

1. SUBJECT CLASSIFICATION	A. PRIMARY Serials	Y-AE30-0000-0000
	B. SECONDARY Agriculture--Development	

2. TITLE AND SUBTITLE
 CIC-AID rural development research project, annual program report 1966/1967

3. AUTHOR(S)
 (101) Committee on Institutional Cooperation

4. DOCUMENT DATE 1967	5. NUMBER OF PAGES 39p.	6. ARC NUMBER ARC 630.711.W811a
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7. REFERENCE ORGANIZATION NAME AND ADDRESS
 Purdue Res.

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)
 (Research summary)

9. ABSTRACT

10. CONTROL NUMBER PN-RAB-338	11. PRICE OF DOCUMENT
12. DESCRIPTORS Technical assistance	13. PROJECT NUMBER
	14. CONTRACT NUMBER CSD-840 Res.
	15. TYPE OF DOCUMENT

CSW-840 Res.

By 1

Rec 10/26/67

CIC-AID

RURAL DEVELOPMENT RESEARCH PROJECT

SECOND ANNUAL PROGRAM REPORT

August 1967

Prepared by
The Central Project Staff
University of Wisconsin

Contract No. AID/csd-840

CIC-AID Rural Development Research Project
An Analytical Study of AID-University Programs in Agricultural Education
and Research in Less Developed Countries

SUBCONTRACT UNIVERSITIES

University of Illinois	Ohio State University
University of Minnesota*	Purdue-Indiana Universities
University of Missouri	(acting cooperatively)
North Carolina State University	Utah State University
University of Wisconsin	

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* Work completed February 28, 1967.

SECOND ANNUAL PROGRAM REPORT

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SECOND ANNUAL PROGRAM REPORT

I. The Setting

If one were to choose a single word to characterize the AID-University rural development contract program, that word surely would have to be "diversity". In character, the some 70 rural development "projects"--present and past--implemented through A. I. D. contracts with U. S. universities virtually span the range of possible variations in objectives types of Host Institutions assisted, size, maturity, prospective duration, local conditions in which they operate and practically every other criterion one might wish to apply. Even what constitutes a project varies widely from situation to situation: Some encompass assistance to several generally related Host Institutions or/and activities in addition to rural development; others being quite specific in their focus upon a single activity. Thus in identifying 67 university contract activities as meaningful units for the present analysis, it is recognized that this number does not correspond to either that of A. I. D. projects per se nor to the number of different contracts involved. Arbitrary though it may be in some respects, the classification used in this study yields the following preliminary distribution of AID-University contract rural development projects by major objectives by Regions.

<u>Project Focus</u>	<u>Latin America</u>	<u>Near East South Asia</u>	<u>Africa</u>	<u>Far East</u>	<u>Total</u>
	(Number of projects)				
Degree institution	12	11	6	10	39
Degree institution and ministry research and/or extension	4	1	-	-	5
Degree institution, ministry research and/or extension and secondary agriculture training	1	1	1	-	3
Ministry secondary and/or technical training	-	-	5	1	6
Ministry research and/or extension	4	2	1	-	7
Ministry research and/or extension and secondary and/or technical training	1	-	3	-	4
Ministry "action" program	2	-	-	-	2
Ministry "action" and research and extension programs	1	-	-	-	1
TOTAL	$\frac{1}{25}$	$\frac{-}{15}$	$\frac{-}{16}$	$\frac{-}{11}$	$\frac{1}{67}$

By looking only at differences, one can easily be tempted to the conclusion that every project is unique and technical assistance is doomed to remain essentially an individually practiced art. Such a conclusion, however, would be no more realistic--nor helpful--than is the prevailing practice of disregarding project differences in advancing generalized remedial propositions. It has been well said that any situation is unique only because the tools do not exist for making it not unique. Fashioning tools for identifying those common elements of AID-University contract projects which help to explain their behavior and the way in which significant variables interact under differing local conditions thus is the challenge and primary mission of the present research. Or, as the Operational Plan put it, the basic purpose of the present study is "to contribute to the factual and analytical bases for policy, program and operating decisions concerning U. S. university-contract assistance to developing agricultural education and research institutions in the less developed countries".

