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**PRELIMINARY FINDINGS AND DISCUSSION OF THE AFRICAN AMERICAN INSTITUTES'  
"STUDY OF THE AFGRAID PROGRAM"**

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## **INTRODUCTION**

The African American Institute is a New York based private non-profit voluntary organization working to further African development and to strengthen ties between the US and the countries of Africa. For over thirty years it has worked towards this goal and can now boast an impressive network of contacts with leaders and scholars in private and public sectors alike both in the America and Africa. Also, AAI has woked extensively in the area of education and has sponsored or has worked intimately with over 70 education or training programs geared towards the development of Africa's growing skilled manpower. Since the early '60s AAI's primary educational activity has been the African Graduate Fellowship Program, known by the acronym AFGRAD, which has provided 80-125 fellowships a year to African students from 39 different countries since for graduate level training in universities throughout the United States.

## **AFGRAD**

AFGRAD is a cooperatively structured program which is managed by AAI. African governments nominate the candidates for awards, pay their round-trip transportation, and guarantee specific employment upon the fellow's return. The receiving American universities provide tuition waivers to the AFGRAD fellows, who are selected from among the nominees by a panal of graduate deans representing the Council of Graduate Schools in the USA (CGS). US AID provides AAI with the funds to cover all student costs and administrative expenses.

Through the years, the primary purpose of AFGRAD has been to train African students who would return home, use their training and move into significant technical and managerial positions in universities and in governmental and parastatal institutions. More recently, it was also anticipated that some would assume jobs in profit-making institutions. All AFGRAD alumni were expected to strengthen and influence the growth and development of their institutions and to transfer their technical capabilities to subordinates and to the next generation.

#### **THE STUDY OF THE AFGRAD PROGRAM**

Late in 1982, AAI with funding from AID intitated The Study of AFGRAD Alumni: Training High Level Human Resources for African Development, 1963-1980 in order to examine who the 1681 AFGRAD fellows were, how they were trained, how they have employed their training, and how they have benefited from AFGRAD. In addition, USAID desired to know how participant traing programs, such as AFGRAD, might be improved. By the end of 1982, 1,535 of the 1681 students had become alumni or had terminated their programs; 146 were still in the process of completing their graduate degrees.

**The Researchers** AAI hired independent consultant Jasperdean Kobes, presently with Chase Manhattan Bank, to direct the study. I was hired on to the study one year after it began in order to provide technical support in data analysis for the study. As the study progressed, I became an associate researcher and have since been asked to write several major sections of the study.

**SPECIFIC OBJECTS OF THE STUDY**

The researchers outlined the major objectives of the study as follows:

- 1) To describe the characteristics of the AFGRAD alumni--who were these students prior to their fellowships?
- 2) To summarize their academic career--what was studied, and which institutions were attended; what degrees were pursued with what degree of success?
- 3) To determine which factors were associated with success or failure of the sponsored African students in US universities.
- 4) To sort out what occurred after the termination of the students' academic programs--what proportion of alumni were sponsored to receive job training and who were they? Who and how many returned home immediately after their academic programs? Of those who stayed in the US for sponsored skill training, what proportion returned home immediately afterwards?
- 5) To determine whether AFGRAD alumni used their training upon their return to their home country?
- 6) To trace out average and typical career paths and current positions of the alumni in their home countries.

7) To characterize the degree to which AFGRAD alumni have decision-making responsibilities and how they exercise these responsibilities.

8) To assess the general impact of the AFGRAD alumni in their African countries.

In addition to these major areas of interest to USAID, the researchers also attempted to investigate the fellows' perceptions regarding their overseas training experience.

### THE DATA AND RESEARCH METHODOLOGY

In this section we will look at some of the various aspects of data collection, research design and methodology with respect to the Study of AFGRAD Alumni. We will start by discussing the data sources, focussing on background data and questionnaire analysis.

**The Student File Data** The first source of data, was the set of original student files. In attempting to extract information from this ostensibly abundant tap, the researchers encountered a number of problems. The collection of files covering nearly two thousand individuals over a twenty year period was not organized or at all suited to our purposes as researchers; neither did it contain a consistent set of information. This was not surprising since the student files were saved for administrative rather than research purposes. Additionally, the files underwent periodic purges--that is, a reduction of contents--in order to make room for additional files given limited storage space. Certainly, a variety of information was amassed together in each alumnus' dossier: most files contained at least some of the following materials: application forms to the AFGRAD program, letters of reference, the signed pledge that the student promised to return to his or her home country, correspondence (both personal and business related), AFGRAD student grade report forms (rarely a complete set for any particular student), faculty letters, theses, dissertations, medical reports, etc.

After a great deal of difficulty, nearly all of the student alumni files were eventually located and coded and entered into computer files; this data set comprised what we came to call the "background" data set. This included student personal characteristics and academic information for all 1681 students, though academic information had to be supplemented by letters and phone calls to universities throughout the country in order to determine whether or when students graduated and with what degrees (the files were often incomplete, contradictory, or vague on these matters). Some students, numbering less than four percent were lost track of at various stages of their stay in the U.S. (during but more often after their programs) and missing values were recorded for these individuals for several items.

Analysis of the background data set revealed many interesting but few surprising findings. In fact, anyone who has had experience with overseas training or education programs could predict nearly all of the summary statistics found in this data with one notable exception. The return rate (return to country of origin within 6 months of program completion, including completion of post-degree training if applicable) was exceedingly high, surpassing return rates claimed by numerous similar programs. These results are discussed below in section 3 with tables in Annex 1.

**The Questionnaires** Despite the problems that the researchers had encountered with the student background files discussed above, it was the preparation, distribution, and summarizing of the questionnaire which was clearly the most problematic aspect of data collection. It is also an excellent example of "too many points-of-view resulting in no point-of-view." The questionnaire was designed by the staff of the Education department at AAI. Everyone suggested items, many were included in one

form or another in the final copy. Some on the staff felt that questions should be open ended because they believed many Africans would be intimidated by multiple choices type items: the consequence was a questionnaire which required hours to complete. In its final and professional appearing form, the typeset questionnaire was 20 pages long with about 30 open ended (fill-in type) questions, over 150 simple response questions of which roughly half were multiple choice items. Throughout the design and development stages, no survey researcher, statistician, or computer specialist was involved. The net result of this lack was the painstaking task of fitting 800 verbose responses into codes in order to summarize responses and locate patterns. So the net result of the coding process was that it was the researchers rather than the respondents who had to force the responses into a succinct statements.

**The Sample** The final questionnaire, typeset and official looking, was sent or delivered to approximately 1500 alumni both in the US and abroad. After on year of effort on many fronts, over fifty percent of the questionnaires were returned to the researchers thanks to the persistence of AAI field representatives, continued efforts of the AFGRAD staff and AAI executives, and last but not least, the sense of debt and thanks felt by the AFGRAD alumni themselves. What is particularly fascinating is the fact that a great number of respondents treated the questionnaire as a long awaited and much desired opportunity to get in touch with their American sponsors: many took the time to fill in every inch of available writing space with comments, criticisms, thanks, and suggestions; some even typed and inserted extra pages. What we do not know from the response set is the patterns associated with non-response although statistical tests demonstrated that the questionnaire respondents did not differ significantly from the non-

respondents on over ninety percent of the background variables. The question remains of whether a shorter questionnaire would have encouraged more to respond or a different set of individuals to respond. Perhaps those in the most important positions for whom time is very costly are less likely to respond to such a mammoth questionnaire biasing the outcomes of the study downwards; on the other hand, perhaps those who are unsuccessful and unstable were not contacted and thus the results could have been biased upwards by losing them.

In any case, while the questionnaire proved difficult to analyze and summarize, it did yield information not hitherto available from studies of this sort. This is discussed in Section 4 below with tables in Annex 2.

**SUMMARY OF BACKGROUND CHARACTERISTICS**

The overall characteristics of the group of countries that nominated participants for AFGRAD from 1963 to 1980 reflect the preponderance of English-speaking young men from the slightly higher income African countries especially during the first 10 years of the program. The slow growth in the annual number of awards conceals the very significant changes that occurred in the portfolio of countries participating in AFGRAD. Most strikingly, by the late 1970s, the countries sending participants were much more diverse economically and linguistically, and a greater balance had been brought about among the sub-regions involved in the program.

