

**PROCESS EVALUATION OF THE
HISTORICALLY BLACK COLLEGES AND UNIVERSITIES
RESEARCH GRANTS PROGRAM**

by
**Eugene W. Adams
Dale W. Berry
Mona A. Feldman**

Prepared for
**Agency Center for University Cooperation in Development
Bureau for Research and Development
U.S. Agency for International Development
Washington, D.C.**

Prepared Under Contract No. PDC-0085-I-00-9087-00
Delivery Order 11

November 25, 1992

TvT Associates

CONTENTS

	<u>Page</u>
ACKNOWLEDGMENTS	i
I. BACKGROUND	1
II. PURPOSES AND SCOPE OF EVALUATION	4
III. METHODOLOGY	6
Overview	6
Survey Design and Implementation	7
Sample Design	7
Response Rates	8
Survey Design and Implementation	8
IV. FINDINGS	9
The Proposal Review Process	9
Program and Statistical Outcomes	12
Health-Related Projects	13
The Agricultural Sciences	14
General	14
V. ANALYSIS, CONCLUSIONS AND RECOMMENDATIONS	16
Analysis	16
Conclusions	19
Recommendations	19

CHART

Scheme for Proposal Submission Process for the HBCU Research Grants Program	11
--	----

APPENDICES

A	Sample Size and Response Rates
B	Questionnaires
	Interview Schedule for RGP Principal Investigators
	Interview Schedule for Directors of Research or International Programs
C	Persons Interviewed

REFERENCES

ACKNOWLEDGMENTS

The contractor wishes to acknowledge the assistance provided by David Rakes and Brij Shrivastan of the Agency Center for University Cooperation in Development. Mr. Rakes and Dr. Shrivastan were very helpful in providing background information about the program and in monitoring the contractor's effort. Dr. Collin Weir and Dr. Julius S. Prince of the International Science and Technology Institute, Inc., were very helpful and provided the contractor with perspective on the development of the Research Grants Program, as did Mr. Floyd O'Quinn, formerly of A.I.D. and currently with Metrica, Inc. Appreciation is extended also to Mr. Jay Davenport of the National Academy of Sciences and various officials of A.I.D. who contributed to this study by offering their perspective and insights.

Special appreciation is extended to the 53 principal investigators and 9 directors of research/international programs at HBCUs who took the time to respond to the survey questionnaires. Without their effort and cooperation the study would not have been possible.

Denise C. Jones and Mona Feldman of the contractor's staff were responsible for locating the principal investigators for the survey and for interviewing or obtaining completed questionnaires from them.

I. BACKGROUND

The Historically Black Colleges and Universities (HBCU) Research Grants Program is unique as a way to attract faculty at these institutions to A.I.D.'s international development activities. Through this program, the agency has sought to make its Missions and A.I.D. Washington staff aware of this largely untapped reservoir of expertise. Moreover, in conducting the research, HBCU investigators would gain valuable experience in addressing problems of developing countries. This experience would enhance the competitiveness of HBCUs in securing grants and contracts and the establishment of cooperative arrangements between HBCUs and other universities. The impediment of a general lack of overseas experience would no longer be an obstruction to HBCUs for serving as grantees or subcontractors, thereby enhancing their potential as envisioned by Presidential Executive Orders and the Gray Amendment, which encourage and mandate, respectively, the participation of HBCUs in A.I.D.'s development assistance efforts.

At the outset, A.I.D. clearly defined its programmatic goals: (a) to encourage exceptional scientists at the HBCUs to redirect their efforts toward the problems of less-developed countries (LDCs), and (b) to encourage them to become involved in A.I.D. activities.

A.I.D. is particularly interested in enabling A.I.D. overseas missions and LDCs to identify outstanding researchers on HBCU campuses--researchers that might not be involved in international assistance programs without the HBCU Research Grants Program.

Grants are awarded through a formal review process. HBCU researchers are encouraged to submit "discrete" research project proposals primarily in the areas of agriculture and health. The grants support the conduct of research in developing countries in collaboration with local scientists at universities and/or research centers. Published results of the research are expected. In fiscal year (FY) 1984, the initial funding year of the Research Grants Program, 11 projects of less than \$35,000 each were funded after internal A.I.D. review. Based on the experience of the first year, the program allocation was increased to about \$2 million per year and the funding limit per grant was raised to \$100,000. The grants are scheduled for completion within a 2-year period. From the beginning, a formal external review system was established with the National Science Foundation (NSF) and later with the National Academy of Sciences (NAS).

The HBCU Research Grants Program is administered by the Agency Center for University Cooperation in Development (University Center) in A.I.D.'s Bureau for Research and Development. The University Center, formerly the Office of Research and University Relations (RUR), also funds development activities for other specialized institutions of higher education, particularly land grant colleges. In recent years, slightly more than 10 percent of the University Center's research and development grants have been awarded to HBCUs.