Needless to say, this broad charter and the heterogeneity of the universe under study have called for stringent application of the overall modus operandi adopted for this study: Sifting and winnowing the plethora of extant informed opinions about factors influencing project success--and adding new ones as the research experience unfolded--in search of those particular factors which logic and available empirical evidence demonstrate to be of prime operational importance. This quest for strategic factors naturally has called into play a variety of research techniques. In particular, it has placed a premium upon conceptualization and logical deduction. As a consequence, what some might term the "planning period" has been rather lengthy. In reality, however, the structuring of the problem and distinguishing of the important from the merely interesting avenues of investigation resulting from these early analyses may well constitute some of the most important products of this research.

II. Current Status

To employ the currently fashionable "stages" idea, the period under review might be referred to as the data-collection phase of this project's development. For the reasons indicated earlier, such an appellation would understate reality by a considerable margin. Nevertheless, the big push during the past year has been upon the collection of overseas and Stateside data on priority aspects of the subject matter under study. Also, with the close of this period, primary attention will move from the marshaling of data to their interpretation and the presentation of results.

By early September, the four Senior Overseas Researchers (SORs) will have completed their overseas data collection assignments and returned to the United States. The University of Illinois Group likewise will have completed their surveys of contract university home campuses and be well along with

their AID/W interviews. And, the Files Search exercise (pertinent reports and data supplied by the contract-universities) was completed earlier in this reporting period. Also completed during the past year were the two special-purpose studies carried out under the University of Minnesota subcontract as integral parts of this overall research program. In March 1967, the reports on these two studies were distributed to members of the Research Group, AID/W and a few other interested individuals. One bears the title, "An Analysis of AID-University Relations 1950-1965 (With Special Reference to Rural Development Contracts)" and explores the causes and effects of changes in AID-University relations over this period. The second comprises a 3-volume "Bibliography on Planned Social Change (With Special Reference to Rural Development)" and includes selected references from over 230 different English language journals, some 670 books and book length monographs and some 650 U. S. Government and U. N. Reports, Proceedings of Special Conferences, etc. Each of these documents clearly has value to others than members of the CIC-AID Rural Development Research Project Research Group. They are referred to here as parts of the "data collection" work, however, inasmuch as they were prepared primarily as data for use in other segments of the overall study.

Thus, all of the large scale data collection activities will have been essentially completed by September 1 as planned. Some "data collection" work will, of course, continue until the very end of this research project just as aspects of the analytical work started with its inception. This is particularly true with respect to exploiting secondary source materials available in the United States as new needs arise out of the progressing analyses, testing of tentative conclusions against the judgment of returned overseas staff members and others, etc. Even so, it can be said that the time and manpower consuming aspects of data collection will have been completed by early September.

The data base available for this study can be indicated briefly by reference to the four principal data collection activities. It should be noted, however, that the following summary excludes recourse made by members of the Research Group to relevant books, professional journals, etc. in the course of their respective studies. Also excluded are the interviews with returned overseas personnel and others conducted for special purposes--in particular those which provided much of the raw material for the University of Minnesota study, "An Analysis of AID-University Relations 1950-1965". And, as the AID/W interviews have not yet been completed, it is not possible to give a definitive indication of the number of respondents in this series.

A. Overseas Data Collection

Each of the 43 AID-University contract projects in operation as of December 31, 1966, were studied in varying degrees of detail as were 13 of the 24 then-expired projects. By design, expired projects were

given priority attention only in the Far East Region where there were no active projects at the time the field work began--except for two which were being closed June 30, 1966. Elsewhere, expired projects were studied only for selected high-priority purposes and then only to a limited extent. This same principle applied to rural development projects financed by Foundations or other organizations. Some comparative data were obtained on a few such activities, notably the Ford Foundation financed Cornell-Los Banos College of Agriculture in The Philippines, the Rockefeller Foundation program in India, and the International Rice Research Institute program in The Philippines.