**Country of Origin** AFGRAD fellows came from thirty-nine countries (Table I-A). 73% of the students came from twelve countries and almost half from only five: Cameroon, Ethiopia, Ghana, Kenya, and Ethiopia (Table I-B). More than half of the fellows came from countries with per capita GNP exceeding US\$ 380 in 1979 dollars. The proportion of students selected from countries with GNP per capita was less than this level increased from 39 to over 55 percent in recent years (Table I-C).

**Language Groups** Most of the fellows were born in English speaking African countries (70%) however, over time, the proportion of French-speaking students who entered the program grew. Consequently, almost 60% of the English speakers began their program during the first 10 years while over 70 percent of the French speakers joined the program during the last eight (Table I-D).

**Gender** Men received 91 percent of the AFGRAD fellowships. Through the years, the participation of the program was actively encouraged by the US staff and the proportion more than tripled from under 5% in the 1960s to over 14 percent by the late 1970s (Table I-E). Over 70% of the female fellows started their graduate studies after 1972. Still, less than half of the participating countries established a practice of nominating women. Twelve countries have never sent any women at all.

**Marital Status** Over time, the proportion of single versus married participants declined from 74.4% to 65.5% in the period from 1977 to 1980. Most of the married fellows had children under 18 years old (71.7%)

**Location of Undergraduate Training Institution** A majority (74.4%) of the AFGRAD fellows received their undergraduate training in Africa and the proportion of alumni who received their first degree in Africa increased from only 52.5% in the mid-60s to 83.4 percent by the late 1970s.

**Academic Disciplines of Study** Over the years, nearly every academic discipline was represented in AFGRAD. However, more than 60% of both master's and doctoral students tended to major in five fields (agriculture, engineering, education, mathematics/science, and economics).

Examining the programs of master's students exclusively, (Figures I-A and I-B) that English-speakers outnumbered French-speakers by two to one in the math and science fields and were also more represented in the field of education. French-speakers were slightly more numerous in engineering and economics. More strikingly, one-quarter of French-speakers received degrees in business, twice as many as anglophones.

Overall, women were three times more likely to pursue masters degrees in the field of education than men and men were 10 time as likely to study engineering at the masters level. (Figure I-C) Also men were about twice as likely found in agricultural fields than women. Interestingly, three out of five fellows who studied advanced science and mathematics at the doctoral level were women (Figure I-D). At the doctoral level, the proportion of men in engineering and women in education was not quite as striking as at the masters level. However, when this variation is analyzed by time period (Figure I-G) one of the more interesting changes over time is the steady increase in the proportion of women studying economics and a dramatic decrease in the proportion pursuing masters in the sciences and maths.

As for more general trends over time at the master's level, there was a steady increase overall in the proportion of students working on degrees in only two fields, business and health (Figure I-E). Interest in the other academic fields fluctuated inconsistently from 1963-1980.

At the doctoral level there was a steady increase in the proportion of students majoring in agriculture, education, business, and health, although

the math and science fields are far and away the most popular (Figure I-F). It should also be mentioned that two-thirds as many french-speakers as english-speakers are represented in the field of education.

In the beginning of the AFGRAD program almost 20% of doctoral students were preparing to become veterinarians, medical doctors, and dentists, but by the end of the decade, the proportion had declined dramatically to 3%. Likewise, the number of fellows in the social science and humanities has decreased. These two trends can be attributed to AFGRAD's increasing focus on technical programs and the opinion that other scholarship programs, such as the Fulbright, exist to meet these needs.

When comparing degrees taken at the master's level and those taken at the doctoral level, we see that over twice as many students at the masters level study engineering as at the doctoral level. In addition, about two and one half as many doctoral degree students are represented in the math and science fields. And a overwhelming 17.8% of master's level students receive degrees in business, compared to 2.5% at the doctoral level students.

**Degree Completion Rates** We will look at completion rates according to four categories: by gender, by language group, by marital status and by field of study.

For those students in master's degree programs, there is no significant difference between males and females (19.9 months vs. 19.2 months respectively). When we examined language groups, however, we found a marked difference between French- and English-speakers (23.6 months vs. 18.3 months respectively). This disparity is obviously explained by the need for francophones to master the English language before embarking on an academic program. Indeed, many questionnaire respondents advise that future fellows be fluent before arriving in the U.S. because the initial

barrier can handicap future progress.

More interesting still, married fellows with children completed their degrees on the average one and a half months sooner than single fellows (18.5 months vs. 20.1 months), although married fellows without children show no significant difference from unmarried fellows.

Not surprisingly, it is the more technical and quantitative fields which require the most completion time. The mean times necessary for economics, agriculture and math or science are 22.5 months, 22.0 months and 21.3 months respectively as compared to the humanities and international relations at 17.9 and 14.9 respectively.

In examining completion rates for doctoral degrees, we found first of all that men do tend to finish more quickly than women with mean completion rates of 50.7 months vs. 54.9 months. A study of completion rates for American women in doctoral programs might also show a slightly slower completion rate vis-a-vis American men due to weak support systems, professors who are not accustomed to working with women, etc.

By language group, the 5 month edge which anglophones had over franco-phones when completing a masters degree, carries over to the doctoral degree. In fact, french-speakers require 7 more months to complete a doctorate (56.4 months vs. 49.3 months).

More startling results are found when comparing single fellows to those married with children. The latter have a mean completion rate for the doctorate of some 8 months sooner than single fellows (45.5 months vs. 53.5 months). At the doctoral level, married fellows without children show no significant difference at 46.3 months completion rate from that of those married with children. That separation from family should create more incentive for students to finish more quickly is not surprising. Many questionnaire respondents detailed the hardships of this separation as this one comment exemplifies: "Fellowships should go to unmarried students only because a separation can break up a marriage, and there is no money to bring a spouse along."

By field, economics again tops the list of completion rates, followed by engineering and agriculture (57.7 months, 53.0 months and 51.5 months respectively). Those with the lowest completion rates are international relations at 20.3 months and more surprisingly business fields at 43.0 months.

**Withdrawal Rates** It is interesting to note that about twice as many francophones withdrew from the AFGRAD master's program as anglophones (7.7% vs. 3.5%) whereas there was no significant difference in language groups when looking at withdrawals from doctoral programs (4.0% for francophones and 5.1% for anglophones). The most obvious explanation for this discrepancy is that once a french-speaker was able to overcome the language difficulties and to survive the first two years, he was able to compete on a more equal footing with anglophones.

**AFTER THE AFGRAD ACADEMIC PROGRAM**

One of the more frequent questions asked by and of those who work with programs that provide advanced training in industrialized countries to students from developing ones is: How many students really return to their home countries after their programs are completed? This is in fact a very important question because at the core of nearly every such program rests the necessary assumption that those who benefit from advanced training will return home to share their knowledge and assist their countries on the road to development.

There are some very strong incentives to remain in the country where training takes place--incentives such as higher incomes, academic and professional contacts, and the many personal ties that can evolve during the course of graduate study. Nevertheless, as we discuss below, nearly all of the AFGRAD alumni do return to their home country.

However, this finding, and details associated with it were the most difficult discoveries to unearth. Problems occurred for a number of reasons not the least of which was the simple fact that we were trying to extract information about these alumni after a lapse of as many as 20 years. One of the major problems was the age of the student background files (other problems with these files were discussed in Section 2 above). Older files had been purged of pertinent documents and what probably appeared as trivial correspondence in earlier efforts to consolidate and streamline the student archives. The researchers remarked on the fact that it was often only from personal correspondence between the AFGRAD staff member and the alumnus that a determination regarding the eventual whereabouts of the fellow could be made.

Overall, 89.1 percent of all AFGRAD participants returned to their country of origin or another African country within about six months of completion of their total programs (which for many included some post-academic practical experience or training under AFGRAD sponsorship for as long as one year). It has been determined that after the academic aspect of the AFGRAD program, most students (approximately 60%) returned to their home countries immediately upon completion of their degrees. Of those receiving master's degrees, an additional 29% stayed on in the U.S. to pursue advanced degrees or to gain practical training experience in their fields and 5 percent continued on in a third country. (22% for US practical training and 7% for further academic training at US institutions not as AFGRAD sponsorees but usually under visa support of the African American Institute). At the doctoral level, approximately 22% remained in the U.S., most of them for practical training. Of the remaining students, both doctoral and master's students, some travelled to third countries to pursue further study, practical training or to take a job. A large 14% of the doctoral population remained in the U.S. for a short-term stay (5 months - 2 years ), possibly to work for a time, to travel, and to make contacts for future projects. The number of unaccounted for students is thirty (less than 2% ). 87% percent of those who entered a practical training program or a visa only post-AFGRAD academic program returned home within one year of their completion of that program.

