation in Agricultural Development is receiving wide attention. Children are said to be the dominant cohort in rural-urban migration, where they are involved in menial jobs in the cities. The kind of activities they get engaged in include; street trading, bus conductors, house helps and helping hands at construction sites, Coupled with the fact that the demographic profile of most African countries has a large size of the group of 0-15 years olds forming about 40% of the .population; CODESRIA, 1997 lends credence to the fact that most national populations are becoming younger and that 'the contributions of children in both domestic and National economies would be quite significant if taken into consideration in national accounting procedures and measurements of GDP/GNP (CODESRIA, 1997).

Farmers' children have been focused in recent times as targets and mediums of extension information transfer. For instance, the Training and visit system of Agricultural Extension emphasized the use of the school farm as a point of training of farmers children for onward transfer of information to farmers farms. Both Primary and Post Primary school farms are used for this training. Each extension Agent is expected to visit and train children on their school's farm based on the recommended improved packages. Durston (1996) corroborates the importance of reforming rural education by developing ''New Schools'' that instead of extracting children from their environment, extend information and knowledge from the schools to the communities.

This study attempts to integrate empirical findings about Extension information characteristics of farmers' children, their personal characteristics and information transfer activities.

This attempt, we hope, will serve as a basis for the generation of more comparable research, leading to the generation of realistic information and generation of theories on children-in-Agriculture.

METHODOLOGY

This study covers Ogbomoso area of Oyo State, Located at approximately lat 8 7^0N and Longitude 4 15^0E, the area falls within the transitional zone between the rain forest of Ibadan geographical region and northern savannah zone. The vegetation of the area is generally regarded as derived savannah which support myriads of agricultural activities. The major crops grown include food crops such as maize, cassava, yam, vegetables, beans and tree crops such as mango, cashew and orange.

DATA COLLECTION

Predominantly, the study used structured questionnaires to elicit information from 250 randomly selected farmers' children. After collation, sorting and consideration for errors of omission and non-response, only 232 of the questionnaires were processed and used for results discussions. Data collected include socioeconomic characteristics and production activities of the farmer's children.

DATA ANALYSIS

Results and discussion in this paper are presented in frequency tables and percentages. Also conventional measure of central tendency - mean - is adopted to explain the distribution of the respondent's respective characteristics.

RESULTS AND DISCUSSION

Personal and Socio-economic Characteristics

Gender: Majority of the children are males 74.14%). This is expected, because males are more involved in most difficult farm activities like Land preparation, Planting, harvesting etc..

Age: The age of the children ranges between 10 and 18 with a mean age of 14.2 years. Majority of the children fall between the age range of 15-18 years. This implies that majority of children are becoming of age, and

experience at times, come with age.

Education: Majority of the children (67.24%) are in the Senior Secondary School level, which corroborates the finding that majority of the children fall between the age range of 15-18 years. About 19% of them are in the primary school or have completed same.

Farming Experience: While majority of them are born into farming, their length of exposure to practical farm work was considered. Most of them (46.55%) had between 4-6 years of farming experience, 29.3% of them have been participating in farm work for between 7-10 years, while only 24% had between 1-3 years of farming experience.

Extension Activities of Farmers' Children Participating in Farming Activities:

Majority of the children participate actively in Land Preparation, Weeding: harvesting, improved planting method. The rank-order scores presented in table 2 of 624,624, 584 and 520 respectively give an insight into their order of importance. Other activities include seed treatment (350) and processing (312).

Level of Contact with Extension Agents:

About 65.5% of the children claimed to have had contacts with extension agents in their schools. The break down in table 2 indicates that 24% of them meet fortnightly with extension agents, 27.58% monthly, a significant proportion (34.48%) also indicate that they have never met an extension agent. Results on contacts with extension agents on Parents' farm show that only 21% do so fortnightly, 32% do so once in a month, and 88% indicated that they meet extension agents once in a while.28% of them have never met and extension agent on their parents' farm. Only 7% of the children claimed to have met extension agents on neighbours' farm. The findings indicate that most of the children have had contacts with extension agents and are capable of introducing such to their parents' farm.

Information Transfer to Parents

A substantial proportion of the children (48%) claimed to have carried extension information learnt back to their parents. The information were carried on various extension activities like use of chemicals (31%) use of fertilizer (24%); use of improved seed/planting materials (21%); Plant spacing (19%) Treatment of Planting materials (14%); Land preparation (10%): Fish pond Management (7.0%); Storage of grains (5%) among others. (See table 3).

The findings above show that farmers' children are involved in the transfer of Agriculturally related information to their parents.

CONCLUSION AND RECOMMENDATIONS

The results of this study has given insight into the participation of farmers children both in agricultural productions and in the transfer of Agricultural Extension information to their parents.

Majority of the children are adolescents whose age ranges between 15 and 18 years, they are mostly, in the Senior Secondary level of education

The children participate in information transfer on various aspects of extension work, including; use of chemicals, fertilizers, improved .planting etc. They are thus active channels of extension information transfer to their parents.

In summary, children play active and significant roles in Agricultural Extension information dissemination. Their role should be recognised, documented and brought to bear on whatever extension information transfer model that is developed in Nigeria.

As a matter of policy, children should be identified as active participants in Agricultural and rural development. Their roles should be supported by the inclusion in the national agricultural policy document.

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TABLE 1: Personal Characteristics of Farmers' Children

Characteristics	Frequency	N = 232 %
SEX:		
Male	17260	74.14
Female		25.86
AGE:		
10-14	68164	29.31
15.18		70.69
EDUCATION:		
Primary	4428156	18.96
Junior Secondary		12.07
Senior Secondary		67.24
FARMING EXPERIENCE:	5610868	24.14
1-3 years		46.55
4-6 years		29.31
7-10 years		

Source: Field survey, 1998.

TABLE 2: Extension Activities of Farmers Children

Activity	Very Often (3)	Often (2)	Seldom (1)	Not at all (0)	Score
Land Preparation	168	56	8	0	624
Seed Treatment	72	32	76	52	356
Improved Planting Method	112	64	56	0	520
Weeding	164	64	4	0	624
Harvesting	144	72	8	8	584
Processing	48	44	80	60	312

Contact with Extension workers

Place of Contact	Forth Nightly		Monthly		Once in a while		Never	
	N	%	N	%	N	%	N	%
School farm	56	24	64	28	32	14	80	34
Parents' farm	48	21	32	14	88	74	64	28
Neighbours farm	16	7	-	-	-	-	216	93

Source: Field survey, 1998.

TABLE 3: Information Disseminated to Parents N = 232

Variable	Frequency	%
Pass Information to Parents	112	48.27
Improved Seeds/Planting Materials	48	20.7
Fish Pond Management	16	7
Treatment of Planting Materials	32	14
Mechanical Land Preparation	8	3.45
Use of Fertilizer	56	24.14
Land Preparation	24	10.34
Use of Chemicals	72	31.03
Use of Organic Fertilizer	8	3.45
Plant Spacing	44	19
Storage of Grains	12	5.17

Source: Field survey, 1998.

PRODUCTIVITY OF FARMERS' CHILDREN IN OGBOMOSO AREA OF OYO STATE, NIGERIA

BY

AJETOMOBI, J. O.; OLADOSU, I.O. AND ADEWALE, J. G

Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

ABSTRACT

This paper attempt to investigate the level of involvement of farmers, Children in agricultural production in Oyo State.

Data were collected on the farm activities from which farmers' children earn income. These include, land clearing (38%) weeding (100%), Ridging/Heap making (29%), Harvesting (55%) among others.

About 29% of the respondents claimed to own personal farms of which the average farm size is 0.67 Ha for maize with an average income of ₦5,500, 1.20 Ha for Cassava with average annual income of ₦7,100, Yam with an average farm size of 0.5 Ha and an average income of ₦5,700 per annum.

INTRODUCTION

Food crisis in Nigeria as well as other sub Saharan Africa and it s attendant hunger and malnutrition has now assumed a critical dimension for the country as a whole, there has been increasing rate of per capita food and agricultural production though the total food production has been rising steadily (Adedeji 1995): According to him, the per capita food production started in 1980 and reached it lowest level in 1984 after which it recovers slightly. It commenced its commenced its downward descent again in 1986 and has since shown little or no improvement.

A major reason which has contributed in no small measure to the problem is neglect of the potential of farmer's children. Moreover the process of ensuring continuity and sustenance of farming as a desirable

profession has not received adequate attention. Hence they should be accorded a place in agricultural policy decisions. Using the thought of Codestria (1997); the contributions of children in both domestic and national economies are quite significant and should be taken into consideration in national policy decisions.

This study proposes to verify descriptively the profitability of agriculture to farmers children. First the profitability of various farm operations is examined. Second, it examines average earnings of the children by type of farm enterprises.

The study is organized as follows. The next section discusses material and methods used. Section three focuses on result and discussion while the final section summarizes and concludes.

MATERIALS AND METHODS

This study covers Ogbomoso area of Oyo State. Located at approximately lat $8^0$7'N and Longitude $4^0$15'E, the area falls within the transitional zone between the rain forest of Ibadan geographical region and northern savannah zone. The vegetation of the area is generally regarded as derived savannah which support myriads of agricultural activities. The major crop grown include food crops such a maize, cassava, yam, vegetables, beans and tree crops such as mango, cashew and orange.

Predominantly the study used structured questionnaires to elicit information from 250 randomly selected farmers children. After collation, sorting and consideration for errors of omission and non-response, only 232 of the questionnaire were processed and used for results and discussions. Data collected include socio-economic characteristics and production activities of the farmers' children.

Results and discussion in this paper are presented in frequency tables and percentages. Also conventional measure of central tendency - mean- is adopted to explain the distribution of the respondent's respective characteristics.

RESULTS AND DISCUSSION

Profitability of Farm Operations

Table 1 summarizes the type of work performed and the amount earned per annum by the children. About 38% of the children engaged in land clearing either on their father's farm or as hire labour. Viewed purely from the angle of hired labour, the children made on the average ₦1800.00 per annum with majority of them making between ₦1500.00 and ₦2000.00. All the children participate in weeding operation and made about ₦2200.00 per annum on the average. Another operation which usually engage farmers' children and yields them reliable dividends is ridge making and/or heap making. This operation employs about 29% of the respondents and earn about ₦5000.00 per annum on the average.

TABLE 1: Profitability of Farm Operations

Farm Operation	% Respondent employed	Average Earning (₦)
Land clearing	38	1800
Weeding	100	2200
Ridging/heap making	29	5000
Harvesting	55	560
Planting	24	200
Transportation of farm produce	7	300
Marketing	5	150
Total no of Respondent	232	

Source: Field survey, 1998

Harvesting was the most important operation performed by the children. More then half of them (55%) are involved in the operation

which consumes a greater percentage of their time. Nevertheless the monetary gains accruing to them from the operation (₦560.00) is much less than the income from either land clearing or ridge making.

A smaller proportion, relative to other activities, of the children participate in transportation and marketing of agricultural produce (7% and 5% respectively). The amount generated from the activities are generally low - ₦300.00 and ₦150.00 on the average in respect of transportation and marketing respectively.

Average Farm Income:

The average farm size and annual income of the farmers' children having their personal farms are presented in table 2. Just 16% of the respondents claimed to have personal farms. The major crops they grow include maize, cassava, yam and vegetables. In respect of maize, their farm size varied between 0.4 to 1.2 ha and the average was 0.67 ha. for cassava, yam and vegetables, the mean farm sizes were 1.20 ha, 0.5 ha. and 0.3 ha respectively.

Children growing cassava on their personal farm earn the highest income (₦7100) on the average. This might be predicated upon the fact that cassava is relatively easy to cultivate. In rank, this is followed by income from yam and maize respectively (₦5700 and ₦5500).

CONCLUSION

In summary, in terms of actual occupational potential of individual farmer's children, they can be great and promising farmers. The results show that they participate in all farm operations and earn for themselves considerable profit particularly in cassava production.

Based on the result, a concerted effort is required by government to encourage the children to choose agriculture as a way of life. This is necessary now since most children develop high status occupational goals at a relatively early stage.

The following options of groups of options can be tried:

a. Providing adequate training on improved methods of farming.
b. Sponsoring farmers' children clubs and ensuring their accessibility to productivity increasing inputs.
c. Provision of scholarship to outstanding students of agriculture in primary and secondary schools and
d. Organization of special extension system to cater for the development of farmer's children.

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OPERATING A CHILDREN-IN-AGRICULTURE PROGRAMME NETWORK IN NIGERIA

BY

IDOWU, I.A. AND K. ADEBAYO

University of Agriculture, Abeokuta, Nigeria.

INTRODUCTION

The concept of children-in-Agriculture implies that the traditional institution, the nucleus family, consisting of the father, the mother and the children is a central operating unit in agricultural activities. Given the recent emphasis on gender issues which seems to pay too much attention to the role of women in Agriculture (Adekanye, 1988: Idowu and Adebayo, 1995, Adebayo, 1994). The relevance and contribution of the children-in-agriculture has been grossly under-emphasized. Their contribution in terms of labour in farm activities and additional incomes from marketing and processing operations have not been accorded much attention in the analysis and understanding of the family economy.

This apparent neglect is compounded by the culture in all societies that references age (Fadipe, 1970: Ekong, 1988) to the extent that children are commonly not expected to attend the same meetings with adults or rank equal with them. If at all they are present, they are expected to be silent observers, rather than active contributors. The implication of this is that their interest is always over-shadowed by those of adults. The adult population assumes, wrongly, that the interest of children are already protected, once their parents have been contacted.

In order to take meaningful steps towards correcting these anomalies, the rural child; the community in which he operates and the cultural restraints he has to contend with have to be well understood. To this effect, the sharing of experiences on a national scale and the involvement of all interested individuals and groups have become absolutely important. Such concerned individuals, groups, governmental and non-governmental organisations interested in children development affairs have to be

organised into a functional National Network system.

The main objectives of such a network is to stimulate a free-flow of ideas, opinions and experiences, which would culminate in a sustainable succession of children development programme plans in which the typical agrarian community in Nigeria can be replaced by a more enlightened, enthusiastic, receptive and more productive populace

SUGGESTED ORGANISATIONAL STRUCTURE OF A NATIONAL NETWORK FOR THE CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP)

Though, the need for a clearly defined and properly organised structure for the CIAP Network is important, functionality and sustainability should be the watchword in putting in place any such structure. To be effective, a two-tier structure at (National and Zonal level) is proposed (Figure 1).

National Coordinating Board (NCB) - This is the highest policy and decision making body in the network system. This will comprise of the following:

a. Chairman - elected from its membership on a 2-year term renewable basis.
b. National Coordinator
c. Zonal Coordinators
d. Representative of the Heads of all institutions, i.e. Universities serving as National Secretariat and Zonal Offices.
e. Representative, chairperson of the Family Support Programme (FSP).
f. Representative, Minister for Women Affairs and Social Welfare.
g. Representative, Minister for Agriculture and Natural Resources
h. Representative of the Head of Universities, Faculties and Colleges of Agriculture.
i. Representative, Minister for Education
j. Representative, Minister for Health
k. One Representative for each of the funding organisations.
l. One Representative of Agricultural Science Teachers in each Zone.

m. One Representative of the Young Farmers Club from each Zone- These should be dropped on the attainment of the age of 18 years.

The NCB shall meet once a year to review policies, assess .performance, and give guidelines for the smooth operation of the network system. It shall source for and control the expenditure of the funds of the National Network. It shall also appoint the National Coordinator and Zonal Coordinators, when such posts become vacant.

The National Coordinator shall be the Chief Executive Officer of the network system,. He shall be based at the National Secretariat and shall run the day-to-day affairs of the network system subject to the guidelines approved by the NCB.

He shall maintain an annually updated membership register compiled mainly through the inputs of the Zonal Coordinators. He shall also be responsible for the maintenance of a CIAP newsletter as well as any approved publications, and give adequate publicity to all publication and audio/visual materials that may be of relevance to the activities of the

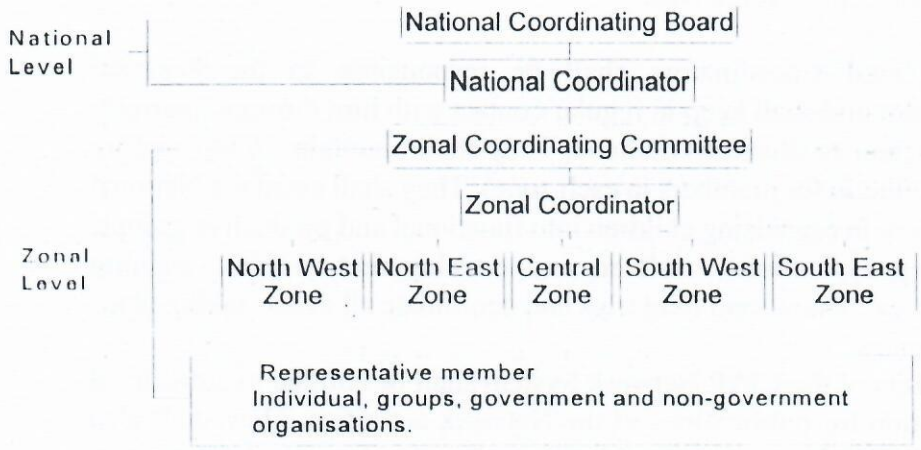

Figure 1 - Proposed Organisational Structure for a Functional CIAP.

network. He shall be responsible for the organisation of national seminar, workshops, conferences and field visits of directs relevance to the objectives of CIAP. He shall give annual reports of CIAP activities to NCB for its deliberation, assessment, comments and necessary action(s).

Zonal coordinating Committee shall be headed by the Zonal Coordinator. The Committee shall consist of all members of the NCB who are from that Zone. It shall also perform functions similar to that of the NCB in each zone.

The Zonal Coordinator shall be appointed by the NCB to oversee activities in each of the five zones of the network.

Each zone shall consist of states in each of the geographical locations of the country, with Abuja as the Centre.

These are:-
North West Zone - Sokoto Area
North East Zone - Maiduguri Area
Central Zone - Abuja Area
South West Zone- Ibadan area
South East Zone- Enugu Area

The Zonal Coordinators shall be responsible to the National Coordinator and shall keep in regular contact with him through quarterly meetings, and as situations demand. They shall maintain a CIAP update (a news bulletin for members in each zone). They shall assist the National Coordinator in organising children into functional and productive groups, organising agriculture - related and development oriented training activities, excursions and field trips and coordinate all events taking place in their zones.

Members of the CIAP Network System shall be entitled to subsidized subscription for publications of the Network activities. They shall also publish their field experience and reports of research conducted on issues of relevance to CIAP.

PROGRAMME FUNDING

Funds will initially be raised through the launching of CIAP nationwide and in all the zones of the Network System. Endowment funds and donations would be solicited for from the Federal, State and Local governments, NGOs, Philanthropic organisations, Voluntary Donors and other interested stake-holders.

CONCLUSION

It is important that all activities within the Network System must be continually mindful of the central objectives of the .programme. Members of the NCB should see such membership as a trust. Attempts to recognise, promote and direct the course of the rural children in the agricultural transformation drive of Nigeria will culminate into positive indication for a brighter and sustainable future for the Nation's Youth.

No Nation can survive without properly channeling the energy and resource potential of its future generations in a productive and development direction. Quite a number of issues addressed in this paper are widely open to discussion. Through further brainstorming and discussion in the plenary meetings, it is expected that the major salient points would be ironed out and consensus on which way forward with the Children-In-Agriculture Programme (CIAP) will be reached.

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GENDER DISCREPANCY OF RURAL CHILDREN'S EDUCATIONAL BACKGROUND: AN EMPIRICAL OVERVIEW

BY

DR (MRS) STELLA WILLIAMS

Department of Agricultural Economics, Obafemi Awolowo University, Ile-Ife, Nigeria.

INTRODUCTION

Both men, women and children are actively involved in the fishing industry. As far back as the advent of Missionaries, who introduced education into Nigeria, Rural communities were the last enclaves to adopt the process of education. Slowly, but surely, schools were built in the rural communities. Children in general and females in particular are yet to benefit from the compulsory education for all scheme. For example in 1994 (UNDP, 1996) reported that 45% of the population of Nigeria is composed of children aged between 0 to 15 years. If it is assumed that Nigeria's population in 1994 was 100 million, 45% was 45 million. Of this number, only 22.7 million aged 0 to 15 were enrolled in schools UNDP (1996) indicated that approximately 3.7 million children below 6 years of age were enrolled for pre-schooling; 16.2 million were enrolled in primary schools; 2.8 million were enrolled in junior secondary schools (totalling 22.7 millions children enrolled in schools as enumerated above).

UNDP (1996) reported information on 31 States indicating female enrolment percentage, Delta State recorded the highest enrolment of girls in schools (60.39%), followed by Edo state (52.1 5% and then nine States with female enrolment in schools ranging between 49.99% and 50.39%. These States are: Abia (50.36%), Akwa Ibom (50.39%), Anambra (50.36%), Lagos (50.18%), Ogun (49.99%), Ondo (49.99%), Osun (50.31%), Oyo (50.33%), and Rivers (50.33%). All the above-named State have Missionary influence dating back to pre-Independent in

Nigeria. Therefore education was introduced to the communities at an early stage of Nigeria's civilisation growth. Other States of the Federation where the enrolment of girls was above national average included: Cross Rivers 49.02%), Enugu (48.15), Imo (48.90), Kwara (46 81%), Kogi (46.26%) and the Federal Capital Territory, Abuja (44.68%).

The observation that is pertinent to the discussion is the fact that in 1994 only 50.4% of the eligible children aged 0 to 15 received education. Another problem reported was the issue of drop-out rate of the children. On a comparative level, boys and girls who completed five years of primary schooling were 56.3% for the boys and 43.7% for the girls. The translation of the above information is that about 62.5% of the male population and 39. 5% of the population are literate.

The cumulative of the background information as exemplified above is an indication that the 49. 69% eligible children aged 0 to 15 who were not enrolled in schools or who dropped out of school after 4 to 5 years of primary education in 1994 were children of farmers and fishers. They were kept at home to help their parents with farm or fishing activities.

Forty-three (43.7%) of the boys who completed five years of primary schooling and 56.3% of girls who completed five years of primary schooling (UNDP, 1996) is a confirmation that the majority of children who were obliged to drop-out of school were the girl - children. This is because of economic reasons coupled with the cultural background that made it mandatory for the girl-child share the heavy work-load of the mothers.

Recent Strategic efforts for children development in Nigeria

In 1990, the World Summit for Children set goals for reducing deaths malnutrition, disease and disability among the Children of the Developing World. Four years later, a majority of nations were estimated to on track to achieve a majority goats set for them (UNICEF, 1995).

The strategies according to UNICEF is that of translating words into deeds: the breaking down of overall aims; securing political support, mobilising new communication capacities; deployment of UN Expertise;

and close monitoring of progress. Nigeria joined in the preparation for the World Summit of Children Programme in 1995. A National Meeting was held at the Igbinedion Secondary School, Benin City from 2 - 6 June 1995. The agenda included: Role Play on Management of Conflict Rights of the Child, UN Structure, Creative Projects and so on The gender perspective was not featured nor did the ecological aspects of the country discussed. The network meeting on the C.I.A.P is welcomed especially at this point in time. Nigeria is going through a very rough economic period where the issue of education, gender and profession as economic factor of growth will be meaningful for the future of the nation.

Nigeria as a nation has to deal with one fundamental problem: discrimination! Gender is a form of discrimination which touch on the society's tradition and cultural attitude to the children.

Children population and involvement in Agriculture: The Nigeria Situation

The main stay of the economy is agriculture. Agriculture provides employment for half the labour force. Unfortunately, it is one record that Nigeria has been unable to provide a census that will not result in disputes or controversy. In general, due to the tradition and cultural set up in the country, child dependency ratio is high in Nigeria. It is reported to be as high as 44% (mean of 44.6%) of the population (children below the age of 16 years of age). UNDP (1996) recorded percentages of population below 15 years of age (Table 1).

Nigeria has a land area of approximately 923,768 square kilometres. According to UNDP (1996) the population is estimated to be about 104 million. The population density is estimated to be about 95.8 per square kilometre. Nigeria is endowed with high quality natural and mineral resources. Approximately 70% of Nigeria is rural as compared to 30% urban areas. Due to its high percentage of young people, most of who participate in the labour force, there is no doubt about the nation's vitality, restlessness and dynamism.

Table 1: Percentage of Population of 15 years of age

State	Percentage Population below age 15
Abia	43.8
Abuja (Federal Capital Territory)	43.9
Adamawa	45.1
Akwa Ibom	47.1
Anambra	41.2
Bauchi	47
Benue	48.2
Borno	43.6
Cross River	46.3
Delta	42.9
Edo	42
Enugu	47.1
Imo	42.9
Jigawa	42
Kaduna	47.1
Kano	46.2
Katsina	47
Kebbi	46.4
Kwara	44.2
Lagos	38.2
Niger	47.5
Ogun	40.2
Ondo	38.6
Osun	40.7
Oyo	40.7
Plateau	47.8
Rivers	42.5
Sokoto	43.3
Taraba	48.8
Yobe	42.9

Taraba State has the highest population of children (48.80%) while Lagos State has the lowest (38.20). Delta State has the highest percentage of female enrolment in primary school while Sokoto State has the lowest percentage of female enrolment in primary school.

Before the discovery of petroleum, Nigeria was dependent on its sales of agricultural products including fisheries. This is because the country has plenty of land for farming and water surface for fishing. Since the discovery of petroleum, the role of agriculture as a source of gross national product is significantly diminished. The population feel deprived of economic development due to the current economic crisis facing the general population) especially the rural population. The symptoms is that of a population with a high proportion of illiteracy which is therefore poorly prepared to cope with human development m all its ramification.

The overall education picture from available population data as enumerated on the basis of distribution of enrolment m basic literacy for all states. Data from 1991 to 1993 and 1995 indicated that about 64% male and 36% female were enrolled for basic education in 1991. In 1995, there was a one percent increase in the enrolment of female (63% male and 37% female). In 1993, the female enrolment increased further (61% male and 3 female). By 1995, female enrolment grew to about 41% as compared to 59% male enrolment for basic literacy education (Table 2).

Table 2: Distribution of enrolment in basic literacy (all States)

Year	Male	Female	Total	% Male	% Female
1991	323797	181237	505034	64.1	35.9
1992	386240	233440	609680	63.4	36.6
1993	452086	290104	742190	60.9	39.1
1994	-	-	-	-	-
1995	469870	327395	797265	58.9	41.1

Source: UNDP, 1996. Human Development Report.

GENDER EMPOWERMENT: FEMALE PARTICIPATION IN DEVELOPMENT

There is, no gainsaying that the Nigerian women, girls inclusive, have always, played significant roles in the society, especially in the economic arena. They are recorded to play multiple roles of a wife, sister, nurse, comforter, daughter, servant, producer, preserver, distributor, and marketer to name some of their roles in the society. The traditional, cultural and political attitude of the society have discriminated and restricted the contributions of the female participation in development of the communities and society in general.

Access to education is the key to development. Nationally there are no written laws discriminating against the females from enrolment in schools, but many factors militate against them. These factors include: traditional and cultural norms, economic status of the family, lack of infra-structure in many of the rural communities, especially m the fishing communities, where the extensive water surface is a natural factor.

One is pleased to show that girls enrolment ratio is on the increase just as the female literacy enrolment is on the increase. Table 3 showed that gross primary enrolment ratio showed gradual increase from 1990 ((59.1) to a high of 86.8 in 1995 (World Summit of Children Year).

Table 3: Gross Primary Enrolment Ratios

Year	Total enrolment ratio	Enrolment ratio for girls	Enrolment ratio for boys
1990	67.7	59.1	76.8
1991	77.1	69.1	84.6
1992	81.1	74.7	93.6
1993	84.1	74.7	93.6
1994	86.1	83.2	89.4
1995	84.2	86.8	81.5

Source: UNDP, 1996, Human Development Report.

Gender inequality in education is an area that should be investigated when discussing the issues of C.I.A.P This aspect of educational enrolment is more pronounced at the secondary and tertiary levels. The girl child and the women average between 40% to 45% for girls and between 22 .5% and 24.0% for the women (UNDP 1996). There are exceptions to this enrolment issue. because there are States where the girl-children enrolment far exceed those of the boy-children. The exceptions are: Anambra where 70% of the girls were enrolled in Junior secondary school in 1994; others where the girls had enrolment rates of over 50% were: Akwa Ibom, Enugu, Imo, Oyo and Rivers States.

The implication for Agricultural development is grave. Only the financially affluent members of the society can afford the technological know-how. These are few and far between in the rural population. This means that the average farmer would not have children who would be interested in taking up farming as a future profession A country that cannot feed its population is doomed So, something must be done now to save the rural] children who are the hopes for Nigeria's Food Security.

Fisheries like the Livestock sub-sector of Agriculture provides animal protein for the population. Nigeria is endowed with coastal and inland water surface. Fish is very nutritious. Like General agriculture, small-scale capture fisheries is a very labour intensive activity. The children of fishers would not naturally desire to become fishers if they have an alternative profession. Therefore, both the issues of gender and fisheries in agriculture have been pointed as areas of additional factors to be researched for welfare of children in rural societies.

GROUP EXERCISE AT CIAP CONFERENCE: PRACTICAL CONSIDERATION

To enable all participants as a group to contribute to the discussion, there was a group exercise. Participants worked for thirty minutes documenting issues that ranged from: working objectives, problems to be targeted, documenting issues entry strategies. Table 4 is the summary of the information documented by the groups.

There was an unanimous agreement among the participants that there was poor education in the agricultural rural communities which of course is due to poor infrastructure, thereby resulting in low percentage of enrolment of children in the rural schools. There also a low incentive for the children in agricultural a change in attitude to providing a positive rural families. There is need to provide a change in attitude in addition to providing a positive attitude to agricultural development in the rural communities. An improvement in the quality to agricultural families will definitely lead towards a change in attitude and a positive attitude to agricultural development in the rural areas of country.

CONCLUSION

The conclusion is simple: "the young shall grow'. It is a fact that the children today will be the leaders tomorrow, what kind of leaders do we desire to foster? It is for this reason that we as interested development change agents must use the targeted problems in addition to the potentials to work towards a positive change in cultural and educational attitudes of the children and parents in the rural communities. These communities are important for the survival of the nation in terms of food security and agricultural sustainability. The nation cannot ignore the rural population, especially e children who will eventually grow into the future leaders of the nation.

We have our work cut out for us as change agents, the sooner we take up the challenge and find solutions to the various problems facing the children m rural agricultural families the better for the nation as we enter the 21st Century. We have to assume the responsibility for giving to our children all that will ensure their survival. We have to join forces with all the groups charged with the implementation of the National Plan of Action (NPA). The NPA report provides the framework for national activities for development. We have to get involved at the local level especially with the identification of resources needed, we have to develop strategies for using these resources as well as monitoring the plan of action.

Through the implementation of the National Plan of Action, Nigeria will take a significant step towards fulfilling children's rights to education thereby improving their overall well-being.

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Table 4: Summary of the Group Exercise Carried out by the Participants

Problems to be targeted	Potentials to be transformed	Working objectives
1. Poor Education	Cultural attitude	To provide opportunity for change in attitude
2. Poor Education	Intelligence	To provide a positive attitude that will improve level of intelligence
3. Poor Education	Qualitative Agricultural Education	To develop a basis for improved agricultural development.
4. Poor Infrastructure	Human Welfare and Development	To improve quality of life of the people in the rural agricultural areas.
5. Low percent of enrolment in schools	Planning and Implementation of Educational System.	To improve children registration in schools from primary to tertiary levels.
6. Low incentives for children to flow in the footsteps of their parents	Parents' and children's potentials to remain in the rural areas and farm in the area.	▸ To encourage parents to invest in the education of their children ▸ To provide incentives for all farm families. ▸ To encourage community social activities.
7. Low literacy level	Adult and children	▸ Mass literacy programme. ▸ Vocational training in agricultural enterprises. ▸ Improved Extension Advisory Services to include Farmers dependant (males and females)
8. Rural - Urban Migrating of Farm Families	Farmers' Children and Youths	▸ Provision of Rural infrastructure, such as water, electricity, transportation, schools, hospitals, social amenities: Cinemas and Sporting outlets and so on

DEVELOPMENT OF A SCALE TO MEASURE POVERTY AND SOCIOECONOMIC STATUS OF FARM FAMILIES AND ITS IMPLICATION FOR CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP)

BY

ADEWALE S. ONASANYA AND OLUSEGUN A. ADEKUNLE

University of Ibadan, Ibadan, Nigeria

ABSTRACT

This paper reports the methodology of the development of a scale to measure poverty and socioeconomic status (POSES) among farm families and its implications for Children-In-Agriculture in Ijebu North Local Government Area of Ogun State.

A universe of interest containing about 320 indicators (items) of poverty and socioeconomic status of significance were collated in the study area, which were later dropped to 117 poverty items and 87 socioeconomic status items when ambiguous items have been removed.

Consequently, 61 items in which significance difference were found between proportions in the highest and lowest 25 percent of the farmers possessing the items were selected from the item validation process using item analysis procedure.

Weighting of the item was carried out using the sigma scoring method which assigned greater scores to valid items which were possessed by only few farmers and expressing such items scores in standard units. Results of validity test carried out on the constructed scale indicated that the scale was quite valid.

Finally, the implication of developing such scale for Children-in-Agriculture programme were highlighted.

INTRODUCTION

Agricultural extension lends itself more to the social sciences despite its root in the applied sciences. Commenting on the problem of social science research, Ekong (1988) explained that social science deals with human beings directly and it is often unethical or impossible to control all those factors which impinge upon the human being as a subject in a scientific experiment.

Rural development, one of the target of Agricultural extension is defined as the participation of people in a mutual learning experience involving themselves, their local resources, external (change) agents and outside resources. People cannot be developed unlike in the physical sciences where it is possible to standardize and control all factors to achieve a desirable change. People are not being developed when they are herded like animals into new ventures (Nyerere, 1968). People in rural areas (rural farm families or small scale farmers) cannot be defined according to a single statistical attribute but by a set of social, cultural and economic factors that borders on poverty and their socioeconomic status.

Poverty is structural and has its roots in the economic and political conditions which influence rural people's livelihood.

Poverty is regarded as misfortunes, deprivation and lack of dignity and in the sense of conscious self limitation to what is necessary for a good life in the community, and in the sense of responsibility and accountability for one's own livelihood.

The prevalence, degree and symptoms of poverty vary between and within the regions, states and communities of Nigeria. Urban and rural poverty are interrelated but have different symptoms and implications.

Socioeconomic status was defined by Chapin (1933) to mean - the position that an individuals or family occupies with respect to the prevailing average standard of cultural possession, effective income, material possession and social participation.

Measurement and scaling techniques as posited by Selltiz *et. al,* (1976), quoted by Akinola and Patel (1987) have been used in social science research to:

i. reduce data complexity,
ii. calculation of a single score that represents several variables for simplified statistical analysis, and
iii. reduce error in measurement and thereby increase reliability of the final measures used in the analysis of data; among other reasons.

PROBLEM OF POVERTY AND SOCIO ECONOMIC STATUS MEASUREMENT IN SOCIAL RESEARCH

According to Akinola and Patel (1987), a common problem in social science research say in Nigeria, had been encountered by researchers when certain characteristics such as: level of living, state of affluence, wealth and social status are to be measured. This probably stems from the fact that respondents do not feel too comfortable to reveal information bearing on their wealth and social status directly to investigators for various personal reasons.

The importance of measuring socioeconomic status of farmers lies in the fact that it helps to portray the socioeconomic progress of the farmers and afford interested persons and institutions an instrument to predict their behaviourial characteristics. Ogunniyi (1986) maintained that the goals of measurement include the ability to describe, explain and predict the performance of a person, process or system in a precise manner.

Among the problems that necessitate this study on poverty measurement include those connected with the people becoming increasingly dependent and powerless to defend themselves (effectively) against oppression and exploitation and their loss of self determination and chance of shaping their own lives. Also Akaegbobi (1996) added that the problem of conserving natural resources and protecting the environment have become a question of survival and a devastating impact on the earth's ecological balance.