For each active project, all of the practicably available data called for by the Overseas Data Collection Guidelines--which covered all relevant aspects of the Research Design--were collected plus such additional items as the respective SORs deemed especially pertinent to understanding either a particular project or project operations in general. This does not say, however, that all of the Guidelines data were obtained from every active project. In some cases, particular items were not pertinent; in others, the desired data were either not available or the cost of getting them would have outweighed their value to the overall study; in some instances, USAID-Host Country relations with respect to particular projects precluded interviews with certain key respondents; in still others, unsettled local conditions forestalled plans for obtaining part of the data sought. This latter limitation proved particularly severe in the case of Nigeria where many of the data for this study were expected to be supplied through collaboration with the Consortium for the Study of Nigerian Rural Development. Study plans were similarly foreshortened in Tunisia and Bolivia; and the expired projects in Indonesia, Cambodia, and Vietnam were excluded at the outset of the study.

In the Far East Region, a special set of data collection guidelines tailored to obtaining those insights uniquely available from such projects was followed. This proved to be an exceedingly useful source of information with respect to post-phase out changes in aided institutions, phase-out criteria and related subjects. It also proved feasible to obtain many of the same kinds of data from expired projects as from active ones which served both to increase the size of the overall sample and to bring Far East experience into these particular analyses.

In collecting their overseas data, the SORs employed a variety of techniques; many of their own design. For the most part, however, the data were collected by personal interviews supplemented by locally available secondary source materials, self-administered questionnaires, papers prepared by qualified Host Country professionals and, in some instances, group seminars. Of particular note among the special studies completed are (a) R. W. Roskelley's design for measuring project

maturity (see Section III-B-3 below) and (b) the study which J. A. Rigney arranged for Dr. K. C. Naik to make of the evolution of Indian agricultural universities. This latter study has resulted in a book manuscript on "New Educational Research and Extension Concepts for Indian Agriculture".

The keen interest shown by respondents in the subject matter of this study both enhanced the value of the inquiries themselves and augurs well for its results meeting a widely felt need. This interest also proved to be something of a handicap from a strictly research standpoint. Frequently, the SORs found on repeated visits that earlier inquiries had suggested opportunities for improvement on which respondents had acted in the interim. While this tended to complicate the already difficult problem of comparability of data, the loss no doubt is more than offset by gains in operating program effectiveness. A potentially more difficult problem is that practitioners may be building expectations about the help this worldwide research study is going to give them with their specific problems than reality warrants. On this it can but be hoped that they will be stimulated to adapt the resulting general conclusions to local circumstances.

B. Home Campus Surveys

Through a combination technique of mailed questionnaires and follow-up interviews, the University of Illinois Research Group has obtained data on a wide range of relevant topics from a large number of returned university contract staff members, their wives and colleagues, and from university administrators. Questionnaires were sent to prospective respondents at 35 universities which now have or have had A. I. D. contracts for overseas rural development projects. The returned staff members had served on 64 A. I. D. contracts. Personal interviews were conducted on the campuses of 32 of the 35 universities by senior members of the Illinois Group with both long tenure in university work and overseas experience in A. I. D. contract projects. Prior to each campus interview, a thorough study was made of the Files Search materials on that university's overseas projects. These two factors together with the technique of having the prospective respondent complete the questionnaire in advance of the interview and the interest manifested in the objectives of this research produced excellent response from all respondent groups. As in the case of the overseas inquiries, there is some reason for concern that expectations of help on specific problems may exceed the ability of this study to satisfy. This, however, is a risk worth taking considering the contribution these focused interests seem likely to make both to self-study by the respective institutions and their use of the results of the present research.

The following table indicates the principal respondent groups and the number of schedules sent and received respectively.