### **Degrees of Satisfaction with AFGRAD and University Programs**

It is a testament to U.S. universities that nearly all respondents were satisfied with the range and quality of courses offered as well as with research facilities and laboratories. On the other hand, over a quarter of program participants who responded to the questionnaire were not satisfied that the courses were relevant to their home country conditions and nearly 40% were dissatisfied because there were so few faculty members with African or international experience in their fields. Over one-third of the respondents expressed dissatisfaction with the lack of financing for attendance at symposia, conferences and professional meetings in their fields and for subscribing to professional journals. A telling 15% of the students felt that foreign student advisors were not accessible. 10% of the participants felt they did not receive adequate guidance in planning their academic programs.

**Opportunities to Develop Skills** Questionnaire respondents were questioned as to which of these specific skills they were given the opportunity to develop either through coursework or through their own initiative: Research, Teaching, Laboratory experimentation, Quantitative data collection, Computer processing and analysis of data, Management and administration, and Project planning, implementation and evaluation. On the whole, the AFGRAD alumni were satisfied with the opportunities they had in the areas of research, quantitative data analysis and computer work. On the other hand, they were not given the proper chance to develop necessary skills in management and administration as well as project planning, implementation and evaluation. Since many of the alumni eventually attained positions of supervision in their respective fields, where these

skills would be considered extremely important these are deficiencies which the AFGRAD staff should examine. There are short term courses on management skills, taught by independent consulting firms in an intensive fashion, which could supplement the AFGRAD student's academic program and better prepare him/her for the future.

**Rrequirements for Thesis or Dissertation** It was interesting to discover that fully half of those responding to the questionnaire did not write their theses/dissertations on Africa, although nearly 70% wrote on development-related topics. Of those who did write about their home countries, 20% of them returned home to do the research. Not surprisingly, a large number remained in the U.S. to complete their writing, as they had access to adequate resources here. In addition, many probably feared the problems of receiving advisement from their professors over such a vast distance. Finally, it is obvious that some were not aware that the option of returning home to do research was open to them.

One-third of the respondents were successful in having their theses/dissertations published.

When asked what skills they wish they had acquired during their studies in the U.S., a quarter of the respondents replied management and administrative skills. This is most likely because, when they returned to their home countries they found jobs with more responsibility and authority than those they had left, and did not anticipate this need for administrative skills during their programs. 28% of the respondents wish they had more research and computer skills, and many also expressed the need for AFGRAD to allow fellows to gain more practical training experience.

Since the majority of the respondents had finished their programs and were working at the time they received the questionnaires, they were asked what skills they would like to acquire which were necessary for their present work. Many again responded that management and administration skills and research skills would be useful, as well as further training in their own field and related disciplines. They felt the best way to gain these types of skills at this point in their careers would be through intensive courses and practical training. In addition, they cited seminars and conferences, study tours and visiting experts, as well as formal coursework towards a degree. Most saw financial constraints and lack of time as impediments to gaining the skills necessary to their present positions.

**Development of Specific Skills** When questioned about the benefits they gained from their programs of study the answers varied from professional competence (37.7%), to the ability to implement what they had learned, to research skills, to the ability to organize work. Respondents also mentioned the more subtle benefits such as the development of more self-confidence and leadership ability. Many of the comments were interesting in this regard. Over and over again people mentioned how much they had learned from living in a culture different from their own: "Toleration and open-mindedness," "Awareness of progress and American way of life--Thinking, sense of simplicity, democracy, hard work & freedom," "Gave me another vision of the world, very sophisticated, helped me to understand the world," "New social values and different ways of conceiving education, a different way of life through social contracts, media ..." "Self-development, versatility of mind, self-reliance, and a confident outlook on life," "Knowing and appreciating people in a different country, opening new horizons for comprehension of events in the world," "Concept of

unity in diversity, including the concept of loyal opposition,"  
"Appreciation of the struggle between developing and developed countries.  
More aware politically."

**Questionnaire Respondents suggest improvements for the AFGRAD program**  
This was an open-ended question and therefore there were a variety of responses. To begin with, suggestions were made concerning the preparation of candidates before they leave the home country: "Be sure student is emotionally prepared for the culture shock. Have alumnis of AFGRAD prepare new fellows, orient them."

Not surprisingly, many students felt that AFGRAD students needed a larger maintenance allowance. Additionally, there were at least 6% who wished the program provided support for spouses to come to the U.S. "Lack of spouse support breaks up a lot of marriages." One respondent went so far as to say, "Do not give scholarships to married students. It is inhuman to let married students go there."

Many participants wish they had had more say in which university they would attend, and not only because of the climate or the small-town environment although these were influential factors. Some felt genuinely, as pointed out above, that their program did not offer enough courses relevant to their home country situations. Also, respondents felt they should have more flexibility in choice of fields to study.

It was also suggested that AFGRAD facilitate periodic meetings among the fellows, so that they could share their experiences. At least 10% of the respondents wished they had had more contact with the AFGRAD staff itself and encouraged more university visits by the staff. At least one student pointed out that money should be made available for return trips to the home country in the event of death of a loved-one.

It is interesting to see that many participants expressed the opinion that it would be more beneficial for future candidates to return home to write their theses/dissertations on local problems, since the program already allows for this. AFGRAD advisors should make this clearer to participants.

In lieu of this, several respondents said that candidates should bring as much of the necessary research material as they could carry when they first come to the U.S.

At the end of their stays in the U.S., not a few respondents felt that the AFGRAD program came to an end too abruptly, that it did not prepare them to find jobs when they returned to their home countries, and that they had no financial resources to draw upon during their job search. Others said that they wish AFGRAD could extend the practical training period (it is presently 18 months) because this experience was so valuable, since they probably would not be returning to the U.S. One respondent suggested that AFGRAD help graduates obtain instruments and equipment for use in their home countries, where this is difficult to come by.

At the post-program level, several respondents mentioned the need for an AFGRAD alumni association and periodic reunions for alumni in their home countries. In addition, at least one participant would encourage academic links between graduates of AFGRAD with U.S. academicians, and also would like to see AFGRAD provide study and research grants to alumni and to provide on-site education.

Alumni were asked to make suggestions for improving the selection of future AFGRAD fellows, based on their experience. The largest proportion (40%) felt that previous academic achievement should be the main criterion. In addition, work achievement should be considered in the selection

process, according to another 23%. Interest in national development was assessed as being mildly important. Respondents did not feel, however, that community involvement or high motivation should be factors in selection.

**Alumni give advice to prospective AFGRAD Students** The strongest advice that alumni could give to prospective AFGRAD participants was that they should inform themselves about the United States, especially about the educational system, and that they should be prepared for the cultural differences they would encounter including the racial situation. Further, prospective participants should be prepared to work hard and to use their time wisely. Many expressed the importance of keeping an open mind and encouraged new AFGRAD students to ask advice often.

When asked how the AAI could have done more to assist in repatriation, most alumni responded that they were satisfied with what AFGRAD had done for them. However, nearly 60 respondents said they wish they had had more help in job placement, and nearly 20% noted that they could have used more assistance with the logistical matters of getting their air tickets in time, and shipping home their personal belongings.

**Problems encountered upon the return to the home country** A small percentage of the respondents experienced difficulties with reintegration into their home cultures, with adjusting to the different tempo and lifestyle there, and with family expectations and acceptance by their colleagues. But far and away the greatest frustration for new graduates was the deficiencies in infrastructure for their professional work, i.e. lack of research resources, inaccessibility of the rural areas, etc. Second to this were logistical problems involved with settling in, such as finding living accommodations, transportation, etc., as well as dealing with the bureaucracy of their home countries.

**Professional and personal contacts developed while in the US** It appears that the AFGRAD program has been successful in bringing Africans and Americans together, both on a professional and personal basis. More than half of the questionnaire respondents have corresponded with American friends since their return to their home countries. Nearly half have been in touch with professors from their alma maters and nearly 23% have researched and published with an American professors. 15% of respondents assisted a former professor to visit their home countries in a professional capacity. Close to 45% have received visits from American friends, and nearly one-third have had reason to return to the U.S. for business purposes.