This situation has necessitated the need for carrying out research aimed at developing instruments to measure these types of characteristics (Akinola *et al.*, 1987). However, very few studies have been carried out in this direction but earlier attempts to measure poverty in Nigeria do not

lend themselves to systematic comparison because different methods were used to estimate poverty lines and the proportion of the poor. Some are based on a few selected states, others on broader surveys, some on food poverty lines, while others are on basic needs or criteria (Sudharshan, 1996). While each attempt throws light on important issues, all lack a consistent and deep statistical base on which to fully analyse the many facets of poverty.

This present investigation on the other hand reports the development of a scale similar to those designed and constructed by Patel *et. al.* (1974), Akinola *et. al.*(1987), Chapin (1933), Sewel (1940) and Skirpuker (1967); to measure poverty and socioeconomic status of rural farm families in Ijebu North Local Government Area of Ogun State, Nigeria by adapting the methodology of Patel and Anthonio (1974), taking into consideration the peculiar social, cultural and economic circumstances of the people living in this area.

Area of Study and Sampling Procedure

This study was conducted in Ijebu North Local Government Area of Ogun State consisting three (3) major towns namely: Ago-Iwoye, Ijebu-Igbo and Oru.

Purposive and stratified sampling were used for this study. From the list of the villages under each major town, eight (8) were randomly selected (balloting technique). These make it up to 24 villages for the study. Ten (10) farmers were then selected from each village by simple random sampling (balloting). Numbers were assigned to names of farmers in each town or village, picked to constitute the sample. This sample size therefore was made up to 240 respondents.

Universe of Interests

The items considered for the measurement of poverty included those selected from observations made from selected villages, a review of literature and items previously documented by Todd (1994).

Out of the initial 320 items that were considered, 204 items (117

poverty indicators and 87 socio economic items) were retained after the pretest and used for preliminary item analysis, when ambiguous items were dropped. Farmers were consequently asked to give information as regards possession and/or non possession of the 204 items (See Ebel, 1972 and Akinola and Patel, 1987 for procedure for item analysis and Evaluation of discrimination indices after Item analysis). Appendix B show an example of item analysis procedure for the possession and Non possession of Television.

Validation of Items:

In order to select the items that best differentiated between high and low possession of poverty indicators and socio economic status items among small scale farmers a validation process was carried out.

Farmers were scored on the possession and non possession by the uniform scoring technique. This involved assigning a value of one (1) for possession and zero (0) for non-possession. For some quantitatively measured items like number of wives, possession was taken as having above the number deemed necessary in the area. For other quantitatively measured items like number of labourers, farming equipment, etc, possession was taken to mean having over the median value and non possession to be less or equal to median value of the items.

Total score on the scale, calculated by adding 1 or 0 for possession and non possession respectively for 204 items were ranked from the highest to the lowest. As a result the highest and the lowest 25 percent of the farmers were then compared to see if there existed any significant difference in the proportions of farmers possessing the item at 0.01 level of significant with the t - test.

From the t-test analysis, 61 items were selected to make up the scale being those items in which significant differences were found between proportional in the highest and lowest 25 percent of the farmers possessing the items.

Weighting of the Items

The sigma scoring method used by Patel and Anthonio (1974) was adopted for this study.

The method assigned higher scores to valid items which were possessed by only few farmers and expressed such in standard units. The sigma values representing deviates from the mean of the areas of the normal distribution corresponding to proportions were then look up from a table of the areas under the normal curve.

In the case of graduated items e.g. Possession of Radio/Cassette player was shown in Table 1.

In the case of non graduated items, e.g. cassava grater was shown in Table 2.

TABLE 1: Example of sigma scoring for Graduated item - Radio/Cassette Player

Number of Radio/Cassettes Player	Frequency	Cumulative frequency	Cumulative frequency mid-point	Cumulative proportional mid point	Sigma values (Z)	Standard score $(Z+2)^2$
0	80	80	40	0.167	-0.966	2
1	140	220	150	0.625	0.319	5
2	18	238	229	0.954	1.685	7
3 and above	2	240	239	0.996	2.652	9

TABLE 2: Example of sigma scoring for Non Graduated item - Cassava Grater

Response Category	Frequency (f)	Percentage (%)	Proportion (P)	Sigma value (Z)	Standard Score $(Z + 2)^2$
No	179	74.58	0.373	-0.324	3
Yes	61	25.42	0.873	1.141	6

The final poverty/socio economic status scale (POSES) was taken as the sum total scores for the selected 61 items (see Appendix 1).

Determining the Validity of Poverty/Socio economic Status (POSES) Scale

In addition to content validity, concurrent validity tests was also carried out on the scale.

Concurrent validity

The concurrent validity was determined using the known group technique. Twelve farmers of very low category farmers and twelve farmers of high category were identified. The t-test was used to test the discriminating power of the known contrast group at 0.01 level of significance using the formulae adopted by Patel and Akinola (1987).

$$t = \frac{\overline{XH} - \overline{XL}}{\frac{(\overline{XH} - XH^2) + (\overline{XL} - XL)^2}{n(n-1)}}$$

where: $(\overline{XH} - XH)^2 = XH^2 - \frac{(XH)^2}{n}$

$$(\overline{XL} - XL)^2 = XL^2 \qquad \frac{(XL)^2}{n}$$

XH^2 = Sum of the square of the farmer in the high scores group (12 farmers with very high poverty indicators).

XL^2 = Sum of the square of the farmer in the low scores group (12 farmers with very low poverty indicators).

$\overline{XL}$ = Mean Score of the 12 farmers with high POSES items.

$\overline{XL}$ = Mean Score of the 12 farmers with low POSES items.

When scores were substituted into the formulae, a calculated t-value was found to be 2.819 significant at the 0.01 level. This shows that the scale is able to discriminate between the two extreme groups of very low and very high POSES items among small scale farmers, therefore it could be concluded that the poverty/socio economic status scale (POSES) was valid. See Appendix A for the POSES Scale developed.

THE IMPLICATIONS FOR CHILDREN IN AGRICULTURE PROGRAMME

In times of rapid demographic, technological, ecological and socio-cultural changes, the poverty and socioeconomic indicators characterising farming profession vary across villages because of the tumultuous event that Nigeria has experienced in terms of changes in income, population and economic performance.

Thus, there is a disruption in the transfer of knowledge and skills necessary to live in the village and arouse unrealistic desires and expectations. This puts pressure on young ones to look for alternative activities and lifestyle in the town.

Therefore, all problems faced by farming profession borders on the prevalence of poverty in all communities nation wide. These have consequently attracted the interventions for providing farmers with genuine assistance that contributes to the preservation and restoration of living conditions fit for human beings and to retain the interest of farmers children or youth generally to remain in the profession by actively participating in farming activities.

Among such programme is the Children-In-Agriculture Programme established to assist farmers' children participating in farming activities so that they may resourcefully make use of the farming knowledge and experience they have acquired through socialization process right from childhood to advantage.

This cannot be achieved through the focus on farmers' children only but on other factors as well.

Wang (1991) posited eleven domains important for the rural quality of life and these domains are:

1. Population
2. Family and/or household
3. Education
4. Employment opportunities
5. Income and Consumption
6. Health
7. Housing
8. Communication, transportation and electrification
9. Water supplies and environments
10. Time allocation and leisure
11. Social stability

Though the perceived and pointed out some problems and constraints in relation to the improvement of the rural quality of life which he said includes poverty itself, lack of political will at the national level, lack of resources, ill defined influence of highly developed countries and insufficient impact of international development cooperation.

Thus, the CIAP would need to address such issues stated above that affects the childrens' potentialities and their tendencies to continue with farming.

Therefore replication processes for any development programmes, there is the need to take into consideration the incidence and influence of poverty among the targeted audience with the use of poverty profile.

The poverty profile is an analytic device for summarising information on the sources of income, consumption patterns, economic activities and living conditions of the poor (World Bank, 1993).

The profile places poverty in the country's economic institutional and social content. (See World Bank, 1993 for the checklist of many questions addressed in a poverty profile).

It can help in the design of reform programmes and system for monitoring poverty during adjustment. It can also be used to established a baseline for monitoring during adjustment and to identify and the key indicators that are correlated with the income, of the farm families and that can be measured readily adjustment.

A similar approach can be used to monitor key social indicators and access to public services.

CONCLUSION

The development of a scale to measure poverty and socioeconomic status among rural farm families have been imperative to bringing about reliable research outcome in the study area. This worthwhile exercise (developing a scale to measure poverty and socioeconomic status have great implication for Children-In-Agricultural Extension which is geared towards improving the performance of farmers in food production.

Poverty may be coverage for a pretentious living and safety for spiritual or psychological attack and the recognised poor may be the migrant which has lost the idea of returning home. Thus, the POSES scale, developed would be very useful to reveal every category of people in line with the socioeconomic status and poverty level thereby making it easy to identify the appropriate target audience that would be involved in development or

change programmes (Dixon, *et al.*, 1994).

Like any other measuring devices, it can be employed whenever an investigator wants information regarding the poverty and socioeconomic status or rural farm families in Ijebu North Local Government Area of Ogun State. It will also stimulate further researchers in the area of developing poverty/socioeconomic status scale. This will gradually eliminate the problem of lack of scales to measure the poverty and socio-economic status of farmers in the whole country.

RECOMMENDATION

The scale developed in this study is recommended for use by researcher. Government policy makers as a working tool in their subsequent policy framework formulation for poverty alleviation, policies to promote rapid economic growth with equity and social policies and programmes to tackle the wider causes of poverty (Dixon *et al.*, 1994). Also for extension agents and development authorities for inclusion into their initiative on poverty targeted social programmes which may contain a large number of relatively small, well targeted, demand driven projects and sub-projects that can be implemented by the communities themselves and that may have impact on the poor to ensure their recognition of the problems of the poor and targeting of their benefits to the needy especially in the area of study.

However, validity test of the scale prior to use is suggested from time to time.

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APPENDIX A
Poverty/Socioeconomic Status Scale (POSES):

SN	Description of items	Number of items possession or non-possession	Standard scores weight
1	Accessibility to storage facilities	No Yes	35
2	Use of storage facilities	No Yes	36
3	Accessibility to Electricity	No Yes	36
4	Use of Electricity	No Yes	36
5	Accessibility to tractor/machinery hiring	No Yes	36
6	Affordability of tractor/machinery hiring	No Yes	36
7	Use of tractor/machines	No Yes	36
8	Affordability of fertilizer	No Yes	36
9	Use of fertilizer	No Yes	36
10	Accessibility to seedlings	No Yes	36
11	Affordability of seedlings	No Yes	36
12	Use of seedlings	No Yes	36
13	Accessibility to seed (Planting)	No Yes	25
14	Use of seeds for planting	No Yes	25

SN	Description of items	Number of items possession or non-possession	Standard scores weight
15	Accessibility to Drugs/Chemicals	No Yes	36
16	Affordability to Drugs/Chemicals	No Yes	36
17	Use of Drugs/Chemicals	No Yes	36
18	Accessibility to non family labour	No Yes	25
19	Affordability to non family labour	No Yes	25
20	Use of non family labour	No Yes	36
	Crop types :		
21	Rice	No Yes	36
22	Sugarcane	No Yes	25
23	Pineapple	No Yes	25
24	Cocoa	No Yes	25
25	Coffee	No Yes	47
26	Rubber	No Yes	47
27	Cashew	No Yes	36
28	Kolanut	No Yes	25
29	Mango	No Yes	36

SN	Description of items	Number of items possession or non-possession	Standard scores weight
30	Cotton	No Yes	36
31	Food item: "Ogi" (Pap)	0 1-2 3 4-5	357
32	Block house in the village	0 1 2 and above	369
33	Pit Latrine	12	348
34	Sitting Room	0 1 2 3 and above	2579
35	Traditional Cloth	0 1-2 3-5 Above 5	2578
36	Yam barn	No Yes	36
37	Cattle	0 1 2 and above	478
38	Goats	0 1 2 and above	468
39	Wardrobe	No Yes	36
40	Cassava grater	No Yes	36
41	Standing mirror	0 1 2 and above	368

SN	Description of items	Number of items possession or non-possession	Standard scores weight
42	Cupboard	0 1 2 and above	358
43	Dining Table	0 1 2 and above	368
44	Floor covering	0 1 2 and above	367
45	Wall Clock	0 1 2 and above	357
46	Wall hanger	0 1 2 and above	257
47	Wrist watches	0 1-2 3-4 Above 4	2467
48	Coal iron	0 1 2 and above	359
49	Umbrella	0 1 2 and above	258
50	Kettle	0 1 2-3 3 and above	2579
51	Motor cycle	0 1 2 and above	368

SN	Description of items	Number of items possession or non-possession	Standard scores weight
52	Tables	0 1-2 3-4 5 and above	2478
53	Television	No Yes	36
54	Refrigerator	No Yes	36
55	Gas Lamp	No Yes	36
56	Flourescent light	No Yes	36
57	Rain coat	0 1 2 and above	247
58	Do you hold any village council title	No Yes	25
59	Do you hold any social club/coop society title	No Yes	36
60	Personal photographs	0 1 3 and above	247
61	Radio/Cassette player	0 1 2 3 and above	2579

STRATEGIES FOR INTEGRATING HOME AND FAMILY RESOURCES MANAGEMENT INTO THE CHILDREN-IN-AGRICULTURE PROGRAMME IN NIGERIA

BY

DR ASIRU, B.M. AND LAWAL, B.O.

Department of Agric. Extension And Rural Sociology, College of Agricultural Sciences, Ogun State University, Ago-Iwoye, Nigeria.

ABSTRACT

Home and family resources management programme in the areas of nutrition, health, finance, shelter, information and general home environment are identified for enhancing the general welfare of the rural children for full realisation of CIA Programme in Nigeria.

INTRODUCTION:

The emphasis on home and family resources management in the general welfare of rural children should not be over looked to ensure the overall success of Children-in-Agriculture Programme (CIAP) in Nigeria. Many family and home resources, including the children themselves, are well take care of.

In the area of nutrition, substantial mismanagement is prevalent in the rural areas to the detriment of the welfare of the children. For instance, substantial losses occur in the movement of perishable fruits and vegetables from the farm gate to the consumers in Nigeria (Ascoli *et al.*, 1967, Dobbing, 1970).

The poor post harvest management of food at home results to malnutrition whose effects can be far-reaching affecting both physical and mental development (Gordon *et. al.* 1978; Monocha *et. al.* 1971) and predisposing children to infections and diarrhoea (Olorunda and Aboaba, 1978; Onayemi, 1981, Schliofield, 1979).

This among other factors, however, if not taken into consideration, may

adversely affect the success of CIAP.

It is therefore the objectives of this paper to highlight the strategies of integrating home and family resources management into CIA programme in Nigeria as to ensure the general welfare of the rural children which serve as the programme subject.

In this paper, identified resources include: food, money, shelter, information technology, time, household equipments, and general home environment and the children.

STRATEGIES OF IMPLEMENTATION:

CIAP should open avenue for research and extension works for home economists especially in the area of management of resources as highlighted below.

FOOD:

Only well nourished children can be sound enough to productively participate in food production in the country. Adequate understanding of basic principles of nutrition by the rural children will help greatly in uplifting their nutritional standard. Hence, CIAP should integrate home economists to conduct research through its extension service programme into proper nourishment of rural children.

Children should be organised into groups village by village for home and fammily management extension agent to work upon.

CIAP research .programme in this realm should follow steps as put up below.

Programme approaches should erected to identify nutritional problems at micro-level (the rural areas). The first step in the planning sequence should be to identify the malnourished, what the nutritional deficiencies are and their severity and trends. The second step is the identification and costing of alternative programmes relevant to the needs of the malnourished. The programme is then selected, implemented, and eventual feedback enables evaluation of its success (Scrismashaw *et al.*, 1967).

Such programme approaches should be children focused. Among the suggested programme for adequate food resources management are:

i) extension services on what is good nutrition. Reasons for good nutrition, and how to ensure good nutrition;
ii) extension services on efficient utilisation of available land for cultivation of both protein and carbohydrate rich crops (such as cowpeas, groundnuts, soya beans, cassava, yam potatoes); soil water and mineral conservation techniques;
iii) provision of subsidized home resources and education on food storage and .preservation techniques in order to prevent post-harvest wastage;
iv) food processing campaign programme to obtain value added agricultural products. This helps maximise the utilization of the harvest. CIAP should come out with strategies of ensuring availability of processing machines in the selected rural areas at subsidized rate; and
v) gardening programme to augment the food supply from the parents of the children.

MONEY:

Children-in-Agriculture Programme should also open avenue by which home economists can be involved in training rural children on effective money management via proper identification of priority, budgeting, and book-keeping. They should also be exposed to other financial security measures such as agricultural insurance policy and banking system, especially in this era of mobile banking system. Children could be organised into cooperative groups where by they will be encouraged to save for the rainy day and grant each other soft loan. These items are crucial to financial sourcing for agricultural projects of the Children-in-Agriculture Programme.

INFORMATION TECHNOLOGY:

Home Economists should come into CIAP in educating the children the use, uses and maintenance of home information/news media facilities, such as television, radio, video, films, where available. Where they are not, provision for the above should be made by CIAP for teaching and collecting current information on farming.

TIME:

The children should be exposed to how to alternate light with heavy jobs; include rest period at specific time of the day; and decide on what is the right part of the day to use for certain task.

HOUSEHOLD EQUIPMENT:

The children would also be educated by the home economists the skill in selection, use and care of different household equipments ranging from broom, dishes, plates, pots, beds, fridge to farm tools.

OTHER HOME AND FAMILY RESOURCES:

Other health related materials such as clothing, drugs, etc., could be provided at subsidized rate coupled with teaching of the use and uses of drugs to prevent drug abuse. The need for regular washing of clothing materials and bathing coupled with technique of clothe care and maintenance, washing of the bathroom and toilet should be taught.

GENERAL HOME ENVIRONMENT :

Weeding and sweeping of the home and its surrounding; the judicious utilization of farm land; soil water and conservation techniques of available farm land; recycling of processing waste products (such as casava .peels, maize chaff and cobs) in order to prevent environmental pollution, are all crucial areas that should be looked into by home economists for CIAP to be fully effective in involving rural children in agriculture.

CONCLUSION:

With the assurance of the general welfare of the rural children by home economists, CIA Programme will go a long way in achieving its laudable objectives among which encouraging children in farming reigns supreme.

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REPLICATING THE CHILDREN-IN-AGRICULTURE PROGRAMME (CIAP) ON A NATIONAL SCALE; A CRITIQUE

BY

OLUGBENGA O. OLUBANJO; ADEWALE S. ONASANYA AND BOSEDE O. LAWAL

Ogun State University, Ago-Iwoye, Nigeria

ABSTRACT

This paper evaluates the feasibility of replicating the CIAP on a national scale in Nigeria. It reviews the mission statements, and identifies the areas requiring improvement in the programme as currently operating in Ago-Iwoye, Ogun State. The conclusion is that the present operational mode, among other factors, needs to be improved upon to effectively facilitate CIAP's replication on a national scale.

INTRODUCTION

The agricultural sector constitutes an integral part of any developing economy. In Nigeria, agriculture remains a vital sector. It provides, inter alia, food for a teeming human population, raw materials which serve as intermediate products in the upstream sector, and acts as a veritable source of revenue for the country. These unique contributions thus make agriculture a victualing nerve centre for the whole economy. Interestingly, available record does not lend much credence to the potentials and contributions of agriculture in Nigeria. Huge expenditures notwithstanding, Nigeria's agriculture has remained essentially subsistent in nature (Mabawonku and Yoshida, 1990). Growth rate of per capital food production is 0.5 percent, while the growth rate of the human population is 3.3. percent (Ojo, 1991). For the period 1980-90, 17 percent of Nigerians were estimated to be food insecure (The Hunger Project, 1991).

The sector's performance obviously cannot be separated from the

ageing nature of operators in the farm sector, the drudgery associated with the use of primordial tools, which in part has driven youths generally from taking up farming as an occupation, and the crave for white-collar jobs which encouraged mass rural-urban migration, away from farm setting and into big cities. (See Marinho, 1985).

Interestingly, with the hopes of securing while-collar jobs dashed and also with the rising living standards coupled with the poor bargaining power of most city dwellers, the nation has started witnessing return-migrations into her rural areas. Such a reverse-migration unarguably portend good omen for the nation's agriculture. Further, in the spirit of the Young Farmer's Club of the oldies, newer efforts are focusing on orientating teeming youths in Nigeria towards taking up farming as an occupation. Interestingly, one of such novel efforts is the Children-In-Agriculture Programme (CIAP) currently residing and operating in Ago-Iwoye but which is now appealing for consideration, and possibly, replication on a national scale. However, for any novel programme to be qualified for consideration and replication particularly on a national level, certain acid tests must be conducted and satisfied. For instance, it is pertinent to inquire about the potentials and likely areas of impact of the proposed programme, the working concepts and their appropriate qualifications, the pattern of organisation and operations, and the possibility of conducting objective evaluation for likely impact and wider replicability, among others. As a critique paper, this sub-mission shall evaluate the CIAP especially within the above-suggested framework and in the light of the published CIAP mission statement (see CIAP Bulletin No.1). The rest of the paper is organised as follows: Section II presents the CIAP statement of purpose with a view to underscoring the conflict and ambiguity in the mission statement. Section III examines the CIAP model and the possible limitations to its replicability on a national scale. Concluding remarks completes the report in Section IV.

CIAP: STATEMENT OF PURPOSE

According to the statement of purpose, indicated in CIAP working paper, the programme has three essential aspects (which incidentally constitutes its basic tenets):

i. It aims at facilitating the attainment of a sustainable agricultural development;
ii. It does not support child labour; and
iii. It intends to assist farmers' children participating in farming in using acquired knowledge and experience in agriculture.

Up to a point on a continuum, all these three aspects are lofty enough to encourage or warrant CIAP expansion and replication on a national scale. Beyond a certain point however serious caution will need to be exercised. Especially to prevent ambiguities or even to eschew likely conflicts in the mission statement. In the "north" where child labour is a rare occurrence such a mission statement is implementable without any fear of likely, conflicts especially of the mission statement with beneficiary interest. Down "south", child labour is a natural occurrence. It has even assumed an alarming dimension with the downturn of the nation's economy, manifesting in growing job destructions and unemployment among the adult population, spiralling inflation and dwindling purchasing power among others. Unarguably, most households now live from day to day by pushing more and more children into the informal labour market. A micro study carried out in Ogun State during the 1987/88 agricultural season found that 27 percent of the members of about 83 percent of the total rural farming households available for farm work in the State are children (OGADEP, undated). As such any programme aiming to put in check child labour must necessarily tackle the cause as opposed to addressing a mere symptom. If CIAP does not support child labour, then it is against child labour. If this is so, the corollary is that the programme is likely to suffer the same fate as its predecessors. This can only be averted if the mission statement is coined and implemented with due consideration given to the local practice and

reality.

Sustainability, in agricultural production requires using natural resources in a manner that assures access to sufficient food by the present generation without precluding or compromising the interest of the future generations (Olubanjo, 1996). For sustainability, the ageing nature of the farm population in Nigeria and the dwindling or largely unavailable wage labour in the farm setting suggest the early involvement of farmers' children in farming (on wage and non-wage bases); hence, the high fertility levels and rates in most rural setting. The covert intent here is to facilitate a smooth transition on the household farm (that is, one with little or no side-effects on the current family menu or even future existence).

Uniquely, it is one issue to be against child labour or to be interested in fostering sustainability in domestic agricultural production, it is another issue to engage in the promotion of farmers' children's continued participation or involvement in farming. The covert assumption in the CIAP tenet is that children's involvement in farming is quite inconsequential of the current and previous inclement economic climates in Nigeria. Unarguably, such an assumption is highly contentious from the benefit of hind-sight especially as regards economic situations in Nigeria.

LACUNAE IN THE CIAP

Presently, there exist some, albeit obvious, gaps in the CIAP model and its implementation that requires addressing or wedging before its consideration or even replication on a national level could be warranted or justified. These gaps relate to four major aspects including the working concepts, the methodology required, the pattern of operation or implementation and the feasibility of its lending itself to critical evaluation for relevance and wider replication. Each aspect is examined in turns below.

Choice and Definitions of Working Concepts

Presently, there is obvious ambiguity in the choice and conception/understanding of the working concepts in the CIAP. As much

as practicable, the CIAP intends to (1) encourage the attainment of a **sustainable agricultural** development, (2) assist **farm children** as opposed to **farm youths,** (3) relate with all children of traditional farmers in the Programme area, and (4) identify and assist **gifted farm children.** The overtly expressed focus notwithstanding, it is essential to furnish the programme's perspectives on these contentious concepts which incidentally are the adopted or working concepts in the CIAP.

Sustainable development connotes many things to different people. Its conception varies across disciplines. For instance, what is sustainable development to ecologists differs to that associated with economists, and so on. Yet, the CIAP mission statement is silent on this.

Whatever definition is adopted on either of these two concepts will determine the final Programme beneficiary. (Nunes, 1994). There is then a need to embrace a working concept which allows a child (the original focus of CIAP) as opposed to a youth (which provides a wider latitude for participation and abuse) as the Programme beneficiary.

Conceptualising literacy or its level is another highly debatable issue. Interestingly, the CIAP is more interested in working with literate farm children.

Whether formal schooling, as opposed to formal and informal schooling statuses and other factors, is a reliable measure of literacy status of farmers' children is an issue that begs for resolution. As much as practicable, development assistance should eschew overt bias. For easy, unwieldy and exhaustive coverage development assistance of this nature should be phased, for instance, out-of-school, pre-primary, primary, and post-primary phases. That is, in line with the federal government's model on early childhood education and development in Nigeria.

Finally, like the gifted children Programme of the federal government in Nigeria, CIAP is interested in identifying and assisting gifted farm children. A question that comes to mind is what constitutes ingenuity in Children? CIAP's answer to this kind of poser will influence the choice of farm children to work with or assist. As with the gifted children Programme and the unity Schools concept, if CIAP decides to pursue the

gifted farm children focus the Programme will be suspects and subject to abuse.

METHODOLOGICAL CONSIDERATION

Ensuring good conception and definition of all working concepts in any development assistance packaging is one issue, estimating and operating within such defined concepts is yet another. In the CIAP, the latent intent is to encourage farm children who are already into farming to continue in farming, and those not already in the occupation to take up or participate in farming. Comprehending farm children's occupational status and farm disposition requires or involves a quantification of their interest; both latent and manifest. This calls for a contingency valuation of farmers' children's willingness to (either) participate or continue in farming. Results of such a valuation exercise certainly, will enrich the packaging and delivery of the Programme. That is, if CIAP does not assume before-hand that farm children already into farming preferred it a **prior** (vis-a-vis other professional occupations) as opposed to being coerced into it by the economic hardships faced by individual farm households. The pertinent questions here are: What led farm children into farming? Do they .prefer to continue in the occupation or in some other occupations? These are questions CIAP should address and provide answers to *a priori* and not *a posteriori* for effect.

Linked to the problem of quantifying farm children's willingness to continue or participate in farming are those of measuring ingenuity and literacy statuses of farm children. These are by no means easy endeavours. Essentially, tests ascertaining mathematical numeracy, abilities for verbal and written English, and in specific, albeit pertinent, subjects will be required. Suffice to add that such tests materials must be well validated and standardised across all potential examines before being conducted. The procedure and outcomes must also allow for easy verification or objective criticism by the generality. It is necessary that all these cogent issues are given due consideration in the CIAP.

OPERATION OF THE CIAP

In modern palance, operations in any human endeavour relate to factors that can constrain achievements. These are the man power base, funding, Programme coverage, identification of beneficiary group, and delivery, that is, if the human endeavour is a development assistance type.

i. Manpower Base: There is no gainsaying that the calibre of human resource engaged in a human-oriented (or any social-welfare) Programme determines its success in terms of coverage and survival in a particular location, and its acceptance and replicability in other areas (Olubanjo, 1997). Interestingly, because development assistance activities are just gathering momentum in Nigerian, very few people possess the required professional training and competence for development work. Hence, the usual problem faced by novel programmes in harnessing funds and the manpower available for development activities in Nigeria. The situation is not even helped by the lack of dynamic curricular for training in development work at the tertiary level in Nigeria. These are issues that should be pondered upon in the CIAP especially for its overall sustainability and replicability.

ii. Funding: That funds are no more available for development work is no news. Neither is the dearth of fund accidental or a mere coincidence of late, donors especially from the north have become quite sceptic and even wary of the prospects of development work and the sincerity (that is, in terms of accountability and transparency) of Non-Governmental Organisations (NGOs) in developing Countries (Farrington et al, 1993; Edwards and Hume, 1995). Unlike, in the past when donor funds have been used in a zero sum manner , it has become quite pertinent that, henceforth, all funds are used in a positive-sum sense or in a way that such funds are additive or even multiplicative in their impact. Pertinent questions here are: What is the funding base for CIAP? Is it reliable and will it facilitate expansions in its activities and coverage? Will its use be multiplicative in impact and guarantee CIAP's sustainability? Suffice to

counsel from this end that if sustainability is a chief concern in CIAP, then non-institutional source of finance in particular, beneficiary self-help financing (as opposed to institutional or donor finance) should be encouraged. Depending on beneficiary performance however institutional funding can be attracted to supplement beneficiary financing.

iii. Coverage, Beneficiary Identification and Delivery: Programme coverage, focused group identification and programme delivery are three inter-related issues which should be given a serious thought during programme packaging. If given the required consideration, particularly at the packaging phase, the tasks to be surmounted at the evaluation stages will be made much simpler. Coverage, operationally informs of the specific activities or areas to be covered in a development assistance. Incidentally, this could be constrained by available fund and personnel. Also, the coverage on a programme will be conditioned in most cases by local factors and especially beneficiaries' latent or expressed interests. As much as feasible, development assistance should focus on meeting the needs of the designed beneficiaries. For this requirement to be satisfied, development assistance must allow for participatory conceptualisation and evolution; that is, in a bottom-top as opposed to top-down fashion.

Designing and identifying the Programme beneficiary is another aspect which should be considered prior to a programme's implementation. It will be a disaster if at the implementation stage, the wrong individuals are included as Programme beneficiaries. Proper delineation of real beneficiaries will be helpful to the CIAP programme. Similarly, proper calibrations and precise measurements of literacy status and ingenuity will also be helpful to programme's delivery. As much as practicable, beneficiary design and identification should appreciate adequately the local environment and reality/workability of proposed designs and identification programmes.

Expectedly, performance with respect to the first two aspects will affect the delivery. Similarly, the calibre of the programme personnel will determine the success of Programme delivery. Furthermore, a

programme's perspective on the essence of the development of a farm child, whether as an end it itself, or a means to an end (as obvious in the CIAP), will influence the success of its delivery. From our viewpoint, the development of a farm child should be seen as an end in itself rather than as a means to an end. Developing or assisting a farmer's child for the basic purpose of taking up farming assumes many cogent issues off. For instance, it is implicitly assumed that farmers in the programme area want their children to take after them. Also, implicitly assumed off is the fact that farm children will prefer to take up farming as an occupation. If anything, these likelihoods should be ascertained at programme's prefeasibility and feasibility stages of the programme as opposed to being assumed off. The essence or import of allowing and fostering a bottom-top programme assistance' evolution becomes even quite glaring at the programme delivery stage.

Equally pertinent to the above discourse is the inseparability of the fates and future of farm children and their mothers, These, unarguably, appeared the most vulnerable members of farm and all households in Nigeria in particular and the Third World in general. Reality thus suggests that assistance packaging should not preclude the interests of either of these two vulnerable groups. Assistance provided to either party is, *ceteris paribus,* likely to have impacts on the other. But when the interests of the two are accommodated simultaneously beforehand, programme delivery and acceptance become quite easy. In addition, the overall impacts are quite manifest and better felt within the beneficiary households.

Impact Evaluation

Though coming last in this paper, critical evaluation of programme's impact for the purpose of improving its coverage, targeting and delivery as well as for facilitating its replication elsewhere is a very cogent aspect of any social-welfare programme. As much as feasible, this should be considered during programme packaging . A programme that has been implemented for upwards of five years should lend itself to critical evaluation. However, programming for later evaluation should start early

particularly at the conceptualisation stage on (Olubanjo, 1995a, and b for details on the importance of evaluations and the existing methodologies for setting-up impact assessments in development assistance programmes). Suffice to add however, that the acceptability and replicability of CIAP or any Programme on a national scale will depend largely on the outcome, and credibility or objectivity, of such impact assessments.

CONCLUSION AND RECOMMENDATION

The salient conclusion in this paper is that the present mode of packaging and implementation of the CIAP needs to be improved upon for its replication on a national scale. Several aspects including the working concepts, the operational methodology, and feasibility of organising critical evaluations for relevance and wider replication, will need to be given serious thoughts with a view to re-packaging the programme, and in the hope of pushing it for replication subsequently. Presently, the CIAP as a pilot programme should use its results so far in adequately packaging it finally as a social-welfare programme focused on improving the lot of *all* farm children by encouraging their placements in the future on *farm and non-farm occupations* as individuals desired and endowed. Farm child-focused development assistance like the CIAP should:

i address the cause of child labour (e.g. poverty) as opposed to tackling the symptoms, that is, the rampancy of child labour in farm settings
ii appreciate as much as possible the local situations, practice and reality. (Ageing farm population, unavailable waged farm labour and poverty seemed to encourage child labour which, in turn, is chiefly to ensure production sustainability and household food security, among others);
iii be wary about the choice and conceptions of all working concepts (clarity and conciseness is essential); the stage to stage or phased implementation of the mission statement; the coverage, beneficiary identification and programme delivery; and the need to accommodate the need for impact assessment at the conceptualisation stage onwards;

iv. encourage beneficiary, self-help or counterpart funding of the programme for sustainability;

v encourage its bottom-top and participatory conceptualisation and evolution for relevance and wider participation;

vi continue to include the interests of women since the overall relevance of any programme on children will depend on or be influenced majorly by the strength of the association between them and their offsprings.

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THE ROLE OF CHILDREN-IN-RURAL FARMING WITH EMPHASIS ON SOYA BEAN AS A PROTEIN SUPPLEMENT WHICH ENHANCES A HEALTHY GROWTH IN NIGERIAN YOUTH

BY

OGUNJOBI KAYODE ADE

Department of Chemistry, University of Ibadan, Nigeria.

ABSTRACT

Nigerian youth contribute in no small measure towards the sustenance and implementation of agricultural polices and programmes. The fact is however appreciated that the practise of agriculture is undoubtedly ill-mechanised in our system but as a third world nation our farming techniques are comparable to places like Indian, Yugoslavia and other Arabia farming practices.

In this exercise soya bean has been chosen for a case study out of various agricultural produces since children enjoy protein-containing meals like meat, egg, beans, milk etc which are not only nutritious but are protein-containing leguminous plants/seed/substances as the case may be.

Nigerian parents that are full-time practising farmers mandate their children to create time (be him/her a scholar or not) to assist in boosting their farming routine in other to make a living especially in rural areas and at tender/childhood age/stage of the children

Government however now want Nigerian students to be relatively involved in farming in order to encourage food production, increase government revenue as well as not allowing other professions to side track effective agricultural practices..

This paper equally focus attention on how soyvita (a beverage) can be produced as a by-product of soyabean and in constrast considers the production of a tea (Good morning) from *Cytnbogogon citratus*. Again, the relevance of these products was considered as alternatives to other

ways of aiding human development and making viable the economy of a nation.

INTRODUCTION

"A healthy child is a farmer" One needs to ask why? When a child refuses to farm he/she will not reject the purchase of raw farm .produce or condemn a decent/nutritious meal for consumption. Nutritious dishes provides the necessary metabolic nutrients both in children and adult. Such nutrients are derived from both plants and animals sources - among which proteins, vitamins, minerals like calcium (Ca), Mg (magnesium), Iron (Fe) Organic acids (RCOOHs) etc are inclusives.

Proteins in fact have their chemical properties traced to the availability and role of organic acid and amino groups coupled with a trace quantity of some other elements/minerals. It is not only in soya beans that proteins supplements may be obtained but are quite derivable from fishes, egg, meat, milk and the likes.

Milk is a product obtained from plants sources (like soymilk, coconut milk) and animal sources (like peak, cowbell etc).

Again, the claim by one school of though that mammalian milk is richer than milks from plant sources should be limited to Kwashiokor children at certain ages since lack of mammalian milk (not only during human breast feeding) may however be eradicated as anti-kwashiokor treatment using protein-containing plants/fruits/seed to prepare delicious meals for children experiencing the disease between the ages of twelve and twenty (12 - 20 years).