The program is now in its eighth year. For the 8 years through FY 1991, 521 proposals were reviewed and 152 were funded at a cost of \$12.88 million. Thirty HBCUs have participated in the program; collaborative research has been conducted

with scientists in 30 LDCs. The program's success can be measured by the number and quality of proposals reviewed and funded, the number of HBCU scientists involved, the number of LDCs in which collaborative research has been conducted, and the effects of the research program on both developing countries and on the introduction of international dimensions to the universities' research and educational programs.

II. PURPOSES AND SCOPE OF EVALUATION

This evaluation consists of independent, external assessment (review of background documents from A.I.D. and other sources) coupled with insights of HBCU principal investigators, research directors/directors of international programs, A.I.D. Washington staff, and others. At the beginning of the study, TvT Associates obtained a thorough understanding of the University Center's concerns and priorities.

The principal areas of inquiry are:

- The process--the efficiency and appropriateness of the various proposal review tasks. Specific attention is directed to: (1) problems related to the approval/disapproval review process, (2) the extent to which the National Academy of Sciences' recommendations are followed in reaching the final proposal funding decision, and (3) the timeliness and appropriateness of the communication flow between the A.I.D. Research Grants Coordinator and HBCU principal investigators during and after the award process.
- Program outcomes--the extent to which (1) HBCU research grants have strengthened and/or improved the research capacity of recipient institutions, faculties and departments; (2) the grants program has increased HBCU international development interests, programs and resources; and (3) individual investigators have used their experiences with the program to obtain competitive research grants from other government agencies as well as from A.I.D. Washington and overseas missions.
- Statistical outcomes--as measured by (1) the depth, number and relevance of research projects that have entailed LDC research sites, either in collaboration with LDC scientists or otherwise, as well as whether the institutions have been able to maintain interaction with the LDCs; (2) the level of other A.I.D. support that has been generated for the HBCU grants program; and (3) the breadth of the sector distribution of all approved research, including subsector distribution.

The primary focus of this evaluation is the proposal preparation and review process, while a limited amount of data on outcomes supplements data obtained in prior studies. The information presented here on the effects and outcomes of the Research Grants Program represents the perceptions of HBCU principal investigators and research directors.

III. METHODOLOGY

OVERVIEW

This evaluation draws on information collected by three methods:

1. Interviews with A.I.D. Washington officials and officials of other organizations involved in administering the program, particularly in the process of research proposal review. These interviews focused on:
 - the evolution and current practices of the review process,
 - the respondents' perceptions of the strengths and shortcomings of the process, and
 - suggestions for improvement.
2. Review of secondary data and prior studies regarding program outcomes.
3. A sample survey of principal investigators who have received grants under the HBCU Research Grants Program and directors of research/international programs at their institutions. Both the principal investigators and directors were asked questions regarding:
 - their experience with the grant application process,
 - the support provided by their institutions and A.I.D. during proposal preparation,
 - institutional support following grant award,
 - effects of the grants and grant activities on their institutions and on international development assistance efforts,
 - perceptions of the strengths and weaknesses of the program, and
 - suggestions for improvement.

All of the data collection occurred between late August and early October 1992.

SURVEY DESIGN AND IMPLEMENTATION

Sample Design

For the fiscal years 1984 through 1991, 152 research grants were awarded to 30 HBCUs. More than half of the grants (83) were received by only 7 of these institutions. The time and resource constraints of this evaluation precluded a survey of all principal investigators and all grantee institutions. Therefore, a sample was drawn to represent the grants and grant recipients. All grants at the 7 HBCUs which had received at least 8 grants were automatically included in the sample. Additionally, 6 HBCUs were sampled from the remaining 23 institutions. These institutions were selected to represent a range of "quality," as measured in the May 1990 study of outputs and benefits of the Research Grants Program. These 6 institutions had received 19 grants.

The sample included all principal investigators for the 102 grants at the 13 selected institutions. Seventy-one principal investigators were identified for the 102 grants (that is, some principal investigators conducted more than one research grant). In addition to the sample of 71 principal investigators, the director of research or international programs in each of the 13 institutions was to be surveyed.

The results of the survey, for the most part, cannot be used to draw statistically reliable inferences regarding the population of program grants, recipient institutions or principal investigators. The sample is purposive or judgmental and statistical sampling error cannot be determined. However, the sample includes all

institutions with heavy Research Grants Program activity, while those with less activity were selected to represent the broad spectrum of all other institutions receiving grants. The sample thus provides sound data for policy and programmatic decision making.