**Contacts with US AID** When queried concerning their contact with the USAID office in their home countries during the past 3-5 years, only slightly more than a quarter had been in touch in any way with the agency, and most of this contact was on a social basis such as being invited to social receptions or special events. Less than 15% of respondents had consulted for USAID in their home countries or were asked by the office for professional or technical advice. A large percentage of respondents expressed an interest in increasing the amount of professional contacts with the agency, including consulting projects in the respondents' home countries or other African countries, organizing workshops and seminars and providing informal professional and technical advice to the USAID office. At the same time, a majority of alumni would like to be considered for USAID research grants and funds for travel outside their countries to attend professional meetings. professional contact with USAID.

### IN THE HOME COUNTRY

**Questionnaire Respondents' Jobs** Ninety percent of the questionnaire respondents are either currently employed by institutions in Africa (87%) or are working abroad for their governments as diplomats or as international civil servants (3%). Of the sixty-seven respondents who are working abroad on their own, 60% are from countries that have recently been experiencing serious political or economic tensions (Ethiopia, Ghana, or Uganda).

**Alumni Career Development** The kinds of institutions that alumni first worked in after completing AFGRAD and leaving the US is represented in Table II-1. Consistent with their career goals prior to AFGRAD, the great majority of alumni (85%) held their first jobs in education and research institutions or in governmental and parastatal agencies, respectively 60% and 25%. While most alumni (77%) are still working in these institutions, a higher proportion are now employed in international organizations, and in banks and the private sector. The number of alumni who now work in these kinds of institutions grew, respectively, by 104% and by 40%.

Table II-2 shows a sharper pattern of change between the first and current jobs of those who were trained during the first ten years of AFGRAD. The earlier set of alumni are much more likely to have moved out of education and research institutions or governmental and parastatal agencies and into jobs in banks, international organizations, and the private sector.

Women (71%) were more likely than men (59%) to find first jobs in education and research institutions. A higher proportion of men entered each of the other types of institutions. This pattern persists in the

current jobs of alumni but a smaller proportion of both men and women are now working in education and research institutions. Following the major differences in their fields of study, the first and current jobs of French-speaking West Africans vary significantly from those of other alumni. In particular, they are much less likely to obtain employment in education and research institutions, and much more likely to find it in each of the other types of institutions.

#### Job Position Patterns

Table 4 presents the position titles of the first and current jobs of all alumni. In their first job after AFGRAD, most alumni went into professional/technical positions: 47% assumed teaching responsibilities (categories 7-10) and 30% worked as technical specialists (categories 11-12). Only 22% became managers/administrators (categories 1-6). In their current jobs, however, 44% of the alumni now have managerial or administrative positions (categories 1-6).

The shifts in the kinds of responsibility held by alumni in their first and current jobs are even clearer in Table 5. Twice as many alumni are managers or administrators in their current jobs, and one-quarter fewer are academics or technical specialists. The trend is even stronger for older alumni (Table 6). Over 50% of them--almost three times as many--are now managers or administrators.

#### Levels of Decision-Making Responsibility

The first and current job titles of the alumni were each ranked from one (highest) to five (lowest), according to the level of decision-making

responsibility they represented in the institution of employment. The rankings facilitated a comparison of levels of decision-making responsibility across employers as well as by the other variables used throughout the study. The following are examples of the kinds of job titles included in each level:

Level 1: University vice-chancellor, minister of state, bank governor, and managing director.

Level 2: dean of faculty, head of a research center or academic department, and head of a major division in one of the non-academic institutions.

Level 3: chief/principal/senior technical specialist or researcher, senior lecturer, and head of a smaller unit (chef de service and chef de bureau) in one of the non-academic institutions.

Level 4: technical specialist, research officer, assistant professor, and an assistant head of a smaller unit in one of the non-academic institutions.

Level 5: instructor or tutor, research assistant, teacher, and trainee.

All alumni, regardless of when they were trained, had similar kinds of decision-making responsibility in their first jobs. Through the years, there was a solid and consistent movement of alumni into the highest levels of decision-making. For example, Table 7 demonstrates that there was over a fivefold increase in the proportion of alumni who moved into top positions between their first and current jobs (from 6% to 34% in levels 1 and 2). At the same time, the proportion of those now working at the lowest levels (4 and 5) has decreased from 78% to 23%. The rise into high level positions is even more dramatic for the alumni who were trained during the first ten years of AFGRAD (Table 8). Over 50% of them have now moved into top positions (levels 1 and 2) in their respective institutions of employment. The increase in decision-making responsibility is also observable within each category of

employer but especially in the banks and private sector. Here, the percent of alumni who moved into level 1 and 2 positions between their first and current jobs increased from a mere 1% to nearly 40%.

#### Participation in Policy-Making and Research Activities

Alumni were asked to indicate the number of times they had carried out a variety of tasks that could be used to infer their involvement in the process of institution-building. For example, they were queried about how often they had developed or revised a policy and operating procedures, directed a research project, and participated in a research project. Over 70% of the alumni who now work in mid- to high-level (1-3) positions have had some experience in developing or revising policy and operating procedures. Those who have been most frequently involved in policy-making are now in top jobs (levels 1 and 2) whereas, those who have been most frequently involved in developing operating procedures are currently holding mid-level (3) positions. Over 50% of the alumni who are now in lower level (4 and 5) positions have never had any experience in carrying out these tasks. Two-thirds of all the alumni have participated in research projects. Level of current job once again points to those who have more frequently directed research projects: over 50% of those now in high level (1 and 2) positions have considerable experience in this area compared to under 40% of those now in mid-level (3) positions.

#### CONCLUSION

The preliminary results of the study confirm that almost all of the alumni who participated in the study are using the graduate training they received under AFGRAD. The great majority of them are living and working in

Africa. Through the years, education and research institutions have continued to employ over half of the alumni thereby placing them in a strategic position to transfer their knowledge and skills to the next generation. About one-fourth of them have always worked in governmental and parastatal agencies, many in mid- and high-level positions. More alumni have moved into jobs in banks, international organizations, and the private sector, particularly those trained during the first ten years of AFGRAD. Most importantly, though, over half of the older alumni now have major responsibility for policy formulation and decision-making in their respective places of employment, a major reason for the establishment of AFGRAD over twenty years ago.

**CONCLUSIONS OF THE STUDY**

All in all, the conclusion is that AFGRAD has been enormously successful and quite impressive..

The study confirms that the AFGRAD program has achieved its primary goal: Nearly all alumni of the fellowship program are working for their home countries, in AFGRAD trained fields, employed in high responsibility, high capacity positions in government, education, international or business institutions. In fact, most of those who completed their training by 1975 are now in positions of the highest levels of decision making and responsibility in their countries--ministers, government secretaries, ambassadors, deputies, deans, bank governors, and business owners.

The alumni report that their positions enable them to formulate, revise and implement policy and formal procedures or to transfer their technical knowledge and skills.

Besides the above conclusions, AFGRAD boasts one of the higher return rates of African participant training programs: nearly 90% overall and surpassing 94% when excluding non-returnees from two countries beset with political or economic disruptions (Ethiopia and Ghana).

### RECOMMENDATIONS

The one overriding recommendation for this and all future studies is this: the organization and its hired researchers must have clear research objectives and hypotheses from the very start of the study. Well thought out and well articulated research questions will be the beacon which lights the way for the rest of the study. The research objectives of the AFGRAD study were not focussed in the beginning. The staff of the African American Institute, and USAID were basically interested in finding out who the alumni were and about what the alumni are doing now. Neither organization was particularly interested in the overall context of overseas training nor in the research agenda of the social science community. Many questions were asked about the students' success. However, it should be obvious that many of these individuals would very likely have been successful had AFGRAD never existed. AFGRAD selectees are considered the cream of developing African human resources. It would have been far more interesting and certainly more useful to researchers and administrators of participant training organizations like AAI if the sample included all nominees for AFGRAD scholarships (thereby including those who were only excluded at the last stage of the selection process when the CGS Deans Committee were forced to select only a limited number of nominees due to the restriction on the number of awards given per period). The research stands alone, with others like it: detailed studies of specific programs often financed or even researched by advocates of the program. Invariably the studies conclude, like this one, that the program studied has met most of not all of its goals, has been invaluable in the development of much needed human resources, and played an essential role in the development process of the

relevant countries involved. These studies are like the artist's still life: the table is arranged in the best light yet the background is empty in order to eliminate distractions.