When well-fed and healthy, children participate in farm practices (agriculture) especially mechanised farming, the result of such exercise is not only beneficial to just a sector of an economy/nation but it attracts global/worldwide/international interests and funding. As a result, this brings about the title of the present manuscript.

Before making out adequate points to back the selection of soya bean for a case study, attention of the audience and readers of this scripts would be referred to the contributions of Akesode F.A. and Anetekhai M.

in the Nigerian Trawler Owners Association (NITOA) Vol. 1 No.1 Feb. 1998 (Ref. 2) where the first author briefed the editorials of NITOA on the need to boast research which in turn will enhance fish farming. Again, the magazine pointed the requirements for the export of sea foods to Europe. This is the mere reason why the cultivation of soya bean and conversion of the seed to various food items as well as CIAP need both financial and moral backings.

Soya bean is selectively chosen for this subject matter because it is an agricultural produce with close to or more than thirty varieties. It is a plant whose percentage composition of nitrogen made it visible as a nitrogen-fixing plant.

According to Taylor (ref.14), the growth of soya bean in Nigeria is only encouraging in Benue, Niger and part of Kaduna states than Abuja and Mokwa. This is an added challenge to southerners to increases their interest in the cultivation of soya bean. Ogunjobi K.A. and Joda A.O. found that the growth of soya bean in Ago-Iwoye has attracted a wide range of interest of scientists and farmers both for research and commercial purposes (ref. 6).

In Africa, Ashaye *et al* (ref.3) in one of their investigations confirmed that only 5% of world production output per annum came from this continent of the globe. The ease with which soya may be cultivated bothers on the fact that the planted seed survives on almost all forms of soil but the best output is obtained on mellow fertile clay or sandy loams as concluded by authors in (ref. 8).

To relate this work to effective implementation of CIAP policy, a leaf is borrowed from the work of Olowookere J.O.- "The consequences of malnutrition and under-nutrition on mental and physical output' (ref. 10). No farmer (children or parents) would bring forth a reasonable farm practise or produce talk less of revenue enhancing farm-produce under the effect of malnutrition or starvation.

Dietary protein according to Bababunmi E.A. *et. al.* (ref. 11) produces a noticeable effect on mitochondrial oxidative phospherylation in mammals. In order not to digress too much from the theme of the

conference, further discussion on protein-supplementation activities of soya bean in Nigerian youth that are expected to be prospective farmers will be treated under results and discussion, summary and suggestion.

Other ways by which Nigerian Youth may increase tremendously in farming culture includes funding and mechanisation

FUNDING AND MECHANISATION OF AGRICULTURE

This is another crucial and relevant sub-title carved out from the major title of this paper because CIAP and FEAP are two inter-related programmes that are expected to be capital oriented. Farmers after a rigourous exercise on farm would expect substantial comfort and rest, income and encouragement. Right from primary education, Nigerian chidlren should be encouraged to participate not only in rural farming system but possible modern day farming such that their interests at higher level of education and later ages will not be jeopardised.

Suggestively therefore, Institutions of higher learning (tertiary) including Ogun State University should have a projection of agricultural engineering as a course worth being pursued. In another dimension,such policies should reach and solicit adequate funding from both national and international organisations like OGADEP, UNICEF, UNDP, WHO, USAID and so o n.

As a digression, commercial fisheries in Nigeria has now attracted funding interests of FAO, NAFDAC and Automotive Gas Oil (AGO). This has equally been used to create awareness at USA and EU level that the interest of Nigerians in commercial fisheries has been alerted and will remain unshaky. The possible outcome of such awareness is the financial assistance promised by the EU to use in backing the exportation of sea foods from Nigeria.

The methodology aspect of this exercise (manuscript) will be within he limits of the conference theme but the results and discussion will be elaborate enough for participants and readers to digest and benefit from.

METHODOLOGY

Shelled and Oven-dry soybean (beancake) was blend into powdered bean (bean flour). Proportional quantity was treated with additives (nutrient-rich) and coloring after which the resultant mixture was weighed into (5g) per sacchet and resultantly packed into a carton (100 sacchet per box) for standardisation. The marketing, marketability and market survey was left for the sales representatives of the product to report back.

The soymilk which is not designed for this exercise have been worked upon and a comparatively susbstantial and encouraging outcome have been obtained.

The shell of soyabean has been used to produce feedmills for livestock, .piggery and fish-farmers. This again increase the revenue base acrueable from the particular farm produce (soybean) selected for this work.

For the purpose of comparison, *C. citratus* has also been blent with *L. alba* (Wt/wt) in the ratio of 4:1, packed and tested as tea (Good morning) for the treatment of malaria in children and adult from the tropics (ref.9).

RESULTS AND DISCUSSION

Results

During the organoleptic test conducted by sampling various beverages, it was found that Bournvita, Milo and Soyvita have almost the same organoleptic properties the only difference being the characteristic odour of soya which was deliberately given that little chance to reflect as a mark of distinction in order to prevent adulteration of the product (soyvita).

Soyvita, according to our distributors and marketers attracts a large market demand not because of the price per sacchet but due to the fact that final consumers prefer the product as protein and vitamin supplement instead of relying solely on the consumption of blood tonic (cypron, multitone, fabitone etc.)

Again, our experiment showed that the shell used for feedmills serves

as a good dietary protein in livestock and poultry farming.

However, the comparative exercise conduct on Good morning tea with Lipton, Green label, beyond comment and other varieties of teas showed that no other tea in the category sampled proves a better worth when it comes to the treatment of malaria. Besides, the fragrant odour of *C. citratus* (active ingredient) is an added factor to its fast moving consumption. The colour of all the teas sampled are very much alike.

DISCUSSION

It worths being mentioned why unhealthy children cannot be farmers since our focus in this work is to compare and map out two extremely different roles (one each) performed by beverages and teas.

Apart from nutritious dishes, beverages adds to the level of comfort expected after a decent meal or rigorous exercise but obese patients (ref.12) are not expected to consume as much as Kwashiokor .patients (ref.13) whereas beverages provide no relevant role during the treatment of that global and acclaimed tropical disease-malaria (ref.15).

On an average level, soya bean contains 40% protein, 21%oil, 34% carbohydrate and 5% Ash. The ash content comes from the shell which provides the dietary protein for livestock, piggery and fishery. However, infants are allergic to low milk (ref. 4.7) between the ages of 6 months to 1½ years as a result they are expected to go for alternative meal during this period.

Other vitamins obtainable from soy products include niacin, thiamine, riboflavine, inosilol, choline, thiamine in addition to vitamins E and K (refs. 4, 7, 14).

Soy milk has an added advantage over cowmilk in that the later when poisoned or refined with methionine. leads to a greater retention of memory especially at childhood (ref. 5) compared to soyamilk refined with methionine. In the contrary, Akinrele (1970) reported that soyamilk is three quarter as good as human/mammary milk. He however explained that this milk from soya bean is a valuable substitute to raw (animal) milk and is good for the treatment of protein deficiency, regulation of

malnutrition, inducement of flatulence which may bring about discomfort due to the presence of galacto-oligosaccharides.

Teas generally (especially Good morning) when taken hot with raw lemon juice mixed in proportional quantity serves as a good suppressant of malaria which in turn is another dimension into making Nigerian youths stay healthy, perfectly fit and alive to become outstanding and practising farmers (ref.9).

CONCLUSIONS AND RECOMMENDATIONS

From this work and report, the following points are drawn in summary in order to conclude:

1. Youths should be actively involved in both rural and mechanised (modern-day) farming.
2. The involvement of youth in agriculture should not be for educational purpose but for commercial (large-scale) revenue generation.
3. Government (national and international) and public organisations should be encouraged to support farmers by providing enough funds for research institutions that are scientifically and agriculturally oriented.
4. Both children and Adult farmers are expected to be given medical treatments almost free in order to remain healthy.
5. Agricultural mechanisation should be one of the key objectives of the present day government in Nigeria.

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CHANGING AGRICULTURAL SYSTEMS: IMPLICATIONS FOR THE HEALTH AND NUTRITIONAL STATUS OF CHILDREN IN AGRICULTURE

BY

DR (MRS) GRACE OLUSEYI SOKOYA

Agricultural Media Resources and Extension Centre (AMREC), University of Agriculture, Abeokuta, Nigeria

INTRODUCTION

Children all over the world, are humanity's most precious asset. The world is currently experiencing the worst economic setback, since the 1930s. This silent combination of extreme poverty and under-development afflict more than 40,000 small children everyday. (Giant 1983).

Economic depression has major impacts on children. They include:

1 Family incomes fall, with disproportionately severe consequences for poor people.
2 Government budgets for social services particularly those affecting young children including nutrition, health and education are often cut back in times of restraints.
3 Bilateral and Multilateral levels of development assistance, staged as a consequence of budgetary policies adopted by industrialized countries.

The poorer the nation, the more severe the above impact would be.

The alleviation of poverty and world hunger has been of great concern to biological and social scientists since the end of the Second World War. Over the years, agricultural scientists have made great strides in improving both the yield and nutrient content of staple foods, which have remain the main food sources for the farm-family. Farmers have been encouraged to increase the quantity and quality of their food and cash

crops, so that more food will be available for export and for consumption in the urban areas..

Increased production, it has been assumed, will provide farmers with more income with which to purchase food and other goods and services essential for their family up-keep. However, micro-level studies by economists, nutritionists, anthropologists and others have demonstrated that increased food production on the family farm has not automatically led to improved nutritional status (Dewy 1979).

Changes in cropping systems that do not enable farmers to increase the quantity and quality of food available for family consumption will have no permanent effect on the well-being of the farm-family, although they may have a positive effect on urban or weather families.

Development experts agree that Nigeria is endowed with abundant human and natural resources, which if properly and adequately harnessed, can ensure sustainable national prosperity. The Family Economic Advancement Programme (FEAP) is a development programme, put in place by the Family Support Programme (FSP) of Nigeria, aimed at improving the socioeconomic standards of low-income groups. FEAP also seek ways of enhancing the health and nutritional status of farm-families, with particular reference to the women and children.

This paper will discuss some of the nutrition related problems that occur in children, when new agricultural technologies are introduced into traditional agricultural systems, and suggest ways in which the impact of these new technologies on the nutritional status of Children In Agriculture could be enhanced.

HEALTH, GROWTH AND DEVELOPMENT OF CHILDREN IN AGRICULTURE

The health community through the World Health Organisation (WHO), has accepted a rigorous challenge by defining health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity; and in the Alma Ata Declaration, re-

affirming strongly that health is a fundamental human right. Health is not only physical, but has psychological and social components.

The goal of child development studies is to be able to understand, predict and control the course of growth and development. Growth and development are two inseparable terms in child development studies. Growth is an increase in size of the whole body or its parts, while development is an increase in skills as a result of increased complexity of the body's structure and function.

The sequence of development is the same in all children, but the rate of development varies from child to child. There are also individual limitations to the growth and development of the child. His physical, mental and emotional development, which are completely independent factors are dependent on a favourable environment (before and after birth), hereditary factors, Socioeconomic factors, a healthy and secure home, loving parents, family size, adequate educational and social services, health and nutritional status.

Growth and Development can be seriously affected by lack of either the quantity or quality of nutrients reaching the body tissues, either due to incorrect feeding, bowel disease or intestinal parasites. Development of the child implies a process of motivation to reach his/her potential through the provision of an environment (physical, mental, social) that maximally promotes the achievements of this potential. It is a continuous process.

Malnutrition is a prevalent cause of infant morbidity and mortality, especially among the low income groups. Majority of Nigerian farmers fall within this low socioeconomic group (i.e live below the poverty level.), thus predisposing the children in these families to the menace of Malnutrition. These Children - In - Agriculture are therefore ironically deprived of good and adequate nutrition, a case or suffering amidst plenty.

In developing countries, particularly in the rural areas, there are many actiological factors responsible for the varying degrees of deficiency of protein and calories in the diets of young children. Some of these factors

include the following:

1. Geographical location: in which the staple food is low in protein, e.g. starchy roots and tubers.
2. Non-availability of food through seasonal changes, poor storage and transportation difficulties, reducing both the quantity and quality of the diet.
3. Poverty and the high cost of proteinous foods e.g. milk, meat or fish. Such foods may be eaten very rarely, and children have little chance of being fed on these foods.
4. Ignorance of the specific dietary needs of the child, and lack of guidance even when there is knowledge of these needs.
5. Poor sharing of the available proteins because of traditional customs and poor methods of food preparation which make it difficult for the growing child to eat certain foods e.g. meat or snails.
6. Intercurrent infections and infestations which may interfere with the appetite or the absorption of food nutrients.

The most common clinical forms of Protein-Calorie Malnutrition (PCM) are Kwashiorkor and Nutritional Marasmius. Kwashiorkor, is a form of Protein - Calorie Malnutrition most usually occurring in early childhood, between the ages of 1 and 3 years.

The main cause is a diet that is very low in protein (especially animal protein), consisting mainly starchy and principally carbohydrate vegetable foods. The clinical signs of kwashiorkor vary somewhat from child to child and also in different parts of the world. They include:-

1. Growth Failure: As shown by a low body weight even if Oedema is present
2. Oedema: swelling of the feet and lower legs, hands, lower back and occasionally the face
3. Wasted muscles, but subcutaneous fat retained. The child uses up his muscles to provide protein, but receives calories in the form of starchy carbohydrate foods.
4. Misery. Difficult to measure, but shown at first by peevishness and a

whinnying cry, later by lack of interest.
5. Hair changes: lightness of colour (brown, reddish, nearly white etc) straightness, sparseness; silkiness; easily pulled out.
6. Light coloured skin: The whole body, or more often the face, may be lighter in colour than in a healthy child.
7. Loose stools: This may occur from failure of digestion of food, especially sugars
8. Moderate Anaemia: If anaemia is severe, it usually suggests and associated infection with hookworm or malaria.
9. 'Flaky - paint' rash: Dark coloured patches of skin which flake off, leaving very light coloured skin or even ulcers beneath. This can occur almost any w here on the body, but is often seen on the back of the legs and buttocks.
10. Ulcers and Cracks. Small skin ulcers are often present, especially over pressure points. These may be deep cracks int he skin especially behind and around the ears.
11. Large liver: The edge of the liver may be an inch below the rib margin. The enlargement is due to fatty change.

NUTRITIONAL MARASMUS

Nutritional marasmus is a form of severe Protein - Calorie Malnutrition, usually occurring in the first 3 years of life. The main cause is starvation, that is, a diet lacking both in protein and in calories. The clinical signs include the following:-

1. Growth failure as shown by body weight, which is extremely low for the age.
2. Wasting of both muscles and subcutaneous fat, as the diet has been low in calories as well as protein . In severe cases, the face has a "little old man" appearance.
3. Loose stools, often because of infective diarrhoea.
4. Hair changes similar to those of kwashiorkor can occur, but are much less marked. Very light coloured hair is very unusual.
5. Signs of associated vitamin deficiency.

6. Dehydration from infective diarrhoea.

In contrast to Kwashiorkor, children with nutritional marasmus
1. Are often under 1 year old
2. Are obviously thin and wasted,
3. Have very little oedema, or usually none at all;
4. Are not miserable; and
5. Have a good appetite.

PREVENTION OF PROTEIN CALORIE MALNUTRITION

Long term

-. Improving the country's food production, especially of animal protein foods, such as milk, fish and meat, and protein-rich food crops, such as legumes.
- Improving the socioeconomic level of the country and money available for people to buy food.
- Improving the literacy level of parents and especially mothers, to enable them understand the importance of the correct feeding of their children.
- Improving the medical facilities, including maternal and child welfare services

Immediate

- Health education of the entire farm family
- Provision of food supplements to affected children. This may take the form of animal proteins or, of various cheap locally produced high protein infant foods. E.g. Soybean foods.

THE IMPACT OF CHANGING AGRICULTURAL SYSTEMS ON THE FARM-FAMILY

Food is a basic human need. The primary goal of increasing food production according to Rubstein (1984), is increased food consumption. This assertion could however not be accepted as absolutely correct,

because food though a basic human need should be consumed in adequate qualities and quantities, in order to meet the individuals nutritional requirements. It is true that increased food production must increase food supply to the household, to ensure an increase in intra-household food allocation, proportionate to individual needs. There is however the need to be cautious not to use production expansion as a proxy for nutritional effect, as it may be misleading, if factors such as changes in the cropping system, livestock species, nutritional composition of foods produced, human energy requirements, production technologies, labour demands or composition and control of income are ignored.

Traditional farmers have generally adapted food production practices to meet environmental, economic and technological imitations. They minimize risk by planting variety of staple crops that mature at different times during the year. Mono-cropping may accentuate seasonal shortages, while traditional inter-cropping decreases the risk of long period, of time without sufficient food. Crops are planted to take account of unpredictable rainfall, insect infestation and different maturation rates. Even if the rains are late, or birds attack the mature corn, some part of this diversified system will produce food for sale and for family consumption.

Farmers also know that the weeks prior to the harvest of the new crops are a time for food shortages. Reliance on food crops of low nutritional status (mainly carbohydrates) during this time, usually have a negative impact on the nutritional status of the household members, especially the children. If these roots and tubers form a major portion of the diet for long periods of time, the children's nutritional status become seriously affected.

Commercialization of the agricultural system, a change from subsistence to cash cropping requires a change in inputs. To increase yield, farmers are encouraged to purchase hybrid or improved seeds in place of seed saved from the previous harvest, to purchase fertilizer and pesticides. Cropping systems usually have to be changed, to minimize the yield of the new seed varieties.

New technologies may require more intensive labour which must be hired or supplied by t he farm family. These changes in seasonal labour requirements are usually more critical for the women and especially the children of farm-families. If the commercial or cash crops is inedible, such as cotton, coffee, or tea, proceeds from the sale may have to be used, to purchase much of the family's food requirements, which would then be competing with non-food requirements.

Household gardens provide foods that add variety and important vitamins and minerals to the staple foods regularly consumed. Hunting and gathering of leafy plants, roots and fruits, add other nutritionally important supplements. Undisturbed, these food patterns are usually nutritionally sufficient. Families producing food for auto-consumption are more likely to ave greater diversity in their diet and to consume more food than families producing primarily for commercial purpose.

Household gardens that provide fruits and vegetables to supplement the family diet also provide a source of income to the women. However, when a new farming system requires that the female head of the household work int he field, to produce cash crop, she may not have sufficient time to manage the household gardening. This will resultantly adversely affect the nutritional status of the farm-family by decreasing the intake of fruits and vegetables and reducing the quantity of the additional foods, usually purchased with income from the sales of garden surplus.

Cultivation and maintenance of household garden (back-yard farming) is one of the major ways currently being propagated by the Family Economic Advancement Programme (FEAP) in Ogun State, as a measure of .poverty alleviation and enhancement of family nutritional status.

NUTRITION RESEARCH AS A COMPONENT OF FARMING SYSTEM RESEARCH

Farming systems research attempt to obtain a holistic understanding of the farm enterprise and to promote technology, cropping systems and livestock, that are consistent with the farmers resources and goals. Appropriate technology crops and animals are identified during the

reconnaissance survey and/or definitive phases of project design.

Nutritional concerns of children in agriculture should be integrated at the initial stage of project conceptualisation and design. Nutritional and child development experts are most familiar with anthropometric or biochemical indices, ethnographic studies, food consumption surveys and morbidity as well as mortality rates. These are criticized as too time-consuming costly, difficult and specific. Economists and agronomists on the other hand, prefer production indicators which nutritionists believe are too general and do not address differences in culture.

THE NEED TO INTEGRATE NUTRITION CONCERNS INTO THE CHILDREN IN AGRICULTURE PROGRAMME

From the foregoing it becomes pertinent to consider the integration of Nutrition concerns into the Children In Agriculture Programme, in order to ensure sustainability int he health and nutritional status of these children, regardless of their age and socioeconomic status. There is also the need to include Nutrition concerns in farming systems research after it has been duly considered by the agricultural, economic, health and nutrition experts, and an appropriate methodology jointly adopted.

The remainder of this paper will suggest data that might be collected in a field survey and how it might be used in measuring change. The intent is to encourage a multi-disciplinary and integrated approach to designing programmes for Children In Agriculture.

Indicators of nutritional change used in farming systems research much be simple to use and easy to interpret. They should not require cumbersome equipment, expensive supplies, refrigeration or electricity. For these reasons, most anthropometric and biochemical indicators have been difficult to incorporate into an agricultural project. The use of growth of pre-school children as an indicator for example, will bias the research sample, since it will eliminate families without young children.

If time and funds permit however, a formal nutrition survey including anthropometric biochemical and clinical studies, could be conducted in collaboration with the local health clinic or states ministries of health.

Nutrition concerns of farming systems research should focus on family food supply and intra household food distribution. Since crop diversity is related to diet diversity and ultimately, nutritional status, some indication of crop diversity must be included in estimates of house hold food production and acquisition

Data to be collected should include the following:-

- Food and non-food production from the fields including livestock
- Costs of production including fertilizers and credit facilities.
- Amount of crops consumed, sold or exchanged for inputs, such as labour
- Income from sales of food and non-food produce
- Household food production, including food grown in the garden or yard, small animals and food obtained through forage or gifts.
- Income from sale of household foods.
- Storage or processing losses.

With this data, changes in food available for family consumption as a result of a new far-system, could be identified including changes in:-

- Ratio of production to consumption: What proportion of the total farm production is sold or consumed by the family and how much additional food has to be purchased?
- Food Diversity: How many livestock and food crops are produced primarily for on-farm production.
- Food Cost: Cost of producing for on-farm consumption plus cost of food purchased; cost of food produced but not actually consumed should also be calculated.

Intra household food patterns should also be identified. The 24 hour dietary recall surveys which nutritionists generally use are difficult to administer in field surveys. Unless highly skilled interviewers are available, the dietary data collected will not be reliable.. Food frequency data is easy to obtain and specific enough for most farming systems

research.

Preliminary discussions with internal respondents, such as community or extension personnel can identify the food generally produced and consumed in the area, including the most important sources of energy and key nutrients, such protein, Vitamin A, Iron and Calcium.

CONCLUSION

Continued agricultural development is imperative, if the growing populations in third world countries are to survive and prosper. Programmes that address food deficits only by increasing output, or improving varieties may increase production while exacerbating other problems.

If nutrition concerns are included in farming systems research, the effects of changes in farming styles or technology on the well being of the farm-family and in particular, Children-In agriculture, can be monitored. If the new technologies have unforseen negative consequence, they will be readily identified and the new system can be modified. This is however not to imply that agricultural development mut be planned around nutritional needs of the farm-fammily. It does however suggest, that consideration for the health and nutritional status of the farm-family and in particular, Children in Agriculture, should play an important role in the initial project design stage as well as in the implementation, monitoring and evaluation stages. This will go a long way in preventing conditions of Protein-Calorie Deficiencies in these children.

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FAMILY ECONOMIC ADVANCEMENT PROGRAMME (FEAP): CONSIDERATION FOR THE DEVELOPMENT OF CHILDREN AND YOUTHS IN AGRICULTURE

BY

[1]AYINDE, I.A. AND A.F.O. [2]AYINDE (MRS)

[1]University of Agriculture, Abeokuta, Nigeria

[2]Ogun State Agricultural Development Programme (OGADEP), Abeokuta, Nigeria .

INTRODUCTION

The Family Economic Advancement (FEAP) came into being in 1997, with the budget pronouncement of President Sanni Abacha. The reasons adduced for the establishment of this programme were many and varied. Prominent among these are the fact that most programmes hitherto established (e.g. National directorate of employment (NDE), Directorate of Food, Road and Rural Infrastructure (DFRRI). National Economic Reconstruction fund (NERFUND),etc; though relatively successful in terms of implementation, did not involve the beneficiaries in the planning and implementation processes, did not incorporate effective monitoring strategies, did not provide favourable lending climate and maroeconomic stability as well as non-provision of simple and realistic collateral (FSP, 1998).

FAMILY ECONOMIC ADVANCEMENT PROGRAMME (FEAP)

The formal inception of FEAP was brought about by the promulgation of Decree 11 establishing it, by the Federal Government of Nigeria, on August 12th, 1997. This programme was put in place with a budgetary allocation of ₦4.3 billion in 1997 and ₦3.3. billion in 1998. Prior to the inception of FEAP, it was identified that most rural farmers are lacking in entrepreneurial skills and capital, have poor access to capital and have poor organizational skills. Also, it was identified that there is low

number of functional institutions providing credit to farmers, and where available, they have stringent collateral requirements. Moreover, the awareness of investment opportunities in the rural areas or the lack of appropriate technology to explore these opportunities geared the establishment of the programme.

OBJECTIVES OF FEAP

FEAP was formulated with the following objectives in mind:

1. Provide loan directly to people at ward level with the capital needed for establishing cottage industries.
2. Provide opportunities for the training of ward-based business operation.
3. Encourage the design and manufacturing of appropriate plants, machinery and equipment.
4. Create employment opportunities at ward levels
5. Improve living standards of the people
6. Encourage producers at ward levels to form cooperative societies.
7. Promote production and develop consciousness
8. Utilize all available local resources for the benefit of Nigeria through inspired production, storage, preservation, processing, recycling, packaging and marketing.
9. Involve private sector participation in its funding and implementation
10. Involve State and Local Government Areas in its funding.
11. Reduce rural - urban migration.

OPERATIONALIZATION OF FEAP PROGRAMME

The programme was established as an "empowerment programme" designed specifically for local - based producers of goods and services, and potential entrepreneurs in the area of establishment of Cottage Industries.

The programme is designed for all Nigerians and in particular the low income families, cooperative societies among others. The programme identifies agricultural cooperatives as pivots of agricultural development

in the rural areas, hence most of the benefits that will accrue to the beneficiaries will be channeled through the cooperative (which are expected to have a minimum of five members), which are expected to apply for the FEAP loan to the tune of ₦500,000.00 through a participating bank. 10 per cent of such loan is expected to be deposited in the first instance as part of the collateral while the equipment purchased with the loan will serve as additional collateral.

Loans are to be repaid within three years, after three months moratorium period from the date of production for industrial projects. However, the moratorium period varies with the type of project. Repayment of loan is within one year for beneficiaries in farming activities. Apart from these, a notional rate of 10 percent interest is payable every year on the loan yet to be repaid.

As a way of ensuring that equipment purchased are in the right quality and specification, emphasis has been placed on the local fabrication of equipment under the supervision of Standard Organization of Nigeria (S.O.N) and such equipment are expected to carry FEAP logo and FSP (Fammily Support Programme) inscription; while the manufacturers will also ensure the proper utilization of the equipment by training beneficiaries and maintaining the equipment.

RURAL CHILDREN AND YOUTH AS FOCAL POINTS IN AGRICULTURAL DEVELOPMENT

Agricultural growth is a necessary precursor of agricultural development, and agricultural growth derives from increased productivity of labour among others. The position of rural children and youths in agricultural development cannot be over-emphasized. Some areas where they play prominent roles are:

1. **Supply of Agricultural Labour:** Youths in the rural areas provide invaluable agricultural labour to the farm families. This lend to credence to the age-long traditional view held by rural farmers that having as many children as possible will enhance supply of more labour for future farm operations and increased agricultural output.

The growth pattern of children to youth stage in a rural setting, has attuned them to the rural way of life in its entirety; this has made it possible for them to fit in easily into farm work at a young stage (when they are supposed to be in nursery or pre-primary school) participating in menial farm work e.g. picking pepper, harvesting vegetable, conveying light loads from the farm etc; to a virile youthful stage when they participate in the real farm work from pre-planting to post planting operations. Given the inherent conception highlighted above, the need to give these youths the necessary education becomes immaterial so long as they do the farm work. This is one of the reasons for low level of education among the rural children and youths.

2. **Future Farmers:** The youths eventually graduate to have personal farms and the vicious cycle continues. Nevertheless, rural - urban migration results in the movement of some of them outside the village to earn better livelihood in towns leaving a few to carry on with the farm. Coupled with other factors like traditional method of farming and its attendant problems, poor storage, poor income , low level of investment etc., these lead to lower output level and a reverse of the process of agricultural development.
3. **Sociological Roles:** In an ideal situation, the rural youths are the prime movers of agricultural development efforts, given their virility and resourcefulness. This social role among others should be a necessary determinant for the inclusion of children and youth into the mainstream of FEAP so as to achieve its objectives.

INCORPORATING CHILDREN AND YOUTH INTO FEAP

Some of the expected benefits of FEAP includes food security, improved processing, preservation and storage to prevent wastages, packaging and marketing of products, reduction of importation of processed food, provision of employment, improvement in the standard of living and provision of a spring board for technical advancement.

These short and long term expectations cannot be realized in isolation

of the children and youth in the rural areas because they will directly or indirectly determine its success to a large extent. As a result of this, it is suggested that children and youths should be incorporated into FEAP from the following perspectives:

1 **Education:** In order to be technologically advanced, curricula aimed at developing the technical competence of the children should feature from primary education through secondary school education, and emphasis should be on the acquisition of practical experience. Hence all rural schools should be adequately equipped with human and material resources. Having these in place will reduce the rate of rural out- migration under the guise of looking for better schools in cities, and rural children and youths will grow up to appreciate their environment and make the best use of the opportunities they have.

2 **Provision of Enabling Environment:** Youthful stage is an adventurous stage whereby youths will want to explore avenues that will make life meaningful to them. Some of these basic rural infrastructure like electricity, for example, are indispensable in the citing of cottage industries, youths may not find it worthwhile to open up cottage industries in an inaccessible area which is also lacking in all the basic amenities; hence this is likely to defeat the objective of taking the programme to the grassroots level.

3 **Vocational Training of Youths:** This is also pertinent towards the success of FEAP. Training in the areas of agro-processing, record keeping, management skills etc, are essential in this regard. Hence, establishment of "FEAP" "Vocational Training Centre" will be a welcomed idea in this respect. This will allow beneficiaries of the programme to seek employment as operators of equipment in these cottage industries or come together as a cooperative outfit to provide a virile and qualitative management team capable of ensuring success of any FEAP funded business.

CONCLUSION

The programmes entrenched under FEAP are laudable, and given the continuity and proper implementation of the programme, it is capable of providing a launch pad for agricultural growth and development. However, the inclusion of children and youth into the programme cannot be over - stressed given their position an roles in the rural fammily set up. This will go a long way to achieve more success and achievement of the objectives of the programme.

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IMPACT OF AGRICULTURAL SCIENCE CURRICULUM ON CAREER ASPIRATION OF SECONDARY SCHOOL STUDENTS IN IKORODU AREA OF LAGOS STATE

BY

T.A. OKEOWO

Lagos State Polytechnic, Ikorodu, Nigeria.

INTRODUCTION

One of the traditional functions of agriculture is in employment generation which allows

both adult, youths and women to be gainfully employed in agriculture.

The United Nations Projected that there will be an increase in rural children population in developing countries from 1.91 billion in 1970 to 2.62 billion in 1990; whereas Auta (1972) noted that Nigeria youth including children constitute about 45% of the country's population and must of them live in rural areas. However, by the projection of the United Nation, children population in Nigeria by the year 2000 AD would have increased to 29.733,000 which is 104.8% increment compared to the present population.

In majority of developing countries more than 50% of the rural population is under 20 years compared with 30 to 40% in Western Europe and North America. This rapid increase in population have major implication for agricultural production, land use and rural development (IBRD, 1974). It is without doubt that this high rural population growth rate has a significant consequences for rural education which has a major role in agricultural development.

One of the categories of rural education according to UN field researchers is occupational education which is designed to develop a particular knowledge and skill associated with various economic activities and useful in making a living.

There is an inherent potential for substantial addition to total farm

output from existing hectares in the country if only skilled manpower, capable of applying modern production technology, could be mobilized to more agricultural productivity towards maximum potential.

However, shift in policy or imbalanced policy on agricultural development and industrialization has driven able bodied youths from rural areas to urban centres in search of non-existence or menial jobs.

It was to correct the imbalance and decline of interest in agriculture that led to the formulation of an educational policy in secondary schools with curricula that are vocationally based.

NEW FRONTIERS IN VOCATIONAL CURRICULUM IN SECONDARY SCHOOLS

The Federal Government in 1981 reviewed the educational policy of the country from which emanated the 6-3-3-4 system of education. One cardinal objective of the national policy on education is the acquisition of appropriate skills, abilities and competencies both metal and physical as equipment for the individual to live on and contribute to the development of the society.

More importantly, the National curriculum for senior secondary school has the following objectives for the agricultural education:

i. To stimulate and sustain students interest in agriculture.
ii. To enable students acquire basic knowledge and practical skills in Agriculture.
iii. Prepare students for further studies in Agriculture
iv Prepare students for occupation in Agriculture.

Schooling is believed to exert a powerful influence upon an individuals career development. The type of school and curricula content to which a student is exposed to, plays a significant role in stimulating career choice.

This study therefore intends to assess the impact of Agricultural Science curriculum on career aspiration of post primary school students. Specifically it intends.

a. To estimate the extent of influence which the subject matter has on interest of a students in taking up farming as a career and
b. To investigate socioeconomic factors perceived by students that makes farming a second rate profession.

METHODOLOGY

The study area was Ikorodu Local Government area with its relative agrarian nature. The primary data were obtained from the secondary school pupils and teachers while secondary data were from related research reports and journals. Questionnaires were given to teachers and pupils in the selected senior secondary schools that offers Agricultural Science.

Quota sampling was used among the schools of interest and register of students offering Agricultural Sciences was used for selecting respondents by taking them randomly through balloting.

Data collected were analysed through the use of descriptive analytical techniques.

RESULT AND DISCUSSION

Agricultural science teachers sampled believed there were no enough facilities and equipments for effective curriculum implementation.

The theory-based approach may not be enough to stimulate the desired interest in Agriculture as a career to students. Tutors have universally accepted that what one learns through seeing remains inplanted for a longer period in students learning experience.

For instance, when the students were interviewed on the state of available infrastructures and equipment for agricultural science, crop production implements such as hoes, cutlasses, spade et c constitute 74% of available items. Whereas there were no enough facilities for livestock.

Table 1 showed that only 26% and 36% were recorded as been available for piggery and rabbitry.

Table 1: Available Infrastructures and Equipment

PARAMETER	FREQUENCY	PERCENTAGE
Farm Implement	37	74.0
Land for Cropping	37	74.0
Pigs and pig House	13	26.0
Rabbitry House/Rabbits	18	36.0
Survey Equipment	17	34.0

Source: Field Survey, 1995.

The ability of a teacher to deliver the curriculum in a vocational subject such as agricultural science could motivate student in that particular profession, and the best judge of the effectiveness of an instructor is the student. Table 2 showed a working degree of rating within the variables. For instance, the student rated Quality of note highest whereas use of teaching aids was considered fair. Also taking students on field trips was rated very low.

The implication of this result is that agricultural science teachers relies mostly on given notes as the major medium of instruction contrary to the widely accepted approach of combing various form of communication in teaching.

The reliance on this method alone may not arose the necessary interest in student and may contribute to the students negative attitude to making a career in agriculture.

TABLE 2: Effectiveness Rating by Students

	RATING RANGE		
Parameter	**High**	**Average**	**Low**
1. Quality of note	45	5	-
2. Use of teaching aids	14	27	4
3. Extent of coverage of syllabus	28	12	4
4. Field Trips	5	2	3

Source: Field Survey: 1995.

The school is an agent of socialization where individuals acquire various attitudes, knowledge and skills which eventually influence aspiration and individual occupational choice. An assessment of the students attitude to the subject matter via three variable was made. The result showed that attendance to lecture was rated fairly average whereas disposition to practical was poorly rated. This kind of rating does not portend a good future career in farming

Table 3: Attitude of Students to Agricultural Science as Rated by Tutors.

Parameters	**High**	**Medium**	**Low**
1.Attendance to lecture	32.0	48.0	20.0
2.Disposition to field work and practical	12.0	32.0	56.0
3. Home work and Exercises	20.0	60.0	20.0

Source: Field Survey, 1995.