Response Rates

Of the 71 principal investigators sampled, completed questionnaires were obtained from 53: a 75 percent response rate. This response rate is reasonable considering that the survey was conducted at the beginning of the fall semester and that some of the grants had been conducted up to 7 years earlier. Questionnaires were obtained from 9 directors of research/international programs; one institution did not have such a position. (See Appendix A for a tabulation of response rates.)

Survey Design and Implementation

Two interview schedules/questionnaires were designed and used in the survey: one for principal investigators and the other for directors of research/international programs. The questionnaires were completed either by telephone interviews conducted by TvT staff or were self-administered and returned by facsimile (fax) transmission or mail. The questionnaire forms are included in Appendix B.

IV. FINDINGS

For the 13 HBCUs selected to participate in this study, 53 principal investigators prepared 106 proposals of which 83 (78 percent) were funded. Of those full proposals that were funded, 27 (33 percent) were based on a concept paper that had been reviewed in the A.I.D./University Center "pre-proposal" evaluation program.

THE PROPOSAL REVIEW PROCESS

The recently revised guidelines for proposal submission for the HBCU Research Grants Program (A.I.D., 1990) describe all tasks associated with proposal review. Principal investigators and research directors are critical of the review system because of:

- confusion as to deadline dates for proposal submission;
- difficulty in obtaining copies of proposal submission guidelines;
- inadequate feedback from A.I.D. Washington staff, overseas missions and program evaluators; and,
- long delays in receiving information on the status of submitted proposals. Respondents indicated that the average time it took A.I.D. to respond to a concept paper was 3.9 months and 6.3 months to notify an investigator of the outcome of a proposal.

However, 62 percent of the respondents indicated that A.I.D. could not have been more helpful or supportive during the proposal process.

The former A.I.D./HBCU Research Grants Program Coordinator explained the reasons for some of the principal investigators' confusion concerning the awards process. In an effort to encourage participation and ultimate success of non-

established investigators, accommodations were made at the beginning of the program. The process was characterized by certain intervention measures--pre-proposal concept reviews, flexible submission dates, return of proposal to the principal investigator with suggestions to meet A.I.D. research guidelines, and other assistance necessary to improve proposal quality. This assistance frequently resulted in delays in the process, causing some proposals to miss the deadlines for the external peer review. These proposals would then be held over until the next funding cycle. Following the RUR internal review, proposals underwent further review by relevant scientists within A.I.D. and/or the International Science and Technology Institute, Inc. (ISTI), an independent contractor. An independent external peer review group (National Academy of Sciences [NAS]) evaluated the proposals for technical merit, and then ranked each proposal in the order of funding merit. A.I.D./RUR staff, then, taking full cognizance of recommendations made by the scientific reviewers, determined which proposals were funded, returned for revision or rejected. (See Chart 1.) It appears that movement of proposals through the review process was directly related to the time required for RUR to complete its "screening" requirements.

Recommendations: Many investigators have submitted quality proposals and have later gone on to submit other successful proposals to A.I.D. and other government agencies. A substantial number of HBCUs, as a result of their participation in the grants program, have increased their capabilities to respond to

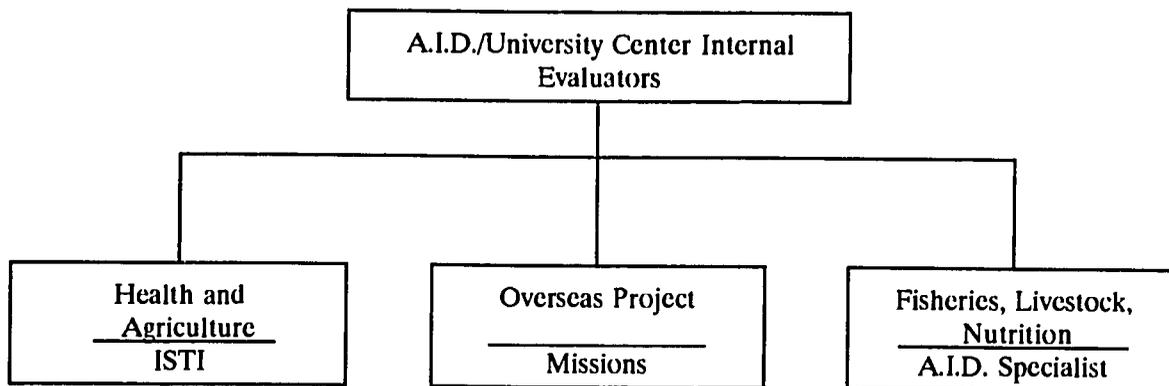
CHART 1

SCHEME FOR PROPOSAL SUBMISSION PROCESS FOR THE HBCU RESEARCH GRANTS PROGRAM

First Evaluation Level

A.I.D./University Center Washington staff receives proposals from HBCU principal investigators. Deadlines: November/March for submission (not adhered to--flexible). Initial screening process (relatedness to A.I.D. programs and to ensure that sufficient information is submitted to enter cycle). Those failing to meet qualifications are returned to principal investigator; others are referred to internal evaluators for further review of methodological and scientific soundness.