<u>Questionnaire</u>	<u>No. sent (Approx.)</u>	<u>No. received or to be received*</u>	<u>Percent response</u>
Team Member	700	500	71
Wives	400	300	75
Team Leader	65	55	85
Department Head	160	145	91
Team Member Colleagues	300	240	80
AID-Contract Administrator	30	30	100

*Some completed questionnaires are still being received.

C. AID/W Survey

The Illinois Group's coverage of A. I. D. staff members concerned with rural development projects implemented by university contracts follows much the same pattern as that employed for the Home Campus survey. To the extent appropriate, comparable information is being sought from AID/W respondents as from the university community. As this work was initiated in late July, it is yet too early to be precise about the size and composition of this universe. Concentrating as it will, however, upon staff members directly concerned with the type of projects under study, the number will not be large. Preliminary contacts with a group of prospective respondents indicated the same keen interest in taking part in this activity as had been experienced in other quarters.

In addition to the Illinois survey, other segments of this research will need to draw upon AID/W experience in a less structured fashion. These inquiries are being coordinated time-wise to the fullest feasible extent to enhance their complementarity and minimize duplication.

D. Files Search

Thanks to the excellent cooperation of the contract universities (all 35 responded), reasonably complete sets of the types of record materials requested are now available for nearly all projects. (See Attachment A to 1965-66 Annual Report for details of materials requested.) The biographic data on Team Members and contract participants provide the bases for systematic analyses of major importance to the overall study purpose. For the most part, the remainder of these materials consist of periodic progress reports, budget data, reports on executive visits, etc. of characteristically varying format and content. Nonetheless, covering as they do in most instances the life span of the respective projects, these materials provide an invaluable historical context for interpreting the primarily current data obtained through overseas and Stateside interviews.

E. Special Purpose Interviews

Mention has already been made of the interview-base for the Minnesota study, "An Analysis of AID-University Relations 1950-1965". This report and the materials underlying it constitute another important source of data for various aspects of the overall study. In passing, it should be noted that this report has received high acclaim from readers in AID/W and others among the limited audience to which it has been distributed. Steps are underway toward publishing a somewhat revised version this fall.

J. K. McDermott, Study Leader at Purdue, plans to test the analytic constructs and strategy-oriented propositions noted in Section III-B-1 below against the experience of a number of returned Team Leaders and others. In addition to testing these tentative conclusions about important aspects of the technical assistance process, these interviews will, no doubt, also produce some data of use to other parts of the overall study. As the various analyses progress, others may also find it advantageous to follow a similar course. Present indications are, however, that such inquiries would be neither extensive nor designed to produce substantial amounts of new data per se.

III. Preliminary Findings

Two courses might be followed in sharing the prospective findings from this research at its present stage. One would be to simply list without explanation or qualification the impressive array of factual, conceptual and interpretive insights gained thus far. Alternatively, the list could be confined to those items which are comparatively little affected by differences in project circumstances, hence, whose emerging implications require little elaboration. The succeeding resume' follows the latter course.

Being pitched at a rather high level of abstraction, the summary which follows substantially understates the volume and range of results useful to decision makers likely to be produced by this research. In particular, it necessitates omitting the very kinds of specific conclusions which bear most directly on the day-to-day problems confronting project personnel.

If the present study points with certainty to any single conclusion, it is to the disservice rendered potential users of advancing specific remedial propositions without making clear the circumstances under which they do and do not apply. Projects vary greatly in their settings and operational details. What may be the ideal solution to a given problem in one set of circumstances may actually worsen conditions in another. Manifestly, the closer one gets to operational specifics, the greater the likelihood of general conclusions requiring adaptation for peculiarities in local conditions. And, it should be noted, such variations

are by no means limited to differences among projects. What constitutes optimal strategy, best practices, most efficient policies, et al clearly is not the same for any given project over its entire life span.

This prefatory note is meant to be more than an explanation of the general content of the succeeding resume'. It is especially intended to caution readers against uncritical acceptance of what are here termed "preliminary findings" as bases for decisions about individual projects. In due course, the operational implications of these and other major findings will be elaborated along with the principles governing their respective applications to different types of project situations.