There are several factors identified that hinders students in taking up farming as a career (Table 4). Result of the study revealed that the various schools sampled, capital requirements of farming (80%) was a major factor highlighted by the student that makes them not be interested on taking up farming as a career. The unstable climate and high level of risks and uncertainties in Agriculture was another highly rated factor that makes farming an un-interesting profession for the students. Furthermore, labour intensive nature of farming operations rated as highly as 68% was also another constraints by the students because they see farming as an energy sapping-based activities which make school children not to be interested in participating fully in future in farming.

Table 4: Agricultural/Career Selection Factors.

Parameters	Frequency	Percentage (%)
1. Labour intensive nature of farming operation	34	68.0
2. Capital requirements of farming	40	80.0
3. Unstable climate and high level of risks and uncertainty	35	70.0
4. Dispositions of parents to Agriculture as a profession	25	50.0
5. Pear-group Influence	10	20.0
6. Government policies and supports	15	30.0
7. Status of farmers in Larger society.	20	40.0

Source: Field Survey, 1995.

CONCLUSION AND RECOMMENDATION

This study is concerned with the assessment of the impact of Agricultural Science curriculum on career aspiration of post primary school students in Ikorodu Area of Lagos State.

It was designed to test the students attitude towards farming as a career. The outcome of the study produced the following results.

a. The common method of instruction by teachers is by the use of common examples with no excursion at all and a negative disposition of the student to field work.
b. There is inadequate infrastructures and equipment in most schools for effective teaching.
c. The extent of coverage of agricultural Science curriculum was considered too wide. Moreso, most of the students were just offering the subject for the purpose of passing examination.
d. Among the highly rated factors that influences their choice of farming as a career are: labour intensive nature of farming, capital requirement of farming, risks and uncertainties, and poor parental disposition to career in farming.

Consequent upon the findings from this study the following are recommended for consideration in improving interest of students in farming for continuity of the profession.

1. Government should provide more infrastructures and equipment in the various schools for teaching.
2. Government should put in place a special agric. Programme that will be mainly concentrated an enhancing the role of children and students in farming. Such programme should make farm input such as land, seeds, tractors and extension education more accessible to the students/youths.
3. Re-training of Agricultural Science Teachers should be emphasized through workshops and seminars so as to make the teachers more effective in curriculum delivery and efficient managers of available resources.

4. School Administrators should desist from making Agricultural activities things of punishment in schools so as to alleviate the negative bias for farming as an instrument of hardship.

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THE PLACE OF PRIMARY EDUCATION IN SUSTAINABLE AGRICULTURAL DEVELOPMENT; A FOCUS ON CURRICULUM

BY

AJAYI, A.O. AND B.O. LAWAL

Quality of Life Foundation, Ibadan, Nigeria and
Ogun State University, Ago-Iwoye, Nigeria Respectively.

ABSTRACT

In Nigeria, formal education of children commences at the primary schools. This level of education is the only formal education attained by a larger proportion of the nations population. Primary education among others is expected to provide a child with the opportunity of attaining manipulative skills which will enable him function effectively in the society within the limits of his capacity. If achieved, this objective is worthwhile. This paper explores the extent to which agriculture is promoted in the curriculum of primary schools, which is necessary for sustainable agricultural development.

The study reveals that rudiments of agriculture are taught only as a part of general science.

The paper finally suggests that the teaching of agriculture be encouraged with the aim of creating awareness and arousing the interest of pupils who are potential farmers of the future. Establishment of school gardens and excursion to established farms are suggested.

INTRODUCTION

Education like other social institutions is a system of social practices evolved around a valued function of the society. Those who participate, the patterns of interaction, the means adopted and the manifest ends are culturally specified and sanctioned. Education is therefore the process of transmitting and acquiring the socially approved aspect of cultural

heritage (Ekong, 1988). Learning, especially of culture actually starts informally in the family, religious group and the community at large. Formal education is limited to the process of teaching and learning carried on at specific times in particular places outside the home for definite periods by persons specially prepared or trained for the task (Herskorit, 1949). According to the International Council for Educational Development, formal education is defined as a hierarchically structured full-time chronologically graded system, running from the primary level through to University level and including general and academic studies as well as a variety of full-time technical and professional training, generally controlled by a Ministry or Department of Education.

In Nigeria, history of formal education can be traced to 1842 when learning to read and write were introduced by the Christian Missionaries (Fafunwa, 1974). According to Uche (1984), the period 1842 through 1882 was a milestone in the history of formal education in Nigeria. The period witnessed the introduction of literary education of Western European countries by the colonialists with the active involvement of Christian Missionaries.

The curricula of these formal institutions were developed to spread Christianity and to produce low and mid-level indigenous personnel for administrative posts. The products of this system were employed as catechists and pastors for churches, and trainees while others were appointed to be clerks for government and commercial houses. The curricula therefore emphasize European values while alienating the learners from their cultural background (Farrant, 1964).

The revolution in education started with the nation-wide National Curriculum Conference organized by the Nigerian Educational Research Council (NERC) in 1969. Part of the outcome of the Conference is the National Policy on Education which was first published in 1971 by the Federal Government which is now revised and enlarged in 1981. One of the main objectives of formal education stated in the policy is the acquisition of appropriate skills, abilities and competencies both mental and physical as equipment for the development of the society. The third

section of the policy is specific on Primary Education. Some of the objectives of primary education are:

i. developing in children the ability to adapt to his changing environment;
ii. giving the child opportunities for developing manipulative skills that will enable him function effectively in the society within the limits of his capacity; and
iii. providing basic tools for further educational advancement including preparation for trades and crafts of the locality.

In another development, the Organisation of African Unity in a statement of child's right stated in article eleven that every child shall have the right to education which shall be directed to the preservation and strengthening of positive African moral, traditional values and culture, development of respect for the environment and natural resources. Nigeria in 1976 adopted a National Policy of Universal Primary Education. This is the first major effort taken on a national scale aimed at ensuring that all children of school going age in Nigeria had the opportunity to go to a school of their parents choice. The policy resulted in an increase of primary school enrolment from about 3.7 million in 1970 to 14.8 million in 1982 (See Table 1).

TABLE 1: Primary School Age Population and Enrolment Ratio (1981-1990)

YEAR	Primary Sch Age Pop. '000.	Primary Enrolment '000	Enrolment Ratio
1981	14,761	12,117	82
1982	15,533	13,778	91
1983	15,827	14,677	93
1984	16,353	14,383	88
1985	16,897	13,025	77
1986	17,460	12,915	74
1987	18,038	11,540	64
1988	18,635	12,691	68
1989	19,545	12,721	65
1990	20,180	13,607	67

Source: Federal Ministry of Education and Youth Development, Lagos (1993) Basic Education For all in Nigeria by the Year 2000, Master plan, p.22.

Education in Nigeria: Primary Schools in Focus

The primary school level in Nigeria is the foundation of all the formal education hierarchies on which subsequent formal acquisition of knowledge is based. It is designed for children between the ages 6-12. Pupils are expected to spend a minimum of six years in the system going through primaries one to six. At this level, eleven subjects are taught. These are Arithmetic, English, Indigenous Language (Yoruba, Hausa, Igbo), Social Studies, General Science, Family Living, Cultural and

Creative Arts, Writing, Physical Education, Religious Knowledge and Agriculture (Agbola, 1993). Primary school is now popularly attended. Although, there is a fall in enrolment ratio, notable from 1986, which coincides with the commencement of Structural Adjustment Programme (SAP).

Apart from the known fact that primary education constitutes the broad base of the educational pyramid in Nigeria, it has been conjectured that for a sizeable proportion of the children, primary education may be the only formal education that they are opportuned to have (Bajah, 1992). Many of the children may drop out of school before completion while others may not just be able to proceed to the next cycle of education and be back into the larger society. A comparison of the number of children completing their first cycle of education in the primary school with the number proceeding to secondary schools revealed an alarming gap as in Fig. 1.

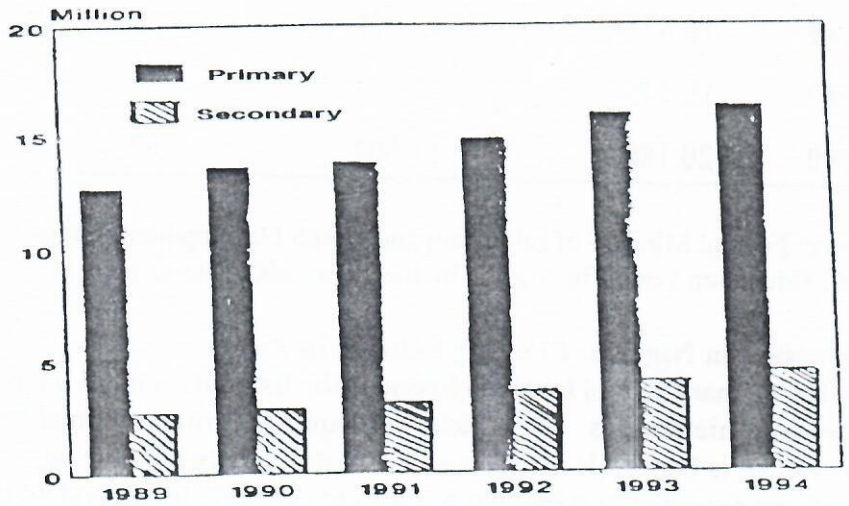

Fig. 1: Total Enrolment in Primary and Secondary Schools
Source: FOS (1995) Annual Abstract of Statistics.

The drop out rate from primary school between 1986 and 1992 is presented in Fig. 2. The highest was 1987 which is 52.4% while the least was 1992 with 30.5% drop out. Though many reasons may be responsible for the trend. Those that could not proceed will be back in the larger society only with primary education completed or uncompleted. To them, primary education is the only feasible formal education they had. However, if the general objective of primary school as stated in the National Policy on Education is achieved, a child which had only primary education is expected to have developed manipulative skills that will enable him/her to function effectively in the society as artisans or farmers.

It is therefore obvious that the primary school will have the highest number of students at every point in time. This being so, the resources directed at training children should be seen as a worthwhile investment for National Development.

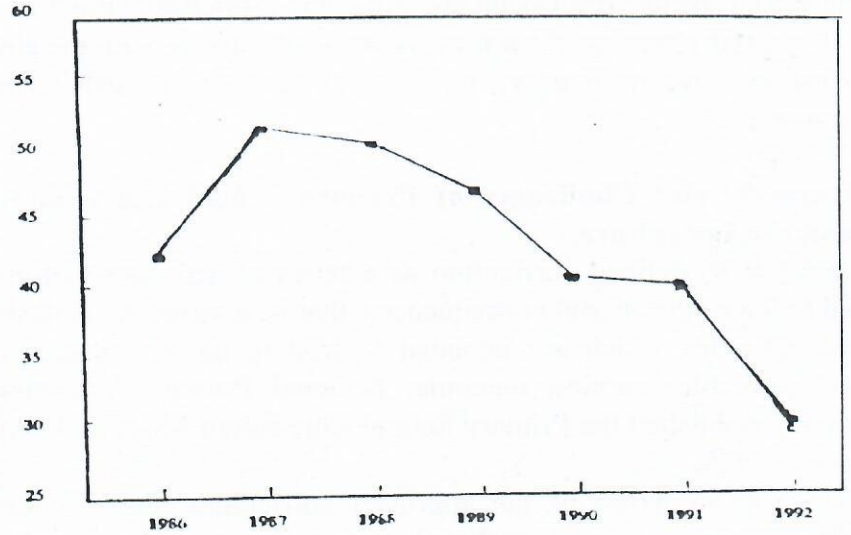

Fig. 2: Primary School Percentage drop out rate
Source: Federal Ministry of Education and Youth Development (1993) Basic Education for all in Nigeria by the Year 2000

In addition, the demographic profile of most African countries shows that the groups of 0-15 years usually represent at least 40% of the population. If the more common definition of the child to include 18 years is adopted, the proportion of children will reach at least half of the population. Care of this proportion amount to care of about 40% of the population. Education is the way to prepare them for future as leaders, followers, and good citizens.

The importance of primary education to sustainable development cannot be overemphasized. It also provide the basic tools for further educational advancement.

In the case of rural Nigeria, a child is likely to take after his father's profession. And the predominant occupation in rural areas is farming. Children, which completed the primary school at the age of twelve years is likely to work with the parents on their farms, thereby undergoing the training of a farmer though informally. The practices of Agriculture by these children leads this discussion on children in Agriculture practices. The next part will overview the primary school curriculum, with the aim of suggesting ways to improve on it so as to foster a sustainable development.

The Prospects and Challenges of Primary School Curriculum: Emphasis on Agriculture.

Eisner (1974) defined curriculum as a series of activities that are intended to have educational consequences, that is, a series of carefully designed activities which are intended to lead to the attainment of students' desirable learning outcome. National Primary Education Commission published the Primary School Curriculum Modules being used now in 1988.

A close examination of the approved curriculum revealed that Agricultural Science is not actually given prominence. However, an exploration of the topics under General Science pointed out the fact that some rudiments of Agricultural Science were included in the curriculum (See Table 2.)

TABLE 2: Rudiments of Agriculture in Primary School Curriculum in Nigeria

TOPIC	Class/Level where taught		
Learning about Environment (Plant and Animal	I	II	III
Air and Water	II	III	IV
Soil and Rocks	IV	&	V
Gardening	IV		
Domestic Farm Animals	V		
Growing Better Crops	VI		
Environmental Management	VI		

Source : National Primary Education Commission (1988) Primary School Curriculum Modules.

Table 3: Breakdown of Agricultural Related Contest of Primary Six Curriculum

Subject Matter	Content Element	Objectives	Pupils Activities	Teaching Aids
Growing Better Crops.	1. Growing crops without fertilizer and compost. 2. Growing crops with compost. 3. Growing crops with fertilizer. 4. Irrigation of crops	1. Observe and describe the effect of using compost and fertilizers in growing common crops: 2. Name and describe some commonly used fertilizer; 3. Prepare and use compost from local materials; 4. Identify areas where compost can be found in the locality; 5. Describe the process of compositing. 6. Observe and describe irrigation.	1. List materials for making compost and collect them from the home, slaughter-house, school, buy, animal houses ora pens; 2. Make a variety of compost heap; 3. Use compost and fertilizers for growing crops; 4. Compare the effects of the use of fertilizers and compost on farm.	(A) 1. Pot. 2. Soil. 3. Compost and fertilizers 4. Maize. 5. Groundnut beans 6. Lettuce. 7. Animal dung. 8. Leaves. 9. Grasses.

Subject Matter	Content Element	Objectives	Pupils Activities	Teaching Aids
Erosion	1. The meaning of erosion 2. Types and causes of erosion 3. Factors that aid erosion 4. Effects of erosion 5. Erosion control	1. State the meaning of erosion 2. List and explain the major types of erosion 3. State the causes of erosion; 4. State man's activities that aid and promote erosion; 5. List of major adverse effects of erosion; 6. Outline methods of controlling erosion; 7. Undertake erosion control activities	1. Pay a visit to and study an erosion site, reporting the state of buildings; 2. Examine photographs of erosion sites and discuss; 3. Discuss the problems of erosion and their solution; 4. Choose an erosion site inside or very near the school; use earth stones etc. to arrest the erosion; 5. Examine the characteristics of soil from erosion sites, and discuss in class.	A. 1. Charts and photographs. 2. Shovels 3. Diggers 4. Planters. 5. Soil samples. 6. Grasses. 7. Wine bread. 8. Nursery plants.

The listed topics are very important to Agricultural development. They are relevant and forms the listed topics are very important to agricultural development. They are relevant and the basic rudiments on which better practical experiences could be build. The topics could also serve as a guide in making the right decisions of choice of land, erosion control, method, environmentally friendly and economically sustainable farming techniques. All of the aforelisted decisions if rightly taken could promote agricultural development.

A further breakdown of selected topics into content element, objectives, activities and teaching aids are presented in Table 3. This gives a clear revelation of the knowledge and skill expected to be acquired by a primary school pupil if the objectives set were achieved

A look at the activities in the rural setting adds more to the appreciation of children's knowledge of agriculture. It is generally accepted that the people in the rural areas are predominantly farmers. Children in most cases live with their parents. They attend schools for about six hours in a day which sum up to about thirty hours in a week. The rest of the time during the week were spent with their parents on their farms and at home,

Their school free days such as weekends, public holiday and school vacations are mostly given to farm activities. Some informal education will as a matter of fact take place. With this background, it may be concluded that school children within the rural setting will apply their knowledge acquired at school, probe the authenticity of such knowledge by asking questions from their parents and eventually get them registered in their sub-consciousness for eventual use in the future

Children in the rural areas also learn more of indigenous farm practices known, tested and accepted in their area. The importance of and need to include such knowledge in the formal school curriculum have been advocated.

From the foregoing, it became clear that with the establishment of school garden within the school premises or somewhere very close to school, children in primary school did learn farming practices by doing.

This is done usually under the guidance and supervision of a group of teachers. In rural areas, however, children live with their parents who are farmers. They also learn more of farming activities, though informally. Learning by watching and doing in most cases reveals the involvement of children in Agriculture. The extent of children's involvement in agriculture and factors associated with same may vary over space and time.

CONCLUSION AND RECOMMENDATIONS

The adoption of Universal Primary Education Policy in 1976 resulted in an increase in the enrolment of children into .primary schools. Primary education constitute the base of the educational pyramid and is the only formal educational institution attended by a proportion of the population. One of the objectives of this institution is mainly to develop in children is the teaching of rudiments of agriculture. This forms the foundation upon which experiences are built. Children by their interest may then be involved in Agricultural practices. The rural children whose parents are predominantly farmers also have further learning experiences on their parents farm informally. All of these educational impact can make them good farmers of the future.

It is concluded that primary education is significant in promoting agricultural development, since it may be the only formal education that some children will have to enable them read and write. It therefore behooves us that efforts directed at making the learning experience in primary schools be made relevant to the culture and government programmes of Sustainable Agricultural Development. Introducing children to relevant agricultural practices through learning by doing in primary schools should be encouraged.

Education is generally acknowledged to be the surest way out of the tunnel of poverty. It is important therefore to make the utmost of primary school which is the foundation and the most popular cycle of educational institutions. Agriculture should be emphasized and be accorded the status of a compulsory subject for teachers in training. A very good primary

education can go a long way in helping those that are unable to go further in education. Ability to read and write enhances understanding and record keeping which in turn promotes good farming result. Farming in the rural area may be full-time or part-time. Whither, the role of education in its success is significant.

This paper recommends that the primary education in Nigeria should be accorded a very good recognition. Teachers should be well trained in agriculture while teaching of rudiments of agricultural sciences should be encouraged. This will promote the achievement of advocated sustainable agricultural development.

Rural and urban primary schools established where land abounds should be encouraged to have school garden where children will learn agricultural practices by participation. The schools chocked up within the developed urban areas could be encouraged to establish rabbitry, poultry and some other livestock farms just to demonstrate the production to children who may be interested later in life. However, where this is not possible, concrete arrangements could be made to take pupils on excursion to established farms once in a month. This will go a long way in arousing their interest in agriculture.

The education calendar being used should be integrated into the nation's agrarian time table so as to enhance children's contribution to the nation's agricultural pursuit. This could be done by making the economic, socio and political environments conducive to both pupil and the teachers. Maintaining a strike-free school calendar will answer the riddle.

Finally, bringing children who are future youth and adults to the level at which they appreciate agriculture and determine to go into it either as career or part-time venture will surely go a long way in enhancing sustainable Agricultural Development. This however must commence at the primary school level.

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RURAL CHILDREN IN AGRICULTURE: COUNSELING AND EDUCATIONAL PLANNING IMPLICATIONS

BY

LASUN GBADAMOSI AND A.B. AKINDELE-OSCAR

Faculty of Education, Ogun State University, Ago-Iwoye, Nigeria.

CONCEPT OF RURAL CHILDREN:

Sociologists have not reached a consensus on who a youth is. According to Friedman (1971) youth is a group of human beings who have reached the age of puberty but have not yet acquired the full rights of adulthood. Akinbode and Osuntokun (1977) conceptualized youth as a given educational, societal and family situation which is explained as a youth still going to school; has neither started employment no own a house of his own. This explanation of who a youth is cannot be universally accepted because of the differences among various societies and the fact that transition between youth and adult is gradual.

The Hague Recueil (1961) defined youth as an individual of either gender whose age is between 15 and 24 years. Also, the National Population Commission (1992) pronounced the National census figures in Nigeria as, 45 percent of the population being children below 15 years of Age. The lack of interest among the rural youth (children inclusive) to fully participate in agriculture led to deteriorating food situation in the 1980s and 1990s.

With as large as 45 per cent of children in Nigerian population and 80 per cent of whom live in the rural areas, these rural children/youth represent the link between present and future as well as reservoir of labour. Therefore, the future agricultural production of the nation rests squarely on the shoulder of these youth/children.

Alabi (1991) opined that since youth constitutes up to 50% of the Nigerian population, only well coordinated programmes that channel their energy in a productive way will yield positive benefits to the nation.

In agricultural development, the youth have a number of characteristics which when nurtured and utilized are invaluable assets to agricultural extension and rural development. The characteristics according to Jibowo (1989) are: innovation proneness - the youth are predisposed to bringing about new changes for personal, occupational and community development; minimal risks eversion-the youth have little dislike for taking on matters which would lead to their personal development; faster reaction time-the youth reacts fast to stimuli in his environment; less fear of failure - the youth ventures into the unknown readily because he has less fear of failure, he has opportunities for future trails, and he has little or no investments which might be threatened by failure; less conservatism - the youth yearns for change more than the adults; greater physical strength; greater knowledge acquisition propensity; social propensity; and, faster rate of learning. Alabi (1991) submitted that a poorly co-ordinated programme to develop children (especially rural-children) will lead to rural-urban migration thereby further compounding the problems of over population and increase in social vices such as pick-pocketing armed robbery, drug peddling etc in the cities. He Submitted further that, it will lead to significant reduction in food production and; future food security for Nigeria.

Summers (1962) opined that for new ideas to make considerable contribution in influencing the attitudes of the generation, rural youth/farmers' children are to be in the vanguard. Emphasis on agricultural development had been shifted from individual to group and the basic group is the farm family comprising the father, mother and their children. Therefore, the rural children are the farmers' (traditional) children. In a survey conducted by Ogun (1997) on farmers' children's reasons for farming, 45 per cent of the respondent engaged in farming activities because they provide income for the family while 23 per cent do it for human subsistence, only 3 per cent do it because of the prestige it commands while 11 per cent do it to keep the farm occupied, another 11 per cent do it for other reason (these range from just to be engaged as against roaming about the street to being forced by their parents) while

9 percent did not respond to the question.

It is important that these rural children who are perceived as the future army of food producers be counselled towards taking careers in agriculture and also the nation's educational planners should draw a master plan towards bringing about a balance in the manpower demand and supply in the agricultural sector.

CAREERS IN AGRICULTURE:

Agriculture is a broad based activity or occupation. According to Makinde and Alao (1987), workers in agricultural occupation often work on farms and poultries. Thus individual who hate working in 'out-of-office' setting may not take to agricultural occupations. A purely subsistence agricultural practice need little or no formal education. However, for a mechanised agricultural practice, formal education is necessary. There are Polytechnics, Universities and Colleges of Agriculture in Nigeria that run courses in Agriculture with different areas of specialization which includes Agricultural Biochemistry, Agricultural Biology, Agricultural Economics, Agricultural Engineering, Animal Science, crop Science or Agronomy, Forestry, Horticulture, Soil Science and Veterinary Medicine (Kuti, 1982).

Good health and physical stamina are essential .personal qualities for success in agricultural practice. For youths interested in securing formal education in Agriculture up to first degree level, the entry requirements are as follows: 5 credit passes at the SSCE or GCE "O/Level which must include Mathematics, Agricultural Science or Biology, Chemistry, English Language and any other subject. Diploma courses in Agriculture also exist in Polytechnics and Colleges of Agriculture all over the Country. Entry requirements into these institutions vary from one institution to the other (Makinde and Alao, 1987).

FACTORS INFLUENCING CHOOSING AGRICULTURE AS A CAREER

Adugbo (1984) quoting Lockwood (1975) made a list of the commonly cited factors on the choice of an occupation and they include: age; intelligence; course of study pursued (school subjects); school marks; interests; aptitudes; abilities; work experience; environment; physical status, economic status; amount of occupational information; nature and degree of occupational counseling; motives or drives; sex; self-knowledge; values; and vocational test data. Although, the list of factors which influence vocational choice seems long, yet, super and Overstreet (1960) feel that some determinants are more important. They believed that intelligence and socio-economic status were most important.. Empirical investigations that have been carried out locally evidenced that inadequate occupational information interests; and pressure that the modern world put on youths tend to force the rural children into choosing agriculture as an occupation.

These research questions and hypothesis will be answered and tested respectively in this study:

1. What are the factors influencing youth attitudes towards future participation in agriculture?
2. What are the guidance and counseling implications of youths taking careers in Agriculture?
3. What are the educational planning implications of having children taking careers in Agriculture.

Ho_1 - Each of the factors motivating occupational choice will not be significantly popular than one another in influencing the choice of agriculture as a career amongst Ogun State University undergraduates in College of Agriculture.

METHODOLOGY

The study was carried out amongst the students of Ogun State University College of Agriculture.

A total of 50 students of the College were randomly selected. Thereafter, a pre-tested Motivation for Agricultural Choice Scale (MACS) was used to collect information on the factors that have influenced their choice of Agriculture as a career. These influencing factors: External Influence; extrinsic-reward oriented values; self - expression values; and people-oriented values were elicited as making them to choose agriculture as a career.

FINDINGS AND DISCUSSION OF THE TESTED HYPOTHESIS

TABLE 1: Test of Relative Popularity of Factors influencing Students' choice of agriculture as a Career.

External Influence 12(12.50)	Extrinsic Reward 12(12.50)	Self Reward 12(12.50)	People Oriented values 9 (12.50)	Total 50

df. 3 P 0.05
X^2 cal = 2.64 X^2 tab = 7.82

As shown in the above table I, the x^2 calculated ratio of 2.64 is less than the x^2 tabulated ratio of 7.82. Hence, we shall accept the hypothesis which states that each of the factors motivating occupational choice will not be significantly popular than one another in influencing the choice of Agriculture as a career amongst Ogun State University undergraduates in college of Agricultural Sciences. This result shows that none of the four factors: external influence, extrinsic reward, self expression and people-oriented values is outstanding as a motivation for occupational choice. The implication of this finding is that all the four factors have equal chance of influencing the choice of agriculture as a career by the respondents.

RURAL CHILDREN AND FUTURE FOOD SECURITY

There is now a common agreement on the fact that the children-in-Agriculture is not in support of child labour. Though, it has been established that with the assistance given towards the rural children/youth participating in farming activities, the rural children/youth may resourcefully make use of their farming knowledge, skill and experience acquired through socialization process right from childhood to advantage and thus enhance the continuity and sustenance of farming profession and consequently increase the production of food and industrial raw materials.

The Structural Adjustment Programme has ushered in a new era of renewed interest in agriculture and food production. The need to guarantee food security not only for our teeming populace but also for our neighbouring countries devastated by the effects of droughts underscores the strategic nature of the agricultural sector in the economy. Given the ever increasing population and the increasing use of our agricultural products in industry as well as the generally low level of productivity associated with Nigerian agriculture, the future of the sector should be a thing of concern to us all.

Table 2: Nigeria: Projections of Basic Human Needs

	Population (million)	Food calories in trillion kilo Calories	Protein in trillion grams.
1980	88.993	97.382	2.134
1985	103.097	112.891	2.474
1990	119.518	130.872	2.868
1995	138.554	151.717	3.325
2000	160.622	175.881	3.855

Sources: Olayide, S.O. et al (1972) A Quantitative Analysis of Food Requirements, Supplies and Demands in Nigeria (1968-1985); FDA Lagos, Nigeria. Calories requirements are projected at 1.095 million kilo calories per cent per annum whilst protein is at 0.024 million grams per caput per annum).

The Table 2 above reveals that by the year 2000, we will need nearly twice the amount of most of what we consume today from tubers and grains to protein items such as beef and fish.

Also, as you may be aware, close to 40 per cent of our farm output is lost annually as a result of lack of storage facilities or poor handling generally. The question then is are we sufficiently equipped to guarantee food security and also supply our industries with the needed agricultural raw materials in the 1990s?

TABLE 3: Estimated Rural Population (Million)

	Total Population	Rural No	Population per cent of Total	Farmer No.	Populations Per cent of Total	Rural Labour force	
						No.	Percent of Total
1980	88.933	64.381	72.39	14.056	15.81	48.286	54.29
1981	91.601	65,822	71.86	14.197	15.50	49.367	53.89
1982	94.348	67.280	71.31	14.339	15.20	50.460	53.48
1983	97.179	68.757	70.75	14.482	14.90	51.568.	53.06
1984	100.094	70.251	70.19	14.627	14.61	52.588	52.64
1985	103.097	71.762	69.96	14.773	14.33	533.88	52.21

Source: Eweka, J.A.; Bello-Osagie, V.E. and Olayide, S.O. (1979) Village Development: Food Basket Management Strategy, Ibadan: Centre for agricultural and Rural Development.

From the above Table 3, it could be seen that averagely 70% of the total Nigerian population between 1980-1985 are rural population. According to Olunuga (1987) the highest proportion of our agricultural production takes place in the rural areas. If we are to increase agricultural production,

therefore, we must positively promote the development of the rural area and the farming practitioners including the rural youth/children engaging in farming activities.

TABLE 4: NIGERIA; Farm Productivity Situation

	Cultivated Area (Mil.ha)	Output (Mil.tonne)	Yield/ha. (Tonne)	Potential Yield/ha (tonne)	Productive Efficiency (Per Cent)
Maize	1.425	1.425	1.000	5.380	18.59
Millet	4.897	2.957	0.604	2.062	29.29
Sorghum	5.658	4.041	0.714	2.242	31.85
Rice	0.255	0.297	1.165	3.363	34.64
Yam	1.188	11.997	10.098	45.194	22.34
Cassava	0.959	6.175	6.439	40.153	16.03
Sweet Potatoes	0.039	0.193	4.063	11.747	34.59
Cow Peas	3.953	0.903	0.228	2.690	8.48
Melon Seed	0.393	0.066	0.168	0.560	25.85
Cocoyam	0.283	1.493	5.276	11.724	45.00

Source(s)

i. Federal office of statistics (1972) "Rural Economic Survey of Nigeria" Res/3

ii. Olayide, S.O. (1976) Economic Survey of Nigeria 1960-1975, APC, Ibadan.

The Table 4 above revealed that the productive efficiency of cocoyam was highest with 45 per cent while cowpea was lowest with 8.48 per cent. It also revealed that yam had the highest potential yield per hectare with 45.19 tonne which was closely followed by cassava with 40.20. The productive efficiency of most of these crops could be improved with the involvement of more children in Agriculture who could imbibe new technology in their farming activities because of their innovation proneness and less conservatism as opined by Jibowo (1989).

Table 5: World; Labour Force in Agriculture (Percentage)

	1970	1975	1980	1985	1989	1990	1991	1992	1993
World	76	73	70	67	65	65	64	64	63
Nigeria	71	70	68	67	65	65	65	64	64

Source: African Development Fund (1994) African Development Report.

With the Table 5 above, it could be seen that the labour force in Agriculture in the world is declining from 70 percent in 1980 to 63% in 1993. This could be due to introduction of technology which dictates for a decrease in labour force. The trend is same in Nigeria. The labour force in Agriculture in Nigeria which was 71 percent in 1970 declined to 63 percent in 1993.

It has also been projected that by the year 2000 AD, Nigerian population will be about 120 million. Out of this number, the rural component will be about 75.477 million or 79.57 percent while the urban will be 24.521 million or 20.43 per cent. It was further projected that 71.609 million of the rural component will constitute the labour force while 35.805 million or 50 per cent of the total labour force will be Youth/children, 20,050 million or 28 per cent as women or 15.75 million or 22 per cent as men (Federal Government of Nigeria, 1975).

Table 6: Number of Employees in the Ogun State Ministry of Agriculture and Natural Resources, Department of Extension, veterinary Services, Livestock, produce in Nigeria.

Cadre	Male	Female	Total No. Of Employees	No of Established Posts	No. Of Vacancies
Agric Officer	10	1	11	28	17 (60.7%)
Agric Planning Officer	3	1	4	7	3 (42.9%)
Produce Officer	4	-	4	8	4(50%)
Livestock Officer	12	4	16	34	18(52.9%)
Agric Engineer	3	-	3	6	3(50%)
Veterinary Officer	16	2	18	27	9(33.3%)
Forest Officer	15	-	15	29	14(48.3%)
Fisheries Officer	24	1	25	43	18(41.9%)

Sources: Ogun State Government (1987) Report of A Manpower Survey of the Ogun State's Public Service; Ministry of Finance and economic Planning.

From the Table 6 above, it could seen that in all the areas of specialisation of agriculture in the Ministry, there were vacancies ranging from 33.3 percent in the case of veterinary officer to 60.7 per cent in the case of Agricultural officers. It also revealed that female workers were not many in agricultural practices. The percentage of female workers as seen on the table was 10.3.

RURAL CHILDREN AND FUTURE FOOD SECURITY: COUNSELING AND EDUCATIONAL PLANNING IMPLICATIONS

The implications of not meeting the felt or expressed needs of the rural children in the are of occupational choice will have a far reaching effect on the children's later career development.

If the career need to the rural children is not met, it will deny the society the opportunity of tapping its human resources at the early stage of life-a factor important in the human resources development of the society which consequently can curb mass unemployment, frustration, and youth involvement in crimes.

The observed inadequacy of parents and family-elders in meeting the career education or need of the student through advice has an implication which borders on the lack of a sense of professional competence evident among many of the parents and family-elders.

Towards the realisation of the aspirations of the rural children, the educational planners provide the necessary educational opportunities for them. The educational planners monitor the manpower demand and supply to bring about an equilibrium in the world of work and the school.

The educational planners give adequate information on manpower needs in the Agricultural sector so that specialists in various fields of agriculture are not over-or under-produced in the labour market.

RECOMMENDATION:

The government should provide professional guidance counsellors in rural schools who will provide occupational information which will reduce the usual conflicts and problems of occupational choice among rural children.

Effective vocational training programmes should be provided for the rural children by the counsellors to help the youths learn job finding skills. This could be through the teaching of their specialized subjects by means of discussion, writing , reading, visitations to library.

Subject teachers in rural schools without a qualified guidance

counsellor should be provided with in-service training programmes in order to become increasingly aware of the career implications of his teaching subjects.

Also, if detailed and current occupational information is provided to rural children, it may reinforce congruent occupational aspirations, exploration and choices which may in turn result in accurate self-knowledge and feed back on vocational choice competencies of rural children.

The educational planners should embark on manpower survey in the agricultural sector to compile the manpower needs, those in posts and the vacancies for a comprehensive human resources data bank in Agricultural sectors.

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UNDERGRADUATE FARMERS AT AGO-IWOYE: PRODUCT OF A LINKAGE PROGRAMME OF THE COLLEGE OF AGRICULTURAL SCIENCES WITH THE OTHER ACADEMIC ARMS OF OGUN STATE UNIVERSITY

BY

S. FOLA ADEDOYIN; S. O. A MORAFA; AND O. E. FAPOJUWO

College of Agricultural Sciences, Ogun State University, P.M.B 2002, Ago-Iwoye.

ABSTRACT

The general studies course in 'Modern Agriculture and Rural Development' designed and offered to all students of Ogun State University by its College of Agricultural Sciences as a linkage programme with all other academic arms of the University was subjected to impact evaluation. Specifically, the extent to which the generality of students in the university have acquired proficiency in practical farming and in the understanding of problems and prospects of agriculture and rural development processes was investigated. 'Before' and 'After' tests were used to generate data for the study in 1995/96, 1996/97 and 1997/98 sessions.

Prior to students participation in the course, 87.2%, 89.1% and 92.8% of them obtained marks below the cut off point of 40.0% for 1995/96, 1996/97 and 1997/98 respectively. On the other hand, 94.2%, 92.7% and 93.0% obtained marks above the cut off point of 40.0% for the three consecutive sessions respectively after completing the requirements of the course. The findings of the study revealed a consistently low knowledge of subject-matters in the area of agriculture and rural life prior to students' exposure to the course. After their completion of the course requirement, the knowledge-gained was significantly high.