Second Evaluation Level



Proposals surviving these technical evaluations are forwarded to University Center staff; depending upon recommendations, may be returned to the principal investigator with comments/suggestions or may continue in cycle. Last stage of "accommodations process." Those surviving this stage are ready for the external reviewers.

Third Evaluation Level

National Academy of Sciences Peer Review Panels convened in November and March of each calendar year. Review Criteria:

1. Problem Definition
2. Quality of Science
3. Research Methodology
4. Institutional Capabilities and Experience

Proposals are in the order in which funding is merited and are returned to the University Center Program Coordinator. Panels meet for 2 - 3 days.

FINAL REVIEW: Project Coordinator and staff draw heavily on recommendations of NAS panels in the process of selecting principal investigator awards. Award notices are made prior to June 1 of cycle year.

A.I.D.'s requests for assistance. It seems appropriate that the "accommodation process" should be eliminated and everyone should be required to adhere strictly to the final submission dates as outlined in the program guidelines. Workshops could be planned on an "as needed" basis for those principal investigators who still need extensive assistance in proposal preparation. To ensure appropriate and timely communication with the universities, the University Center is urged to continue to provide a program coordinator who is available on a daily basis, aware of HBCU capabilities, sensitive to HBCU needs, and committed to a smooth and successful operation of the Research Grants Program. In addition, the University Center should

- Make a concerted effort to place in the hands of each principal investigator, research director and director of international programs a copy of the revised Guidelines for Submitting Proposals.
- Give wide publicity to the extent to which NAS has gone to ensure that the external review is indeed a peer review, and that HBCU scientists are regularly selected as members of the review panels.

PROGRAM AND STATISTICAL OUTCOMES

Judging whether program and statistical outcomes of the research program activities have strengthened and improved research capacities can be assessed in terms of:

- the number of
 - funded proposals developed,
 - publications in peer-reviewed journals,
 - graduate students and post-doctoral candidates trained, and
- knowledge gained and its use in obtaining grants and contracts from government agencies.

It is perhaps much too early to judge the cost and benefits and ultimate success of this program, but project results reported by principal investigators at certain of the HBCUs give mute testimony to the noticeable benefits to both A.I.D. and the institutions.

Activities in both the agricultural and health sectors at the institutions cited below clearly demonstrate that the grants program has made significant progress toward meeting A.I.D.'s stated objectives. These institutions are cited because of their significant research program development and the concentration of resources in specific research areas. This concentration has led to the development of a critical mass of experienced investigators and a continuity of research interests essential to establishing a center of excellence.

Health-Related Projects

A. Trypanosomiasis/Malaria Research Center at Meharry Medical College. After eight years under the Research Grants Program, the Center for Tropical Diseases has competed for and received 13 awards totaling \$1.28 million. The Center's scientists have also been responsible for 7 refereed publications, 8 abstracts, 2 doctoral theses, and the training of 2 post-doctoral candidates and 3 graduate students (National Research Council, 1991).¹

B. The Morehouse School of Medicine, with research grant support, has been able to concentrate its resources in the areas of prevention of diarrheal diseases, population control and schistosomiasis. Seven principal investigators have been

¹See the last page of this report for references.

responsible for 27 publications in refereed journals, 26 abstracts, 2 theses, and the training of 8 graduate students. Between 1987-1991, grants and awards generated \$644,138.

The Agricultural Sciences

Research programs are cited at four institutions (Lincoln, Howard, Tuskegee and Prairie View Universities) which have developed significant research programs in the subsectors of plant and animal science. Research efforts at these schools resulted in the publication of 19 papers in refereed journals, 11 abstracts, and training of 7 graduate students. Linkages were established with scientists at 5 African universities, one international research center and several West Indian islands. A total of \$2.3 million has been generated from research grants and contracts.

General

Comments made by the survey respondents reveal additional evidence to support the thesis that significant progress has not been limited to a few institutions but that there is a high degree of acceptance and awareness of the Research Grants Program objectives in the HBCU community as a whole. For example:

According to information supplied by at least one principal investigator at each of the HBCUs:

- 92 percent of the institutions surveyed are now engaged in international program development
- 62 percent have enriched existing courses with international material
- 69 percent have recruited faculty with international expertise and/or interest

- **64 percent of the principal investigators report increased contacts with A.I.D./Washington**
- **44 percent report increased contacts with USAID Missions overseas**
- **83 percent report that the overall effect of the research program on their institution has been somewhat or very positive, and**
- **80 percent report that, in their judgment, the impact of the program on the host countries has been somewhat or very positive.**

V. ANALYSIS, CONCLUSIONS AND RECOMMENDATIONS

ANALYSIS

The HBCU Research Grants Program is not designed as a cohesive research program. Grants are awarded for discrete projects, and no systematic method exists to assure that new grants will build on prior grant research results or will be related to other ongoing grants. Such cohesion as exists appears to have been the result mainly of the efforts of some of the HBCUs and principal investigators. Because of the fragmented and discrete nature of the research grants, integration of the research depends to a large extent on the commitment and continuity of research efforts at individual HBCUs.

