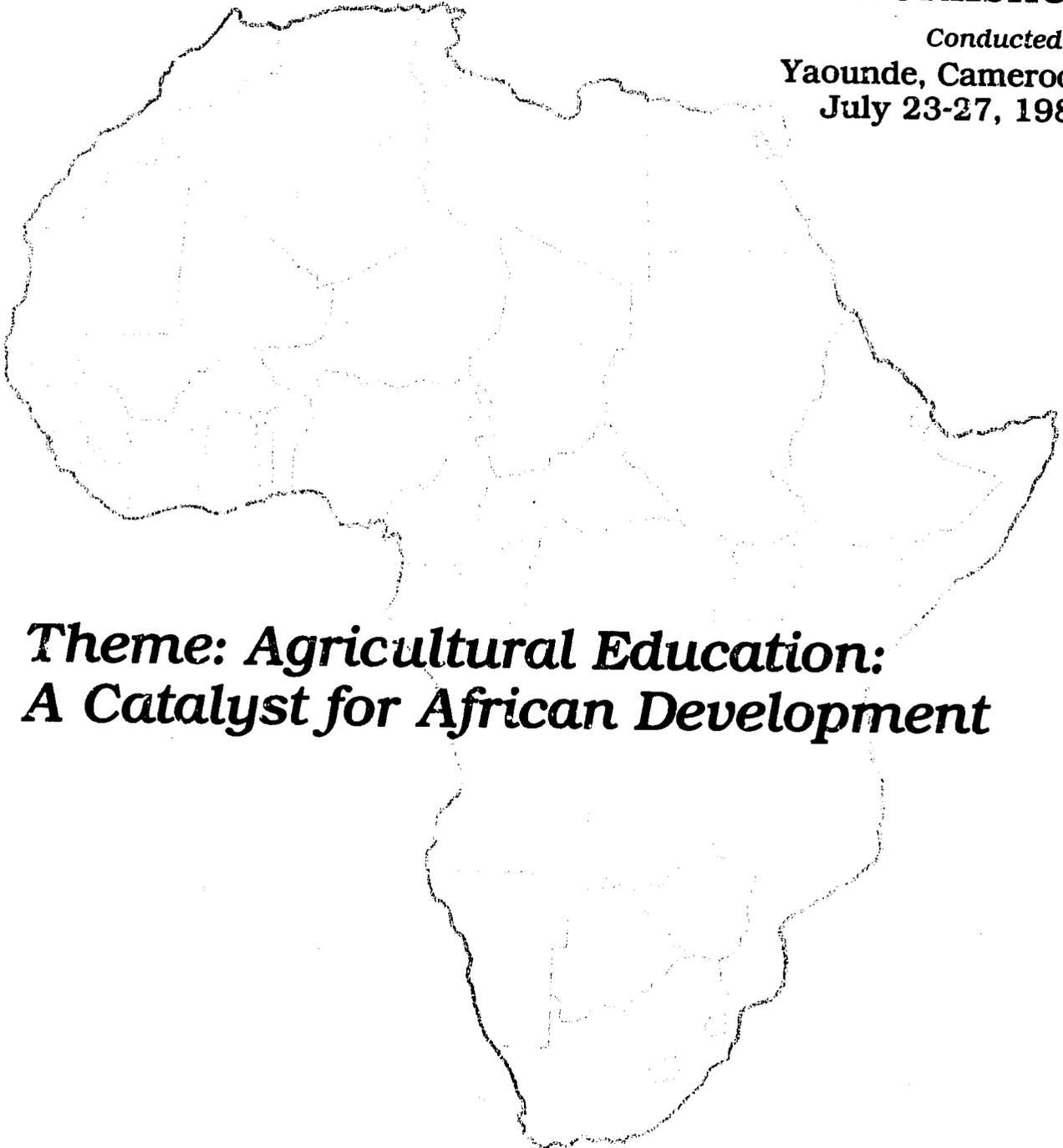


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EXECUTIVE SUMMARY
of the
General Proceedings
of the
**AGRICULTURAL
EDUCATION
WORKSHOP**

Conducted in
Yaounde, Cameroon
July 23-27, 1984



***Theme: Agricultural Education:
A Catalyst for African Development***

Sponsored by:
**The Education and Human Resources
Development Division * The Agriculture and
Rural Development Division * Office of
Technical Resources, Africa Bureau * and
USAID Mission, Cameroon**

Agency for International Development
Washington, DC



AGRICULTURAL EDUCATION WORKSHOP PARTICIPANTS, Yaounde, Cameroon, July 23-27, 1984

EXECUTIVE SUMMARY

GENERAL PROCEEDINGS

of the

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FOR AFRICAN DEVELOPMENT

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PREFACE

[The dinner speech on the second evening of the workshop presented by Dr. Asavia Wandira, Vice Chancellor, Makerere University, provides a thoughtful commentary on the workshop objectives and proceedings, and is a fitting Preface for the Executive Summary of the Conference Proceedings.]

Dr. Perry, Your Excellency the Ambassador, and if there are security men, high-ranking officers, ladies and gentlemen. I feel very old tonight--I have been asked to compare the past with the present. By giving such an excellent speech in the morning, Dr. Perry set the tradition for workshop speeches. She has again done so this evening, and that presents a particular challenge for me.

I don't know how many times in my life I have ever prepared a speech. Worse than that, when I look at the working definitions of agriculture education we were given earlier--you know what I mean--I find no reference to dinner speeches. But, there right at the beginning, is agricultural education defined as "education for agriculture." So from that definition, I am to understand a dinner speech must be a speech at dinner, or a speech which is spoken again at dinner.

Since I have managed to destroy that bit of speech that I did prepare, then perhaps I should give an "after-speech speech." And I must tell you, I learned something about speech-giving from a "miracle man" called Idi Amin. It was a strange habit he had to read his speech beautifully, although all of us knew that the speech had been written by someone else. He was always anxious to get that speech over quickly to his audience, and would then put down his paper and say, "I'll now tell you what I really want to say.