This innovation of the Ogun State University has not only created a regular corps of 'undergraduate farmers' at Ago-Iwoye but it has also equipped such 'leader of tomorrow' with basic understanding of the underlying factors which could motivate them into promoting agriculture and rural development as the ace for a self reliant national economy.

INTRODUCTION

There is an obvious need for general exposure of all people to a certain level of education in agriculture and rural life. According to Adedoyin (1987), such exposure will enable people irrespective of their occupations, to understand and consequently participate in decision making process or influence decisions in support of programme aimed at agricultural and rural development.

Education remains the most effective instrument for introducing change (Jibowo and Adedoyin, 1991). Hence, a programme of general exposure in agriculture and rural life is better undertaken by people within the formal schools system. To this end, government has made participation in practical agriculture compulsory for all students in primary and secondary schools in Nigeria. But the autonomy usually enjoyed by tertiary educational institutions in the design and implementation of their academic programmes, especially along various fields of specializations has not made such a directive to be workable with them.

Tertiary institutions prepare people for direct entry into leadership positions in the various sectors of the economy. A programme of general Studies in agriculture and rural life will therefore be more meaningful and relevant at the tertiary level of education. This then calls for an effective linkage between faculties or departments of Agriculture and all other academic arms of tertiary educational institutions.

Linkage is a regularized pattern of communication interactions in the form of input-output relationship between a resource system and other system (Idowu, 1988; Adedoyin, 1990). What is therefore required is a programme of regularized interactions through which faculties or

departments of agriculture will be able to provide general orientation in agriculture and rural life to all students, irrespective of their chosen fields of study. The goal of such linkage programme should be to bring about improvement in general attitude and decision making abilities in support of agricultural and rural development as the ace to a self reliant economy.

The need for such linkage programme and general exposure in agriculture and rural life emanates from the fact that hunger has become the most important political factor towards the end of the 20th century. According to Igbozurike (1977), the cancerous food supply crisis is reflected in (i) the child who is too restless with hunger to pay attention in the classroom (ii) the operator unable to run a farm tractor for eight regular working hours, (iii) the planner incapable of clear thinking, (iv) a less than active baby staring at people out of rheumy eyes, (v) an adult unable to survive from fever attack, (vi) young people dying at about middle age, (vii) an academic incapable of intellectual articulation, and (viii) a pregnant woman giving birth to a physically deformed and mentally retarded 'leader of tomorrow'.

The ultimate measure of agricultural success is the consistency in adequately meeting the food, fibre and physiological needs of a nation. This could be linked with the idea of agricultural self-reliance which was explained by Eweka *et. al.* (1979) as the ability to meet requirements for basic consumption goods and basic services beyond basic survival and continuous survival up to productive survivals level. That is, it means more food, clothes, shelter, income and increase ability to pay for good and services.

Early exposure to knowledge and practice of agriculture and rural development can stimulate favourable life long behaviourial patterns (Christenson and Warner, 1985). Hence, the integration of General Studies in agriculture and rural life into the formal academic programmes of educational institutions will help to evolve the right type of leadership in developing agrarian countries like Nigeria. Specifically, it will create a pool of future leaders who will be capable of transforming the country's economy through accurate knowledge of opportunities for gainful

employment, productive resources and investment opportunities that abound about in the rural sector.

In the history of higher education in Nigeria, there is no record of such special and clearly articulated programme of general instruction in agriculture and rural life backed up with practical farm projects for all students, irrespective of their courses of study. This was the case until 1982 when Ogun State University was established at Ago-Iwoye, Nigeria and it came up with the innovation.

Ogun State University offers a course titled 'Modern Agriculture and Rural Development which is compulsory for all students admitted into its academic programmes and which must be passed at not less than 40 percent as a condition to qualify for award of degree of the University. Participation in the programme, especially the practical farm project aspect, is compulsory for all students of the university, irrespective of their courses of study. The course is a part of the university's programme of General Studies specially designed and offered by the College of Agricultural Sciences. The programme takes participants through theoretical and practical experiences in land or site preparation, inputs procurement, agribusiness management, crop production, animal husbandry, post-harvest practices, fisheries and forest resources management, policy and its implication, farm engineering practices, rural employment, rural industries, farmer' educational and extension practices, rural community leadership, community development process, gender issues in agriculture, rural youth programmes and special problems in agriculture and rural development.

A visit to Ogun State University at Ago-Iwoye brings one face-to-face with its undergraduate farmers' who are future medical doctors, lawyers, engineers, agriculturists, bank and business executives, teachers, planners, journalists, administrators, scientists, managers, religious philosophers, and military and political leaders working with commitment and pleasant excitement on their individual farm plots during their free periods. Members of the university community and the general public regularly visit the project sites to buy farm produce.

Adequate records are kept on all operations, production costs, sales and returns under close monitoring by the programme coordinators. Through this programme, Ogun State University tries to mobilize and orientate future leaders towards effective harnessing of agricultural and rural resources for overall national development.

This study as conducted between 1995-1998 after the university has existed for over seventeen years. The study had as its main objective the determination of the effectiveness of the General Studies programme of Ogun State University's College of Agricultural Science in promoting acquisition of general knowledge and abilities in modem agriculture, practical farming and rural development among participants of the programme.

MATERIALS AND METHOD

'Before' and 'After' tests were conducted in 1995/96, 1996/97 and 1997/98 sessions. The 'Before' tests were administered on this first lectured/project activity day in each of the sessions. On the other hand, the 'After' tests were administered on the last lecture/project activity day in each of the sessions. The same questions were used for the 'Before' and the 'After' tests per session but tests vary from one session to another. The same set of students took the 'Before' and 'After' tests in each of the sessions.

The test items focused specifically on problems of agricultural development; vocational and investment opportunities in agriculture; past and present approaches towards agricultural and rural development; practical knowledge and skills in agricultural production, post-harvest technology, and farm management; fisheries and forest resources management, land preparation and input procurement; timing of agricultural operation; and the role of extension services in agricultural and rural development; other areas covered include rural employment; rural leadership; produce marketing; women and youth programme; farm engineering services; agricultural policy and its implication; and the right attitude and habits for progressive endeavours in agriculture and in the

rural sector.

The development of test instruments and the scoring of students' responses were moderated by the programme coordinating committee comprising some members of staff of the academic department of the University's College of Agricultural Sciences. The moderation exercises were also carried out separately by a specialist innovational agricultural education within the university. With the cooperation of the programme Coordinators, the researchers were able to personally administer the tests. With full assistance of field staff of the Teaching and Research Farm it was possible to take care of the large number of participants involved. The results of the 'Before' and 'After' tests were simply compared to elucidate the findings. A score of 40% which is the minimum pass mark in the university was used as the cut-off point in deciding success or failure. A total of 2094, 2382, and 2514 students participated in the programme in 1995/96 1996/97 and 1997/98 sessions respectively.

RESULTS AND DISCUSSION

Table 1 shows the extent of practical knowledge, skills and effective abilities in agriculture and rural development possessed by students before and after their participation in the course including the practical farm project. In summary, the table shows that 2094 students from seven colleges/faculties took the course in 1995/96 session. Majority (87.2%) of them obtained marks below 40% while only few (12.8%) obtained marks above 40% before their participation in the course. On the other hand, majority (94.2%) of the participant obtained marks above 40% while very few (5.8%) obtained marks below 40% after their exposure to theoretical and practical aspects of the course.

The results for 1996/97 session also give a similar picture. For example 2382 students took the course out of which the majority (89.1%) obtained marks below 40% few (10.9%) of them obtained marks above 40% before participating in the course. After the participation, 92.7% and 7.3% had marks above and below 40% respectively.

In 1997/98 session 2514 students took the course out of which 92.8%

and 7.2% obtained marks below and above 40% respectively before participating in the course. The results obtained after their participation shows that 93.0% obtained makes above 40% while 7.0% obtained marks below 40%.

The results obtained in the three consecutive years shows consistency when compared. For example, 87.2%, 89.1% and 92.8% of the participants obtained marks below 40% before participating in the course in 1995/96, 1996/97 and 1997/98 sessions respectively. This is an indication of consistently low level of practical knowledge in agriculture and rural life prior to their participation in the course. But consequent upon their participation, 94.2% 92.7%, and 93.0% obtained marks above 40% in 1995/96, 1997/98 session respectively. Again, this is a clear indication of consistently high level of practical knowledge in agriculture and rural development.

CONCLUSION AND RECOMMENDATION

The General Studies course in 'Ibadan Agriculture and Rural Development' designed and offered to all students of Ogun state University by its College of Agricultural Sciences as a linkage programme with other academic arms of the University has proved successful and effective in providing general exposure in agriculture and rural life to all students of the university. This is irrespective of the courses of study of the students. It is therefore worthy of emulation by all tertiary institutions in Nigeria and in other countries desirous of mobilizing genuine support of Youth and children towards utilization of agriculture and rural resources as basis for national economic development. It should also be adopted as a tool for inculcating value for the dignity of labour. This strategy is recommended to all developing agrarian countries of the world in particular as a way of motivating their prospective leadership (traditional, cultural, Socio-economic and political) for sustainable improvement in agriculture and rural life as the ace for self reliant economy.

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TABLE 1: Respondents' levels of practical Knowledge Before and After Participating in the Courses/Farm project for 1995/96, 1996/97 and 1997/98

Session	College/ faculty	No. of Student	Before		After	
			Below 40%	Above 40%	Below 40%	Above 40%
1990/91	Arts	540	87.01	13.01	5.5	94.5
	Agriculture sciences	134	88.1	11.9	1.5	98.5
	Education	378	94.1	5.9	10.7	89.3
	Health Sciences	162	74.1	25.9	6.2	93.8
	Law	204	98.0	2.0	5.9	94.1
	Sciences	344	84.4	15.9	4.7	98.3
	Social and Management Sciences	376	83.5	16.5	4.3	95.7
	Total	2094	87.2	12.8	5.8	94.2
1991/92	Arts	500	89.5	10.5	9.2	81.8
	Agricultural Sciences	164	78.0	22.0	10.1	89.9
	Education	400	93.5	6.5	11.0	89.0
	Health Sciences	180	100.0	0.	3.3	96.7
	Law	222	96.4	3.6	15.3	84.7
	Sciences	410	92.9	7.1	5.9	94.1
	Social and Management Sciences	416	96.11	3.91	8.2	91.8
	Total	2382	89.1	10.9	7.3	92.7
1992/93	Arts	600	100.0	0	16.7	93.3
	Agricultural Sciences	230	70.4	29.5	13.0	87.0
	Education	410	97.6	2.2	8.8	91.2
	Health Science	184	88.0	12.0	4.3	95.7
	Law	248	92.7	7.3	8.1	91.9
	Science	420	89.5	10.5	4.3	95.7
	Social Management Sciences	422	95.7	4.3	5.7	94.3
	Total	2514	92.2	7.2	7.0	93.0

Source: Research data 1995/96, 1996/97 and 1997/98.

PARTICIPATION OF YOUTHS IN AGRICULTURE THROUGH THE NATIONAL DIRECTORATE OF EMPLOYMENT AGRICULTURAL SCHEME IN LAGOS STATE

BY

AGBELEMOGE, A. AND O. A. ADEYEMI

Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago-Iwoye, Nigeria.

ABSTRACT

The unemployment of youths reached a peak of 3 million people in 1985 and National Directorate of Employment was set up to assist these youths into self employment in 1986 throughout the federation. This study examines youths' participation in the Agricultural Scheme in Lagos State.

Taking random samples form all the four sites in Lagos State the study concludes that NDE is truly creating jobs for the youth but does not realize the peculiarity of agricultural business by non-release of enough fund (loan) and credits, farm inputs and supplies, and performance of extension services. Thereby implore the government and NDE to monitor properly the performance of these functions so that our youths' hope in going back to the land is not dashed.

INTRODUCTION

The rural-urban drift has deprived the rural areas of their male and female youths who are at their prime and full of vigour and energy to help generate lots of agricultural produce. These youths leave their villages for towns and cities to pursue their education in secondary and tertiary institution but when they finish schooling they stay back to look for paid employment.

Agbelemoge (1983) reported that an average of 55% of cocoa

farmers' children have drifted away to urban centered but only came home at Easter, Christmas and Ogun festival periods.

It is a common phenomenon in Lagos State the study area to find youths males and females idling away, sleeping under bridges and in some cases getting involve in crimes armed robbery inclusive. Police reports over the last two decades' have shown that most of the armed robbery cases were committed by people of between he ages of 17 & 25 years.

So also the incidence of "Area Boys" who constituted themselves into nuisance by begging for aims at public gatherings and functions during the day but turned to terrors and armed robbers at nights in Lagos metropolis and on rough roads in the country side.

The National Directorate of Employment

The National Directorate of Employment was set up on 22nd November, 1986 to find ways of solving the massive unemployment problems which had reached its peak in 1985. The youths and graduate were hardest hit. Of all the unemployed Nigerians ranging upwards of 3 millions., three quarters of them were under 25 years of age.

The Board of the National Directorate articulated four practical programmes nation wide, each operating as separate departments.

i. Youth Employment and Vocational Skill Development Programme.
ii. Small Scale Industry and Graduate Employment Programme.
iii. Agricultural Sector Employment Programme.
iv. Special Public Work Programme.

The Agricultural Sector Employment Programme

This Department is the one that is totally responsible for Agricultural programme.

The aim of this programme is to generate employment of the unemployed graduates, non-graduates and school leavers in the agricultural sector with emphasis on self employment in agricultural production and marketing.

The Agricultural Programme include:

a. Graduate Agricultural Employment Scheme.
b. School Leavers Farmer's Settlement Scheme.
c. School Leavers Farmers Training Scheme.
d. Reactivating/Establishment of Farm Settlement, Farm Institutes, Agricultural Projects.
e. Procurement of farm Equipment/Implements.

Research Problem

Youths are known to have accelerated growth and this consolidates a strong and physical body as a result youths are placed in a better position to help with agricultural work at home, in schools and on the farm. Their physical contribution as a source of farm labour supply and as home agricultural labour supply will be higher at this stage physical development (Adeyemi 1995).

Youths are adventurous and love to have new experience this make them to behave like deviants. These characteristics can be agriculturally utilized by using the youths as channels for introducing new ideas or bringing about change and technologically useful innovations in farming. Their emotional characteristics make them to adopt innovations faster in a bid to satisfy their growing emotional needs.

With the perceived problems of agricultural development such as the evils of land tenure system which makes land unavailable for agricultural production particularly in Lagos State where land is the scarcest commodity deny youths access to land. Lack of access to agricultural loans and credit facilities. Insufficient agricultural extension agents, soil infertility and incidence of pests and diseases.

The questions this study aims at finding solutions to are: How are the National Directorate of Employment Agricultural Scheme assisting these unemployed youths to participate gainfully in agriculture and establishing them as employers of labour?

Objectives

The objectives of this study are to:

i. Investigate into the participation of rural youths in the agricultural programme of the National Directorate of Employment.
ii. Estimate the professional benefits enjoyed by the participating youths in this agricultural programme such as supply of seeds, fertilizers extension services and so on.
iii. Investigate the major problems suffered by the participating youths in agricultural programme.

METHODOLOGY

The study covered all the agricultural activities of Lagos State National Directorate of Employment. Farm sites and settlement were located in only four local government areas. The respondents were taken from the NDE participants at these project sites. A total of sixty was planned for the study at fifteen for each farm site. These farm sites were located at Epe, Badagry, Ojo and Ikorodu Local Government Areas.

The research instrument was questionnaire both face and content validation were performed on them before production and thy were distributed to participants randomly. Descriptive statistics was sed in the analysis of the responses and a non-parametric statistics was used to test the hypothesis formulated of the study at 0.05 level of significance.

RESULTS AND DISCUSSION

The study used only 50 questionnaires that were retrieved form the field in July 1995.

The National Directorate of Employment Agricultural Scheme beneficiaries were both males (76%) and females (24%).

Age

Thirty percent (30%) were between 25 - 30 years of ages, twenty eight percent (28%) were 30 - 35 years, thirty eight percent (38%) were 35 -55 years only four percent (4%) i.e two males were more than 55 yeas

of age.

It is evident that the youths those below the age of 25 years were not attracted though those between the age 25 and 40 years accounted for seventy eight percent (78%).

Education

the participants were all educated, fourteen percent (14%) had only primary education, fifty four (54%) had secondary education while the remaining thirty two percent (32%) had tertiary education.

Occupation

Sixty percent (60%) of participants were previously unemployed, only the percent (10%) were already in farming. The remaining thirty percent (30%) were either office workers, traders of newspapers and tailor.

The National Directorate of Employment is creating jobs for the unemployed and particularly attracting the white collar jobbers and those that were marginally employed.

About thirty six percent (36%) of the beneficiaries were intrinsically motivated to participate in the agricultural scheme while the remaining sixty for percent (64%) were motivated by the NDE.

Problems of Agricultural Development

The various problems participants adduced for joining the scheme were Finance alone ten percent (10%) professional benefits such as supplies and inputs, extension and others only four percent (4%). Land and fiancee forty eight percent (48%) Land, Finance and professional benefits were thirty two percent (32%). The regaining participants (6%) joined because of all these benefits put together.

Regularity of the Professional Benefits

Only forty four percent (44%) adjudged the provision of inputs and supplies to be regular while the remain fifty six percent (56%) claimed

that they were not regularly supplied.

Only twenty two percent (22%) of the participants received fertilizers and other inputs. As many as seventy eight percent (78%) did not receive them.

Participants Production Activities

Twenty two percent (22%) engaged only in crop production, eight percent (8%) engaged in animal production only while seventy percent (70%) combined both crop and animal production.

Perception of Participants Yields

Twenty two (22%) of participant felt their farm yields are enough, fifty eight percent (58%) felt they were just adequate to keep soul and body together while twenty percent (20%) were already aware that their yields were never enough.

Amount of Loan Received

Forty eight percent (48%) of the participants received between five and seven thousand naira (₦5,000 - ₦7,000) twenty eight percent (28%) of them received between eight and ten thousand Naira (₦8,000 - ₦10,000). Eighteen percent (18%) of them received between eleven and thirteen thousand naira (₦11,000 - ₦13,000) while only six percent (6%) of the participant received between fourteen and sixteen thousand Naira (₦14,000 - ₦16,000). The average money they received was eight thousand five hundred naira (₦8,500) which was much less than what the programme proposed.

Assessment of Youths Participation in Agriculture

The participants were asked to assess their participation, As many as eighty percent (80%) claimed that they were better of while the remaining twenty percent (20%) knew they were no longer making enough as when they were either selling newspaper and so on.

The Participants Coping Mechanisms

The participants claimed that they had to keep a secondary occupation such as tailoring, trading and so on at least six percent (6%) in tailoring while twelve percent (12%) are into trading.

TESTING OF HYPOTHESIS

The two most important objectives of the agricultural sector employment programme are.

a. To provide self employment in agriculture to unemployed graduates who possess degree, HND, NCE, OND qualifications in relevant disciplines and to boost production of food and fibre as a result of the activities of the agricultural programmes.
b. To provide financial and other relevant support to the school leavers trained as farmers to enable them set up viable farming businesses.

HYPOTHESIS 1

This Hypothesis is stated in the null form thus. "There is no significant relationship between participants initial occupation and youths participation in Agricultural Programme scheme of the National Directorate of Employment".

The participants were asked for their former occupation and the type of agricultural production they engaged in, their responses were used for the chi-square (X^2) analysis below in Table 1.

HYPOTHESIS 2

The functions of the agricultural department of National Directorate of Employment include.

a. Sourcing and acquisition of farm lands.
b. Clearing and allocation of land
c. Organizing, Orientation and training participants.
d. Procurement and distribution of farm inputs
e. Training of school leavers in modern farming practices
f. Provision of extension services to NDF assisted farmers

g. A loan value of ₦15,000 for arable crop f arming and ₦18,000 - ₦25,000 for livestock farming is to be provided for each beneficiary in cash and kind.
h. Insurance scheme for each beneficiary of Nigerian Agricultural Insurance Company (NAIC) is provided.

The original certificates of participants will be deposited with the participating bank as collateral. The loan is recovered in 5 years duration including one year mentorium with an interest of 9%.

Statement of Hypothesis Two in Null Form

"There is no significant relationship between the problems limiting youths participation in Agriculture and their enrolment with National Directorate of Employment".

The participants were asked for their problems that they hoped to solve through NDE. Below are the response in Table 2 tested with chi-square (x^2) analysis.

SUMMARY

This study was conducted in July 1995 using fifty respondents. The participants were 76% males and 24% females; and were averagely young people of 37 years of age and were literate. They were attracted from unemployment and under-employment even from office work to Agriculture.

The professional benefits like the provision of inputs and supplies were not regular particularly fertilizer. They were practicing mixed farming system and they did not receive enough yield for their efforts.

The amount of cash loan received was an average of eight thousand five hundred naira and no beneficiary got up to eighteen thousand naira proposed for livestock inspire of the fact that seventy eight percent of them were livestock farmers.

Participants have started to assess their involvement and realized that they were not earning more than that from their previous employments

and they had gone back to their previous trades as secondary occupation.

The participation of youths in Agricultural programmes was statistical related to participants' initial occupation and statistically credited to the effort of NDE.

RECOMMENDATION

The National Directorate of Employment had facilitated the youths' return to farming even in the urban areas of Lagos State by providing the unemployed and under-employed graduates and school leavers land and take-off loans.

The Directorate should ensure that farm inputs be supplied adequately at the appropriate time. Due to infertility of tropical scale coupled with the continuous cropping system, fertilizer application is a must and should be supplied in sufficient quantity, appropriate type and time. The loan money should be given as when needed for participants to be able to recruit labour and Carry out cultural operations promptly. As a single operation delayed on the farm may result into a total loss of the year's yield.

Mechanization should be provided for the participants' farming operations because doing these cultural operations manually with labour will be more costly, less efficient and time wasting. The Directorate should increase the performance of professional (extension) services to participating farmers because modern farming cannot do without the needed extension services input.

The Directorate should organize training sessions for participants to learn new production technologies for different crops and animals and advise them to come up with proposals which the directorate should generously fund. The Directorate should realize that farming is a full time, business and be prepared to fund off-season production activities for participants such as dry season vegetables, broiler production etc.

The NDE is a good programme that should neither be killed by self-centered executors who will use the fund for something else thereby starving the participants of fund nor be allowed to die a natural death due

to change of governance like most other government programmes before it.

The government through the NDE are compelling the youths to stay in Agricultural Profession (farming) by collecting the participants' academic certificates as collateral security, they should be seen to justify their actions by proving to these youth that farming is a profitable venture of business by giving them all the assistance they needed for production and marketing. They should not portray farming as resigning to accept a life of poverty as their parents. If the youths cannot produce optimally beyond the break even point they will be worse then their farmer parents.

The success of the government and the NDE lies in the number of farmers that NDE can successfully institutionalize in their own farm land as employers of labour, it is then the opportunity can be extended to new beneficiaries, and not the number of youths that started but collected their certificate may be after seven years when they were able to borrow from here and there to off set their indebtedness only t o fall back to the labour market looking for paid employment again.

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Table 1: Relationship between participants initial occupation and participation in Agricultural programme of the N.D.E

	Initial Occupation								
Participation	**Unemployed**		**Office work**		**Farming**		**Others**		**Total**
	O	E	O	E	O	E	O	E	11
Crop	7	2.57	2	3.14	0	0	2	2.75	
Animal	4	0.53	0	0	0	0	0	0	4
Crop and Animal	19	22.17	5	25	5	35	6	26.25	35
Total	30		7		5		8		50

df = (3 - 1) (4 - 1)
= 6

Level of significance = 0.05
X^2 Calculated = 88.75
X^2 Tabulated = 12.592

Null hypothesis is rejected, as X^2 calculated is greater than Tabulated X^2. Then accept the alternative hypothesis which states that there is significant relationship between participants initial occupation and participation in Agricultural sector programme of the N. D. E.

TABLE 2: Relationship between problems limiting youth participation in agriculture and their enrolment with N.DE

Problems	Enrolment with NDE				
	Yes		No		Total
	O	E	O	E	
Land and Finance	12	9	12	16.0	24
Finance	4	0.63	1	0.28	5
Land, finance, insurance and professional	1	0.06	1	0.11	2
Professional benefit	1	0.06	1	0.11	2
Finance, land & professional benefit	13	6.5	3	2.67	16
Finance and Insurance	1	0.03	0	0	1
Total	32		18		50

Df = (6 - 1) (2 - 1)
= 5

Level of significance = 0.05
X^2 Calculated = 43.04
X^2 Tabulated = 11.07

Null hypothesis is rejected as X^2 calculated is greater than X^2 Tabulated. Then accept the alternative hypothesis which states that there is significant relationship between problems limiting youth participation in agriculture and enrolment with N.D.E.

CONTRIBUTIONS OF NON-GOVERNMENTAL ORGANIZATIONS (NGOs) TO DEVELOPMENT OF RURAL CHILDREN AND THE CONTINUITY AND SUSTENANCE FARMING PROFESSION IN NIGERIA: A CASE STUDY OF LEVENTIS FOUNDATION (NIGERIA) AGRICULTURAL SCHOOLS PROGRAMME

BY

OGUNWALE, ABEL BABALOLA

Development of Agribusiness and Rural Development, Faculty of Agricultural Sciences, Ladoke Akintola University of Technology, P.M.B 4000, Oyo-State; Nigeria.

ABSTRACT

Non-Governmental Organizations (NGOs) have been involved in different activities concerned with various aspects of rural life such as agriculture, business, health, education and total community life and needs in Nigeria. Leventis Foundation of Nigeria is one of such Non-governmental organisations currently operating in areas of agricultural training and education in Nigeria. This paper examines the activities of the foundation concern with rural children. It was noted that the Leventis Foundation Agriculture School Programme has come at a time when Nigerian Agriculture needs to be strengthened by the training of young able bodied men to improve and increase its human productive capacity.

INTRODUCTION

Development entails the development of man i.e the unfolding and realization of his creative potential enabling him to improve his material and living condition through the use of resources available to him. It is a process by which men's personality is enhanced, and it is that creative and organize personality which is the moving force behind the socio-

economic transformation of the society (Siddle, 1968). When the account on development is on things, all human resources remain latent and untapped and a society can be poor in the midst of opulent materials resources. On the contrary when the society is properly oriented, organized and disciplined, it can be prosperous on the scanties basis of national wealth.

The Non-Governmental Organization (NGOs) have been in the fore-font is working towards a transition to suitable agriculture at the practical level and also, in proposing changes in programme and polices (FAO, 1995). These organization are made up of people of different disciplines who combine their various skills and knowledge together to develop rural areas and communities. Non-governmental organizations that have played major roles in rural and agricultural development in Nigeria include Leventis Foundation of Nigeria, Shell Petroleum Company, Cheveron Nigeria Limited, United Trading Company (NTC), United African Company (UAC) among others.

This paper examines the contributions of Non-governmental Organizations (NGOs) to the development of rural children and the continuity and sustenance of farming profession in Nigeria. It specifically examines the activities of Leventis Foundation of Nigeria Agricultural Schools Programmes which are to make modern productive farmers of our school leaving youths who are mostly rural children of our ageing farm populace.

Background Information on the Agricultural Schools Programme.

In 1987, a programme for the establishment of Agricultural Schools was initiated and two schools were set up at Dogon-Dawa in Kaduna State and Ilesa, in Osun State.

The main objectives of the schools programme are:

i. To train young Nigerian Small-holder farmers in modern farming practices, including the maintenance and repairs of some Agricultural tools and equipment.
ii. To assist in the establishment of technically sounds, commercially

oriented family farms, thereby contributing to the country's self-sufficiency in food production and to the production of cash crop surplus for exports.

iii. To encourage the production of raw materials for the use of local industries and;

iv. To encourage the farming system that improve soil fertility permanently on a sustainable basis.

The schools approach has been that of solid plan, made for each of the intakes by way of conducting a comprehensive interview to be able to identify who and who are actually interested or could be motivated to get interested in "Production" Agriculture. The schools programme is meant to achieve the following among others.

i. Self-reliance in the trainees.

ii. Provide better farming practices, abundant food supply and Agricultural raw materials in Nigeria.

iii. Produce young and virile/education work force on the farms to replace the present ageing farming population, and

iv. Facilitate a move from the subsistence/peasantry system of Agriculture to a more permanent one.

In brief trainees are expected to translate the knowledge impacted to them while in the schools into actual practice in the rural areas.

The Training Programme:

The admission into the training programme entails a comprehensive interview. In the interview, the agricultural background of the intakes is noted, availability of, or possibility of obtaining land is established and of course, the physique of the intakes naturally gets registered, among other important factors sough for in order to make selection of candidates that would be trainable. The interview constitutes an importance bench-mark (a point of take-off) for both the school and the would-be students.

This is because candidates who might have pretended to be serious initially or at the point of application for training, would see that the school is very purposeful and so would voluntarily drop away or be dropped at the interview.

Selection at the interview is based on aptitude of the candidate and his/her determination to succeed in the profession and not on the number of credits obtained at the West African School Certificate/Senior Secondary School Certificate or the Ordinary Level of the General Certificate of Education (G.C.E).

The educational programme of the Agricultural Schools forms an integral part of rural children development activities. It consists of the technical training in Agriculture of young farmers who will go back into agriculture on their own or as part of a family under-taking. The primary function of the Agricultural Schools is to produce young men and women who have the knowledge and ability to plan and manage farming operations on their own and to develop technically and economically sound family farms. To meet this objective, a well balanced programme of theory and practice, each complementary to and strengthening the other is offered.

As skill acquisition is a pre-condition for self employment as a farmer, approximately 80% of the educational performance is allocated to practical training leaving 20% for classroom lecturing, where general subjects in agricultural crops, livestock, agricultural engineering and farm management are taught. The major course curriculum, theoretical and practical consists of Crop Production; Animal Production; Agricultural Engineering; Farm Management; Farm Products processing and Utilization; Agroforestry and Bookeeping.

Tuition, boarding and lodging are free throughout the course. In addition, students received a modest allowance during the first 9 months of their training until they have generated funds from their own farming activities on their individual and communal plots. Excursion to various educational institutions and farmers' fields, also constitute part of the training.

Simple modern and appropriate technologies are being used in the training programme. The Poultry Small Unit Brooder House Design in the two Schools is very simple and cost effective. In fabrication practice, planters, fertilizer applicators maize shellers, and some processing machineries are produced. The use of Animal Traction and "Bee-hives for honey production at farm level are note-worthy for emulation in our Colleges and Faculties of Agriculture in Nigeria.

The communal living incorporated in the training programme ensures good health and prepares the boys and girls for a future in which people can live naturally without much problem. It also brings about some affinity among groups of people. The free feeding is an incentive. More incentives are inform of shirts/frocks and overalls, all for the students as they resume in the school. Group assignments, especially at practicals are encouraged in the school. This is where they can learn to be in cooperative groups and derive the advantages thereof.

After completing the one-year course; students are issued as statement of participation which is not intended to be used for seeking outside employment as they are expected to be self-employed on their own farms. Also, the Extension unit of the school, continues monitoring and evaluating the performance of ex-trainees in their local communities. Thus, ex-trainees usually receive visits and appropriate advice from their trainers over a two-year period according to their actual needs. The schools also assist ex-trainees in securing credit facilities and agricultural loans from commercial banks and other relevant credit institutions.

Agricultural Input Supply:

At the beginning of every rainy season, about 0.5 hectare plots of land is allocated to each trainee. On these fields, trainees farms on their own under the supervision of the trainers. Inputs such as seeds, fertilizers, chemicals, day-old chicks, etc. are supplied by the schools at a cost, without actually collecting money from trainees, while incomes from these farming activities are credited to trainees' bank accounts (which the schools normally open shortly after resumption) after deduction of the

cost of materials supplied to each trainee.

It is expected that by the end of the course, each trainee would have generated certain funds through his/her farming activities. The fund generated by the trainee is referred to as trainee take-home-income at the end of the year. These funds enable the trained farmers to acquire the basic tools and equipment in addition to those the schools normally supply to them to use along with the acquired skills and abilities for the farming activities on their own farms.

Factors Militating Against Full Achievements of the Agricultural School's Objectives

From the various information and records gathered, seven main problems were discovered to be militating against full achievements of the objectives of the agricultural schools Programmes. These problems/ constraints include the following:

i. Lack of adequate finance,
ii. Lack of farm inputs
iii. High cost of labour
iv. Tractor hiring problem
v. Land acquisition problem
vi. Transportation problem, and
vii. Lack of storage facilities.

These problems had resulted to increased altrition rate of the ex-trainees from farming activities in rural areas.

The Experiences and Prospects of the Schools' Programmes:

With all the benefits of the programme, the Leventis Foundation Agricultural School is actively involved in effective education of the rural children and actual production on training. This is a sort of profitable apprenticeship for the trainees in that very few, if any, of the graduates of the agricultural schools ever think of doing any other job different from that for which they are trained. They could fore see a bright future when

they see how well the ex-trainees of the schools work and live.

These experiences can be readily adapted by our Colleges and Faculties of agriculture in Nigeria. This type of education appears to be the right type for this country. We should have a way of returning our youths to our national age-long occupation-farming. The trainees should be encouraged to go back to farming and take it as a career, now that fund is made available by Government Provisions through the Banks and other Financial Institution established all over the country.

While it is generally recognized that non-availability of land and fund, especially t he former had been bottle-neck for some of the ex-trainees, the Leventis Schools, having learnt from this common problem of many who would have become practicing farmers has adequately taken care of this better-neck. These days, the community leaders and parents are involved in the search by the schools for production facilities.

CONCLUSION

The Leventis Foundation (Nigeria) Agricultural Schools Programme can be likened to an experiment carried out by the former Western Nigerian Government, under the farm institute/settlement scheme. Under the scheme, the school leaves were taught the technical know-hows of Agriculture in the farm institutes and then pulled in groups unto Farm Settlements, to practice in cooperative bodies. It was an experiment that was fairly successful until it died as Nigeria severed diplomatic relationship with Israel from whom the practice was borrowed. The Leventis Foundation (Nigeria) should take note of this, and make sure that the agricultural school programme continues till the goal is fully achieved and sustained.

The Leventis Foundation has contributed to the development of rural children and sustenance of farming profession in Nigeria through Agricultural Schools Programme. However, to ensure continuity of the programme, more funds would be needed, more dedication would be required from both the staff and trainees, better staff welfare should be operated then there would be reduced rural urban migration and more

farm income would be available for young able-bodies in the profession to build a healthier their nation with a better economy.

Finally, the Leventis Foundation and the State Governments in areas of school operations or other Agricultural finance institutions should jointly institute a credit facilities scheme for the ex-trainees who are determined and ready to take farming as their career in life. The credit facilities will make it easier to establish a profitable commercial farm enterprise to feed themselves and the nation at large.

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SUSTAINABLE FOOD PRODUCTION: A CASE FOR ENVIRONMENTAL EDUCATION FOR RURAL CHILDREN

BY

DR. A.E ADEKOYA

Department of Agricultural Extension Services, University of Ibadan, Ibadan

ABSTRACT

Food security for the nation is a high goal that has to focus on the future role players in the agricultural sector. The central issue is that of sustainability, that is, enhancing production without compromising productivity. This has to do with the nature of practices engaged which depends on the understanding of the processes by the practitioners.

The futuristic aspect of food security implies a consideration for the future role players who are the rural children of today. Rural children, apart from representing considerable agricultural labour force, are often involved in a lot of domestic activities and yet, have to undergo career training preparatory to adulthood.

That the agricultural independence and sufficiency of the nation rests on this group requires immediate concern for their ability to achieve the responsibility reposed on them. What is expected goes beyond increased agricultural production but that which is hinged on constancy an at no reparatory costs. Much concern should therefore be towards provision of education on resource/environmental management especially as this relates to agricultural production. When they do become agricultural decision-makers, they will be innovation prone and environmentally friendly in their activities. Then, food security will be assured in this respect.

INTRODUCTION

Rural children imply those living in or are in frequent contact with rural areas and in this particular situation of favorable orientation towards

agriculture. Definition of rurality usually has to do with the degree of social development, infrastructural development and most importantly, predominant occupation of the people. It is however difficult to describe a community as entirely rural using all the prescribed parameters, hence, rurality has become a relative term that considers the integrity of the parameters hence, within a community. It can be asserted that rurality is dependent upon its relationship with urbanity for its meaning. Classification on rurality, therefore, is merely a position on a continuum with perfectly urban and perfectly rural as the opposite extremes. That there are transformations in the rural communities cannot be denied and thus they bear certain urban characteristics while retraining some rural characteristics. However, one characteristic that is retained in all rural areas is the predominance of agriculture as occupation.