The concept underlying the HBCU Research Grants Program contains an inherent conflict. The A.I.D. effort (and the efforts of other federal agencies) concerning HBCUs is "to increase participation of minority institutions in problems of developing countries." (Emphasis added.) (National Research Council, 1988, p. 1.) It was hoped that "HBCU principal investigators would gain valuable experience . . . that . . . would enhance the competitiveness of HBCUs in securing grants and contracts for technical assistance projects from A.I.D. and other funding organizations." (National Research Council, 1988, p. 3.) However, the research grants often are the result of the efforts of one researcher (or a very small group of researchers). These researchers often obtain multiple research grants, and often at different HBCUs. For example, in the survey conducted for this evaluation, 19

principal investigators had obtained more than one grant. The total number of grants obtained by this group is 48, and the total number of HBCUs which received the grants is 9.

As long as the principal investigators remain with minority institutions, the aggregate capacity and experience of HBCUs are increased. However, the development of the capacity of a particular institution often is thwarted by the movement of principal investigators who take with them the necessary expertise and experience to obtain additional grants.

A.I.D. should consider carefully the aims of the Research Grants Program as they are related to development of institutions. To some extent, the program, despite its considerable successes, has not systematically addressed the direct development of HBCUs as much as it has encouraged individual researchers.

To address this issue, A.I.D. has the option of modifying the Research Grants Program to increase emphasis on meeting the needs of the institutions compared to the needs of individual researchers. Various ways exist to accomplish such a shift. For example,

1. Institutional experience and/or commitment could be given additional weight in the selection process;
2. The grant award size could be increased, resulting in fewer but larger grants.
3. A portion of program funds could be devoted specifically to development of HBCU research capacity; and/or,
4. HBCUs could be rewarded through the program for their initiatives in developing strong research centers.

The first option does not represent an altogether satisfactory approach in that some researchers might not be able to obtain grants because of the HBCU's lack of experience. Thus, both a capable researcher and a needy institution would be penalized.

The second option is appealing to institutions and principal investigators, most of whom indicated that they would like to see the size of grants increased. However, given the fact that the total budget for the program is unlikely to increase, the effect of choosing this option would be to reduce for the less-experienced HBCUs the probability of obtaining grants.

The third and fourth options are related but different. The third option--development of HBCU research capacity in general--could be accomplished by increasing the proportion of grant awards to the least experienced HBCUs. To the extent that the program increased the capacity of these institutions, the average research capacity of HBCUs would be raised. Although this approach has some merit, it is being served to some extent by the present system. Also, this approach appears to be less cost-effective than the fourth option.

The fourth option would reward and reinforce HBCU initiatives to develop strong research centers. This approach recognizes the fact that certain institutions (as discussed in Section IV) have developed a critical mass of research resources. These HBCUs have drawn successfully on funds from the Research Grants Program and other public and private sources to operate research "centers." Because of their experience and resources, investment in these centers, in comparison to other

HBCUs, is likely to generate favorable and visible results. Moreover, because of the existing resources of these centers and economies resulting from the agglomeration of resources, given levels of expenditures should yield higher levels of benefits and effectiveness than at other HBCUs. Adopting this option would encourage the development of designated "centers of excellence" for research at selected HBCUs.

CONCLUSIONS

The overall impact of the program, from the perspective of principal investigators and research directors, has been positive. Only 8 years after establishment of the research program, a critical mass of HBCU scientists has developed expertise in international program initiatives, and many HBCUs have strengthened their capabilities to participate in A.I.D.'s assistance program.

RECOMMENDATIONS

Drastic changes in the Research Grants Program are not recommended.

However, it is suggested that A.I.D.:

1. Continue program funding at the highest possible level.
2. Ensure that the program is continually monitored, including feedback from the HBCUs.
3. Revise the proposal due dates and accept proposals only once per year. The due date probably should be February 1.
4. Consider allocating a portion of program funds for the development of "centers of excellence" for research in the agricultural and health sectors. (See further discussion below.)
5. Strengthen contacts with HBCUs and linkage partners through symposia and workshops to make effective use of human and institutional resources.