I gather that my role as a speaker tonight, is to speak to you from the perspective of an African who does not know how to read or write, but who can speak best from the bottom of his heart.

I would like on behalf of those of us who come from outside Cameroon and particularly from this Continent of Africa to say a word of thanks to Dr. Perry and those high officials of the Agency that brought us here, for organizing this conference on the subject of consuming interest that has faced us for the last eighty years. I would like also on behalf of the Africans to say a word of thanks to the great people of the Republic of Cameroon, working under the illustrious and beloved President, His Excellency Paul Biya, for making us welcome to this country.

I would like also to salute the potential of the partnership which seems to be growing again between the great people of America and the scholars of Africa. As a university man, I would like on behalf of the universities of Africa to look forward to the possibilities of the linkages between African universities and American universities, in this great task of developing agricultural education.

I found it indeed heartening to hear this morning that the Agency for International Development looks forward to working out a strategy that may guide policies in agricultural education and university building in Africa for the next few years. My hopes are great tonight that we Africans who have come to this workshop have not come for nothing; that we will be able to go home and explain why we came to Cameroon, that we will be able to say that the Agency is committed and is going to offer assistance.

I feel it necessary to emphasize this, especially because we have the honor tonight to have with us the representative of His Excellency the President of the great American people [the U.S. Ambassador]. I would like your President to know, Your Excellency, that we Africans appreciate any help we can get and that our purpose for coming to this workshop was in the hope that as the Agency changes its strategy, the change will not only benefit the Agency, but no doubt will improve the lot of people on this continent.

I would like as we proceed with the workshop, to bear in mind the context in which agriculture has ensued. The food crisis which besets our continent has been referred to by Dr. Perry, and indeed by the radio in reporting great speeches being made in Zimbabwe, where an FAO conference is being held. I do hope that this food crisis is something that agricultural education can have effect on. I am not sure after hearing Dr. Fafunwa, whether this will be so, but I have hope that we will be able to make a contribution.

I would like to say, however, that beyond the food crisis, beyond the pursuit of food self-sufficiency, there are other goals of African development.

I am glad to recognize the representative of the OAU, Professor A.O. Williams, who is here on behalf of the OAU, and therefore who enables me to mention the Lagos Plan of Action--a plan which all governments of Africa are committed to as a guided value strategy for development. Our governments individually also have development plans and guides to what they wish to do. Their policies are conditioned by those forces that operate in our society. Some of these are internal economic crisis, political crisis, or even unmentionable things called security.

There are some forces that characterize the environment in which governments operate and condition their action: commodity prices, terms of trade, balance of payment crises, shortage of foreign exchange, the IMF and other agents of Draconian policies. I will say that these economic crises describe the poverty over which we are so worried. These policies will also determine the agricultural policies we hope to pursue. Poverty weakens our will to pursue those things we would like to pursue.

Nevertheless, in spite of these strange circumstances in which our governments have to operate and fashion new policies, I have no doubt in my mind--and I believe no one here in this room has any doubt--that education continues to occupy a central part of the policies of all of our countries. Indications of this are to be seen in the large budgetary allocations which all of our governments are trying to make towards the furtherance of education.

I know in countries where there are problems of security, education comes only next to defense in the national budgetary allocations. I know also that apart from this measure of their commitment to finance allocations to education, governments are making large allocations through other ministries and agencies which are engaged in some form of education.

And, since here we are gathered under the courtesy of Cameroon's Ministry of Agriculture, consider the amounts that are available to extension and other forms of agricultural education. Consider the concern of ministries for community development. Consider ministries in some countries that are concerned with national youth service activities. All these activities tend to absorb a lion's share of government education funds in addition to that required by formal education. These allocations, however, are indicative of the commitment of our governments to the furtherance of education and the importance which continues to be attached to education.

I would like to make this preliminary point, that education is a political matter; the formulation of education policy is a political matter at all levels of education (nursery, primary, secondary, tertiary, adult out-of-school) and all types of education (academic, technical, agricultural, artist-culture, or what have you). Whether you are thinking of education for special groups, (and I don't see why I should place women among special groups--they no longer want to be so mentioned anyway) there are specialized groups that are truly deprived unlike those privileged women of Africa, and these must also be educated.

And, whether we are considering groups or levels of education, the question of surviving education of one kind or another, has become a political matter. In my own country, weekends are not spent in the capital by those Members of Parliament (MP), who hope to be returned to Parliament. They are always spent up-country in one's own constituency in raising money for schools, in opening new schools, in opening new classrooms. An MP, who at the end of five years has not done these things, has little hope of ever being returned.

I know also that when I catch the plane, which I must do so very soon after this speech, I will be returning to a crisis at my university over admissions which have more than doubled the number of people qualified to enter the university. When I tell the Minister of Education that I will take only half that number--if I take away his opportunity to say "the number of graduates, the number of people being educated at Makerere has doubled"--if I don't in some way assure that he will be returned to Parliament next year and his job--I am not sure whether I'll keep mine.

I would like you to appreciate the implications of educational expansion when we have a shortage of money and the implications for a workshop such as this. We are dealing with a situation where diminishing allocations per student are being made to our institutions. I have spoken of the desire of my Minister to report progress. He expects me to achieve 100% passes in the degree examinations. I happen also to chair the schools examination council and every year we must enable our Minister to report that the system is doing better than last year, because the results--the number of grade ones--is higher than last year and that the number of schools that are doing better than last year has gone up. You know this is a measure of the efficiency of his Ministry, and yet he does expect the school system and the university to perform these wonders on a diminishing allocation per student in terms of instruction, and in terms of student life on the university campus.