The following possibilities are suggested for researchers of future tracer studies:

- 1) Sample from other programs or sample other Africans who received higher education training at home or in other countries.
- 2) Interview individuals in institutions where alumni are working in order to obtain objective information regarding contributions to institutional development, comparing the training program participants to other individuals holding similar posts.
- 3) Identify a true random sample of some 5 to 20% and make every effort to collect data from the entire random sample. The summary statistics would more truly represent the entire population than a nonrandom 50% sample such as the one obtained by the questionnaire response of the AFGRAD study. The costs could be considerably less.
- 4) State specific research hypotheses consistent with research theories of the relevant social sciences, for example of economic or sociological research.
- 5) Have social scientists, experienced researchers, and computer experts on the staff or as consultants from the very start to avoid costly problems later on.
- 6) Perform several pilot tests of the questionnaire and analyze the results of the tests to identify ambiguous items or ambiguous results.

Table I-A

<u>Country</u>	<u>Number</u>	<u>Percent</u>
Benin	12	0.7
Botswana	15	0.9
Burundi	5	0.3
Cameroon	101	6.0
Chad	3	0.2
Congo	5	0.3
Djibouti	1	0.1
Ethiopia	182	10.8
Gambia	12	0.7
Ghana	195	11.6
Guinea	4	0.2
Ivory Coast	78	4.6
Kenya	107	6.4
Lesotho	26	1.5
Liberia	53	3.2
Madagascar	29	1.7
Malawi	41	2.4
Mali	52	3.1
Mauritania	3	0.2
Mauritius	12	0.7
Morocco	3	0.5
Mozambique	1	0.1
Niger	4	0.2
Nigeria	207	12.3
Rwanda	3	0.2
Senegal	43	2.6
Sierra Leone	37	2.2
Somalia	17	1.0
South Africa	1	0.1
Sudan	53	3.2
Swaziland	24	1.4
Tanzania	49	2.9
Togo	35	2.1
Tunisia	26	1.5
Uganda	82	4.9
Upper Volta	26	1.5
Zaire	55	3.3
Zambia	49	2.9
Zimbabwe	5	0.3
	<hr/> 1,681	<hr/> 100.0

AFGRAD Students by Country, 1963-1980Group A (Over 100 Students)

Cameroon	101
Ethiopia	182
Ghana	195
Kenya	107
Nigeria	<u>207</u>
sub-total:	792 (47%)

Group B (50-99 Students)

Ivory Coast	78
Liberia	53
Mali	52
Sierra Leone	57
Sudan	53
Uganda	82
Zaire	<u>55</u>
sub-total:	430 (26%)

Group C (20-49 Students)

Lesotho	26
Madagascar	29
Malawi	41
Senegal	43
Swaziland	24
Tanzania	49
Togo	35
Tunisia	26
Upper Volta	26
Zambia	<u>49</u>
sub-total	348 (20%)

Group D (1-19 Students)

Benin	12
Botswana	15
Burundi	5
Chad	3
Congo	5
Djibouti	1
Gambia	12
Guinea	4
Mauritania	3
Mauritius	12
Morocco	8
Mozambique	1
Niger	4
Rwanda	3
Somalia	17
South Africa	1
Zimbabwe	<u>5</u>
sub-total	111 (7%)

GRAND TOTAL: 1,681 (100%)

TABLE I-B

AFGRAD Fellows by Country Income Level and Time Period

<u>Time Period</u>	<u>\$370 or less</u>		<u>\$380 or more</u>		<u>Total</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
1963-1968	153	(38.0)	250	(62.0)	403	(24.0)
1969-1972	160	(38.3)	252	(61.2)	412	(24.5)
1973-1976	243	(47.5)	269	(52.5)	512	(30.5)
1977-1980	196	(55.4)	158	(44.6)	354	(21.0)
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Overall	752	(44.7)	929	(55.3)	1,681	(100.0)

TABLE I-C

AFGRAD Fellows by Language Group and Time Period

<u>Time Period</u>	<u>English Speaking</u>		<u>French-Speaking</u>		<u>Total</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
1963-1968	335	(83.1)	68	(16.9)	403	(24.0)
1969-1972	338	(82.0)	74	(18.0)	412	(24.5)
1973-1976	325	(63.5)	187	(36.5)	512	(30.5)
1977-1980	177	(50.0)	177	(50.0)	354	(21.0)
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Overall	1,175	(69.9)	506	(30.1)	1,681	(100.0)

TABLE I-D

AFGRAD Fellows by Gender and Time Period

<u>Time Period</u>	<u>Men</u>		<u>Women</u>		<u>Total</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
1963-1968	385	(95.5)	18	(04.5)	403	(24.0)
1969-1972	392	(95.1)	20	(04.9)	412	(24.5)
1973-1976	453	(88.5)	59	(11.5)	512	(30.5)
1977-1980	303	(85.6)	51	(14.4)	354	(21.0)
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Overall	1,533	(91.1)	148	( 8.8)	1,681	(100.0)

TABLE I-E

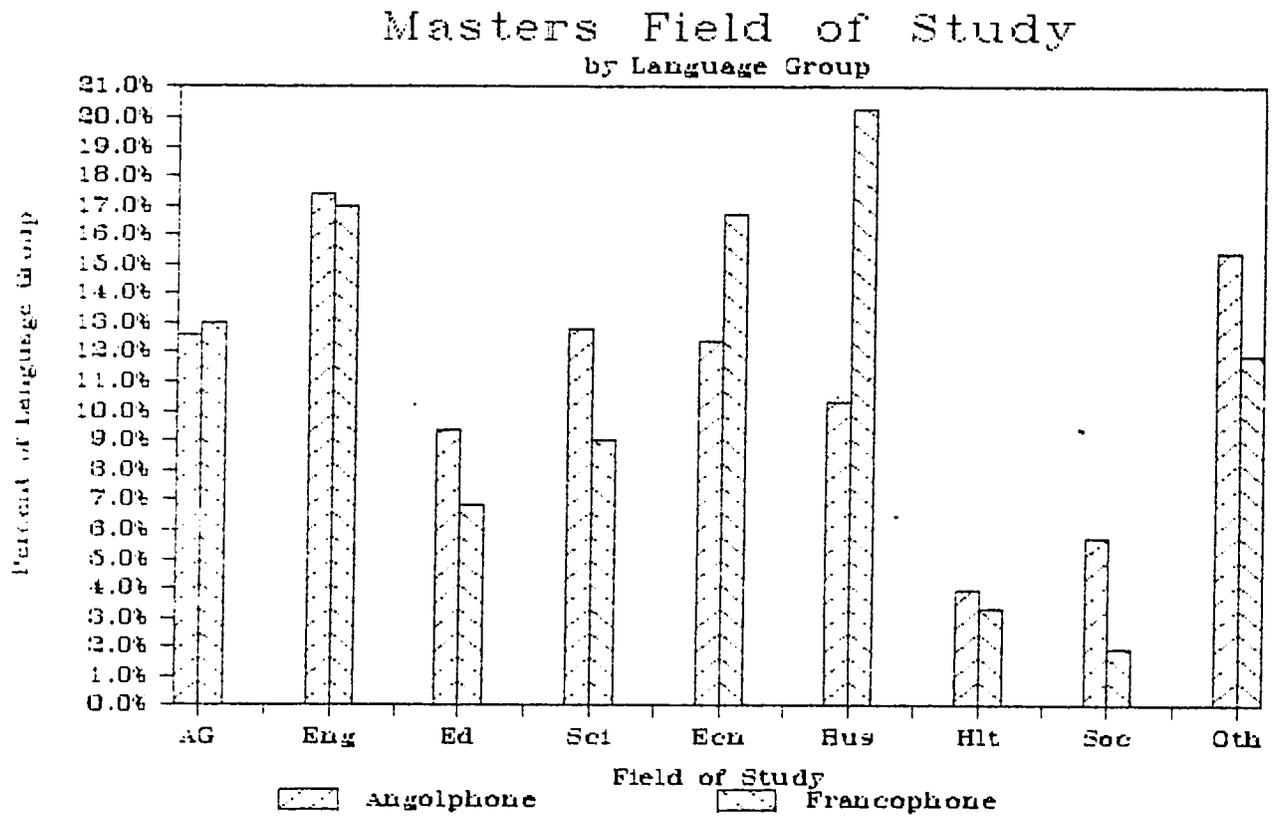


FIGURE I-A

AG= Agriculture      Eng=Engineering      Ed=Education  
 SCI= Science and/or Mathematics      Ecn=Economics  
 Bus=Business      Hlt=Health      Soc=Social Sciences (not Economics)  
 Oth=Humanities, Intl and Public Affairs, Medicine, Other Misc. Fields