The establishment of "centers of excellence" could be a very important factor in improving the effectiveness of the Research Grants Program and in meeting its overall goal of strengthening HBCU research capability. Such centers also would undoubtedly increase the probability that HBCUs will contribute significantly to solving the problems addressed by the research.

The rationale for the proposed "centers of excellence" is discussed above. What would be the key characteristics of the centers and how would they operate? First, the centers would, as required of all program grantees, focus on funding priority areas established for the Research Grants Program. Prospective centers also would be expected to define a long-term research program, perhaps for 5 years. Funding by the Research Grants Program could be for the entire 5 years, with annual funding contingent upon satisfactory progress by the grantee toward its stated objectives.

An integral feature of each grant would be that the HBCU (or a consortium of HBCUs) would submit not only a 5-year plan for development of a research program and research center but also a plan for supplementing the A.I.D. grant with funding from other sources. Although it may not be realistic for A.I.D. to demand extensive matching funds from the HBCU in the first year or two, long-range success of the grants will depend on leveraging the initial A.I.D. funding to obtain non-A.I.D. resources. A.I.D. might even seek assurances from grantees that the centers will be sustained primarily by private funds after the fifth year.

The precise nature of the "centers of excellence" is difficult to predict. As with the current grants, A.I.D. should encourage collaboration with USAID Missions and

researchers in LDCs. It can be envisioned that the centers also might wish to award subgrants to other HBCUs or provide research and graduate study opportunities for students of other HBCUs.

A.I.D. could encourage applicants for "centers of excellence" grants to propose carefully crafted programs of research that have the potential for impact both in terms of resolving problems for LDCs and for developing first-class research capabilities in HBCUs as well as in any collaborating LDC universities.

Funding for "centers of excellence" could be approached as a demonstration. This would allow A.I.D. to evaluate fully the concept, operations and outcomes of the centers initiative.

It is recommended that until the efficacy of the approach is established, no more than perhaps 20 percent of the total budget for research grants be allocated for this effort. If two "center" grants were awarded at current budget levels, each would receive approximately \$200,000 annually. That amount appears sufficient to provide a reasonable expectation of success of the initiative.

APPENDIX A
SAMPLE SIZE AND RESPONSE RATES

Appendix A

SAMPLE SIZE AND RESPONSE RATES

Name of Institution	No. of Grants	No. of Principal Investigators Sampled	No. of Interviews Completed	Response Rate (%)
Morehouse College of Medicine	16	8	4	50%
Meharry Medical College	15	7	4	57
Tuskegee University	13	9	8	89
Howard University	11	10	8	80
Lincoln University	11	7	7	100
Florida A & M University	9	7	6	86
Clark-Atlanta University	8	8	2	25
Prairie View University	5	3	3	100
North Carolina A & T State University	4	3	3	100
University of Arkansas, Pine Bluff	3	3	2	67
Southern University	3	3	3	100
Virginia State University	3	2	2	100
Xavier University	1	1	1	100
TOTAL	102	71	53	75%

APPENDIX B
QUESTIONNAIRES

INTERVIEW SCHEDULE FOR RGP PRINCIPAL INVESTIGATORS

--	--	--	--	--	--	--	--	--	--

1. How did you first hear of the A.I.D. Research Grants program?

CHECK ALL THAT APPLY:

- From a colleague
- From the college/university
 - Academic department (SPECIFY): _____
 - Business/Development Office
 - International Program
 - Other (SPECIFY): _____
- From A.I.D. publication
- From other publication (SPECIFY): _____
- From A.I.D. staff
- From an A.I.D. Mission (SPECIFY COUNTRY): _____
- From another source (SPECIFY): _____
- Not sure/don't remember

2. Have you submitted any concept papers to A.I.D. regarding proposal ideas for the Research Grants Program?

- Yes
- No (GO TO 6)

3. How many concept papers have you submitted?

____ (ENTER NUMBER)

4. How many of these were "accepted" by A.I.D.?

____ (ENTER NUMBER)

5. How long did A.I.D. take to respond to the concept paper(s)?

IF MORE THAN ONE PAPER, ENTER THE AVERAGE:

___ months

6. Were you responsible for or involved in submitting any proposal(s) to A.I.D. for the research grant(s)?

- Yes
 No (GO TO 14a)

7. How many proposals have you submitted?

None
___ (ENTER NUMBER)

8. How many of these proposals have been funded?

None
___ (ENTER NUMBER)

9. How many are pending or are under review now?

None
___ (ENTER NUMBER)

10. How many of the full proposals were based on a previous concept paper?

None
___ (ENTER NUMBER)

11. How long did A.I.D. take to notify you that the proposal(s) was (were) successful or unsuccessful?

IF MORE THAN ONE PROPOSAL, ENTER THE AVERAGE:

___ months

12a. Could your institution have been more supportive or helpful in the proposal process?