Three broad types of findings are discussed in the following summary: (1) observations, (2) conceptualizations, and (3) research methods. The first category comprises a series of major factual findings together with some speculation upon their apparent implications to technical assistance policies and practices. Under the second heading is provided a highly capsulized preview of those major theoretical formulations which are reasonably concrete at this stage. In the third category are collected those methodological "findings" growing out of experience with the present study which have a particular bearing upon the interpretation of substantive results or/and the planning of similar research endeavors.

Needless to say, the distinction between the first and second categories is an arbitrary one. Underpinning both the attribution of importance to particular observed "facts" and the inferences drawn from them are hypotheses about the effects of different variables upon the outcome of technical assistance projects. Those which are here termed "conceptualizations" are merely further along at this time toward being forged into more general theoretical formulations. And, as a final cautionary note, it should be emphasized that the "findings" reported under all three headings are subject to alteration as the various analyses progress. Some are, at this stage, little more than informed hunches; others have passed the test of logic but have yet been little subjected to rigorous empirical validation; still others are, at present, well documented empirically but their theoretical implications only generally explored. Readers of this report, thus, are requested to share with the Research Group any questions or misgivings they may have regarding any of the items discussed below. At the same time, however, it is hoped that they will keep an open mind with respect to the prospective usefulness of the results of this research until the findings have been further winnowed and tested and can be presented in substantially fuller form.

A. Observations

1. Institution building process is poorly understood

A high percentage of the specific problems encountered by technical assistance projects appear to have their origins in the prevailing paucity of knowledge about the processes involved in building an institution. In particular, the fundamental changes in individual and group behavior patterns--which are both a prerequisite to and consequence of institutional development--seem to be generally overlooked or taken for granted. As a result, specific activities designed to further overall technical assistance project and program goals not infrequently are rendered ineffective by resistances to change elsewhere in the system.

Most Americans would no doubt view the preceding statements with equanimity. Manifestly, the less-developed countries lack the know-how to cope with such intricate development problems or they would neither seek nor accept foreign technical assistance. So satisfying an interpretation, however, would be misdirected. The statements refer specifically to all technical assistance personnel and to a major limitation upon their effectiveness. This limitation appears to be widely shared--by all elements of the U. S. technical assistance complex and by other domestic and foreign technical assistance donor organizations as well.

Before proceeding, it would be well to recognize that by no means all AID-University contract projects in the rural development field have as their sole or even primary goal the building of a viable Host Country institution as such. Technical assistance projects of whatever kind can be said to produce three main types of outputs: (1) "institution building" or the capability for producing future services; (2) "current services", e. g. , teaching, research, and/or extension; and (3) "indirect outputs" or by-product contributions to other goals of the donor or/and aid recipient. The relative emphasis given each of these types of outputs clearly varies significantly among projects and not infrequently among parties to the same project. Consequently, the applicability to any individual situation of the comments made in this section regarding the "institution building knowledge gap" depends heavily upon the mix of outputs contemplated by the goals of that particular project. Also, as was emphasized earlier, all of the factual observations presented in this report as "preliminary findings" no doubt have varying degrees of pertinence to individual cases. Distinguishing among such situations is the art of technical assistance decision-making. Helping to move this art a step closer to becoming a science is a major responsibility of research.

Returning to the central theme of the present topic, the reasons for the institution building process being poorly understood are fairly apparent. Few of those engaged in helping to build agricultural education and research institutions abroad have had institution building experience at home. Domestic professional work simply does not provide relevant experience. Comparable U. S. agricultural institutions have long since passed through the stage of revolutionary redirection in basic orientation, philosophy and organizational arrangements which characterize the transition from traditional to modern institutional forms, programs and technologies. Presumably it would be helpful to substitute for individual firsthand experience formal instruction in the history and philosophy of the Land Grant Colleges and principles of institution building. In general, however, the universities provide little such instruction for either their overseas staffs, foreign participants, or American students interested in international rural development.