The day when African people could speak of ivory towers, the day when people could speak of luxuries in universities in Africa have already gone. We are running systems of education that are overcrowded. We are using equipment which is overused, which is over-stressed. We sometimes have to experience breakages in services, a measure of the load on the system we are using. We are using outdated equipment which cannot be replaced because money for capital development is not available. We are using inadequately serviced equipment because the technical know-how is not available to service that equipment. Sending it abroad or calling in expatriate technicians would be too too much for us to pay. We are running services where educational supplies cannot keep pace.

We are running systems of teacher education where the changes we would like to see in teacher education have of necessity been delayed in favor of expansion of systems by those who are not yet educated. We are running systems where support systems for teachers such as in-service education, the inspectorate and other advisory services for teachers cannot be expanded while so many of our school age children remain outside the system. We are running systems where managerial capacity is over strained and which need to be strengthened further, if we are to cope with expanding systems which must become more efficient at less cost.

It must be understood that we are considering agricultural education in a context where the capacity for innovation of the system we are talking about is extremely limited. I would like therefore to suggest that one of the earliest attentions the Agency for International Development must give must surely be to help us to build our institutions again, build the capacity within those institutions and create for Africa the necessary capacity to do the things we are talking about.

It would be the irony of our time, if after these several decades, we are told that WE are the makers of independence; that WE will be given the opportunity to think about how agricultural education should change and develop and then to find that WE as Africans ourselves have no capacity to do these things. It will be the irony of our time if we accuse colonialists of imparting outdated information and inculcating unacceptable attitudes in areas where we think we can do a better job, and then find that those of our African friends who want to help us do not have the capacity to do the job required.

It seems to me the greatest urgency we could attach to this workshop is to ask of our donors that the capacity of our institutions in our countries be increased so that we are better able to describe and carry out the programs this workshop may well recommend.

This workshop already has faced an almost overwhelming problem of learners' attitudes, the problem of adult learners--we ourselves-- who might well reject agricultural education, however well designed it may be. We must try and understand how we as Africans arrived at these present day attitudes. I would like to refer to the three great traditions which seem to be affecting African education: One, the liberal conservative tradition in education, associated with such concepts as love of learning, learning for its own sake, associated with such concepts as excellence and the building of centers of excellence.

You will remember those times when AID was so good to build centers of excellence, including my own university. I have no quarrel with that, but what about those universities that were not centers of excellence. A strategy of development which isolates only a few places to be developed as centers of excellence, however liberal in its intention, remains a little irrelevant to the present day Africa. I am talking about the pursuit of international standards, even when these become irrelevant to our context. All of this has been associated with this one position of liberal conservatism.

I remind you secondly of our standard school traditions; you know that the standard schools were started to keep idle hands busy, because you know the devil is very clever; he has one more idle hand, and you must put idle hands to work.

The standard school position is responsible for a number of experiments in African education. You will recall a man called Fredrick Lugard, great colonialist. I was going to say theorist, but you know I have got a good collection of books of his--and Dame Margaret Thorum--I dare not speak evil of Lord Lugard--among other colonial administrators, who feared that the African was picking up wrong things from western education and was likely to suffer from a split personality, the theme taken up by many writers of that age.

There are also those people who fear that African youth are getting into trouble, and they are not the sort of men we should be bringing up in our society. Troubled youth pick up wrong things and the remedy is agriculture education.

You will also remember that those people who get education in a highly selective system acquire elitist attitudes. The only way you can correct it is--not through an academic education or any other type of formal education--practical education is the only way to remove an elitist attitude, they say. The other day, a technician nearly dropped a hammer on my head, and I wondered if he were a product of elitism.

You will remember that our societies are worried about unemployed youth, and I have often wondered why. Recently, I discovered that it is because "unemployed youth want to spoil it all for us who live in towns" and therefore, the best thing we can do for them is to return them to the land, put them on some acres to dig and they will be gainfully employed. But this also includes rebellious students; we decreed therefore that they shall have national service.

We all know how difficult systems that are short of money will find it to maintain these youth and will give them tasks in the rural areas, even in agriculture. Perhaps the truth is that we borrowed too much from the Sunday School tradition to design the agrarian tradition, although I am not sure where we Africans got that one.

I suppose it all came with the manpower experts, and the great literature which we all enjoy in teaching and learning in our schools of education, in our schools of economics and other disciplines. The literature taught us that we should send our students to do PhDs in manpower planning. Those students came back and fooled their masters into accepting the importance of relating educational development to manpower planning.

As a result, we produced plans that described in great detail the number of this type and the number of the other types we needed. We began to categorize people, and I suppose people should be categorized, into areas where we are now over supplied. Therefore, when some of my friends have lately approached me to say "the answer is agricultural education," I want to ask whether we are sure that those we give agricultural education will not come back and ask us for a job for which they are unprepared. To what extent can we conform with the manpower tradition, which is a part of our post-independent development?

These conditions and attitudes which I have described have exercised an undue influence on our affairs and have not gone unnoticed.

I would like to admit that we Africans together with our friends from afar have made strenuous efforts to change attitudes. Nyerere's "Education for Self-Reliance" has been well known throughout the world, as the literature of Tanzania is one of the most telling in recent history of African education. But there are other experiments and innovations of equal importance.

Zambia once had a study and work statement. I will ask my friend from Zambia whether anybody there now is talking about study and work or, even work and study. Yet, I have seen a heavy document on this and even taught a whole course on it in my education days.

There were also the Brigades of Botswana, where young people were given practical skills that would fit them into the economic demand of their country, without necessarily following traditional educational programs. In my own country I would like to mention the Nambythumba project so well described by UNESCO, which attempted to transform the attitudes of both teachers and students and also the villagers in the neighborhood. Based in a teacher training college, the project encompassed several primary schools in the neighborhood and involved adults and young people in a common learning experience, which we hoped would dramatically change attitudes. Indeed, UNESCO said so, and so did we educators who evaluated the project.