The rural household usually comprises of a male head who decides on and directs all activities, including farming, making use of members of the family (women & children). Agricultural activities engaged in include production, processing, storage and marketing.

CHILDREN IN RURAL AREAS

The rural family units is determined by the form of residence and comprises of the male head, women and the children regardless of whether it is polygamous or monogamous, nuclear or extended. The children (usually between 15 - 18 years) constitute a considerable work force in the execution of family programmes. The reliance of he family on the contribution of children is often displayed in the slackening of activities should the children be unavailable. They are often involved to a greater extent than the adults. Their involvement vary from provision of backup services like carrying/fetching materials to sharing in physical job executions. Rural children are not only involved in family engagements but are in personal service to older members of the family by rendering various forms of assistance.

In addition to the engagements of children in rural families is the fact that such children are still involved in many training situations. This

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In addition to the engagements of children in rural families is the fact that such children are still involved in many training situations. This

becomes imperative as the children are prepared for adult life and the responsibilities that go with this. Training experiences for the children include formal schools informal learning from adult occupation especially in agriculture and other learning of artisanal skills.

The daily engagement of a rural child is such that he/she is occupied for about 17 hours which are spent in trekking long distances, carrying heavy loads and involving in other menial duties. Thus the child is, from a very early age, introduced into routine economic activities in the family, often leaving little or no time for recreation.

RURAL CHILDREN AND AGRICULTURE

Agriculture has been variously described as a rural occupation both in terms of the resources required and usual location of the business. It is the predominant occupation of ruralities and has become an index in determining degree of rurality of a place. Agriculture is practiced in rural areas in the form of land cultivation, maintenance of the crops, harvesting, feeding of livestock, processing of agricultural products and marketing. These activities usually involve all members of the family.

However, the personal demand is more on the children than adults. This is because, while the adults take agriculture as a career or profession, the children are yet to decide their career. Thus they are involved in some other career training and yet have to serve as family labour force for agricultural activities. The implication of this is that the children hardly have time for leisure.

Rural children therefore learn about agriculture from a tender age and get actively involved in all the activities. The positive aspect of this is that the continuity of the profession is enhanced and continuous agricultural production is thereby assured. To a large extent the child farmer learns every aspect of the agricultural indigenous knowledge as well as modern techniques from family members and neighbours. Even when the child is trained in other fields, he/she is still favourable predisposed to agriculture.

SUSTAINABLE AGRICULTURAL DEVELOPMENT

The issue of sustainability is hinged on a consideration of the likely effect of today's activities/decisions on the future. It therefore behooves a careful utilizations of non-renewable, resources so as to ensure their availability in the future. Brundtland (1987) explained sustainablity as meeting present needs without compromising needs of future generations. The concept therefore emphasizes the maintenance of productive capacity of any system over the long term. Pronk and Haq (1992) said that sustain ability is a new concept of economic growth that provides fairness and opportunity for all the world's people without further destroying the world's finite natural resources and carrying capacity. This calls for a scrutiny of all production systems in order to understand their impact on the available resources.

Agricultural development is a positive drive towards increased productivity. This is usually achieved through intensification of production activities, use of chemicals and fertilizers and introduction of high yielding breeds and varieties. The innovations are often pursued with a sort of desperation that tend to override any other consideration especially as achievements are only measured in economic returns.

Evolving a sustainable agricultural system requires a balance between the existing resource (in terms of quantity and quality) and the utilizations of the resources. Sustainablity in agriculture may be location specific in which case the variability existing among vegetation zones, peculiar environmental problems, farming system, landuse patterns and tenural rights (Adekoya, 1997) will guide the design of the practices. The concern should be that of maintaining a productive rural environment in terms of soil fertility, consistent sources of water, vegetation for livestock, forest for hunting and provision of firewood. The United Nations Development Programme (UNDP, 1994) described sustainable agricultural development as a means of safeguarding the national food security and working to improve the quality of life of people who depend on farming for a living while ensuring that the natural resource base they and their children depend on is not further depleted or degraded.

Sustainablity in its primary focus towards the future is consequently a concern for the children.

CHILDREN EDUCATION FOR SUSTAIN ABILITY

Enhancement of food security is a direct product of sustainable agricultural systems. This will no doubt require a change from the existing practices especially as these have been variously implicated in the recent distortions in the environment which have culminated in declining agricultural production and productivity. The design of new practices should start from an understanding of the existing situation so as to provide solutions to problems experience. The voluntary involvement of all role players become imperative in the design phase in order to achieve appreciable level of acceptance and usage of the technology (Atta-Krah, 1992).

Going by the meaning of sustain ability the children are the ultimate users of improved practices because of the trend of their involvement in agriculture. This implies that the future of sustainable agricultural management depends on an understanding of the issues and tenets of sustain ability by the children. Apart from being a substantial part of the present role players, the continuity of the profession is in their hands. Thus an education of rural children on sustain ability will go a long way to enhance food security for the future.

George (1990) explained that as sustainable practices favor the coming generations, there is a need to teach the children who will soon have to uphold the tenets. The onus of this is that the agricultural curriculum in schools need to be expanded to include environmental aspects relating to agriculture. Environmental education especially in soil management and pollution with emphasis on enhancement of natural replenishment and reduction of inorganic chemical usage, need to be particularly directed towards children. The design of the Programme should be such that will correspond with observable degradation in the area. This activity can be jointly sponsored by the Education Ministry, Environmental Protection Agency and Agricultural Development Project.

It should be noted that provision of general agricultural education for rural children will also enhance their innovation adoption proneness and thereby complement agricultural extension efforts.

CONCLUSION

The future of agriculture rests with rural children and the extent to which they embrace agriculture as profession. Apart from this, the form of practices they engage in agriculture, which is dependent upon their understanding of the impacts of the practices and their freedom of choice of practice, will determine the sustain ability of agricultural productivity. The issue of food security therefore requires a focus on the role of rural children in agriculture and provision of agricultural education to improve their productivity.

Rural children need to be educated on the relationship between natural resources and the need for a conservatory approach to resource utilization. Sustainable food security demands much on resource management, that is, a balance between resource utilization and conservation. Therefore, the effect of agricultural activities on the environment, particularly the soil, has to be explained to the children so as to engender a reformatory tendency towards engaged practices.

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REKINDLING YOUTHS' INTEREST IN AGRICULTURAL PROFESSION THROUGH THE NATIONAL DIRECTORATE OF EMPLOYMENT AGRICULTURAL SCHEME IN LAGOS STATE

BY

AGBELEMOGE, A.; ADEYEMI, O. A. AND S. F. ADEDOYIN

Department of Agricultural Extension and Rural, Sociology, Ogun State University, Ago-Iwoye, Nigeria.

ABSTRACT

The discovery of petroleum in Nigeria in late sixties aggravated the drift of people form the rural areas to the urban centres leading into deprivation of these agricultural areas of their energetic youths who could have complemented and supplemented their parent's agricultural production. Consequently, agricultural production took a downward trend to the extent that government started importing food to feed its teeming population. Unemployment of these drifting youths led the federal government to set up National Directorate of Employment in 1986 and Agricultural programme to assist the youths in starting their own farms.

This study aims at investigating which of NDE schemes attract or appeals to the youths and to determine their level of youths' interest in the schemes. The secondary school students in the Local government areas where NDE farm sites were located were used as respondents.

Almost half (46%) of the students were not aware of NDE due to low publicity but are highly interested in farming and the NDE agricultural scheme particularly the graduate scheme.

The NDE should publicize its schemes and improve its performance of functions to agricultural scheme participants to be able to sustain the interest it has well-up in the youths.

INTRODUCTION

Agriculture was the mainstay of Nigerian's economy from the colonial era. It provided employment for over seventy percent (70%) of the working population food for the teeming populace and raw materials for industries at home and aborad.

This significance of Agricultural sector took a downward trend soon after the discovery of petroleum in the seventies. The discovery of crude oil resulted into many farming families drifting away from the rural areas to the urban centres to enjoy better conditions and standard of living through paid employment in the cities.

The drift was more prominent among the youths who left the rural areas and only returned to their villages during traditional ceremonies such as yam festivals, Egungun festivals and other religious celebration such as Easter, Christmas and generally at the end of the year to share their earnings with the rest of their families.

The result of this drift was the deprivation of the rural areas of their youths who could replace their agin farmer parents to generate lots of agricultural produce. Consequently, agriculture which had been the major foreign exchange earner and the producer of food and fibres for the teeming population was neglected and was at the brink of total collapse.

Food production no longer meet the demands for food by Nigerians. The government has to resort to spending the scarce foreign exchange on food importation. The food import bill on rice alone was as high as One hundred and ninety four million naira (₦194.76m) in 1978, this was nineteen percent (19%), of that year total food import bill at three billion seven hundred million naira (₦3.700b) Agbelemoge (1986).

National Directorate of Employment.

The National Directorate of Employment was consequently set up by the Federal Government in November, 22nd 1986 to find ways of solving the massive unemployment problem and restore hope from the growing despondency among the youths and their parents as a result of the growing joblessness. The Board of NDE started four practical

programmes nation wide which operated as departments namely:

i. Agricultural Sector Employment Programme.
ii. Special Public Work Programme
iii. Youth Employment and Vocational skill Development Programme and
iv. Small Scale Industries and Graduate Employment Scheme.

The Agricultural Sector Employment Programme

The aim of this programme was to generate employment for unemployed graduates, non-graduates and school leavers in the agricultural sector with emphasis on self employment in agricultural production and marketing.

The programmes in this department include:

a. Graduate Agricultural Employment Scheme.
b. School Leavers Farmers Settlement Scheme.
c. School Leavers Farmers Training Scheme
d. Reactivation/Establishment of farm settlement, Institutes, Agricultural project et.
e. Procurement of Farm Equipment/Implements.

The two major important objectives of these schemes were:

Firstly to provide self employment in agriculture to the unemployed graduates who possess degree, HND, NCE, OND qualifications in relevant disciplines and to boost production of food and fibre as a result of the activities of the agricultural programmes; and

Secondly to provide financial and other relevant support to the school leavers trained as farmers to enable them set up viable farming business.

The functions of the Agriculture department include:

a. Sourcing and acquisition of farm lands.
b. Clearing and allocation of land.
c. Procurement and distribution of farm inputs
d. Land preparation

e. Organizing, Orientating and Training of participants.
f. Training of school leavers in modern farming practices.
g. Provision of Extension Services to NDE assisted farmers.

A loan value of fifteen thousand naira (₦15,000) was proposed for arable crop farming and between eighteen and twenty five thousand naira (₦18,000 - ₦25,000) for livestock farming per participant in cash and kind. The loan recovery durations is five (5) years including one year meritorium with an interest of 9% with original certificates as collaterals. Insurance with Nigerian Agricultural Insurance Company (NAIC) is provided are required for loan beneficiaries.

Relevance of Youths Programmes

The relevance of youth programmes to national development can not be over-emphasized since youth programmes spread to many areas of youth life such as social, economic, political, education, agriculture and so on.

The primary aim of the youth programme of any nation should be to develop youths into future leaders of the country be educating them to be gainfully employed. Such relevance can be highlighted thus:

1. Youth programme is prominent in the development of various sector of the national economy such as agriculture, home economics, community welfare and so on.
2. It is an instrument for prospective implementation of some government policies and social regulations e.g War Against Indiscipline (WAI), Brigade in Nigeria is a youth wing of Mass Mobilization for social justice and economic recovery (MAMSER).
3. It is perceived to be the social justice and cultural nerve centre of village life hence it is used in providing village amenities and the introduction of new technology.
4. It is a forum for training national leaders.
5. It is also a channel of information to parents and village community.
6. Finally, it is a means to revolutionize against any national symptoms

that constitute an obstacle to national development such as bribery and corruption, tribalism, nepotism and so on.

Research Problem

Youths are a category of people who have attained adolescence and are gradually approaching adulthood. Youths are positively responsive to love and security. Adolescents raised in home with parental love are likely to emerge as more active, outgoing, socially assertive, independent, friendly, creative and lacking in hostility towards others and self (Conger, 1977). During adolescence the need to belong to and identify with a group of individuals of the same age is stronger than it is at any other period. The youths love to have new experience. These emotional characteristics of the youths can be exploited and profitably utilised by forming the youths into groups like youths clubs with agricultural orientation.

The youths have accelerated growth and body formation. The strong body consolidation due to the accelerated growth from adolescence places the youths in a better position to help with agricultural work at home, school and on the farm. Their physical contribution as a source of farm labour supply and home agricultural labour supply will be higher at this stage of physical development.

Considering the youths physiological, emotional and affinity for belongingness one wonders if this is not the right time and proper stage to inculcate into the youths lessons on dignity of labour and sensitize them to develop interest in agricultural business.

The Research Questions are:

- What are the opinions of the youths who are the would be school leavers that are expected to enrol in the agricultural schemes?
- What are the interest level of these youth that are expected to enrol with the NDE for the agricultural schemes after the completion of their course of study?
- Are the youths aware of the National Directorate of Employment (NDE) and its programmes and schemes?

Table 1: Relationship between choice of N.D. agricultural programme and the interest of youth in agriculture.

Programmes	Interest in Agriculture				
	Yes		No		
	O	E	O	E	Total
Graduate Agricultural programme	15	9.4	2	1.48	17
School leavers farmers settlement scheme	3	0.7	3	0.8	6
School leavers Farm training scheme	9	3.7	2	0.9	11
No choice of programme	0	0	16	11.1	16
Total	27		23		50

$$df = (4.1)(2-1)$$
$$= 3$$

Level of significant = 0.05
x^2 Calculated = 28.20
x^2 Tabulated = 7.815

Null hypothesis is rejected since calculated x^2 is greater than Tabulated x^2.

Thus, I accept the alternative hypothesis which states that, there is significant relationship between National Directorate of Employment (N.D.E) Agricultural programmes and interest of youths in Agriculture.

EVOLVING APPROPRIATE TECHNOLOGY FOR ENHANCING ACTIVE PARTICIPATION OF YOUTHS IN NIGERIA'S AGRICULTURAL DEVELOPMENT PROGRAMMES

BY

J.O. AKINYEMI AND A.S. ONASANYA

College of Agricultural Sciences, Ogun State University, Ago-Iwoye, Nigeria.

ABSTRACT

Development of appropriate agricultural technology for sustenance of Nigeria's economy presupposes an understanding of farmers mechanisation needs and their sociological background.

There is no single technology which can be said to be appropriate for all development processes of peasant agriculture. Thus every technology is appropriate for achieving some set of objectives. This paper has highlighted appropriate technology for peasant agriculture that will open new resources, increase productivity and generate new capacity to .produce goods and services on the farms.

The need to restore dignity to agricultural practice has become very urgent and one way to achieve this is through developing processes that can handle different agricultural practices with less human energy input.

INTRODUCTION

Sub-saharan African has critical development problems. The population grows at an average rate of 2.5%, while food production is increasing only be about 1.% per annum (IBRD), 1989). Of this food .production, 90% comes from small holder farmers who generally drop less than 3 ha (Spencer, 1991) practice shifting cultivation (Sancher 1976) and use few improved technologies or more (Mayong and Degand, 1997). It is not surprising that an average Nigerian today i.e. faced with serious food shortages or that agro-industrials and there is a rise in food

Sources of Awareness of NDE Schemes

The students sources ranged from Television as high as (24%) twenty four percent, followed by NDE workers themselves with twelve percent (12%) friends and Textbooks were eight (8%) and six (6%) percent respectively while Radio was the least with four percent (4%). Forty six percent (46%) were not aware of the NDE agricultural schemes. It was now evident that there was not enough publicity. There was no effort to reach out to the target group-the would-be participants, in their schools.

Interest in NDE Agricultural Schemes

Though almost half of the students were not aware of these schemes. They were explained to them and their interest was sought. Most of them (74%) were instantly interested while some, twenty six percent (26%) were not interested in the schemes.

Their interest levels were rated in ten point continuum and forty eight percent (48%) had a score of eight and above (8-10) fourteen percent (14%) scored six points, four percent (4%) scored four points while eight percent (8%) scored two points. The average score for the interested students was seven and a half points.

On the choice of the schemes they will enrol for after completion of the study their preferences were for graduate scheme as claimed by thirty four percent (34%) and school leavers farmer training by twenty two percent (22%) while school leavers farm settlement was least with twelve (12%) percent. As many as thirty two (32%) percent of the students are not interested in any of these schemes.

Testing of Hypothesis

The hypothesis was set up to find out the relationship of youths interest in Agriculture profession and the NDE schemes. The students responses were computed and analysed using chi-square (X^2). The result of the test is presented in Table 2 below.

SUMMARY

The age of students ranged from fourteen to nineteen years but the average age was seventeen (17) years. They were twenty nine (29) boys and twenty one (21) girls as those school were co-educational schools. Since the study area was Lagos State some schools have no schools farms for practicals hence only sixty eight percent 68% claimed that their schools have schools farms.

The students' carrier interest varied with Agriculture as highest with fifty four percent (54%) followed by Engineering with twenty four percent (24%) Medicine sixteen (16%) percent and science with six percent (6%).

These students were not all aware of the NDE agricultural scheme. Only fifty four percent (54%) were aware while forty six percent (46%) were not aware at all. Among their sources Television was the commonest with twenty four (24%) percent, while Radio was least with four percent (4%). As many as twenty six percent (26%) of the students were not interested in them. Thirty four (34%) percent in graduate employment twenty two percent (22%) in school leavers training. Only twelve (12%) were interested in school leavers farm settlement.

CONCLUSION

The National Directorate of Employment Agricultural Scheme was not popular with the Secondary School students in Lagos State as evident in the finding that about half (46%) of the respondents have not heard about it and its schemes. NDE had not made any attempt at publicizing its programme. The few students that heard about it probably watch them on television during commissioning.

The students that knew about the agricultural schemes were highly interested in agricultural profession and the schemes. The respondents' choice of scheme in the NDE was the graduate scheme. The most probable reason was the aspiration of the youths to continue their education till university level even if they will still partake in the agricultural scheme.

The hypothesis tested proved to be significant at 0.05 level hence the null hypothesis was rejected and its alternative accepted that "There is a significant relationship between the youths" interest in agriculture and the NDE agricultural schemes".

National Directorate of Employment Agricultural Scheme is rekindling the youths' interest in agricultural profession (farming) particularly the secondary school students in Lagos State.

RECOMMENDATION

The National Directorate of Employment should make greater effort at publicizing its programmes particularly the agricultural schemes. The electronic media should be used particularly the radio which has the advantages of working without electricity in the rural areas. Television must be used as it was the only media that informed the youths that were aware of the NDE schemes. Jingles and Slogans must be advertised in both radio and television particularly directed at the secondary school students and the undergraduate agriculturists as they are the would-be participants for the graduate agriculture scheme.

The NDE should use the Youth Club forum to rekindle their interest in agriculture by resuscitating the young farmers' club in the secondary schools.

The print media could also be used in publicizing the NDE agriculture programmes due to their residual enlightenment/educational advantages. Such as the Daily Times, the Concord, the Punch etc. The NDE should improve the performance of their services to their participants if the NDE wants to earn credibility and sustain the interests it, had rekindled in the youths, for the NDE performances will be revealed to these students for NDE workers and participants were among the sources of awareness to the secondary school students.

The government should incorporate into the secondary school's agricultural curriculum the NDE agricultural programmes and make it compulsory for all secondary schools taking agricultural science to have school farms or at least livestock farm like poultry that does not need

much land to establish for states that are densely populated like Lagos State.

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Development of appropriate agricultural technology for sustenance of Nigeria's economy presupposes an understanding of farmers mechanisation needs and their sociological background.

There is no single technology which can be said to be appropriate for all development processes of peasant agriculture. Thus every technology is appropriate for achieving some set of objectives. This paper has highlighted appropriate technology for peasant agriculture that will open new resources, increase productivity and generate new capacity to .produce goods and services on the farms.

The need to restore dignity to agricultural practice has become very urgent and one way to achieve this is through developing processes that can handle different agricultural practices with less human energy input.

INTRODUCTION

Sub-saharan African has critical development problems. The population grows at an average rate of 2.5%, while food production is increasing only be about 1.% per annum (IBRD), 1989). Of this food .production, 90% comes from small holder farmers who generally drop less than 3 ha (Spencer, 1991) practice shifting cultivation (Sancher 1976) and use few improved technologies or more (Mayong and Degand, 1997). It is not surprising that an average Nigerian today i.e. faced with serious food shortages or that agro-industrials and there is a rise in food

importation bills which is a huge drain in our foreign exchange earnings.

Given the inherent indigence and indignity of .peasant farmers with hand tool technology, it is a fact that in Nigeria today, doctors tend to beget doctor with pride, and engineers beget engineers, lawyers beget lawyers but a farmer who begets a farmer dies regretting his existence. We are all aware that in Nigerian today, a farmer's son goes to school (if he does at all) not to become a farmer, but to escape the lots of farmers as he knows it. For today's youths, "The man with the hoe" has become a dreadful anachronism (Odigboh, 1997) under the conditions where a farmer has only hoes and diggers, he is an endangered 5 pieces. The peasant farmers are ageing and diminishing in numbers while not replenishing of reproducing themselves. The current practice of agriculture is not sustainable because of these various constants to increase productivity with minimum energy input.

It has therefore, become imperative to develop or evolve a national policy that will enhance engine power technology.

It has become very necessary to charge the undignifying image of agricultural practices in Nigeria through a modern transformed technology, in order to make farming more attractive to the youths, thereby fastering some hope of a better future for Nigerian agricultural industry.

CONCEPT OF AGRICULTURAL TECHNOLOGY

Technology may be defined simply as the systematic application of collective human rationality to the solution of problems through the assertion of control over nature and all kinds of human processes. It is the embodiment and result systematic, disciplined, cumulative, non-accidental and non serendipitous research (Olayinde, 1980). In this complex agricultural technology may be defined as the application of technology for the promotion and development of agriculture. So conceived, it has four major features. First, it serves as a major resource for creating agricultural wealth. Second, it is an instrument facilitating the exercise of social control in such various forms as the exercise of

monopoly in the diagnosis or .pre-packaging of professional services and subtle but efficacious means of controlling demand. Third, it decisively affects modes of decision - making to achieve social charge. Forth, it constitutes a central arena where in new meanings must be created to counter alienation, which is the antithesis of meaningful living. (Ellul, 1965).

STATUS OF AGRICULTURAL TECHNOLOGY

Agricultural technology for the small farmers involves a lot of drudgery for most of the farm operations. In order to reduce the current status, devices that are labour - saving and labour enhancing must be provided.

TABLE 1: Human Power Consumption for Various farming Activities

Activity	*Gross Power* Consumed (Watts)
Clearing bush	
Shrub	400 - 600
Felling trees	600
Hoeing	300 - 500
Ridging, deep digging	400 -1,000
Planting	200 - 300
Ploughing with animal draught	350 - 550
Driving single -axle tractors	350 - 650
Driving conventional 4 wheel tractor	150 - 350
Driving car on farm	150

Source: Odigboh, 1997

The human energy consumption for various farming activities energy requirements vary from a low value of 150 watts for driving a car on farm to 600 watts in felling a tree. In using hand tool technology, where human being is the power source the farmers most often are unable to cultivate

more than one hectare. Odigboh (1997), observed that it is a has been scientifically established that a healthy person in a tropical climate consumes energy at a maximum sustainable rate of only about 0.25kw (About 0.30kw in temperature climate) thus limiting production of farmers to maximum of one hectare.

TABLE 2: Some Field Operation Rate by Farmers Using Hand Tools

Operation	Average Manual Work Rate (Man Days/Hectare (ha)
Land clearing	32.6 (20.1 - 47.8)
Ridging for cassava	43.8 (29.7 - 64.5)
Mound making for yams	57.8 (35 - 93)
Cassava planting	28.3
Yam planting	17.3
Weeding root crops	36.7 (22.3 - 77.6)
General Weeding	40.0
Cassava harvesting	28.5
Yam harvesting	32.0

Note: Range valves in parenthesis: Odigboh, 1997.

Table 2 shows some field operation rate by farmer using hand tools. The Table shows a minimum value of 17.3 manday/ha to a maximum of 43.8 manday/ha for ridging. In order to enhance agricultural .production some devices must been carried out to improved the technology of using these hand tools. It has been established that only about 25 percent of the

energy consumed by a person can be converted to human work out put. Therefore, at the indicated continuous energy consumption rate of 0.25kw and 25 percent conversion efficiency, the minimum continuous physical human .power output in the tropics is approximately 0.063kw (0.075kw in temperate climated. It becomes obvious from Table 1 and 2 that the peasant farmers are limited to very limited amount of human power available far farm operations.

ADVANCED AGRICULTURAL MECHNISATION

In many parts of developed countries, farm machinery and electronic equipment are in wide use. Intensive experimentation, conducted on the drawing board and in the field, has resulted in the development of heavy duty soil penetration machinery to make ling barren fields fit for cultivation. Mechanical equipment for sowing, fertilizing and harvesting and diverse irrigation systems, from sprinklers to computerized drip irrigation systems, have been development. Mechanised milking and egg-collecting equipment and .production recording computers have been introduced as well as machinery for the grading, packing storing and transporting of .produce. All this is done with a view to lowering costs, increasing, yields, improving quality and saving manpower. For example in Israel, as advanced agricultural technology has come into under use, less manpower is need. The proportion of agricultural workers in the national labour force has decreased from 17.6% in 1965 to about 4.6% in 1990 (I.I.C., 1990).

THE WAY FORWARD

The younger generation must be aware of the prospects and advances in agricultural technology that are in current use in the different parts of the world. Access to information is vital to management decisions and is therefore a driving force for development. Without information, business enterprises cease to exist.

Technology for the small farmers must, therefore take into account the basic elements of small scale farming by peasant producers , First is

the technical elements made up of physical chemical, mechanical biological factors. Second is the human element which is made up of exogenous, endogenous, socio-cultural and infrastructural factors (Aluko, 1972).

There should be proper subsidies incorporated into agricultural technology programmes for the smaller farmers. In order to have efficient machines suitable for the .peasant farmers, a proper technology research must be undertaken. Most of the research efforts have been directed towards large-scale farms to the detriment of the .peasant farmers who are the people carrying out most agricultural practices in Nigeria. This research should be based on product utilisation, techniques, prototype design-fabrication, equipment management servicing - repairs, appropriate - intermediate technology and innovations. This type of research should span the sub-sectoral fields of agriculture such as crops, livestock, fishery, veterinary, forestry, wildlife, agro-meterology economics and information. (Olayide, 1980).

There showed be a strong extension services organisation based on .participating farmer which has to be adequately funded. This is to help in the area of technology transfer that will meet specific goals and objectives.

These include endowment of the community with commensurate and modern infrastructure, transformation and re-orientation of community values, evolvement of stable.

Self-sustained agrarian growth and generation of agro-industrialisation and capital accumulation.

CONCLUSION

The need to raise a new generation who will values agricultural practices has become very imperative. The following suggestions are therefore recommended as part of necessary step.s thata can be taken to develop appropriate mechanisation for Nigerians agricultural sector.

1. Establishment of a data bank on detended designs and manufacture of various agricultural machinery (equipment. This will include

models suitable different ecological zones.

2. There should be facilitates which will handle small and medium scale enterprises both in maintenance and repair of agricultural machinery/equipment.
3. Promoting commercial manufacture or production of identified and tested agricultural equipment . The farmers should be encourage to adopt these equipment.
4. There should be programme for linking local agricultural machinery designers with similar other developing nations such as India and Brazil.
5. Fund should be committee to the design, development and production of prototypes of identified key agricultural machines and training of personnel competent in agricultural mechanisation research, equipment operation, maintenance and repairs.

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FARM CHILDREN'S LEVEL OF USE OF IMPROVED TECHNOLOGY OF RICE IN OGBOMOSO, OYO STATE, NIGERIA

BY

ADEWALE, J.G. AND O.A. ADEKUNLE

University of Ibadan, Ibadan, Nigeria.

ABSTRACT

The study was conducted to determine the level of use of improved technology by farmers' children in Ogbomoso Zone of Oyo State. A sample of 150 children was selected using multistage sampling technique. Data were collected from the sampled children through the use of interview schedule.

The study showed that there was low level of use of improved technology among the respondents. Respondents' level of schooling showed .positive and significant relationship with their level of improved technology use.

It was also found that age had negative and significant correlation with the level of use of production recommendations. Gender had no significant relationship with the use of improved technology.

INTRODUCTION

Rice is an important cereal crop in Nigeria. It has a higher available carbohydrate than maize or wheat (Christou, 1994). The cereal crop offers opportunities for utilization in breweries; laundry starch, cosmetics, and textile industries. Furthermore, rice hulls are used as roughage for cattle, goats, and sheep feed, and chicken litter. Rice cultivation and utilization thus provide incomes to the farmers and workers of the industries using the crop as a raw material.

Wudiri and Fatoba (1991); West Africa Rice Development Association, WARDA (1987 and 1986) noted that domestic production of rice in Nigeria has been found to be always short of the demand for the commodity. The yield per hectare of rice crop, according to Wudiri and

Fatoba (1992), were poor as well, when compared to the yield potential. The country, as at 1992 has therefore imported more than 216,000 tons of rice valued at US $60 millions to complement the local supply (IITA, 1994).

Nigeria's low production and productivity of rice could be traced to the poor performance of rice farmers' indigenous technology. The need to improve and sustain the output of rice farmers therefore calls for change of native technology of rice production for the improved technology.

Each member of farm family has his firmly designated status and roles. Children are active members of farm family and their productivity on the farm is likely to be high. Research has established that young people are more receptive to new idea and are more inclined to accept farm innovations than older people. As Obibuaku (1983) observed, farm populations which have higher concentrations of young people are less likely to be conservative owing to the fact that they tend to accept new ideas more rapidly than older people.

Literacy rate has increased considerably among farmers' children (Obibuaku, 1983). According to Obibuaku as high as 59 percent of the children studied were attending primary schools, while 38 percent had completed secondary education. It was observed that a high level of education tends to foster positive attitudes towards the use of improved farm technology. Marsh and Coleman (1966) found that eight years of schooling were associated with higher adoption rate than fewer year of schooling.

The need to employ improved technology by rice farmers, especially the young farmers therefore necessitates the examination of children's level of use of improved technology of rice. Specifically, the study objective were to:

i. determine the characteristics of the children engaged in rice production.
ii. Identify the improved practices in rice production used by the children.

iii. Ascertain the children's demographic and non-demographic characteristics that predict their level of use of improved technology of rice.

METHODOLOGY

The study was conducted in Ogbomoso Agricultural Zone of Oyo State. The Zone has five blocks, namely: Ajaawa, Ikoyi, Oolo, Gambari and Iresaadu blocks. The population for this study is the farmers' children involved in rice cultivation.

There was no complete list of the population to constitute a sampling frame from which individuals could be selected. Multi-stage sampling technique was therefore employed in selecting 150 rice farmers' children as sample of the study.

First, two blocks were selected; Ikoyi and Iresaadu blocks were purposively selected because of concentration of rice farmers there. Each of the two blocks consisted of 8 cells.

Second, twenty percent of the cells were randomly selected, that is approximately two cells each. The selected cells are Tewure and Ikoyi in Ikoyi block, and Alagbede and Oko in Iresaadu block. There were 8 farmers' groups in each cell.

Third, twenty percent of the farmers' groups were selected at random. This is made up of 2 of the 8 groups in each cell, which gave a total of 8 farmers' groups.

Finally, 20 percent of the number of listed rice farmers' children as compiled by some enumerators were randomly selected. The selected children constituted the sample for the study, making a total of 150 respondents. The distribution of respondents according to cells are as follows: Ikoyi (40), Tewure (36), Alagbede (43) and Oko (31).

Instrument

Pretested structured interview schedule was employed to solicit information from the farmers' children about their demographic, non-demographic characteristics, and their production practices. Selection of

items into the schedule came from preliminary survey and literature search.

Data Collection

Four students of the Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology were trained and employed as enumerators. The enumerators were under close supervision of the investigators. The administration of the instrument on the respondents took place in their houses in February, 1998.

Measurement of Variables

The dependent variable of this study was the farm children's level of use of improved technology in rice production. The respondents were asked to indicate the improved practices they followed in rice cultivation. The use of each of the items of improved technology was scored "1" and non-use was scored "O". The aggregate of a respondent's scores is his/her level of use of improved technology in rice cultivation.

The independent variables of this study included respondents' demographic and non-demographic variables. Demographic variables included gender, age and education, while the non-demographic variables consisted of place of origin and present place of residence. Age and education were measured using an interval scale, while gender, place of origin, and place of residence were measured at nominal level.

Data analysis

Descriptive statistics such as frequencies, and percentages were used in the presentation of data on demographic and non-demographic characteristics of the respondents. The relationships between the respondents' level of use of improved technology and their demographic and non demographic characteristics were analysed using analysis of variance (ANOVA) AND Pearson product-moment correlation coefficients respectively for the variables measured at nominal and interval levels.

RESULTS AND DISCUSSION

The results of the investigation are hereby presented.

Respondents demographic characteristics

Seventy percent of the respondents were male children, while 30.0 percent were female children (Table 1). The table also shows that 28.0 percent of the farm children were below 10 years, while 21.3 percent fell between ages of 13 to 15 years, and 24.7 .percent were between 16 to 18 years. . Half of the respondents (50.0 percent) has no schooling, 26.0. percent had 4 to 6 years of formal education, and 12.0 percent each had 1 to 3 years and 7 to 9 years of schooling. Fewer farmers' children (12.0 percent) had more than 6 years of education. The respondents' low level of formal education might foster low level of use of modern technology in rice production.

Respondents' non-demographic characteristics

Twenty percent each of the respondents had their .places of origin at Abuja area and Edo State as shown in Table l. Another 16.0 percent are Tivs, while 12.0 percent came from Enugu area of Nigeria. Only 14.0 percent are indigenes of the study area, that is Ogbomoso. It was found that 48.0 percent of respondents' fathers had no formal education; with 38.0 percent completing primary school, and only 14.0 percent had more than primary education. The few years of formal education of respondents' fathers might lead to poor use of modern technology in their rice cultivation. Also, 70.0 percent of the respondents had residence in both rural and urban centres, while the remaining 30.0 percent had residence in rural areas alone.

Use of improved technology in rice cultivation

It was found that rice was cultivated on lowland areas alone. None of the respondents employed mechanical means of seed bed preparation and non planted improved rice varieties. There were variations among respondents in the use of other improved practices such as seed treatment

before .planting, planting seed in the nursery before transplanting to the field, chemical weed control, inorganic fertilizer application, chemical control of pests on rice, and mechanical hulling. Twenty-four percent of the respondents scored zero in technology use, while 26.0 percent scored 1 (Table 2). Also, 12.0 percent, 4.0 percent and 2.0 percent respectively scored 4.5 and 6. It can be inferred that the level of use of production innovations among the respondents was low. Only 18.0 percent followed 4 to 6 production recommendations.

Formal education had positive and significant correlation with the use of improved technology, with Pearson product moment correlation coefficient(r) of 0.535. This observed value is greater than the tabulated value (0.254) at 0.01 level of significance. It can be inferred that the higher the level of schooling, the more the use of improved technology. That is, respondents with more years of formal education had higher scores on technology use. This is in line with Obubuaku's (1983) findings. Respondents' age had negative and significant correlation with their level of use of improved technology ($r = -0.365$). It implies that the older respondents had low level of improved technology use. The older children were probably more involved in traditional farm operation which are essentially labour intensive. Gender had no significant relationship with the use of improved technology because observed F value (0.0697) is smaller than tabulated value of 3.91 at 0.05 level of significance. This shows that there was no significant difference in the use of recommended practices by male and female children.

The respondents' place of origin showed significant relationship with the use of improved technology in rice production as the observed F value (90.516) is greater than the tabled value (2.62) at $p \leq 0.01$. The respondents from Edo and Enugu States had higher scores of technology use than the indigenes of Ogbomoso. There was significant difference between the respondents' use of production recommendations and their place of residence. The observed F value (42.0550 is greater than the tabulated value (6.81) at 0.01 level of significance. The mean scores of technology use of respondents with dual residence in rural and urban

areas and those living in rural places were 2.37 and 0.73 respectively. It can thus be inferred that there were significant variations in the level of use of improved technology by the respondents with dual and single residences.