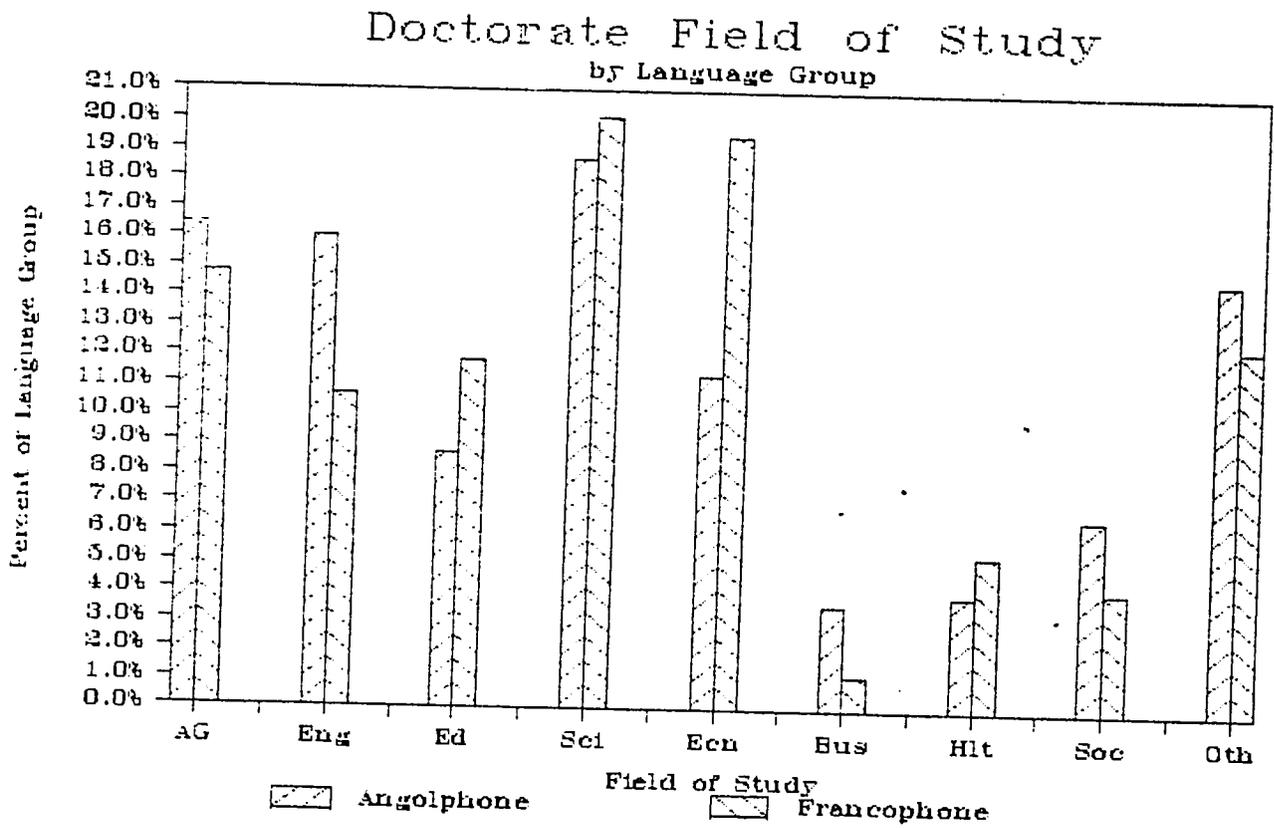


FIGURE I-B

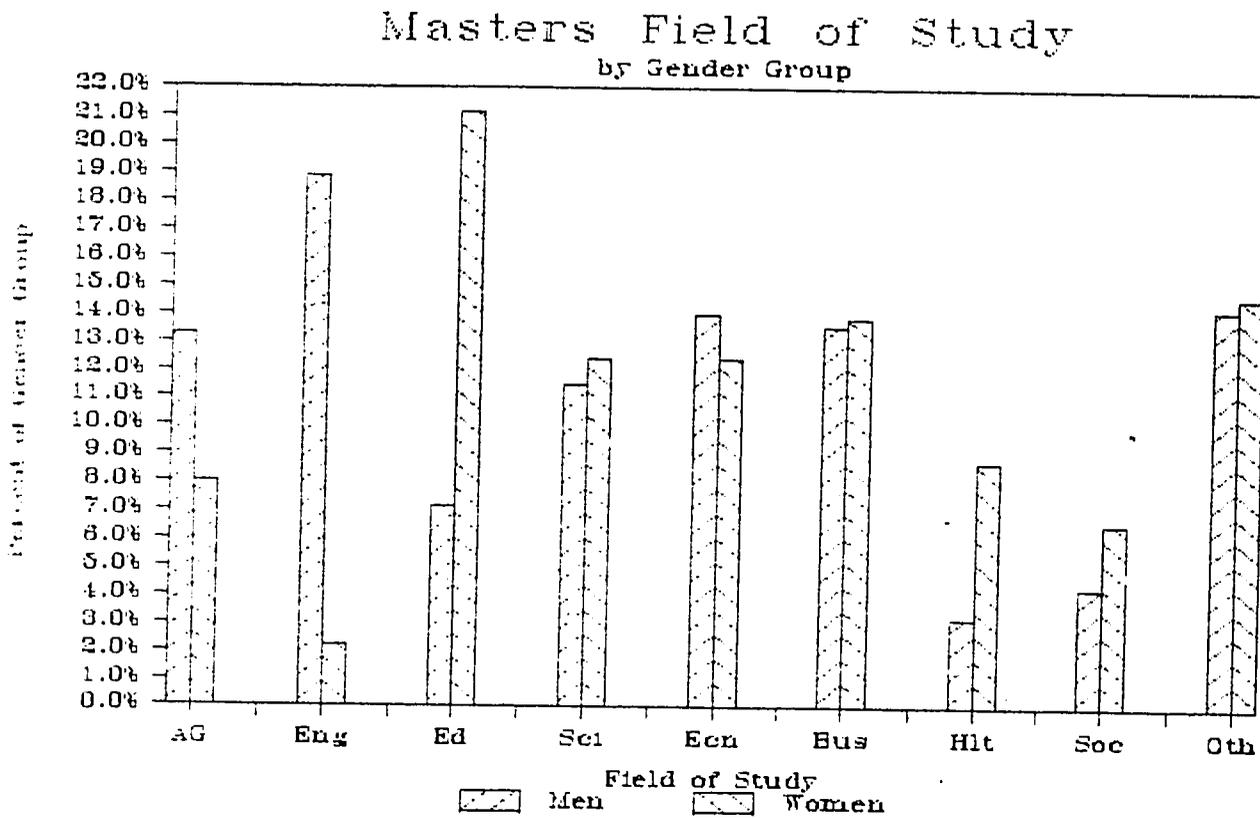


FIGURE I\_C