But lo and behold, although we had the hope of extending the worthy experiment, I must tell you we have not yet gone beyond the Nambythumba teaching scheme.

We need to assess why innovations have not been sustained in Africa. We need to study the leadership pattern of innovative experience, and we need to look at the climate of innovation, those factors which make for success and those factors which lead to failure. It seems to me that we have not done enough on this and it might well be an area that will interest AID research.

I must also add that we need new projects on attitudinal change, for learners at school, for youth out of school and for adults. I would hesitate to say that we don't know enough about it; but I think it is a worthy involvement of those who are talking about change. We need attitudinal change and education based on experience as a means of changing attitudes.

I was told that AID is famous for conducting such studies, many of which remain on our shelves and people tend to forget about the last study before they formulate the next one. I do think, however, that America, which has so much experience in this, might lend a hand to us in trying to tackle a problem that is embedded in our tradition.

I am not saying here that tradition is itself a bad thing, that we must become liberal, that we should not correct and provide for remedial education when this is necessary. I am also not saying that the whole of Africa should become agriculturalists and that nobody should learn anything else. You know I am aware that the Lagos Plan will not allow us to say that, and people will rise in rebellion against our governments if it were said. I am saying that we need to study how existing systems can be used to tilt the balance between conservatism.

My last point arises from those very penetrating points made by the keynoter, when our attention was drawn to the reward system that affects agricultural development. I would like this workshop to feel that this was one of the most important statements of the afternoon. I would like to add that apart from awards and incentives, there are other major issues in agriculture. For the structure of agriculture itself--whether we are talking of peasant agriculture or plantation agriculture--how fast we should produce a landless population depends on other forms of employment and how radical one can be in trying to evolve new structures in agriculture. To consider this area and to arrive at a balance is a policy matter of great political delicacy.

I should like also to mention the issue of land tenure, which in Africa is one of the most explosive issues of our time and the emotions that are associated with ownership of land are so great that anybody trying to touch land tenure is likely to lose the next general election. These are all issues of policy, issues of politics, which are so sensitive.

In addition to the question of rewards and incentives, one must acknowledge the marketing system as it relates to taxation, through which many of our governments are taxing the peasant farmers, much more heavily than the urban employee. All these are so sensitive and so politically laden that anybody trying to do agricultural education and hoping for change in these areas are already at great disappointment.

The nature of these questions and the difficulty of their resolution, encourage me to suggest that in addition to the other areas of concern and study, policy oriented studies are urgent in our countries. I would like to commend to the Agency for International Development in conjunction with our need for "university building" the idea brought by ECA, that each country should consider establishing an Institute of Policy Studies in addition to a Pan-African Institute of Policy Studies.

If the Lagos Plan of Action is to be put into effect with full meaning, it will require full knowledge of the policy implications of what we are discussing.

May I, in ending, say that Africa's capacity is limited in terms of innovation, although Africa's need for innovation is great. The importance of this workshop lies in our saying so, and in hoping that in the areas we can identify at this workshop, there will be a commitment from our donors and our governments alike before the end of the workshop toward increasing Africa's capacity to respond to these urgent problems and to create mechanisms for change.

Dr. Perry, Your Excellency, high ranking officers, distinguished guests, ladies and gentlemen, I thank you.

Yaounde, Cameroon
July, 1984

Dr. Asavia Wandira
Vice Chancellor
Makerere University

CONTENTS

| | <u>Pages</u> |
|---|--------------|
| Preface..... | i |
| SECTION ONE: INTRODUCTION..... | 1 |
| A. Sponsorship..... | 2 |
| B. Site..... | 2 |
| C. Participants..... | 2 |
| D. Objectives..... | 3 |
| SECTION TWO: WORKSHOP FORMAT..... | 3 |
| A. Plenary Sessions..... | 3 |
| B. Panel Discussions..... | 3 |
| C. Small Group Sessions..... | 4 |
| D. Large Group Sessions..... | 4 |
| SECTION THREE: SUMMARIES OF GROUP DISCUSSIONS | 4 |
| A. Agriculture in the General Education Curriculum..... | 4 |
| B. Vocational and Technical Agriculture at the Secondary Level..... | 5 |
| C. Higher Education in Agriculture.... | 6 |
| D. Women in African Agriculture..... | 8 |
| E. Extension and Non-Formal Agricultural Education..... | 9 |
| SECTION FOUR: MAJOR WORKSHOP RECOMMENDATIONS | 10 |
| SECTION FIVE: FOLLOW-UP ACTIVITIES | 11 |
| Addendum: | |
| - Workshop Agenda..... | 12 |
| - List of Participants..... | 19 |

EXECUTIVE SUMMARY

Agricultural Education Workshop
Yaounde, Cameroon;
July 23-27, 1984

SECTION ONE: INTRODUCTION

The Agricultural Education Workshop in Yaounde brought together more than 100 professional agricultural educators, specialists and managers, more than 50% of whom were African, for intense and indepth discussion of issues inherent in the workshop theme: Agricultural Education: Catalyst for African Development.

The similarities in the development concerns voiced by African educators and their American counterparts were strikingly numerous; e.g., concerns about inequities in food pricing, lack of support mechanisms for rural families, policies which deny a fair return on investment to farmers and an inability to attract young people to agriculture as a profession. The degree of urgency felt by Africans, however, for resolving such problems is very different. As expressed by the Vice Minister of Agriculture of Cameroon in the official opening of the workshop:

"The food question...is the number one problem facing Africa today. It is a problem which we must solve urgently in order to save the lives of millions of our sons and daughters. Hunger, malnutrition and consequent diseases stare us straight in the face. Food! Food! Food! is the outcry in many corners of the continent. Food importation and gifts of food by benevolent organizations are only temporary relief measures. Food self-sufficiency is the answer. The means to this end is agricultural development and there can be no real and effective agricultural development...except through agricultural education."