CONCLUSION

The educated young people have significant role to pay in agricultural technology development. Based on the findings of this study it was concluded that the literacy rate among farmers' children was still poor. Half of the children studied had no schooling. Formal education correlates positively and significantly with the use of improved technology in rice cultivation.

Fewer female children were engaged in rice cultivation. Gender, however had no significant relationship with the use of modern technology in rice production.

There is a strong positive relationship between the use of recommended practices and place of residence. Contact with urban centres fosters adoption of farm innovations by the farmers' children.

The following recommendations were proffered to improve technology adoption and agricultural development among the young farming population in Nigeria.

i. Farmers' children should be encouraged to go to school. This is to improve the literacy rate among them. This becomes important as high level of education helps farmers' innovativeness.
ii. Social amenities associated with dissemination of farm innovations should be provided in rural areas. The amenities include electricity, and schools.

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TABLE 1: Respondents' Distribution According to Their Characteristics n = 150.

Category	Frequency	Percentage (%)
Gender		
Male	105	70.0
Female	45	30.0
Age		
Less than 10 years	42	28.0
10-12 years	12	8.0
13-15 years	32	21.3
16-18 years	37	24.7
Above 18 years	33	22.0
Education		
Years of Education		
0	75	50.0
1-3	18	12.0
4-6	39	26.0
7-9	18	12.0
Place of origin		
Idahigala	9	6.0
Gboko Tivs	9	6.0
Ankpa Tivs	15	10.0
Doko Bida	6	4.0
Abuja	30	20.0
Enugu	18	12.0
Edo	30	20.0
Ikot Ekpene	12	8.0
Ogbomoso	21	21.0
Place of residence		
Rural	45	30.0
Both rural and urban	105	70.0

TABLE 2: Respondents' Distribution According to Their Technology Use Scores.

Technology	Frequency	Percentage
0	36	24.0
1	39	26.0
2	21	14.0
3	27	18.0
4	18	12.0
5	6	4.0
6	3	2. 0

Table 3: Relationship Between Respondents' Characteristics and Their Improved Technology Scores

Characteristics	degree of freedom	F value	Decision
Gender	1	0.0697	NS
Place of origin	8	90.516	S
Place of residence	1	42.055	S
Characteristics	**degree of freedom**	**r value**	**Decision**
Age	148	0.254	S
Education	148	0.535	S

NS= Not Significant
S= Significant at $p < 0.01$

RURAL CHILDREN AND THE CONTINUITY AND SUSTENANCE OF SUGARCANE FARMING IN NIGERIA

BY

O.O. OWORU

Department of Crop Production, College of Agricultural Sciences, Ogun State University, P.M.B. 2002, Ago-Iwoye, NIGERIA.

ABSTRACT

Children in agriculture is a new concept in agricultural extension and rural sociology research. The contributions of children defined as young people between ages 6-17 years in three organizational levels of sugarcane farming with reference to specific operations during the growth of the crop is discussed.

Suggestions for retaining the interest of the children when they grow up in sugarcane farming are articulated.

INTRODUCTION

Sugarcane farming started on the coastal villages of Western and Eastern Nigeria during the fifteenth century when sailors brought the crop to Nigeria (Aikulola, 1978). It is also grown in the fadamas of Northern Nigeria. The crop was planted initially by few villagers as a garden crop using children labour to sustain its growth.

As a result of brewing honey from sugarcane, there was increased interest in planting the crop by the rural population and this necessitated the use of children labour to support production. Increased agricultural productivity is one of the pre-requisites of economic progress designed by agricultural and industrial planners to encourage a nation in improving her foreign reserve by earning scarce foreign exchange through the export of agricultural produce (Alimi, 1991). Sugarcane farming, among other vital roles, provides sugar for the teeming millions of Nigerians, employs a sizeable proportion of the labour force including children, produces raw materials for the manufacturing industries and generates foreign exchange

for the country. Other by-products of sugarcane that are of immense economic value for industrial development in Nigeria include molasses, bagasse and the green leaves used as fodder in livestock production (Oworu, 1988).

The concept of children in agriculture is relatively new in agricultural extension and rural sociology research. *Ab initio,* children have participated in agriculture by taking active part in some agricultural operations during the planting and harvesting seasons, although such known participation has not been empirically quantified and documented.

I propose in this paper to refer to children as young people (male or female) between ages 6 - 17 years who help their parents (mostly farmers) in crop and livestock production and who occasionally are employed in some agricultural establishment/sugar estates during specific field operations such as planting, fertilizer, herbicide/insecticide applications, application of irrigation water, occasional hand weeding, harvesting, etc, to earn a living to support their families in the rural areas or at home in the cities. However, the question of retaining these children when they grow up in the profession as practising sugarcane farmers remains problematic.

This may be due to the attitudinal disposition of these children to farming when they grow up and the perceived behavioural disposition of the Nigerian society including the educated elites who erroneously views farming as the last profession in the world. This societal idiosyncrasy may presumably be one of the reasons that has continuously led to the rural/urban migration of young people from the farms in search for non-existent white collar jobs in the cities.

This paper focuses on children involved in sugarcane farming for the production of sugar at three organisational levels of production with reference to specific operations during the growth of this important industrial crop. Attempts are made to suggest various incentives to retain the interest of the children in sugarcane farming when they grow up.

ORGANISATIONAL LEVELS OF SUGARCANE FARMING IN NIGERIA

Three organisational levels of farming:
(1. Family, 2. Industrial and 3 Plantation levels) . . . as suggested by Agunbiade, Adefuye and Torimiro (1997) also apply in sugarcane farming in Nigeria. However, Industrial and Plantation levels of farming go together in sugarcane farming. The third one is the Outgrowers Scheme or the Outgrowers sugarcane farming. Thus, in sugarcane farming, the following organisation levels are identified.

1. Family Sugarcane Farming
2. Industrial/Plantation Sugarcane Farming.
3. Outgrowers Sugarcane Farming.

PARTICIPATION OF CHILDREN IN SUGARCANE FARMING

In the Family Sugarcane Farming level, the farms are owned by the family. Sugarcane is grown by the family using children to plant. The planting materials are cane tops consisting of two buds which are planted slantingly at about 40° on mounds (Oworu, 1985). Prior to planting, the children are involved in cutting the planting materials from the main sugarcane stalks. They are also involved in cutting the planting materials from the main sugarcane stalks. They are also involved in weeding particularly at the initial stage of the growth of sugarcane before close-in which smothers out the weeds. They are used in harvesting and carrying of the sugarcane stalks from the field to the villages where the expressed juice sap is used to prepare jaggery, a local type of sugar. Children are also involved in cutting the sugarcane stalks into bits and hawking the packed bits to commuters at the nearest highways to the farms. This scenario is very common at Papalanto, Mamu and some villages around Ijebu Ode in Ogun State and villages near the fadamas in Northern Nigeria where sugarcane is cultivated.

In the Industrial/Plantation Sugarcane farming, such as the Bacita Sugar Estate in Kwara State, the Savannah Sugar Company in Numan, Adamawa State and the Gayvita Sugar Company in Sowunmi Village,

Papalanto, Ogun State where large sugarcane farms are established to feed the factories for the production of sugar, children of Industrial/Plantation workers and farmers in the adjoining villages of the sugar estates are hired to work on certain operations which hitherto cannot be performed by machines. Such operations include the pre-planting operations of packing sugarcane planting materials into cages for dipping into aretan (an organo-mercurial compound used to control soil borne diseases after planting) and hot water known as hot water treatment (HWT) for the control of smut.

At planting, children are used to lay planting materials (usually whole stalks) into the furrows and cutting the planting materials into two or three eye setts. They are also used in the application of pre and post emergence herbicides for weed control, insecticides for the control of pests and diseases. Children are used for occasional hand weeding along irrigation channels where herbicide application remains problematic. At harvesting, where burning in practised, children are used to set fire on sugarcane fields to remove thrash particularly in logged canes before cutting. They are also involved in the cutting of canes and packing of leftovers that cannot be scooped by the packing cranes into the wagons for onward transmission to the factory. They are involved in stubble shaving (recutting of sugarcane stubbles that were not properly cut during initial harvesting) for increased sugar production and the removal of extraneous matters such as stones, metals, etc. from the harvested canes as they are put on the conveyor belt for crushing in the factory.

In the outgrowers sugarcane farming, individuals and farmers living in villages around the sugar estates are encouraged to grow sugarcane for sales to the factories for crushing in order to increase in order to increase sugar production. Inputs such as land preparation, improved planting materials, fertilizers, herbicides, insecticides, irrigation water etc. are supplied to the outgrowers. The cost of the inputs are then deducted from the outgrowers' sales of sugarcane to the factory. The outgrowers form themselves into cooperatives to plant large hectarages and maximise profit per unit areas of land. Children are hired by the outgrowers to carry

out agronomic operations such as planting, weeding, harvesting, etc. It is noteworthy that children travel long distances to the outgrowers' sugarcane farms to take part in the various agronomic operations.

FACTORS MILITATING AGAINST CHILDREN'S CONTINUED STAY ON THE FARMS

In spite of the fact that the children involved in sugarcane farming are children of farmers, most of them appear not to be interested in farming as a profession. The factors responsible for this include:

1. Society's attitude towards farming that treats farmers particularly in the rural areas as second class citizens - a situation which has denied the rural farming population better infrastructures such as clean water, electricity, good road, medical facilities to improve their quality of life.
2. Lack of good educational facilities and teachers for effective teaching in rural areas where most of the sugarcane farms are located.
3. Children are often hired as casual workers whose terms of employment in the sugar estate are not well defined. They are therefore poorly remunerated and laid off as soon as seasonal operations on the estates are completed.
4. Lack of care against hazards during working seasons. Since children are casually employed, they have no access to compensation against injuries during working period.

SUGGESTED INCENTIVES TO RETAIN CHILDREN IN SUGARCANE FARMING WHEN THEY GROW UP

To retain the interest of children in sugarcane farming the following incentives must be encouraged:

- Access to educational facilities from primary to tertiary levels that will ensure the training of agriculturists, engineers, doctors, lawyers, chemists, artisans, etc. among the children of sugarcane farmers.
- Construction of model cities around sugar estates (e.g. Bacita) to encourage children when they grow up as trained specialists to live

near the estates and service the system.

- Village participatory and collaborative research programmes along the Rapid Rural Assessment (RRA) model suggested by Oworu (1996) should be encouraged.
- Grown ups should be encouraged to invest in sugar business by buying shares in the sugar companies individually or through cooperative societies.
- Model sugar estates of about 50,000 tons sugar per year as suggested by Oworu (1988) in which grown ups are encouraged to participate as partners or promoters with loan from Government should be established.
- Soft loan should be given to grown ups who are interested in sugar production in locations suggested by the National Sugar Development Council (NSDC, 1995) for increased sugar production to satisfy and sustain the need at home estimated to be about 2 million tons per year and for export.

If the suggested incentives are accommodated, it may be possible to encourage rural children to continue and sustain sugarcane farming in Nigeria whose importance to the economic development of Nigeria is being increasingly recognised in recent years by the Federal Government of Nigeria.

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PARTICIPATION OF FARMERS' CHILDREN IN RICE PRODUCTION IN OGBOMOSO ZONE OF OYO STATE

BY

ADEWALE, J. G., OLADOSU T.O. AND J. O. AJETOMOBI

Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

ABSTRACT

Rice cultivation in Nigeria has expanded through the years. Rural children are assets in providing labour in rice production. This study determined the level of participation of farmers' children in rice production in Ogbomosho Zone of Oyo State.

Multi-stage sampling technique was employed in selection of 150 rice farmers' children as sample for the study. A pretested interview schedule was used in data collection.

The study revealed that the respondents' age had positive and significant correlation with their level of participation in rice production (observed value of r is greater than tabled value). There were significant variations in the level of participation of male and female children in rice production. It was also found that respondents' level of schooling did not significantly correlate with their level of participation in rice cultivation (observed r = 0.1296 and is smaller than tabulated r = 0.1946 at 0.05) level of significance.

INTRODUCTION

Rice occupies a dominant position among arable crops in Nigeria. The emphasis on rice consumption has shifted form its, rather, ceremonial status to a staple food in the country. Out of a total potential of land areas of 4.2 million hectares which were suitable for rice production in Nigeria, only 1.7 million hectares (40.5 percents) were cultivated as at 1994 (International Institute of Tropical Agriculture, IITA, 1994; Wudiri and Fatoba, 1992). Indigenous technology, which is

essentially labour -intensive is still mainly employed in rice cultivation in Nigeria (Olayide, 1980; Babaleye, 1993). The low hectares of rice cultivated over the years might be due to high labour requirement of the crop.

Children (ages 1-14 years) constitute a significant proportion of Nigeria's rural population and they are assets in providing farm labour (Jibowo, 1992). According to Jibowo, children as members of farm family have their clearly designated status and roles in agriculture. They are involved in all aspects of rice production chain from land clearing, seed bed preparation, seed broadcasting, or planting in nursery, transplanting of rice seedlings, weed control, fertilizer application, fetching water, spraying of chemicals(s) for rice crop protection, scaring of birds, cutting of rice heads, beating the rice heads to remove the grains, and hulling. However, the drudgery of the traditional farm operations may discouraged the farmers' children from taking active part in the operations.

This study thus examined the level of participation of the children in rice production. Specifically, the study was designed to:

i. determine the characteristics of the farmers' children;
ii identify the aspects of rice production in which the children were involved;
iii. ascertain the relationship between the respondents' characteristics and their level of participation in rice cultivation.

METHODOLOGY

The study was carried out in Ogbomosho Agricultural Zone of Oyo State, Nigeria. The Zone comprises 5 blocks; Ajaawa, Gambari, Iresaadu, Ikoyi and Oolo. Most of the rice produced in the study area came from Ikoyi, Oolo and Iresaadu blocks. The population for this is the farmers' children engaged in rice cultivation in Ogbomosho Zone.

Sampling Technique and Sample Size

There was no complete list of farmers' children to constitute a

sampling frame from which individuals could be selected. Multi-stage sampling techniques was thus employed in selection of 150 farmers' children as sample of the study.

The first stage involved selection of Ikoyi and Iresaadu blocks. The blocks were purposively selected because of concentration of rice farmers in the blocks. Each block consisted of 8 cells.

In the next stage, twenty percent of the cells in each block were randomly selected, that is approximately 2 cells. The selected cells are Ikoyi and Tewure in Ikoyi block, and Alagbede and Oko in Iresaadu block. There were 8 farmers' group in each cell.

Thereafter, twenty percent of the farmers' group were randomly selected. This was made up of 2 groups in each cell, which gave a total of 8 farmers' groups.

Finally, 20.0 percent of the number of listed children of rice farmers' in each group as complied by some enumerators were randomly selected. The selected children constituted the sample for the study, making a total of 150 respondents. Respondents' distribution according to cells are as follows: Ikoyi (40 respondents), Tewure(36), Alagbede (43) and Oko (31).

Data collection instrument

A structured interview schedule was developed, pretested, reviewed and later employed to solicit information from the rice farmers' children. The schedule contained information about respondents' demographic and non-demographic characteristics, and participation in rice production operations. Items in the schedule were selected from literature search and preliminary survey.

Data collection

Four students of the Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomosho were selected, trained and employed as enumerators. They were closely supervised in collection of data by the investigators. The instrument were

administered to the respondents in their houses in February, 1998.

Measurement of Variables

The dependent variable of this study was the level of participation of farmers' children in rice production. Operations in rice cultivation were listed and the respondents were asked to indicate their level of participation in each operation. The level of participation in each operation was measured using a 5- point scale. The scale ranged from O for "no participation" 1 for slight participation", 2 for "moderate participation", 3 for "high participation" and 4 for "very high participation". The aggregate of a respondent's scores is his/her level of participation in rice production.

The independent variables of this study included respondents' demographic and non-demographic characteristics. The demographic variables include gender, age and education, while the non-demographic variables consisted of place of residence, and place of origin. Gender, religion, place of origin, and place of residence were measured at nominal level, while respondents' age and education were measured using an interval scale.

Data analysis

Descriptive statistics such as frequencies and percentages were used in the present presentation of data on demographic and non-demographic variables. The respondents' level of participation in rice production was correlated with their demographic and non-demographic variables. Analysis of variance (ANOVA) was used to test the relationships of the variables measured at nominal level, while pearson product -moment correlation coefficients were calculated of the variables measured at interval level.

FINDINGS AND DISCUSSION

The findings of the study are hereby presented

Respondents demographic characteristics

Table 1 shows that seventy percent of the farmers' children engaged in rice production were male children, while 30.0 percent were female children. Fewer female children participated in rice cultivation. The table also reveals that 28.0 percents of the respondents were below 10 years of age. Also, 21.3 percent fell between ages of 13 to 15 years, and 24.7 percent were between 16 to 18 years. Fifty percent of the farmers' children studied had no formal education, 26.0 percent had 4 to 6 years of schooling. On the whole, only 12.0 percent had more than 6 years of education. It can be inferred that there was poor literacy rate among the farmers' children interviewed.

Respondents' non-demographic characteristics

Twenty percent each of the respondents have their places of origin at Federal Capital Territory, and Edo State (Table 1). Also, 16.0 percent are Tivs, while 12.0 percent have their places of origin in Igboland. Only 14.0 percent are indigenes of the study area, that is, Ogbomosho. Additionally, 70.0 percent of the respondents lived in both rural and urban centres, while 30.0 percent had residence in rural areas alone.

Respondents' participation in rice production

The respondents were involved in all aspects of rice production. The respondents' maximum participation score was 49, and the minimum was zero as revealed in Table 2. The mean participation score was 23.41. forty-four percent of the respondents had participation scores of 1 to 20, while 40.0 percent had scores of 31 to 50. Also, 14.0 percent had their participation scores fell between 21 to 30, and only 2.0 percent did not participate at all in rice production. On the whole, majority of the rice farmers' children took part in cultivation of rice.

TABLE 1: Respondents' Distribution According to Their Characteristics n = 150.

Category	Frequency	Percentage (%)
Gender		
Male	105	70.0
Female	45	30.0
Age		
Less than 10 years	42	28.0
10-12 years	12	8.0
13-15 years	32	21.3
16-18 years	37	24.7
Above 18 years	33	22.0
Education: Years of Education		
0	75	50.0
1-3	18	12.0
4-6	39	26.0
7-9	18	12.0
Place of origin		
Idahigala	9	6.0
Gboko Tivs	9	6.0
Ankpa Tivs	15	10.0
Doko Bida	6	4.0
Abuja	30	20.0
Enugu	18	12.0
Edo	30	20.0
Ikot Ekpene	12	8.0
Ogbomoso	21	21.0
Place of residence		
Rural	45	30.0
Both rural and urban	105	70.0

TABLE 1b: Relationship Between Respondents' Characteristics and their level of participation in rice production.

Characteristics	degree of freedom	F value	Decision
Gender	1	182.71	S
Place of residence	1	2.016	NS
Age	148	0.8010	S
Education	148	0.1295	NS

NS = Not Significant
S = Significant at $p < 0.01$

TABLE 2: Respondents' Distribution According to their Participation Scores on Rice Production n = 150.

Participation Score	Frequency	Percentage
0	3	2.0
1 - 10	30	20.0
11 - 20	36	24.0
21 - 30	21	14.0
31 - 40	45	30.0
41 - 50	15	10.0

Mean Participation Score = 23.41

Relationship between dependent and independent variables

Respondents' age correlated positively and significantly with their level of participation in production of rice because the observed value of pearson product-moment correlation coefficient, r (0.801) is greater than the tabled value (0.2540) at 0.01 level of significance . It can be inferred

that the older the farmers' children the higher the level of participation in rice production. Gender showed significant relationship with the level of participation in rice cultivation. This is because the observed F value (182.71) is greater than the tabulated value of 2.62 at 0.01 level of significance. The mean participation scores for male and female children were 26.40 and 12.53 respectively. It implies that the variations in participation scores of male and female children were significant.

Respondents' level of schooling, however, did not significantly correlate with their level of participation in rice production as the observed value of r (0.1295) is smaller than the tabled value (0.1946) at 0.05 level of significance. That is, the level of education of respondents did not influence their level of participation in rice cultivation. Also, there was no significant difference in the level of participation in rice production of respondents living in both rural and urban centres and those living mainly in rural areas. This is because the observed F values (2.016) is smaller than the tabled value (3.91) at probability equal to or less than 0.05. It thus implies that the place of residence of respondents did not influence their level of participation in rice production.

CONCLUSION

Characteristics of farmers' children predict their level of participation in agriculture. Based on the results of this investigation, the following conclusions were made. More male children took part in rice production operations. There was significant difference between male and female children in their level of participation in rice cultivation. It was also found than the older the children the higher the level of participation in cultivation or rice.

The respondents' level of schooling did not predict their level of participation. It shows that education still foster positive attitude towards farming. Also, the place of residence of respondents did not influence their level of participation in rice production.

The following recommendations were proffered on the basis of the findings of the study:

i. In order to ensure continuity and sustenance of farming profession in Nigeria more female children should be encouraged to participate in agriculture. To achieve this, improved technology should be widely disseminated to farmers. The technology will help remove drudgery of labour scaring many female children away from participating in rice cultivation.

ii. The school children's attitude towards agriculture should further be improved through agriculture practical in schools. The children should be made to appreciate the dignity of labour.

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INSECT PEST CONTROL IN AGRO-ECOSYSTEMS: A STRATEGY FOR PROMOTING RURAL CHILDREN PARTICIPATION

BY

DR. A. A OBADOFIN

Dept. of Crop Production, Ogun State University, Ago-Iwoye, Nigeria.

ABSTRACT

The paper discussed the role of insects in agroecosystems, the damage they cause as well as their beneficial effects. Also, the various methods of insect pest control in vogue, the inherent dangers to the agroecosystem of relying solely on one method and the need for adoption and practice of integrated pest management were highlighted. The paper emphasised the need for extension agents to encourage and train our farmers to adopt the modern approach to insect pest control. This could be done by creating awareness and interest of the rural farmers and their children in pest activities through workshops, radio jingles, discussion programme and farm demonstrations.

In view of the importance of the future role of the rural children in agriculture, the paper advocated the early introduction and encouragement of school children in general and rural children in particular to the science of entomology through formation of entomology clubs in their various schools and neighbourhoods. Activities in the clubs will involve developing awareness for insects, rearing and collection of insects as well as local, state and national competitions. It is believed that with such an approach, the rural children who hopefully would take over form their parents in future would have been well exposed to the science of entomology thus enhancing future agricultural production.

INTRODUCTION

There is little doubt that insects have the widest distribution on earth and with almost a million described species are the most numerous faunal group today constituting about 83% of all animal species. Most entomologists estimate the actual number of living species at between 2 - 5 million. They include some of the better known insects - beetles, butterflies and moths, ants, bees, wasps, flies and termites to mention a few.

The effects which insects and their close relatives have on human welfare in fields as diverse as health, agriculture and shelter are so profound as to make the insects perhaps among the most important of all animal groupings. While these assertions are familiar to and accepted by professional entomologists, it is not widely appreciated by the general public that the insects are estimated to consume over 35% of cultivated crops. This may be in the field or store. The quantity of food lost to insect pests annually has reached an alarming proportion. There is therefore a constant need to protect crops from insect pests.

This paper focuses its attention on the role of insects in nature, the benefits and damages by insects in agroecosystems and the steps and ways on how economic insect control can be achieved for crops for sustainable development. Also, the paper stresses the need for exposing children in the rural areas early enough to basic entomology knowledge as this will enhance their productivity in future.

The role of insects in nature

Insects play diverse roles in ecosystem functioning wherever they occur. In addition to bacteria and fungi, insects aid in the decomposition of organic matter and soil formation. For example, maggots of flesh-flies and blow flies are the main agents of the decay of carrion in nature. This is usually followed in quick succession by the activities or larva of moths and butterflies which are capable of breaking down feathers and hairs. Nutrients which are trapped in organic material are thus recycled by these activities.

Sexual reproduction in flowering plants requires the transfer of pollen grains from the stamens to the ovules or the ovule bearing organs-without which the production of seeds and fruits which contain the genetic information for the next generation will not be possible. Because of their sedentary nature, flowering plants have recourse to enlist the services of external agents for pollen transport. In flowering plants, these are in order of diminishing significance: insects, wind, birds, mammals and water.

Socialisation in the insect world has been markedly developed. There is to be found among insects multiple niches filled by different species each functioning in the ecosystem. Also, the cheer numbers of insect species and individual numbers coupled with their mobility, temporal dispersion and rate of reproduction have made them excellent sources of food to man, mammal, birds, reptiles, amphibian, and other insects. The roles of insects in food chain are therefore usually taken into consideration in any carefully planned control system. Also, the advantages of some insects feeding on other insects is often exploited in biological control programme.

Benefits of insects in agroecosystem

In agroecosystem where the thrust of cultivation is primarily for the production of crops of commercial value, insects assume a dual role. While on the one hand they are important in performing the normal function of pollination, there are some (parasites and predator) which feed on other insects thereby reducing the damaged that these latter group would otherwise have caused. Some are sometimes responsible for the weed control for the crop planted by eating the weeds on the field. Conserving such insects make direct economic sense. In addition, some insects provide the sources of products which are both important to man and some animals. These include honey, milk, silk, dyes, pigment and wax.

Insect damage

Because of their versatility and ability to feed on many types of organic matter, insects cause severe agricultural damage. Crop and farm animals may be attacked in storage or in the field. Insects also transmit pathogens to crops and farm animals. Direct effects of insects on crops include eating of leaves, leaf curling leaves may be mined and tunnelled, leaves may be rolled and webbed, buds are eaten destroying either the growing point of young flowers and fruits and seeds may be eaten or bored and destroyed or caused to fall prematurely, stems and roots may be eaten or bored etc. Among the indirect effects of insects on crops are the delay in crop maturity, dwarfness of distortion, loss of quality or contamination in the crop. The indirect impacts of insects on agroecosystems results from a attempts by agricultural technology to reduce insect populations by application of diverse chemicals. In order to embark on a hitch free and environmentally sound insect control, it is therefore essential to have a full knowledge of the modern day techniques of insect control.

Modalities of insect control

To some, insect control is insecticide management; to others it is remote - sensing or developing a resistant variety, managing a predator, or monitoring with a sex pheromones. Over the years, single factor approach (i.e. use of only one control agent) was the norm but, currently multi factory programmes are being developed and practicalised on the field. Insect control involves first a scientific judgement, "How can insect control be achieved" , and second a social judgement, "How should insect control be achieved."

Complete freedom from insect attack is neither necessary in most cases for crop yields nor appropriate for insect pest management. Nearly all plants can tolerate a substantial degree of leaf destruction without appreciable effects on plant vigour. Every crop is different and pests and conditions may vary from one ecological zone to another. A crop variety should not be grown if it is known to be unusually susceptible or

potentially vulnerable to pest attack, thereby intensifying the need for control activity. Conversely crops should be grown in a manner that will eliminate or reduce difficult pest problems.

Insect control should not be undertaken without having accurate estimates of the pest and natural enemy population densities or without reliable assessment of plant damage and its effect on yield. The importance of field surveys and monitoring in this direction cannot be over-emphasized. Unfortunately, most of the control done in Nigeria lack this vital input. Evaluating damage depends, to a large extent, on whether the insect is a direct or indirect pest. Direct pests affect the desired product of a crop while indirect pests damage plant parts that may or may not affect yield; according to the role of the part in the physiology of the plant vis-a-vis the development of the desired product. It must be noted that the effect of indirect pests is frequently the cause of unarrnated decisions in control programmes.

A thorough study should be made before a decision is reached regarding the use of a natural enemy be it a parasite or predator, no matter how disruptive the cropping practice may be. Biological control or the use of natural enemies is generally regarded as being most effective in very stable systems as forests, rangelands, orchards and parks. Disruption of naturally occurring biological control by poor choice and for use of insecticides, harmful cultural practices etc, should be avoided. There are usually enough problems without increasing the existing ones or causing new ones. Parasites and predators must have some hosts or prey to survive. In addition, a thorough knowledge of the life cycles and biology of both natural enemies and pests must be known so that all cultural and other control practices can be as beneficial to nature enemies and as harmful to pest as possible. Management of pest population in non- crop areas should be part of the control efforts, since many pests move f rom the refuges to crops. The used of natural enemies is one of the best approaches in non-crop areas, since such areas may be very large and the cost of any method that is not self-regulating may be prohibitive.

Insect diseases are often important natural regulators of insect

populations. When naturally occurring insect disease frequently act as controlling factors in the insect populations, they should be considered and integral part of the control system and utilized to the fullest extent. Viruses and fungi are the two groups of insect pathogens most often credited with causing epizootics, bacteria, protozoa and nematodes usually cause epizootics less frequently than viruses and fungi, but this may be due to the fact that they are less recognised than the latter. Insect pathogen often infect on stage of an insect host but not another. For e example *Bacillus thuringiensis* is infectious to many lepidopterous larvae but usually does not infect the adults. The relative specificity of most insect pathogens allows them to be used without the danger of destroying beneficial predators and parasites in the area.

Insecticides are the most powerful tool available for use in pest control whether applied on the ground or through the air. They are also the most destructive of the environment if not applied properly. They are highly effective, rapid in curative action, adaptable to most situations, flexible in meeting changing agronomic and ecological condition and economical. They are perhaps the only tool for insect control that is reliable for emergency action when insect pest populations approach or exceed the economic threshold.

A crucial problem in successful insect control is the proper timing of insecticide treatments. Treatments should solely be based on needs. A single spray properly timed can often prevent excessive spraying. Efforts to make use of insecticides totally compatible with the aims of modern insect control must seek to reduce both frequency of application and the dosage applied. As a rule more than a good percentage of the insecticide applied to control insects does not hit the target pest, and it becomes incorporated into the environment in various ways. In the process of application, parasites and predators are also reduced or eliminated. It is generally agreed by entomologists that insecticide treatments in Nigeria are in general excessive, and that the technical know-how of application is still lacking in the country.

Insect attractants (sex pheromones, aggregation pheromones on food

lures) can be utilized in insect control in sampling or monitoring insect pest populations. They can be used to attract insects and distract them from normal mating, aggregating, feeding, or oviposition behaviour Repellents on the other hand, prevent insect damage to plants or animals by rendering them unattractive, unpalatable or offensive. Other methods include the use of genetic control (Sterile-Male-technique, Conditional lethal and Chromosomal translocation and Chemosterilization).

In order to minimize the abuse and dangers of insecticidal usage and maximize its benefits, the following procedure must be adopted.

1. Recognise that 100% control of most insect pests is not required to prevent economic loss.
2. Substitute 'treat-when-necessary' insecticide application for presently employed routine- treatment' insecticide schedules.
3. Use insecticides specifically and selectively for target insect pests and avoid unnecessary treatments and insecticidal intervention.
4. If an insecticide must be used to control one or more pests, use one that is selective in some ways towards the pests and has minimal effect on the natural enemies if available. If non is available, look for resistant natural enemies.

ROLE OF EXTENSION AGENTS

In view of the modern approach to insect pest control, it is very clear that the role of the extension agent in the implementation of these recommendations is very crucial to the farmer. An extension agent who is not knowledgeable enough or conversant with the trend will still ask the farmer to follow the "routine-treatment" approach instead of the 'treat-when-necessary'. The farmers in fairness to them are quite familiar with the insect pest problems on their farms. Advantage of this should be taken by the extension through workshops, radio jingles, discussion programmes and farm demonstrations. These extension programmes should be extended to their children in the process. The war with insects has now reached the stage of mass participation in which control programme undertaken by government agencies need the incorporation

of rural dwellers as active participants rather than passive onlookers.

Participation of Rural Children

In order to arouse the interest of children, there is the need for professional entomologists to encourage the study of entomology by adopting groups of school children in their neighbourhoods and rural areas near to them and introduce them to entomology as a hobby for which schools would be encouraged to form clubs. Various kinds of activities such as rearing insects and other arthropods would be undertaken. The children would be encouraged to report their findings in the form of periodic bulletins of their clubs or as portions of their school magazines where such exist. It might be possible to institute state and national completions to find for example the young Amateur Entomologist of the year for whom the three tiers of Governments would be urged to support with prizes like it is done with the JETS. This sort of approach will serve to enable the rural children learn about entomology early enough before they go into full scale farming or related enterprises in the future.

CONCLUSION

We should appreciate the role of insects in nature and particularly in our agroecosystem. In addition, Nigeria should be moving away from the present fire-brigade approach of insect control involving the use and sole reliance on insecticides to the modern day technique which involves the arithmetic management of all factors that predisposes the crop to insect attack and which encourages population explosion of the insects involved. The early exposure of rural children to the tenets of modern farming including scientific approach to pest control is therefore a prerequisite for increasing food production in the foreseeable future.

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MODERN PLANT PROTECTION TECHNIQUES: A MOTIVATING FACTOR FOR PROMOTING RURAL CHILDREN PARTICIPATION IN AGRICULTURE

BY

JODA, A.O.

Department of Crop Production, Ogun State University, Ago-Iwoye.

ABSTRACT

About 80% of the Nigerians are residing in the rural areas taken to farming (either as a full or part-time job). The standard of living in the rural areas is rather low which need upliftment. The farming population is aging and there is an urgent need to make agriculture attractive to the rural children thus ensuring sustainable agricultural productivity.

This write-up examines the characteristics of our rural populace, the need for its development, the old farm practices and suggests the modern plant protection techniques serving as a motivating factor for better participation of rural children in agriculture. Children-In-Agriculture-Programme (C.I.A.P) is viewed as an avenue for promoting rural children participation through the formation of CIAP clubs in the rural-based secondary schools. This in my view will improve the adoption of innovation that is hitherto rejected by older farmers.

INTRODUCTION

Agriculture, though neglected, is the main stay of Nigerian economy. For some years now, lukewarm attitude of people and in availability of government incentives towards agriculture has made the nation depends on importation food items to supplement the few produced internally. However, the little production of food items takes place in the rural areas which lack the essentials of good standard of living. Although various programmes mounted by different government regimes i.e. operation Feed the Nation (O.F.N); Green Revolution and recently, DFFRI and

NALDA were aimed at alleviating the constraint against the optimum agricultural production, these programmes unfortunately were ill-fated. Also these programmes focused their attention on old men and women living in the rural areas that have little strength to carry out whatever they learned from these programmes. These attempts over the years did nothing but wasted government revenue.

However, to ensure high level of agricultural production and incomes, and agricultural extension services supported by agricultural research that is relevant to farmers' needs is crucial (Benor and Baxter, 1984). Lip services paid to agricultural extension services in this country are enough and there is a need to establish/strengthen a link between the agricultural research and the active working force (youth) in our rural areas. This paper therefore is an attempt to explain some vital issues relating to agricultural production in the country, x-raying the rural population (which includes the methods of farm practices,) the phenomenon rural-urban migration as it affects agricultural production. Also plant protection against weeds, insects and diseases that are available. Motivation of rural children would also be discussed.

RURAL POPULATION

Various schools of thought have tried to define the rural population but up till now, there is no universal definition for the word 'rural' population. The reason for this is not far fetched. Research workers associated rural population independently with certain criteria such as certain level of infrastructure, number of inhabitant per unit area, agriculture and natural resources-based economy and inadequate ideas and skill. Other reasons stemmed from the fact that rural people basically are dynamic and undergoing changes. Nevertheless, the population Reference Bureau (FRB) in 1996 stated that an area with a population of 2000 is rural in nature. Let us be contented with this for now.

In 1994, 45% of the world population was living in the urban (i.e 55% in the rural areas). The world urban population grew at the rate of 2.5% p.a between 1990 and 1995 but population in the rural is 0.8% growth

(Ayoade, 1997). At present, over 80% of the projected population of Nigeria ar residing in areas mistakenly referred to as urban but realistically rural. With PRB statement in mind, Nigeria is rural in nature.

CHARACTERISTICS OF THE RURAL POPULATION

Decisions on economic and social activities in the rural areas centred round a household .but not on individual. The composition of a household in the rural setting is made up of the nuclear family and in most cases extended family is included. Rural family unit, of course, comprises of the father, mother and their rural children. Therefore, rural children are offspring of farmers living their early life in the rural area. Family planning programme is taboo in the rural setting. Hence, their is no limit to the size of family. Therefore, children are in large number in the rural setting.