- Yes
- No (GO TO 13a)
- Yes and No

12b. Please explain what support or assistance could have been provided.

13a. Could A.I.D. have been more supportive or helpful in the proposal process?

- Yes
- No (GO TO 14a)
- Yes and No

13b. Please explain what support or assistance A.I.D. could have provided.

14a. After the research grant was received, did you receive adequate support from your institution for the project start-up?

- Yes (GO TO 15a)
- No

14b. Please explain.

15a. (Did you receive)(Have you received) adequate support from (your institution) throughout the grant period?

- Yes (GO TO 16a)
- No

15b. Please explain.

16a. Has (your institution), to your knowledge, done any of the following as a result of the grant:

CHECK ALL THAT APPLY:

- Added new international courses
- Enriched existing courses with international material
- Recruited faculty with international interest or expertise
- Recruited staff with international interest or expertise
- Engaged in international program development (facilities, funds, staff)

16b. Has (your institution), to your knowledge, as a result of this grant:

CHECK ALL THAT APPLY:

- Increased contacts with A.I.D. in Washington
- Increased contacts with A.I.D. Missions overseas
- Increased or initiated efforts to obtain private-sector funding for international projects

16c. Please explain each of these changes (FROM 16a AND 16b).

17a. In your judgment, has the overall effect of the research grant on (your institution) been:

CHECK ONE ONLY:

- Nonexistent or too small to measure,
- Somewhat positive,
- Very positive,
- Negative, or
- Not sure of effect.

17b. Please explain.

18a. In your judgment, has the effect of the Research Grants Program on the host country(ies) been:

CHECK ONE ONLY:

- Nonexistent or too small to measure,
- Somewhat positive,
- Very positive,
- Negative, or
- Not sure of effect.

18b. Please explain.

19. What have been the effects of the Research Grant Program, if any, on each of the following:

Host country government?

Host country communities?

Host country economy or individual enterprises?

Research in the host country?

Host country colleges/universities?

USAID Mission?

20. In your opinion, what is the principal way or ways in which the Research Grants Program has enhanced development efforts in less developed countries?

21a. Can you suggest any (additional) ways for A.I.D. to improve the grant application process or award process under the Research Grants Program?

- Yes
- No (GO TO 22a)

21b. Please explain.

22a. Do you have any (other) suggestions for improving the A.I.D. Research Grants Program?

- Yes
- No (GO TO 23a)

22b. Please explain.

23a. Do you have any suggestions for expanding or improving (your institution's) involvement in the A.I.D. Research Grants Program?

- Yes
- No (GO TO 24)

23b. Please explain.

24. Do you have any additional comments?

Thank you for your time and for sharing your knowledge and insights.

**INTERVIEW SCHEDULE FOR DIRECTORS OF RESEARCH OR
INTERNATIONAL PROGRAMS**

--	--	--	--	--	--	--

1. Have you been involved in the submission of any proposals to A.I.D. under the Research Grants Program?

- Yes
 No (GO TO 6a)

2. How many proposals have you been involved with?

_____ (ENTER NUMBER)

3. How long did A.I.D. take to respond to the proposal(s)?

IF MORE THAN ONE PROPOSAL, ENTER THE AVERAGE

_____ months

4a. Did you receive adequate support from (your institution) in the preparation of the proposal(s)?

- Yes (GO TO 5a)
 No
 Yes and No

4b. In what way(s) was support less than adequate?

4c. What, if anything, has been or is being done to correct the(se) situation(s)?

(IF NOTHING DONE, CHECK HERE AND GO TO 4d; OTHERWISE DESCRIBE WHAT HAS BEEN OR IS BEING DONE):

4d. What (else) needs to be done?

5a. In your view, what are the main strengths of the Research Grants Program application and award process?

5b. What are the main shortcomings of the application and award process?

5c. Can you suggest any ways for A.I.D. to improve the grant application process?

- Yes
- No (GO TO 6a)

5d. Please explain.

6a. After the research grant(s) (was)(were) received, did you receive adequate support from your institution for the project start-up?

- Yes (GO TO 7a)
- No

6b. Please explain.

7a. (Did you receive)(Have you received) adequate support from (your institution) throughout the grant period?

- Yes (GO TO 8a)
- No

7b. Please explain.

8a. Has (your institution), to your knowledge, done any of the following as a result of the grant:

CHECK ALL THAT APPLY:

- Added new international courses
- Enriched existing courses with international material
- Recruited faculty with international interest or expertise
- Recruited staff with international interest or expertise
- Engaged in international program development (facilities, funds, staff)

8b. Has (your institution), to your knowledge, as a result of this grant:

CHECK ALL THAT APPLY:

- Increased contacts with A.I.D. in Washington
- Increased contacts with A.I.D. Missions overseas
- Increased or initiated efforts to obtain private-sector funding for international projects

8c. Please explain each of these changes (FROM 8a AND 8b).