The problems reflected in this report are urgent; the shared concerns are real; Africa is looking to agricultural education for solutions. While participants studiously avoided presenting agricultural education as a panacea, they did see it as an essential element in any long-term solution to Africa's food problems.

The following pages provide a summary of workshop activities, conclusions and recommendations which help to define that essential element. Broader descriptions and analyses are presented in the Workshop Proceedings.

A. Sponsorship of Workshop

The Agricultural Education workshop was sponsored and conducted by the Education and Human Resources Development Division, in conjunction with the Agriculture and Rural Development Division, Office of Technical Resources, Africa Bureau. USAID/Cameroon co-sponsored the workshop and provided logistic support for planning and implementation activities.

The United States Government was represented by the American Ambassador to Cameroon and the Director of the USAID Mission located in Yaounde. The workshop was convened by the Chief of the EHR Division, AID/W.

B. Workshop Site

Yaounde was selected as the workshop site primarily due to the comparative prominence given to agricultural education by the Government of Cameroon, the development of Dschang University patterned after U.S. Land Grant colleges, and the open invitation and support provided by the USAID Mission Director and staff.

Pre-workshop activities were conducted at Hotel des Deputes, where most participants were housed. Workshop activities, including plenary sessions and small groups, were conducted at Palais de Congres, which allowed the use of large and small rooms, and simultaneous translation (French and English) for plenaries and discussions by the group as a whole.

The Government of Cameroon actively participated throughout the workshop with representation from the Ministries of Education, Higher Education and Scientific Research, and Agriculture. High-level government officials presided over both opening and closing sessions of the workshop. In addition, the Government of Cameroon hosted a state reception at Mont Febe Sofitel for all participants on the closing night of the workshop.

C. Participants

More than 100 participants attended the workshop including representatives from twenty Francophone and Anglophone African nations, twenty-two U.S. universities, ten bilateral and multilateral donor agencies, and several staff members from USAID Missions in Africa, AID/W, and USDA. Plenary sessions and group meetings were conducted in both French and English. A complete participant list is contained in the addendum to the Executive Summary.

D. Workshop Objectives

The basic assumption of the workshop was that the ultimate purpose of improved agricultural education in Africa is to assist nations to grow more food and ultimately to become food self-sufficient. The workshop was especially pertinent in light of current conditions of famine in Africa and research data which indicate a decrease of twelve per cent in per capita food production in Africa over the past ten years.

The central theme of the workshop was: "Agricultural Education: A Catalyst for African Development." Workshop objectives were to:

- Provide an opportunity for professional exchange among educators, donors, and practitioners in African development for discussion of agricultural education perspectives for Africa;
- Improve communication linkages and networking between professional African and U.S. educators, and between donor technicians in the field of agricultural education; and
- Develop and promote appropriate strategies for improving agricultural education in Africa.

Workshop plenary sessions and working groups fully explored five major areas of concern:

- Agriculture in the General Education Curriculum
- Vocational and Technical Agriculture at the Secondary Level
- Higher Education in Agriculture
- Women in Agriculture
- Extension and Non-formal Agricultural Education

SECTION TWO: WORKSHOP FORMAT

A. Plenary Sessions

The format of the workshop included plenary sessions at which major presentations were made on the above themes in the form of keynote addresses and panel discussions. The full texts of keynote addresses are included in the Workshop Proceedings.

B. Panel Discussions

Five panels were organized to discuss the major themes. Each panel had an appointed chairman and four to five panelists who presented summaries of their tabled papers. Copies of the papers are included in the Anthology on Agricultural Education for Africa.

C. Small Groups

The total group was divided into ten working groups, each of which was assigned a team leader. These groups developed conclusions and recommendations on the five themes.

D. Large Group Sessions

The group participated as a whole in discussions following major presentations, at special dinner sessions with guest speakers and in the final wrap-up session in which the total workshop deliberations were summarized and recommendations were considered for adoption.

A copy of the agenda with names of major presenters and group leaders is contained in the addendum to this Executive Summary.

SECTION THREE: SUMMARIES OF GROUP DISCUSSIONS AND RECOMMENDATIONS

The total workshop membership was divided into ten small groups, with care taken to preserve inasmuch as possible the same degree of diversity; i.e., African professionals, bilateral and multilateral donors, American university personnel, USAID field staff, etc. Each group discussed all five themes and remained intact throughout the workshop. The following summaries represent the combined thinking of the small groups.

A. Agriculture in the General Education Curriculum

It was noted during the discussion that individuals who become farmers in Africa rarely progress beyond primary level education. Concepts of agriculture, therefore, should be introduced early in the formal schooling program. When appropriate technology is available, literate farmers produce more food. To include agriculture in the general curriculum, especially as part of the primary science education program, will make the curriculum more relevant to the students, increase awareness of options in agriculture for youth and help improve the image of agriculture and farming.

One African educator expressed his concerns: "How do we make the reward system competitive enough to attract young people to a respectable life? This is perhaps the key to the whole thing. Will there be the political will to tackle the problem? Have we not seen that we have nice sounding policies and plans and even programs--the architects of which do not inspire confidence, because they don't intend those programs for their own children. . ."

After deliberation of the theme, participants recommended that decision-makers:

- Include agricultural concepts in primary school curricula, in order to develop basic skills and foster an early awareness of the importance of agriculture.
- Develop agricultural education on a continuum, so that students have applicable skills for gainful employment at any stage from primary school to graduate levels.
- Incorporate agriculture in curricula for teacher education, with emphasis on theory, practice and attitudes relevant to increased food production and improved quality of rural life.

B. Vocational and Technical Agriculture at the Secondary Level

Participants noted that agriculture is an economic activity and its promotion depends on the remuneration that the producers get for their production. Since profit-making from farm production is rarely the case, secondary schools in Africa are generally seen by rural youth as a means of escape from the rural areas and farming. Until greater agricultural development occurs which will increase farm income and the quality of rural life, demand for secondary vocational agriculture programs will be limited.