Hence, the characteristics of rural households, their economy is localised. Nigeria has about 110,000 communities with about 30,000 development Association (Jibowo, 1992).

Although living conditions in the rural area is determined by the settlement pattern, nucleated rural settlement makes possible the provision of social infrastructure on a collective basis. In general, the standard of living of the rural folks have, on the average, half the access to health services and portable water that urban dwellers have and only a quarter of the access to sanitation facilities (UNDP, 1990; Durojaiye, 1997). However, the burden of nationals poverty is borne more by the rural folks.

Other peculiarities of the rural populace are:

a. Low life expectancy (56 years).
b. High mortality rate (87/1000 birth)
c. Very high birth rate (43/1000)
d. Very low literacy level.
e. Abundance of unskilled labour (UN, 1988).

At this juncture, it is necessary to reiterate that farming is the major occupation of the rural people. However, off-farm economic activities do take place e.g Mat making, weaving, food processing though this may not contribute more than 31% of the total farm workers (Durojaiye, 1996).

Rural areas with the afore-mentioned plagues inevitably will not encourage the stay of young people hence the drift of youths to urban centre (Momoh, 1995). To rectify this anomaly, rural areas need development. This positive change can only be effected through the fortification of extension programmes. We all aware that the primary aim of extension services is to teach the rural people how to raise their standard living with minimum assistance from government and by their own efforts using their resources (Savile, 1965). This development effect should include rapid growth in Agricultural output and productivity as well as general economic improvement in the rural areas and the bulk of the population employed in agriculture. Rural development should also involve the development of indigenous capabilities, including education and business skill, using all available resources to generate successful, commercially productive enterprise and the improvement of quality of life of the rural people through the provision of social infrastructure like good access roads, electricity, modern water and educational facilities. For rural development programme to be sustainable, it must involve dissemination of innovations from researcher to rural people and transfer of rural problems to researchers, incorporation of women and youths and government in providing basic social infrastructure necessary for tapping local resources (Ekpere, 1990; Durojaiye, 1997). Hence the need for the promotion of an extension linkage programme which will take care of children in the rural area CIAP.

PRIMITIVE FARM PRACTICES IN THE RURAL AREAS

A major determinant of agricultural activities is land acquisition. The land availability in a rural setting depends on the pattern of settlement adopted. In most cases land accessibility is constrained by a menace of communal land tenure system - land owned by the community. This

often leads to land fragmentation. Even with the promulgation of the land use decrease of 1978, the situation remain unchanged in the rural areas. This limits the hectarage of farm an individual can cultivate. These made all agricultural agencies to shift emphasis on the productivity per until area (UN, 1988).

The methods of farming in the rural areas remain crude. The act of controlling weeds an and protecting farm produce from damages caused by insects and diseases had not changed significantly from what it is used to be despite the introduction of new techniques through government agencies such as ADPS, NGOS and the extension services of the state ministries of Agriculture. This is because farmers, most especially older ones are conservative, uneducated and reluctant to change. In Ogun State, the two universities: Ogun State University, Ago-Iwoye (through OSUEVS) and university of Agriculture, Abeokuta (through AMREC) have and still playing vital roles in the dissemination of farm improved techniques to farmers in the villages with the aim of boosting food production and raising the standard of living of the rural populace. However, more funding is expected to reach the desired goals. Having found out that older farmers are not ready for any innovation why not shift our emphasis on their children (which are still receptive) this medium - CIAP hence the purpose of our gathering today.

MOTIVATION OF RURAL CHILDREN FOR FULL PARTICIPATION IN AGRICULTURE

Motivation Theories

Motivation by definition is the drive, energy or degree of activity than an individual displays initiated by some need. Psychologists worldwide have postulated various theories to explain the evolution of motivation. The most popular of these theories is the "instinct theory" which ascribed the degree of activity displayed by individual to inherited tendency. However, there is evidence to suggest that the vicissitudes of the early environment may have a greater effect upon instinctive

behaviour than has been supposed. The " imprinting" phenomenon as explained by Moldz (1960) on the behaviour of birds confirmed this.

Social theory on the other hand stressed the interaction of organism with the environment. Similarly, culture-pattern theory stressed the effect of early upbringing of children as an important factor whereas filed theory concluded that the total effect of all forces acting on the individual in the current situation. (Madson, 1961).

In summary, all motivation theories admit that an interaction of the organism and the environment as a crucial process. Is there any need for motivating rural children knowing fully that they are being dragged to do farm work by their parents?

Need for Motivation of Rural Children

Motivator are reward producers or conditions that encourage employees to apply themselves mentally and physically, more productively to their jobs. They encourage commitment to the task. They are mostly psychological and include recognition advancement, responsibility, challenging work and the opportunity for further growth. Really the job becomes the major source of motivation. Hence, there is the need to enrich the job by means of making he job more important than it is. This will make the employee to become more enthusiastic about the job (Herzberg, 1966). Organic motivates are also used indirectly as when he encourages an adolescent to work harder in order to be in a favourable economic position, to secure and support a mate.

The methods of farming int he rual areas has failed to proivded motivation to rural children. They are being forced to perform the little they are doing. The children are doing the job with the hope that Liberty will come one day. Farmer's standard of living (parents of rural children) is nothing to write home about. Their condition is precarious. Many farmers appeared unkept, unattractive and unprogressive. Some are even deformed due to tedious job of weeding. Fine clothing are not found on farmers and they appeared older than their age. All these conditions are demoralizing and will not encourage rural children to take up agriculture

as a lucrative business.

Rural children can be encouraged putting into use, the suggestions put forward by Maslow (1943), Jibowo (1992) and Momoh, (1995) which can be summarized as follows:

a. Children will work harder at tasks when they feel the result is important to them or that in some way the task measures their real worth as a person e.g. the need for survival takes priority over other needs.
b. Children tend to exert themselves more vigorously when a standard of attainment has been set but the target must be withing the capacity of children, provided they work hard.
c. Telling children that a certain tasks is likely to contribute to success in life is likely to stimulate them. Such success is likely to increase the chances of stability in social relationships to attract the attention of others, to increase the chances of material rewards,, to give greater opportunities to manipulating things and ideas, and to increase one's own sense of worth. Indirect use of organic need can sometimes be made.
d. We should present constantly to children challenge which they are likely to accept our challenge will set in motion the striving, while failure resulting from giving up the struggle means some loss of self respect for individual and some loss of face in the eyes of his peers.

All these suggestions can easily be put into practices by evolving a programme of action that chooses children as the main actors. The CIAP is a fortune in this regard. This programme would take as one of the motivating factors modern plant protection techniques to attract rural children to agriculture. This could be done through the establishment of CIAP clubs in the rural-based high schools as well as result demonstrations methods. Some of the techniques necessary for introduction are that of weed control, insect and disease control as well as fertilizer application.

MODERN PLANT PROTECTION TECHNIQUES

A farmer knows that he can expect good harvest, protection of his crop from the adverse effect of weed competition, disease infections and insect pest infestations are necessary. Agriculture, being a worldwide profession, received a global innovations on how to protect our crops with ease and effectively too. What is required is the utilization to effect the desired goals.

WEED CONTROL

Weeds are unwanted plants that interfere with the normal growth of crops by competing with them in nutrients, and space utilization. Weeds are of two types; Annual and Perennial and they may be either broad-leaved or grasses. The severity of the competition depends on the type of crops planted. For instance, there is keen competition between Maize and grasses for nutrients as they have the same growth requirements.

In a rural setting, farmer are used to reducing the effect weed competition by hand/hoe weeding, 2.3 times before crop harvest. This practice is not only wasting but strenous (i.e farmers used most of his time weeding). This practice is capable discouraging rural children from choosing farming as a career. However, new method of controlling weeds is through the use of **"HERBICIDES"**. Herbicides are chemicals meant for controlling the growth of weeds without adverse effect on crops. Two types of herbicides are available: contact/selective which can be applied either post emergently or preemergently to crops. For example, we all know that maize crop is very susceptible to weed competition and the farmer need to weed first at 2 - 3 weeks after planting then at 6 - 7 weeks after planting or else, crop failure may result. Instead of passing through the tedious method, it is suffice to Apply Primexthra (Metolchlor + atrazine) at the rate 3.5 kg a. i./ha just at planting. With this application, the farmer can use his time for other economic ventures while awaiting the harvest. It also affords the farmer to operate on large scale (Akobundu, 1987). Since this method is easier than manual weeding it is expected to be more attractive to rural

children.

DISEASE CONTROL

When talking about crop diseases, the black pod disease of cocoa is famous among farmers. This disease is properly managed by spraying copper-based fungicides such as perenox and copper sulphate crystals. However, disease of arable crops are often ignored until and out-break wipe out their crops. For instance, Web Blight of cowpea which devastates the leaves and usually results in crop failure cannot be identified by them. Any outbreak of this disease ruins cowpea plantation especially during the prolonged late rain. Of the same magnitude is the Maize Downy mildew. Fortunately, disease outbreak is sporadic. Nonetheless, rural children should be trained on how to control some devastating disease. The extension programme as the CIAP would be of great advantage in this regard.

INSECT PESTS CONTROL

Crop yield loss due to insect is enormous most especially on nutritious grains (Morill, 1996). The damage may also be quantified in terms of quality of the produce. Insects eat kernel of grains thus reudce the food value as well as marketability of the grains. This great monetary loss is incurred when care is not taken to control them.

Crops that are highly susceptible to insect pests attack are improved varieties of *Oryza sativa* (Rice);*Zea mays* (Maize) *Vigna unguiculata* (cowpea); *Manihot spp* (cassava) and a host of others. African Rice Gall midge *(Orselia oryzivoara* H & G) is a serious pest of rice than often lead to crop failure (Ukwungu, 1987) farms on which it ravaged, the owners (farmers) usually regard themselves as unfortunate that year. Likewise, maize attacked by maize strerk (a disease transmitted by a plant hopper (Cicadulina sp) suffers yield reduction of high magnitude. Cowpea is the most susceptible crop to insect pests. Infact, farmers should not expect any yield when they failed to apply chemical spray regime. Cassava mealybug (Plannococcus *manihoti*) is

also devastating especially on cassava planted during the late season - reducing their stems to "candle-sticks" (Akinlosotu, 1977). Unfortunately, most of these insect pests are not recognized by older farmers and they often interpreted their effects on crops as the work of witchcraft. Therefore, the training of rural children on the methods of insect pest control such as cultural, chemical as well as the use of host plant resistant varieties would be an effort in the right direction in accommodating some of the crops dread by older farmers. Therefore the idea of Southern farmers relying on the purchase of cowpea (bean) from the Northern farmers should be dropped as cowpea farming can equally be successful in the southern Nigeria. Children in Agriculture Programme should take note of this while carrying out their campaign, as children are more receptive to leaning and innovative.

FERTILIZER APPLICATION

The issue of increasing farm output per unit area may not be realized if we close our eyes to the fact that with each cycle of cropping, soil is depleted and the nutrients removed by crops should be replaced somehow. Deficiency of nutrients cause parasitic disease on crops such as stunted growth, reduced leaf area and low yield. In the past, farming systems like fallowing, shifting cultivation were employed due to the availability of unutilized expanse of land. However, land is not easy to acquired now especially when large hectrarage is envisage . Hence, method of replenishing soil nutrient without necessaring leaving your present farmland is important. Therefore, application of organic manure (e.g Animal dungs, poultry droppings inorganic fertilizers (single or compound) will go along way in replenishing the lost nutrients from the soil.

Thus boosting agricultural productivity per until area. The CIAP should endeavor to enlighten the rural children on the proper use of manures and fertilizer.

CONCLUSION

Agriculture (whether practised on full time or part-time basis is the major occupation of Nigerian most especially among the rural dwellers. This implies that agriculture provides employment for over 80% of the Nigeria populace. However, the living standard in the rural area is poor and due to this, young people are leaving for urban centres leaving old and weak people to practice farming on full-time basis. Hence, agricultural productivity is reducing.

Rural children (offsprings of the se old farmers living with them and coarse to work on the farm) are not motivated by the way the farming is practiced. They view it as tedious and do not bring any tangible reward and often lead to loss of self respect. However, modern methods of agricultural practices, one of which is the plant protection will provide motivation to rural children when they realize that with lesser effort greater production can be achieved. And that there are more prospects in farming than going to the town looking of job that is not there. However, government has major role to play in the agricultural development of this country. Developing agriculture which is the main stay of our economy will go a long way in improving the living standard of the rural people, so this government should make frantic efforts.

This will encourage rural children to stay in the rural areas and contribute meaningfully to our economy. Rural children which usually leave parents after their completion of the elementary school to high school in the urban centre should be encouraged to stay back by establishing more secondary schools in the rural areas.

The formation of C.I.A.P clubs should be a must in a every secondary schools so that modern methods of farming can be introduced to them (since they have more receptive minds). C.I.A.P clubs should be managed by the university extension services for effective execution , so that they will not be paralyzed by administrative bureaucracy as in the case of the younger farmers' club of the ministry of Agriculture. Therefore government is hereby called upon to make fund available to the children-in-Agriculture programme in order to carry out this tasks

effectively.

Finally, children in Agriculture Programme (C.I.A.P) should present farming as a lucrative business by teaching young the modern plant protection techniques through various extension teaching methods e.g result demonstrations. Their attention may be drawn to laudable achievements of farmers in the past. The exemplary achievement of the Western region government that used proceeds from cocoa production to build cocoa house and established Odua investment Company are the nearby witnesses. Also worthy of mentioning are the past presidents of U.S.A eg, Ronald Reagan and John Bush that are full time farmers.

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PLACE OF FARM CHILDREN IN THE APPLICATION OF BOTANICAL PESTICIDES: A CASE STUDY OF *HYMENIA RECURVALIS* F. A PEST OF *AMANRATHUS*

BY

A.D. BANJO AND R.O. OLALEYE

Department Biological Sciences, Ogun State University, P.M.B. 2002, Ago-Iwoye, Ogun State, Nigeria.

ABSTRACT

Three concentration of aqueous extracts (5, 10 & 15%) from leaves of *Azadirachta indica* (Neem) *Acalypha wilkesiana* and *Jatropha curcas* (Physic nut) were used against Lepidopteran larvae *Hymenia recurvalis* which feed voraciously on the lamina until only the network of veins remains. Result showed that the extracts of 15% concentration significantly reduced the population of *Hymenia recurvalis* (at $P \leq 0.05$). The extract of Azadirachta indica was found to be most effective for no longer than 2 to 4 days, after spraying follow by *Acalypha wilkesiana* which was effective for 2-3 days and the least effectively of the three was *Jatropha curcas* controlling the pest at lower rate for only 2 days. The three plants have potentials as natural pesticides.

The farm children can make use of these botanical pesticides in solving some of the pest and disease problem on the farms.

INTRODUCTION

The plant kingdom has supported mankind in many ways. Perhaps the first attempt to utilise this resource of ancient man was for food (Prakash & Rao, 1997).

Civilised man developed agriculture to use plant resources primarily as food and, with further development, for fibre and fodder, soon, the need to use them to combat human disease led to the development of ayurvedic homeopathic and Uani systems of medicine (Prakash & Rao

1997).

Encouraged by the results of treatment of human diseases, it was quite natural that the civilised man again turned towards the plant kingdom to find solutions for pests and diseases of agricultural crops (Prakash and Rao, 1997).

According to Prakash and Rao (1997) plants have evolved over some 400 million year and acquired defence mechanisms during their evolution, which secure their survival in the presence of hostile environments and enemies. Some of the morphological protective measures such as thick cuticular waxes, thorns and prickles, and sticky hair are easily identifiable although less obvious, more important and subtle defence mechanisms are based on chemicals which protect roots, stems, foliage and flowers from insects and other bioagents. Thus a large number of different plant species contain natural pesticidal materials, and some of these have been used by man as pesticides since very early times.

Of all the pests of *Amanranthus, Hymenia recurvalis* is considered as the major pesticides was considered as the major pest. The adult enters between the blades of the developing leaves; it's eggs are laid on the underside of the leaves; the larvae produce a gummy excrement which holds the blades together; they pupate in the young leaves and feed voraciously on the lamina until only network of veins thus causing harvest and also exposing the plants to various diseases (Epenhuijsen, 1974).

As a result of this menace caused by this pest, this investigation was carried out to assess the effectiveness of using locally available plant materials to reduce to the minimum level, the occurrence and the rate of destruction of *Amaranthus* by *H. recurvalis* using aqueous leaf extracts of *Azadirachta indica, Jatropha curcas* and *Acalypha wilkesiana.*

Aqueous plant extracts are very cheap and can be easily produced by farmers in developing countries, harmless to plants and animals. They are biodegradable and, as a general rule, they are quite specific and cause little disturbance to the natural balance between living organisms.

According to Schmutterer (1985) the main target species for neem products are *Lepidoptera*. Very good to satisfactory result were obtained by field application of neem sprays against a number of serious pests.

Children have been found to significantly participate in farming activities, vegetable production inclusive (Torimiro and Adedoyin, 1998). They can thus be involved in the application of some botanical pesticides for the control of some vegetable pests.

MATERIALS AND METHODS

Fresh leaves of each of these plants were collected from trees within the University Campus. Using infusion method, infusion simply means immersion of the leaves of plants into boiling water br five minutes and left to stand as tea or herbal infusions. The infusion is allowed to cool to room temperature before use according to the method of Dupriez and de Leener (1989).

A small quantity of starch (2 grams per 100ml) was added to the mixture to make it adhere more easily to the vegetation treated and the bodies of the pest (Dupriez and de Leener, 1989).

Application of the extracts was by a Barry band hand sprayer when it was observed that every beds have been infected by pests. (That was about 4 weeks after planting).

The concentrations applied were approximately 5, 10, 15% where 5 g of plant leaves in 100mls (approx. 3 bottles of 35cl coca cola) of water was regarded as 5% Concentration. The control was distilled water spray regarded as 0g.

Application of extracts was done weekly. The number of larvae on infested plants per bed were counted every 24 hours from the day of spraying. The number of days for which each treatment was effective was noted and there were three sprayings before the end of the experiment.

RESULT AND DISCUSSION

The effects observed were due to antifeedant properties of active ingredients in *A. indica, A. wilkesiana* and *J. curcas* against *H. recurvalis.*

The treatment at 15% concentration gave better protection of the *Amaranthus cruentus* leaves against *H. recurvalis* when compared to control, and the mean difference between the number of larvae found in the treated and the control plants were highly significant ($P < 0.05$).

This result is similar to that of Dreyer quoted by Schmutterer (1985), who reported at aqueous seed kernel extracts gave excellent control on *Plutella xylostella,* a very dangerous cabbage pest in the tropics. This is also similar to the results of the studies on neem, *Azadirachta indica* (Sowunmi and Akinnusi, 1983).

Four days after spraying, there was slight increase in the larvae population trend in the treated plants. This may be due to the appearance of new larvae which hatched from eggs laid bye adults of *H. recurvalis.*

The effectiveness of both *A. wilkesiana* and *J. curcas* leaves extracts in controlling the population trend of *H. recurvalis* on *A. cruentus* is significantly better than the control ($P \leq 0.05$). The *A. wilkesiana* extract is as effective as that of *A. indica.* The *J. curcas* extract also reduce the population of *H. recurvalis* larvae but not to as significant level as *A. indica* extract (Table 1).

The application of 15% concentration of aqueous leaves extracts of *A. indica, A. wilkesiana* and *J. curcas* were effective in reducing the larval population to 11.77%, 33. 33 % and 55.56% respectively at the 4th day for *A. indica* and of the end of the 3rd day for *A. wilkesiana* and *J. curcas* (Table 1).

Although the active ingredient of *A. wilkesiana* and *J. curcas* have not been determined. azardiractin the active ingredient of neem, is likely to be responsible for the effectiveness of neem leaf against *H. recurvalis* infestation.

Of the three concentration used the 15% concentration have a more effective control of the pest and the most potent of the extract is A. indica

having 82% and 88% efficiency on the 3rd and 4th day respectively followed by *A. wilkesiana* controlling the pest infestation rate at 67% on the 3rd day.

Inference that can be drawn from this is that there is need for respraying every fourth day with 15% concentration.

Table 1: Mean number of insect larvae as percentage of the number on the days of application of extract.

% SURVIVAL UNDER 15% LEAF EXTRACT OF:				
DAEA	***Azardirachta indica***	***Acalypha wilkesiana***	***Jatropha curcas***	**Control**
1.	100.00	100.00	100.00	100.00
2.	41.18	46.67	61.11	100.00
3.	17.65	33.33	55.56	116.67
4.	11.77	40.00	55.56	133.33
5.	17.65	53.33	55.56	158.33
6.	23.53	56.33	66.67	166.67
7.	29.41	60.00	77.78	166.67

% SURVIVAL UNDER 10% LEAF EXTRACT OF:				
DAEA	***Azardirachta indica***	***Acalypha wilkesiana***	***Jatropha curcas***	**Control**
1.	100.00	100.00	100.00	100.00
2.	70.00	62.50	71.43	100.00
3.	50.00	56.25	64.29	150.00
4.	50.00	68.75	71.43	200.00
5.	100.00	81.25	78.57	250.00
6.	110.00	87.50	78.57	260.00
7.	140.00	112.50	78.57	350.00

% SURVIVAL UNDER 5% LEAF EXTRACT OF:				
DAEA	*Azardirachta indica*	*Acalypha wilkesiana*	*Jatropha curcas*	Control
1.	100.00	100.00	100.00	100.00
2.	66.67	87.50	83.33	125.00
3.	66.67	100.00	100.00	150.00
4.	100.00	100.00	133.33	175.00
5.	133.33	165.50	150.00	200.00
6.	166.33	175.00	216.67	200.00
7.	150.00	200.00	216.67	200.00

DAEA = Days After Extract's Application

CONCLUSION

Since according to Prakash and Rao (1997) plant products have many advantages over synthetic chemical which include Botanical pesticides in general possess low mammalian toxicity and thus constitute no health hazards and environ mental pollution. There is practically no risks of developing pest resistance to these products when used in natural forms.

Due to prohibitive cost of synthetic pesticides and the problems of environmental pollution caused by continuous use of these chemicals, the place of rural children in Agricultural development is to adapt such low level technology in coping with problems of pest and disease on the farm so that at the macro level, the need for foreign exchange for the importation of chemical pesticide can be reduced when the chemical pesticide can be reduced when the chemical are replaced with natural pesticides.

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SECTION THREE

OPERATIONAL GUIDELINES DERIVED FROM RESOLUTIONS OF THE FIRST CIAP NATIONAL RESEARCH

Participants at the Closing Ceremony of the 1st Conference

FROM RESOLUTIONS OF THE FIRST CIAP NATIONAL RESEARCH NETWORK MEETING

The first National Research Network Conference and meeting of the children -in-Agriculture programme (CIAP) was held from Monday 23rd to Thursday 26th March, 1998 at Ago-Iwoye, Nigeria. At the end of the conference, the first national research network meeting was also, held and it took the form of an annual general meeting (AGM). The meeting which started at about 2.00 p.m on Wednesday 25th March, 1998 lasted for about four hours under the chairmanship of the National Coordinator/President of CIAP Dr. S. Fola Adedoyin.

The meeting came out with the following resolutions which form the instrument for overall administration and management of CIAP pending the time a formal constitution will be put in place for that purpose:

1. That the National Headquarters shall be located at Ago-Iwoye, Nigeria
2. That the National Coordination/President, the Programme Officer, and the State Co-ordinators shall constitute the National Board of Coordinators which will be responsible for the overall management of CIAP. The National Coordinator/President and the Programme Officer shall be the chairman and Secretary of the Board respectively.
3. That interested persons who have completed all membership registration formalities shall be formally admitted into the membership of the National Research Network of CIAP at its next meeting. such persons names shall then be entered into the National Membership Register.
4. New members shall pay a prescribed fee for registration of membership and registered members shall pay a prescribed annual dues. Failure to pay annual dues by any member for three consecutive years shall make that person to forfeit his/her membership. Such

person will need to reapply for membership and undergo fresh registration formalities.

5. That the following persons appointment as state coordinators were ratified at the First CIAP Network meeting held at Ago - Iwoye, Nigeria on Wednesday 25th March, 1998.
   - Dr (Mrs) Stella Williams, Department of Agricultural Economics, Obafemi Awolowo University, Ile-Ife, Nigeria as State Coordinator for OSUN STATE.
   - Dr. Isiaka A.Idowu, Director, Agricultural Media Research and Extension Centre (AMREC), University of Agriculture, Abeokuta, Nigeria as State Coordinator for Ogun State
   - Mr. Joshua B.Agunbiade, Director, School of Agriculture, Lagos State Polytechnic, Ikorodu Campus, Lagos State, Nigeria as State Coordinator for LAGOS STATE; and
   - Mrs Biola. Phillips, Federal College of Chemical and Leather Technology, Zaria, Nigeria as State Coordinator for KADUNA STATE.

   Based on active participation, readiness and capacity for leadership, the Programme Officer may nominate suitable persons to the National Research Network meeting for ratification of their appointments as State Coordinators. Such persons are expected to spearhead the establishment of State Chapters. They are then to report development to the National Secretariat. where arrangement will then be made for the National Coordinator or his representative to come and inaugurate the State Chapter.
6. State Coordinators are to render reports at CIAP National Research Network Meetings. After such presentation, the state coordination are to submit neat copies of such report to the Programme Officer for inclusion in CIAP Annual Report.
7. That the various State Chapter willing to host CIAP National Research Network conference and meeting will indicate at a current meeting and decision will then be taken democratically on the matter.
8. A State Chapter authorised by the Network meeting to host the next

Conference should swing into action promptly. The first stage is for the State Chapter to invite the National coordinators and the Programme Officer to a meeting at which the proposed activities will be presented for approval, after such approval, the National Secretariat will provide a token take -off grant, Official letter head papers, and official receipt booklets to be used for the conference.

9. All publications of CIAP at national, State and Local levels must carry the address of the National Secretariat and names/offices of the National Officers. This is to sustain a single line of authority in the programme nationwide.
10 Sources of income for running the National Secretariat will include:
   i Membership registration fee,
   ii. Annual dues,
   iii. Donation from members and other individuals and organisations; and
   iv. 20 percent of fund accruing from conferences and other activities, at State and Local levels after deducting cost.
11 A meeting of the National Officers (National Coordinator, programme Officer and other members of the National Board of CIAP Coordinators) with the LOC is to hold at the conference venue a day to the officer opening of any conference. The meeting will review the conference plan and preparations made, and provide the forum for necessary briefing.
12 The Chapter hosting a Conference will be responsible for the accommodation and boarding of the National Coordinator and the programme Officer for the period of the conference.
13 State Coordinators as team leaders should feel free to embark on activities that could promote CIAP in the State and even at national and international levels. However, for unity of purpose and single line of authority in the running of CIAP, approval must be sought from the National Secretariat for such activities. All necessary papers should also be provided to the National Secretariat.
14 The State Chapters have the responsibility for publishing

Conference/seminar/workshop proceedings and reports on their activities, However, the final draft of such document must be submitted for perusal and approval by the National Coordination before publication distribution and/or submission to donor agency.

15 State Chapters are to work very closely with community schools, NGOs, Ministry of Agriculture, ministry of women Affairs and in particular, the extension service system for the integrated of CIAP into their development efforts. Formation of CIAP Clubs in secondary Schools should be aggressively pursued.

16 A CIAP quarterly Newsletter to be tagged "FUTURE FARM INDUSTRIALIST" is to be produced regularly and Programme Officer is the Editor of the publication. Widely distributed.

SECTION FOUR

LIST OF PARTICIPANTS

(corporate and individual)

LIST OF PARTICIPANTS

A. CORPORATE:

Diocesan Agricultural Development Project (DADP), Justice, Development and Peace Commission, Catholic Diocese of Ijebu - Ode, Ogun State, Nigeria.

Research, Empowerment and Development Institute (REDIN). P.M.B 315, Ago-Iwoye, Nigeria.

Agricultural Media Resources and Extension Centre (AMREC), University of Agriculture, Abeokuta, Nigeria

Ogun State University Extension Villages Scheme (OSUEVS), Department of Agricultural Extension and Rural Sociology, Ogun State University, P.M.B 2002, Ago-Iwoye, Nigeria.
Institute of Education, Ogun State University, Ago - Iwoye, Nigeria.

Local Schools Board, Ijebu North Local Government, Ijebu Igbo, Ogun State, Nigeria.

Ogun State Agricultural Development Programme (OGADEP), Abeokuta, Nigeria.

Ministry of Women Affairs and Social Development, Ogun State Government Secretariat, Abeokuta, Nigeria.

National Horticultural Research Institute (NIHORT), Idi-Ishin, P.M.B 5432, Ibadan, Oyo state, Nigeria.

Federal College of Chemical and Leather Technology, PMB 1034, Zaira, Nigeria.

National Agricultural Extension and Research Liaison Services (NAERLS), Southwest Zonal Office, Moor-plantation, Ibadan, Nigeria.

Institute of Agricultural Research and Training (IAR & T), Obafemi Awolowo University, Moor Plantation, Ibadan.

Research and development Centre (RESDEC), University of Agriculture, Abeokuta.

Federal Economic Advancement Programme (FEAP), Ogun State Coordination Office, Abeokuta, Nigeria.

Peoples Bank of Nigeria, Ago -Iwoye Branch, Ago - Iwoye, Nigeria.

B. INDIVIDUAL:

Mrs Doyin Ogunbiyi: Ministry of Women Affairs and Social Development, Abeokuta, Nigeria.

Professor O.Y.Oyeneye: Ogun State University, Ago - Iwoye, Nigeria.

Professor Titus Ola Ogunfiditimi: Department of Agricultural Extension Science, University of Ibadan, Ibadan, Nigeria.

Professor A. Adegboyega Jibowo: Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife, Nigeria.

Professor J. Ade Alao: Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife, Nigeria.

Professor Bola Okuneye: University of Agriculture, Abeokuta, Nigeria/FEAP Coordinating Office, Abeokuta, Nigeria.

Professor J.O. Babatola: National Horticultural Research Institute (NIHORT), Ibadan, Nigeria

Rev. Fr. John Patrick Ngoyi: Justice, Development and Peace Commission (JDPC) Catholic Dicocase of Ijebu - Ode, Nigeria.

Mr. J. S. Oluwole: Human Resources Development Component, Ogun State Agricultural Development (OGADEP), Abeokuta, Nigeria.

Dr. S. Fola Adedoyin:Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

Dr. (Mrs) Stella Williams: Department of Agricultural Economics, Obafemi Awolowo University, Ile - Ife, Nigeria.

Professor B. O. Durojaiye: College of Agricultural Sciences, Ogun State University, Ago - Iwoye, Nigeria.

Professor O. L. Oludimu: Faculty of Agricultural Management and Rural Development, Ogun State University, Ago - Iwoye, Nigeria.

Professor K.O. Adejonwo: Faculty of Agricultural Production and Renewable Resources,. Ogun State University, Ago - Iwoye, Nigeria.

Dixon Olu Torimiro: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

Dr. I.A. Idowu: Agricultural Media Resources and Extension Centre, University Of Agriculture, Abeokuta, Nigeria.

M.A.Jaiyeola: Agricultural Media Resources and Extension Centre, University of Agriculture, Abeokuta Nigeria.

I.A.Adeniji: Agricultural Media Resources and Extension Centre University of Agriculture, Abeokuta, Nigeria.

T.A. Okeowo: School of Agriculture, Lagos State Polytechnic Ikorodu, Lagos, Nigeria.

L.A. Odeyemi: School of Agriculture, Lagos State Polytechnic Ikorodu, Lagos, Nigeria.

J.O.Y. Aihonsu: Department of Agricultural Economics and Farm Management, Ogun State University, Ago - Iwoye, Nigeria.

Nurudeen Alliyu: Department of Sociology, Ogun State University, Ago - Iwoye, Nigeria.

Dr. Akinbile L.A: Department of Agricultural Extension Services, University of Ibadan, Ibadan, Nigeria.

M.G. Olajide: Department of Agricultural management and Extension, School of Agriculture, Lagos State Polytechnic, Ikorodu, Lagos, Nigeria.

Mrs B. Biola Phillip: Federal College of Chemical and Leather Technology, P.M.B 1034, Zaira, Nigeria.

A. A. Oyekunle: Department of Sociology, Ogun State University, Ago - Iwoye, Nigeria.

C.I. Shodiya: Department of Agricultural Extension and Rural Sociology, Ogun State university, Ago - Iwoye, Nigeria.

A. F. Oluborode: Department of Agricultural Extension and Sociology, Ogun State University, Ago - Iwoye, Nigeria.

J.B. Agungiade: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago -Iwoye, Nigeria.

J. O. Okunlola: Department of Agricultural Economics and Extension, Federal University of Technology, Akure, Ondo State, Nigeria.

S.D. Yomi Alfred: Department of Agricultural Economics and Extension, Federal University of Technology, Akure, Ondo State, Nigeria.

J.A. Afolabi: Department of Agricultural Economics and Extension, Federal University of Technology, Akure, Ondo State, Nigeria.

Mrs D. A. Adegbite: Agricultural and Resources and Extension Centre (AMREC), University of Agriculture, Abeokuta, Ogun State, Nigeria.

Patrick A. Edewor: Department of sociology, Ogun State University, Ago -Iwoye, Nigeria

Dr. A. J. Farinde: Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile - Ife, Nigeria.

S.A. Adeyemi: Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University , Ile - Ife, Nigeria.

I.O. Oladosu: Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

J. G. Adewale: Department of Agric business and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

J.O. Ajetomobi: Department of Agricbusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

K. Adebayo: Department of Agricultural Extension and Rural Development, University of Agriculture, Abeokuta, Ogun State, Nigeria.

A.S. Onasaya: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

Dr. A.O. Adekule: Department of Agricultural Extension Services, University Of Ibadan, Ibadan, Nigeria

Dr. B.M. Asiru: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

Mrs B.O. Lawal: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

Mr. O.O. Olubanjo: Department of Agricultural Economics and Farm management, Ogun State University, Ago - Iwoye, Nigeria.

K. A. Ogunjobi: Department of Chemistry, University of Ibadan, Nigeria.

Dr. (Mrs) Grace Oluseyi Sokoya: Extension Fellow and Programme Leader, Women - In - Development (WID), Agricultural Media Resources and Extension centre (AMREC), University of Agriculture, Abeokuta, Nigeria.

I. A. Ayinde: Department of Agriculture Economics and Farm management, University of Agriculture, Abeokuta, Nigeria.

Mrs A.F.O. Ayinde: Ogun State Agricultural Development Programme, Someke Block, Ogun State, Nigeria.

A. O. Ajayi: Programme Officer (Research and Training), Quality of Life Foundation (An NGO), Ibadan, Oyo State, Nigeria.

L. Gbadamosi: Department of Educational foundation and management, Ogun State University, Ago - Iwoye, Nigeria.

A.B. Akindele-Oscar: Department of Educational foundation and Management, Ogun State University, Ago - Iwoye, Nigeria.

S.O.A. Morafa: Department of Crop production, Ogun State University, Ago - Iwoye, Nigeria

Mrs. O.E. Fapojuwo: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

A.A. Agbelemoge: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago - Iwoye, Nigeria.

O.A. Adeyemi: Department of Agricultural Extension and Rural Sociology, Ogun State University, Ago -Iwoye, Nigeria

A.B. Ogunwale: Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.

Dr. A.E. Adekoya: Department of Agricultural Extension Services, University of Ibadan, Ibadan, Nigeria

Dr. J. O. Akinyemi: Department of crop Production, Ogun State University, Ago - Iwoye, Nigeria.

Professor O.O. Oworu: Department of Crop Production, Ogun State University, Ago - Iwoye, Nigeria.

Dr. A.A. Obadofin: Department of Crop Production, Ogun State University, Ago -Iwoye, Nigeria.

A.O. Joda: Department of Crop Production, Ogun State University, Ago-Iwoye, Nigeria.

A. D. Banjo: Department of Biological Sciences, Ogun State University, Ago -Iwoye, Nigeria.

R. O. Olaleye: Department of Biological Science, Ogun State University, Ago- Iwoye, Nigeria.