9a. In your judgement, has the overall effect of the research grant on (your institution) been:

CHECK ONE ONLY:

- Nonexistent or too small to measure,
- Somewhat positive,
- Very positive,
- Negative, or
- Not sure of effect.

9b. Please explain.

10a. In your judgement, has the effect of the Research Grants Program on the host country(ies) been:

CHECK ONE ONLY:

- Nonexistent or too small to measure,
- Somewhat positive,
- Very positive,
- Negative, or
- Not sure of effect.

10b. Please explain.

11. In your opinion, what is the principal way or ways in which the Research Grants Program has enhanced development efforts in less developed countries?

12a. Do you have any (other) suggestions for improving the Research Grants Program?

- Yes
- No (GO TO 13a)

12b. Please explain.

13a. Do you have or do you know of any plans for expanding or improving (your institution's) involvement in the A.I.D. Research Grants Program?

- Yes
- No (GO TO _____)

13b. Please explain.

14. Do you have any additional comments?

Thank you for your time and for sharing your knowledge and insights.

APPENDIX C
PERSONS INTERVIEWED

Interviews with the following individuals were conducted in relation to this study:

- | | | | |
|----|--|----|---|
| 1. | Mr. Floyd O'Quinn*
Former Research Coordinator, RUR
Bureau of Science & Technology, A.I.D.
Washington, D.C.
(Currently with Metrica, Inc.) | 5. | Dr. J.S. Prince**
ISTI
Arlington, VA |
| 2. | Dr. Joyce Turk**
A.I.D. Livestock Specialist
Washington, D.C. | 6. | Dr. Lamar Trott***
A.I.D. Fisheries
Arlington, VA |
| 3. | Dr. C.C. Weir**
ISTI
Arlington, VA | 7. | Mr. Jay Davenport**
Coordinator
HBCU Panels National
Academy of Sciences
Washington, D.C. |
| 4. | Dr. Sam Kahn***
Office of Nutrition
Arlington, VA | 8. | Dr. Steve Hawkins**
Agribusiness Specialist
OICD/USDA
Washington, D.C. |

SUMMARY STATEMENT: All interviewees were most supportive of the program and gave high marks as to the effectiveness of the program to identify and assist in the development of scientific expertise at the HBCUs. Those familiar with the review process fully appreciated the criticism of principal investigators and research directors and suggested that the "Accommodation Process" be discontinued. Mr. Floyd O'Quinn was given credit for much of the success of the program because of his total commitment and dedication to seeing that things worked.

- * indicates person interviewed by telephone
- ** indicates person interviewed in person
- *** indicates person contacted by survey instrument

REFERENCES

REFERENCES

- National Aeronautics and Space Administration, *Historically Black Colleges and Universities Research Centers, Program Notice* (Washington: National Aeronautics and Space Administration, April 1991).
- National Research Council, *A Review of the Agency for International Development Research Grants Awarded to the Center of Tropical Diseases, Division of Biomedical Sciences and Graduate Studies, Meharry Medical College, Nashville, Tennessee, 1985-1990* (Washington: National Research Council, 1991).
- National Research Council, Board on Science and Technology for International Development, Office of International Affairs, *A Review of the AID Research Grants Program for the Historically Black Colleges and Universities*. Report prepared for the U.S. Agency for International Development, Bureau for Science and Technology, Office of Research and University Relations (Washington: National Research Council, December 1988).
- National Science Foundation, *Guidelines for Establishing (a) A Science and Technology Center, (b) Minority Research Centers of Excellence, and (c) State/Industry University Cooperative Research Centers* (Washington: National Science Foundation, 1991).
- U.S. Agency for International Development, International Development Cooperation Agency, *Annual Performance Report for Historically Black Colleges and Universities, Fiscal Year 1990* (Washington: Agency for International Development, December 1990).
- U.S. Agency for International Development, Office of Research and University Relations, *Outputs/Benefits of the HBCU Research Grants Program* (Washington: Agency for International Development, May 1990).
- U.S. Agency for International Development, Bureau for Science and Technology, Office of Research and University Relations, *Guidelines for Submitting Proposals Under the AID Research Program for Historically Black Colleges and Universities*, 2nd Revision, Effective January 1, 1990 (Washington: Agency for International Development).
- Weir, C.C., and J.S. Prince, *Abstracts of Research Projects Conducted by Historically Black Colleges and Universities, 1984-1991*. Report prepared for the U.S. Agency for International Development, Center for University Cooperation in Development (Washington: International Science and Technology Institute, Inc., n.d.)