They concluded, however, that there is a role for vocational agricultural programs in Africa in countries where an investment in secondary agricultural programs can:

- train high quality students who are motivated to attend agriculture universities and become agricultural professionals;
- train individuals to fill technical positions in the agriculture sector;
- serve as an avenue for rural women to move into professional agricultural positions;
- train students to become capable farmers;
- involve youth organizations, such as 4-H and FFA, as integral parts of the secondary school experience.

To accomplish these objectives, participants noted that agricultural programs for Africa will have to move away from the colonial models which allow little room for practical learning experiences; e.g., there must be a shift away from teacher-centered methods of instruction; school farm facilities and instructional equipment must be made available or upgraded; and agricultural youth clubs will have to be created and supported.

An African participant from an international research center questioned the relationship of existing training programs to the goal of increased production. "We are training so many people," he said, "and none of these people who are supposed to be trained ever become a successful farmer. There is hardly anybody who has gone through the agricultural education system who has in fact put his hand to the wheel and has become a successful farmer, in many parts of Africa. That is the problem we have to tackle."

Following full discussion of what they considered more appropriate secondary level programs in vocational and technical agriculture, participants recommended that schools:

- Adopt teaching methods and curricula and obtain necessary equipment to permit an emphasis on practical learning experiences.
- Decrease the differences between rural and urban curricula by including aspects of agriculture in the urban school curriculum; i.e., importance of agriculture to the economy, agribusiness, processing, marketing and other agri-related services required for development.
- Develop a "living curriculum" with sufficient flexibility to utilize local examples and to related to local conditions, needs and problems related to food production.
- Provide adequate laboratories for practical field training; e.g., land area, shop facilities and equipment, to facilitate applied farm mechanics; i.e., simple surveying, metal working, woodworking, rope work, fabrication and maintenance of tools and equipment.

C. Higher Education in Agriculture

Discussants noted the importance of preparing researchers on their own soil with skills particular to solving problems faced in the African environment. Several examples were given of training received abroad which had no applicability to the "real world" of African soils, climatology, etc. Africa requires not only the training of professionals in Western universities, but also the building of institutions to continue the training of required personnel.

Degree programs at U.S. universities help to provide the seed for growth of African universities. The African universities themselves need strengthened linkages with other universities. African professionals need the support systems offered through linkages with other professionals in their respective fields. Questions of extension and outreach by African professionals are yet unresolved.

As noted by one participant: "...[African] university staff tend to concentrate on theoretical or academic matters, because this is the only way they are evaluated for promotion and recognition. To direct them to assist farmers, even when carrying out adaptive research, [will cause them] to shy away because they cannot produce learned papers out of this effort. They tend to be removed from the realities of the situation."

Discussants agreed that a renewed emphasis on development of African institutions and relevant research efforts would be an appropriate intervention, but would require long-term, sustained financial and technical support from a combination of donors.

The issue of "national" versus "regional" institutions was repeatedly raised with the admonition by African participants that all governments will insist upon their own universities, for various social and political reasons; that it would be more effective and less costly to develop the capacities of certain national universities to serve regional research and training needs than to establish alternative, competitive institutions.

The relevance of the U.S. Land Grant experience to food production problems in Africa was fully debated. The integration of teaching, research and extension that characterizes the U.S. Land Grant model is considered to be equally important to African institutions. It was agreed that while the American experience in Asia (particularly India) had some merit for Africa, a peculiarly African model should be developed on African soil which could accommodate local cultures, government priorities, human needs and agricultural systems.

Participants considered the following strategies in the improvement of higher agricultural education to be significantly important:

- Strengthen existing African universities.
- Provide training for professionals through inservice and preservice programs.
- Develop linkages and networks among African institutions, international organizations, national and international research centers, and American universities.

- Focus African university programs upon practical applied research based on local needs and priorities.
- Develop agricultural education systems which integrate teaching, research and extension activities.
- Develop curricula and instructional materials to promote education for agriculture.

D. Women in African Agriculture

The most spirited discussions during the workshop centered around issues raised under this topic, both at plenary level and in small groups. It was noted that although women produce 47 per cent of the food in Africa, they make up only 3.4 per cent of the total trained agricultural personnel (FAO Report, 1984), and in Sub-Saharan Africa, have primary responsibility for production of food crops. Educational programs must therefore include greater numbers of women if such programs have as their central purpose increased food production.

Donors were reminded by participants that assistance efforts must also recognize that sex equity is just evolving in African cultures. Encouraging and promoting equity therefore is likely to be more effective than mandating change through conditionality. From a male perspective, ". . .tackling the problem of food production is a real priority problem in Sub-Saharan Africa at this point in time. I think the emphasis is on delivery of improved technology to the farming population, irrespective of whether they are men or women--that is the priority.

Participants recommended that the following actions be taken to enhance the roles of women in food production:

- Recognize and promote contributions that women make to agriculture in Africa.
- Identify and treat cultural barriers which tend to limit women's access to extension information.
- Develop extension programs and techniques to reach and benefit women.
- Increase participation of women in training programs at all levels with special care taken to avoid sex segregation or isolation of women in special programs.
- Integrate women into agricultural professions, including research, teaching, extension and policy development areas of governments.

E. Extension and Non-Formal Agricultural Education

In spite of uneven successes of extension and nonformal programs in African countries, participants viewed the nonformal elements of education as the "bottom line" of all workshop discussions. Nonformal education was viewed as the contact point through which information and technology is transmitted to the primary producers and rural families.