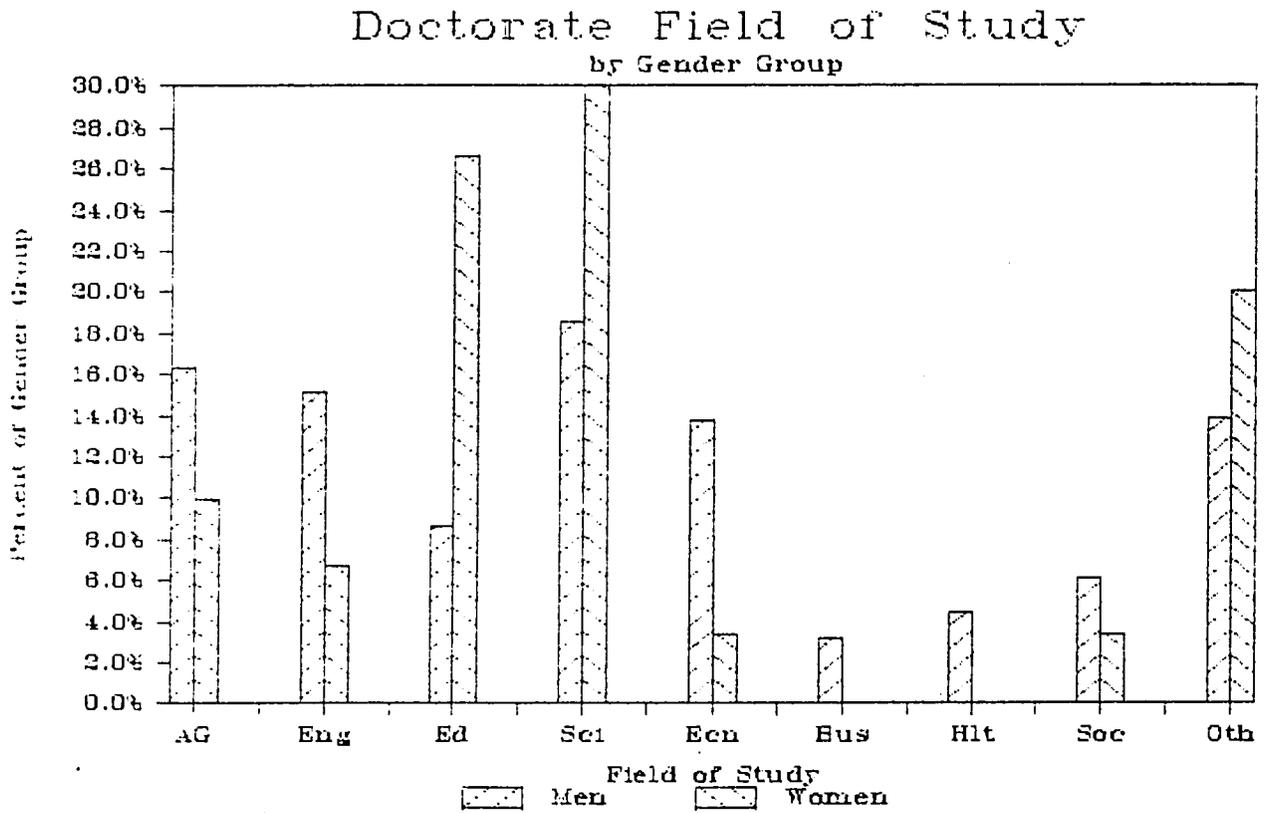


FIGURE I-D

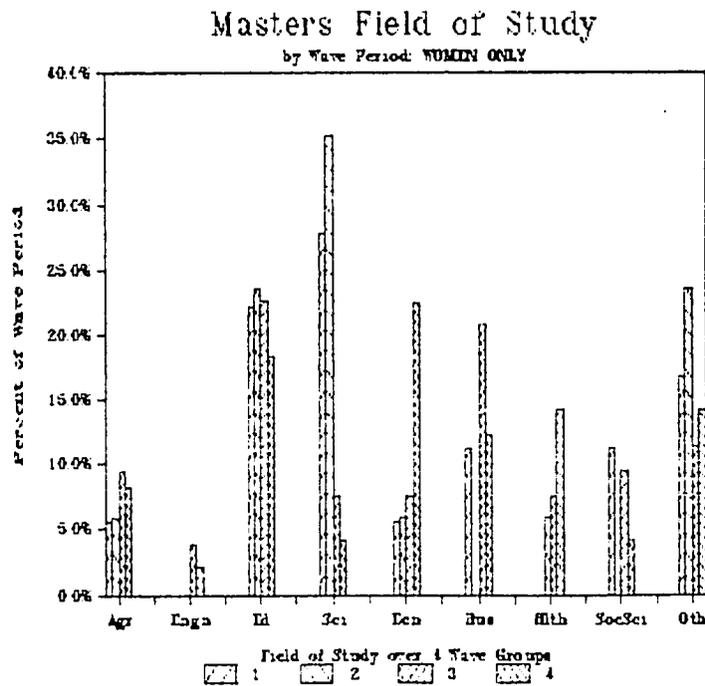
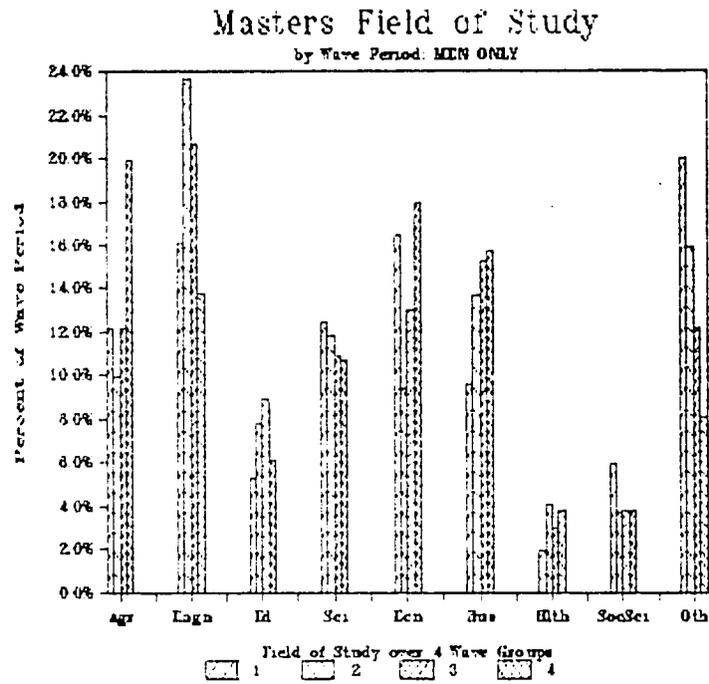