Participants discussed the inefficiencies and high recurrent costs of existing extension systems, and the urgent need for improvements to meet the challenge of food self-sufficiency. Extension in Africa faces a number of constraints: the lack of research-based technology to extend; poorly paid extension agents who lack transport, supplies, and other elements of a support system; inadequate numbers of subject matter specialists; and various bureaucratic and policy constraints.

They viewed top-level government support as essential to the success of extension programs, but felt that problem identification must be at the grassroots level to increase adaptability of new technologies.

Alternatives to existing extension systems were also discussed; e.g., distance teaching, radio, development of information programs for dissemination through public radio and television and other potential outreach mechanisms. Most participants felt, however, that "the extension systems are in place; we cannot change overnight, but we must insist upon improvements to meet today's challenges."

Discussants recommended the following actions to improve extension and non-formal agricultural education:

- Provide top-level government support for agricultural extension, with commitment to reduce constraints and improve extension support systems (transportation, supplies, etc.)
- Emphasize the educative role of extension agents (with reduction or elimination of unrelated responsibilities which extension agents often have in Africa).
- Revise reward and incentive systems for extension workers, to improve job satisfaction and to increase retention.
- Increase involvement of both men and women in extension, as professionals and as clients.

- Provide leadership training for extension agents who in turn must provide leadership training for rural populations through extension programs.
- Develop extension methods which involve grassroots participation, and include farmer consultations and results demonstrations.

SECTION FOUR: MAJOR CONCLUSIONS AND RECOMMENDATIONS

Workshop participants recommended that African governments, international organizations and donors do the following:

- Develop programs to target:
 - farm families for an immediate effect on agricultural development and food production;
 - primary and secondary students for long-term impact;
 - agricultural professionals to develop the technology needed to increase food production and food distribution.
- Strengthen selected national institutions to serve as centers of excellence in the various specializations of agricultural education and as regional centers for training and research.
- Provide sustained support to local training institutions to permit in-country training and materials production and to establish institutional capacities for planning, analysis, research and dissemination of improved technologies.
- Initiate and foster interdisciplinary approaches to agricultural education, including sociology, anthropology, home economics, education and training methodology, management and technical agriculture.
- Increase opportunities for training in the U.S. and other countries in technical specializations and at levels of professional training not locally available,
- Expand the roles of women in all aspects of agricultural education, to include active recruitment of women at all levels and provision of training opportunities in support of these roles.
- Include representatives from client populations (e.g., farmers, teachers, extension agents, etc.) in project planning for agricultural education.

Workshop participants further recommended that donors and governments take strong and swift action to address Africa's needs in agricultural education and increased food production.

SECTION FIVE: FOLLOW UP ACTIVITIES

During the final session of the workshop, the group as a whole considered the outcomes of the various plenary sessions and discussion groups, and recommended follow-up activities to be conducted within a six-month period. Participants felt that the following actions were necessary to stimulate appropriate action at local, national, international and intercontinental levels.

- Preparation and wide dissemination of workshop proceedings and anthology of working papers.
- A follow-up donor conference to include workshop representatives of African organizations, donor agencies and African government representatives before the close of the fiscal year, at REDSO level, to clarify the roles of organizations and professional associations in agricultural development, and to finalize a regional plan of action.
- A briefing seminar for AID/W and Africa Bureau personnel on workshop proceedings and outcomes, to establish Agency plan for future activities in agricultural education for Africa.
- Briefing reports prepared by participants for sponsoring missions, host governments, universities, or organizations for prompt consideration and action at those levels.
- A state-of-the-art newsletter on agricultural education to be developed by AID/W for periodic dissemination to workshop participants in both Africa and the U.S., and interested governments and agencies.
- Predeparture seminars for African participants in agricultural education from various U.S. universities, to be conducted in a Land Grant university during FY 85 and FY 86.

The following observation made by an African participant at the close of the workshop is expressive of the level of receptivity, intensity and professional concern which typified the workshop:

". . .it goes back to all of us in this room. How many of our children do we want to go back to the farm? We have to start with ourselves; we are the agricultural education leaders. What do we do after this conference? That is the beginning. Leadership has something to do with it. We have tried everything anybody in this room can think of in [country] and it is not working. I hope our African colleagues will find out early enough what will work and not waste too much time before asking the right questions..."

The Yaounde Workshop was considered a huge success by all who attended and by the masses of Cameroonians who heard the several interviews and workshop coverage by Radio Cameroon.

To truly evaluate the Yaounde Workshop as successful, however, the effort must be continued to establish a broad network of interested professionals in agricultural education and management, to begin immediately to strengthen the capacities of African institutions to train their own resources, and to deal effectively with policy issues which severely constrain the ability of governments to respond to urgent food issues.

AGRICULTURAL EDUCATION WORKSHOP
AGENDA

THEME: AGRICULTURAL EDUCATION: A CATALYST FOR AFRICAN
DEVELOPMENT

Convener: Dr. Cynthia S. Perry, Chief, Education and Human
Resources Division, Office of Technical Resources,
Africa Bureau, AID/Washington.

Monday, July 23

- 1:00 - 5:00 Workshop registration, Hotel des Deputes
- 3:00 - 4:00 Preliminary meeting with panel moderators -
Dr. C.S. Perry
- 4:00 - 5:00 Preliminary meeting with group leaders and
rapporteurs: Dr. Ray Morton and Dr. Edna
McBreen (See page 28 for list)
- 4:00 - 6:00 Open House, Hotel des Deputes

DAY ONE - Tuesday, July 24

- 8:00 Buses depart for Palais des Congres
- 8:30 Opening Address - Dr. Solomon Nfor Gwei, Vice
Minister of Agriculture, Government of Cameroon
- Break
- 9:30 Opening Remarks: Dr. Cynthia S. Perry, Convener
Welcome: U.S. Ambassador Myles Frechette
Welcome: Mr. Ron Levin, USAID Mission Director
- 10:00 Keynote Address I: Agricultural Education in
Africa: The Problems and Priorities.
- Professor Richard Musangi, Egerton College, Kenya
- 10:55 Keynote Address II: The Status of Agricultural
Education Training Capacity in Africa.
- Dr. Burton Swanson, Department of Agricultural
Education, University of Illinois
- 11:40 Buses depart for hotel

- 12:30 Luncheon
- 2:30 Buses depart for Palais des Congres
- 3:00 Introduction to Basic Workshop Format - Dr. Stanley Handleman, Chief HRDO, USAID/Cameroon
- 3:30 Break; small group meetings
- 4:00 PANEL: AGRICULTURE IN THE GENERAL EDUCATION CURRICULUM
- Moderator: Dr. Raymond H. Morton, Division of Agriculture and Rural Development, Africa Bureau, AID/W.
- Panelists:
- Mr. Kajih John Tansam, Director, IPAR/Buea, Cameroon
 Dr. Babs Fafunwa, Education Consultant, Nigeria
 Mr. David Gooday, World Bank
 Mr. David Winkelmann, Agriculture in the Classroom Project, USDA
- 5:00 General Discussion
- 5:30 Buses depart for Hotel des Deputes
- 8:30 Dinner Session: Hotel des Deputes
- Topic: The Impact of Government Policy on Agricultural Education Programs in Africa
- Professor Asavia Wandira, Vice Chancellor Makerere University, Uganda

DAY TWO - Wednesday, July 25

- 8:00 Buses depart for Palais des Congres.
- 8:30 PANEL: TECHNICAL/VOCATIONAL AGRICULTURE AT THE SECONDARY AND POST-SECONDARY LEVELS IN AFRICA.
- Moderator: Dr. John Kamara, Principal, Njala College, Sierra Leone

Panelists: Mr. J. Meka NGamba, Head of Agricultural Education, Ministry of Agriculture, Cameroon

Dr. James Christiansen, Department of Agricultural Education, Texas A&M Univ.

Dr. Earl Russell, Department of Agricultural Education, University of Illinois

Dr. Roger Steinkamp, Ministry of Education, Rwanda

- 9:30 Discussion
- 10:15 Break
- 10:30 Small Group Meetings
Topics: Status of and priorities in agricultural education.
Agriculture in the general education curriculum.
Technical/vocational agriculture at the secondary and post-secondary levels.
- 12:00 Lunch (Catered at the Palais des Congres)
- 2:00 FAO Study of Agricultural Manpower and African Agricultural Institutions
- Dr. Heinrich Hoffman, FAO/Rome
- 2:30 Report of small groups - Dr. Edna McBreen
- 3:00 Break
- 3:15 PANEL: WOMEN AND AGRICULTURAL EDUCATION
Moderator: Dr. Eudora Pettigrew, Associate Provost, University of Delaware
Panelists: Dr. Mary Rojas, Office of International Extension, Virginia Polytechnic Institute and State University
Dr. Timothy Ngwira, Vice Principal, Bunda College, Malawi
Dr. Terry Hardt, Agricultural Development Officer, USAID/Sudan
Dr. Maria Mullei, Rural Development Officer, USAID/Kenya

- 4:15 Discussion
 5:00 Open Forum
 6:30 Buses depart for Hotel des Deputes

DAY THREE - Thursday, July 26

- 8:00 Buses depart for Palais des Congres
 8:30 PANEL: HIGHER EDUCATION IN AGRICULTURE
 Moderator: Dr. N. Jean Anderson, Associate Dean of
 Education, University of Massachusetts
 Panelists: Dr. Rene Owona, Director General,
 University Center at Dschang, Cameroon
 Dr. Glen Magagula, Dean of the Faculty of
 Agriculture, University of Swaziland
 Dr. O. Donald Meaders, Department of
 Agricultural and Adult Education, Michigan
 State University
 Mr. Fomba Kourouma, Ministry of Higher
 Education, Guinea.
 9:30 Discussion
 10:00 Break
 10:15 Small Group Meetings
 Topics: Women and agricultural education
 Higher education in agriculture
 11:30 Buses depart for hotel
 Afternoon free

DAY FOUR - Friday, July 27

- 8:00 Buses depart for Palais des Congres.
 8:30 Report of small groups: Dr. Edna McBreen
 9:00 PANEL: EXTENSION AND NONFORMAL AGRICULTURAL EDUCATION
 Moderator: Dr. Maiza N. Shandomo, School of
 Veterinary Medicine, University of Zambia

Panelists: Dr. K.J.B. Keregero, Head, Department of Education and Extension, University of Dar es Salaam, Morogoro, Tanzania

Dr. Joe Busby, University of Florida and Chief of Party, Dschang University Project, Cameroon

Mr. Mahluli Mngadi, Director of Lesotho Distant Teaching Center, Maseru, Lesotho

Mr. Benoit Ouedraogo, Director, Young Farmer Training Program, Ministry of Rural Development, Burkina Faso

- 10:00 Break
- 10:15 Discussion
- 11:30 Buses depart for hotel
- 12:00 Lunch
- 2:00 Buses return to Palais des Congres
- 2:30 Small Group Meetings
Topic: Extension and Non-Formal Agricultural Education
- 3:15 Break
- 3:30 Small Group Meetings (to finalize reports)
- 4:30 SYNTHESIS OF WORKSHOP CONCLUSIONS AND RECOMMENDATIONS
- Dr. William Drake, Agricultural and Occupational Education, Cornell University
- General Discussion
- 5:30 Wrap-up: Dr. Cynthia S. Perry
- Expression of Gratitude: Dr. Babs Fafunwa, Nigeria
- 6:00 Closing Address:
The Honorable Dr. B. Kouesseu, Secretary General,
Ministry of Agriculture, Government of Cameroon
- Adjournment
- 7:00 State Reception

Hosted by the Ministry of Agriculture, Government of Cameroon - Hotel Mont Febe Sofitel.

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