FIGURE I-G

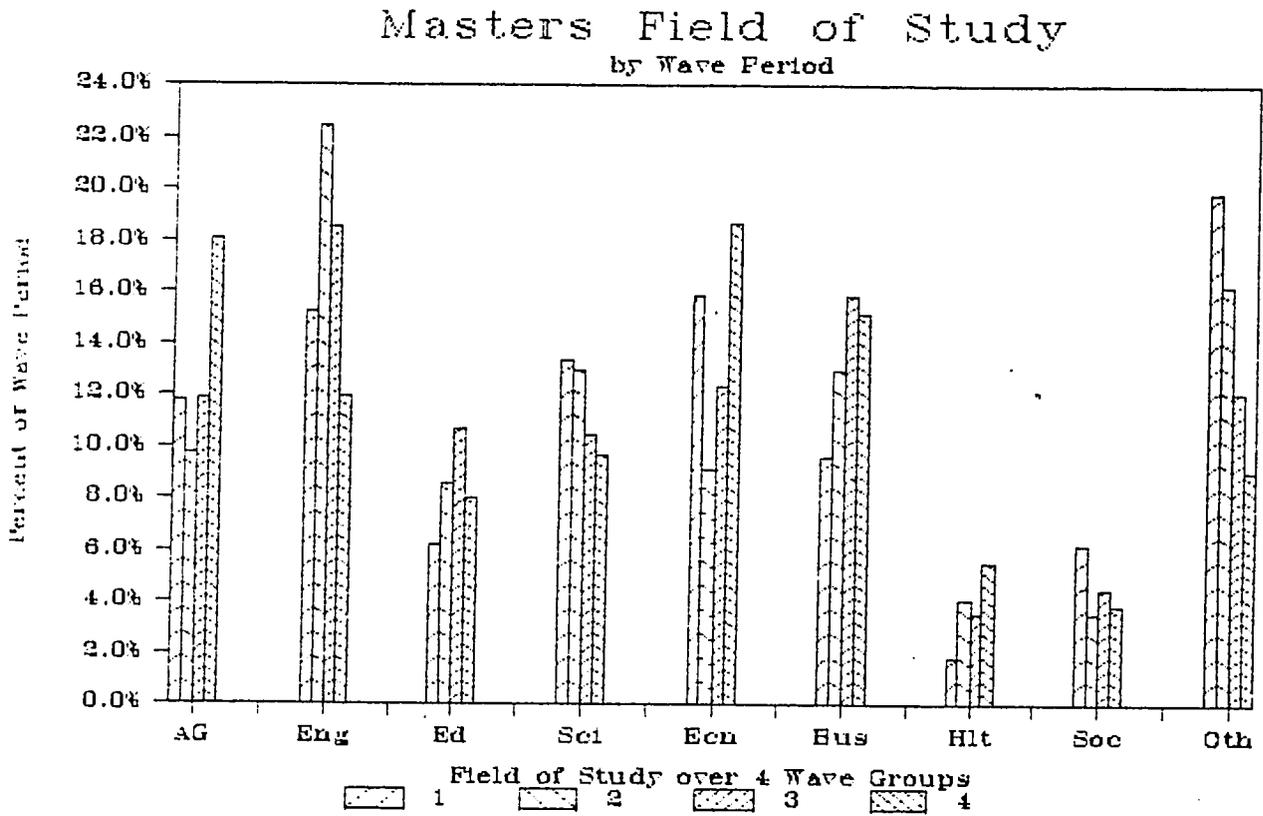


FIGURE I-E

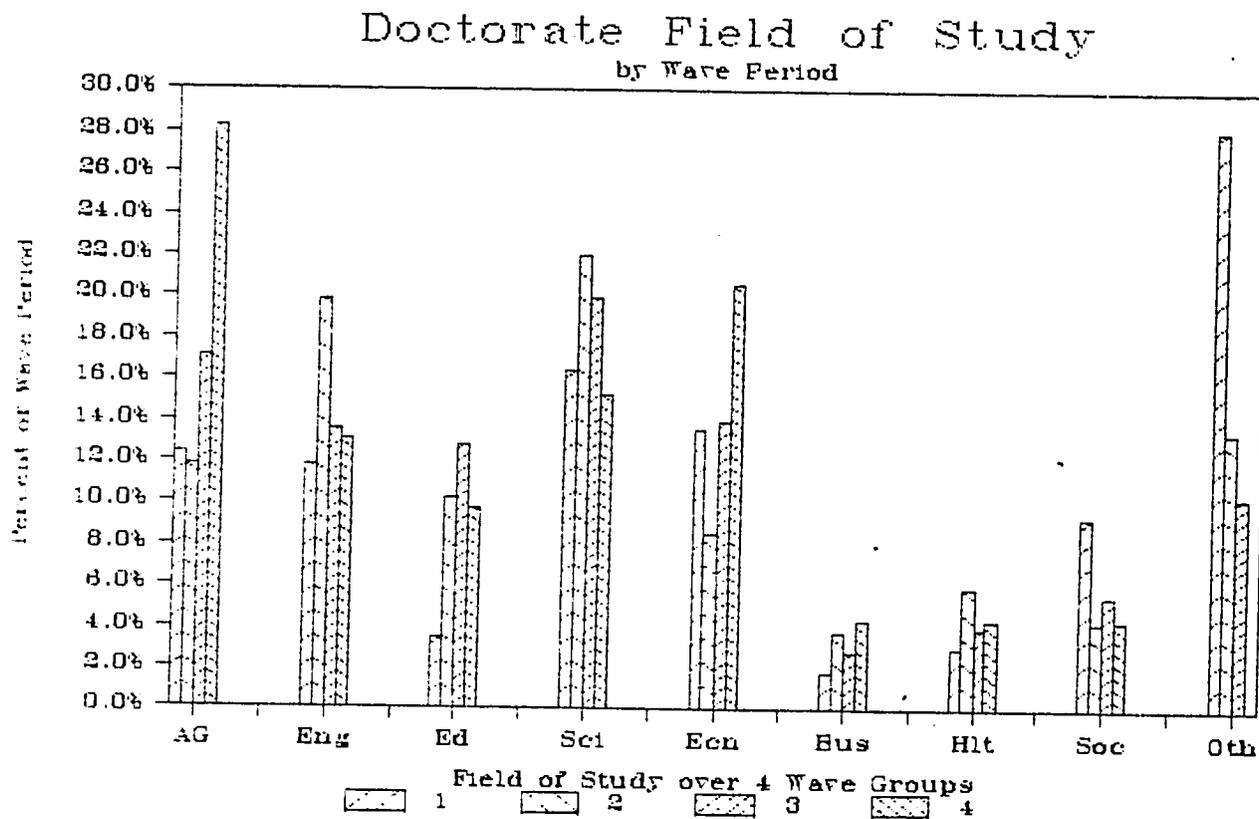


FIGURE I-F

Kind of Institution for First and Current Jobs  
of All Alumni

Institution	First Job		Current Job	
	No.	(%)	No.	(%)
Education and Research	467	(60.3)	407	(53.3)
Governmental and Parastatal	194	(25.1)	182	(23.9)
Banking and Private Sector	86	(11.1)	119	(15.6)
International Organi- zation	27	( 3.5)	55	( 7.2)
TOTAL	774	(100.0)	763	(100.0)

TABLE II-1

Kind of Institution for First and Current Jobs  
of Alumni Trained in First Ten Years

Institution	First Job		Current Job	
	No.	(%)	No.	(%)
Education and Research	220	(62.7)	185	(53.0)
Governmental and Parastatal	82	(23.4)	64	(18.3)
Banking and Private Sector	37	(10.5)	66	(18.9)
International Organiza- tion	12	(3.4)	34	(9.7)
TOTAL	351	(100.0)	349	(100.0)

TABLE II-2

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(no TABLE 3)

Position Title of First and Current Jobs  
of All Alumni

<u>Position Title</u>	<u>First Job</u>		<u>Current Job</u>		<u>Change</u>
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>(%)</u>
(1) Chancellor Registrar, Principal	3	(0.4)	13	(1.6)	+333.3
(2) High Level Manager (e.g., Minister of State, Bank Governor, Managing Director, Small Business Owner	6	(0.8)	60	(8.0)	+900.0
(3) Head of Center, Bureau, Institute or Dean of Faculty, School	6	(0.8)	26	(3.3)	+333.3
(4) Head of Major Department or Division (Academic, Research, Planning, Other)	29	(3.7)	113	(14.7)	+289.7
(5) Head Deputy of Major Department/Division or Head of Smaller Department/Division	84	(10.8)	96	(12.5)	+ 14.3
(6) Administrative Position (e.g., Assistant Manager, Coordinator, Other)	42	(5.4)	27	(3.5)	- 35.7

TABLE 4 (cont. on next page)

<u>Position Title</u>	<u>First Job</u>		<u>Current Job</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
(7) Full or Associate Professor	1	(0.1)	41	(5.3)
(8) Senior or Principal Lecturer	20	(2.6)	53	(6.8)
(9) Lecturer or Assistant Professor	275	(35.4)	136	(17.7)
(10) Other Teaching Positions	65	(8.4)	24	(3.1)
(11) Senior Principal, Chief Technical Specialist	35	(4.5)	60	(7.8)
(12) Technical Specialist	202	(25.9)	110	(14.3)
(13) Graduate Student	9	(1.2)	11	(1.4)
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	777	(100.0)	770	(100.0)

TABLE 4

(continued from prev. page)

Type of Responsibility in  
First and Current  
Jobs of All Alumni

<u>Type of Responsibility</u>	<u>First Job</u>		<u>Current Job</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Managerial/ Administrative	152	(22.8)	313	(45.0)
Professional/ Technical	516	(77.2)	383	(55.0)
TOTAL	668	(100.0)	696	(100.0)

TABLE 5

Type of Responsibility in  
First and Current Jobs  
of Alumni Trained in  
First Ten Years

<u>Type of Responsibility</u>	<u>First Job</u>		<u>Current Job</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Managerial/ Administrative	60	(20.0)	162	(52.3)
Professional/ Technical	240	(80.0)	148	(47.7)
TOTAL	300	(100.0)	310	(100.0)

TABLE 6

Level of Responsibility in First and Current  
Jobs of All Alumni

Level	First Job		Current Job	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
1	7	(0.9)	66	(8.7)
2	43	(5.5)	194	(25.4)
3	131	(16.9)	194	(25.4)
4	508	(65.5)	270	(35.4)
5	86	(11.1)	39	(5.1)
	775	(100.0)	763	(100.0)

TABLE 7

TABLE 8

Level of Responsibility in First and Current  
Jobs of Alumni Trained in First Ten Years

Level	First Job		Current Job	
	No.	(%)	No.	(%)
1	3	(0.9)	47	(13.7)
2	18	(5.1)	129	(37.5)
3	56	(16.0)	88	(25.6)
4	231	(66.0)	73	(21.2)
5	42	(12.0)	7	(2.0)
	350	(100.0)	344	(100.0)

TABLE 8