Adding to the knowledge gap--and largely causing it--is the lack of comprehensive theories of technical assistance in particular and rural sector development in general. Only recently has scholarly attention been directed toward the systematic study of the institution building process as a whole and to the role of technical assistance in this process. Until a body of research-tested principles is established, it seems safe to predict that technical assistance will continue to be essentially an individually practiced art. Also, compensating for the lack of opportunity for domestic institution building experience by formal instruction will be limited until the theoretical bases are laid for making such instruction applicable to international technical assistance activities. It is for these reasons that the present research gives particular emphasis to establishing broadly applicable principles with special reference to the institution building process (cf Section III-B below). Related research efforts--notably the pioneering work of the Inter-University Research Program in Institution Building--are furthering this same end. It would be far too much to expect, however, that these few research activities can make more than a beginning toward meeting the needs on this front.

To give the preceding discourse more tangible meaning, a few illustrations of the manifestations and implications of this so-called knowledge gap may be cited. Among the more common ones: (1) concentration of technical assistance activities upon the technical--as opposed to attitudinal--aspects of change; (2) a common assumption that the form of the U. S. Land Grant College--or its parts--should be transplanted more or less intact; (3) vagueness of project goals, work plans and criteria; (4) tendency for Team Members' activities to be proliferated and only loosely related to overall institutional development goals; (5) seeming reluctance of A. I. D. to intervene with Host Governments to ensure

effective integration of Host Institutions with their environments; (6) tendency to concentrate upon the structural and physical aspects of institution building and give only limited attention to helping the Host Institution and its personnel to find their optimal roles in their respective environments.

To these bits of overseas project-oriented evidence could be added the general slowness of contract universities to institutionalize their own capabilities for participating in international technical assistance activities. Few are found which have moved far toward systematically utilizing the feed-back from their overseas experience--including on-campus participant training--to strengthen either their domestic programs or their projects abroad. Whether this reflects a lack of knowledge or of interest is not yet clear. There can be little question, however, that a considerable potential exists in this field which the respective universities could exploit without much expense. At the same time, what practicably could be done in this manner at this time would by no means meet the needs envisioned by Section 211d and The International Education Act. It might, nonetheless, provide a useful supplement to these larger efforts.

2. Strategy plans are seldom found

One line of data collection activities focused specifically upon ascertaining the content and rationale for the technical assistance strategies being employed in different projects. Its primary purpose was to provide a basis for inter-project comparisons of alternative strategies. The underlying premise--drawn from the extensive literature on decision-making theory--was: A cohesive strategy understood by all its members is an essential prerequisite to optimal group progress toward achieving its organizational goals. This, of course, merely says that the greater the unity of purpose and action by individual members and sub-groups comprising an organization, the more efficiently will that organization accomplish its intended purpose. In the case of AID-University contract projects, such a premise leads one to expect to find not only an overall Technical Assistance Complex (TAC) strategy guiding the collaborative efforts of the four component entities--i. e. , AID/W, USAID, Home Campus and Team--but also each of these entities employing a definite strategy geared to its specific role in the larger endeavor and to the more inclusive TAC strategy. In view of the known high turnover rates of overseas Team and USAID personnel, one would also be led to anticipate a special effort by TAC to formulate such strategy plans and make them known to new personnel as they entered upon project activities. This because one of the major purposes of a group strategy is to enhance continuity as well as consistency of actions.

Prior experience with the program did not give the Research Group much hope that these theoretically ideal expectations would in fact be realized. It was surprising, nonetheless, to find so little thought and discussion having been given the subject by any of the TAC entities. This was all the more surprising in light of the enthusiastic discussion of the need for strategy plans and the pros and cons of alternative approaches to particular situations which generally resulted from the investigators' posing the question to Team Leaders and other respondents. Needless to say, however, this line of inquiry provided practically no information useful for its initial purpose. It did, nonetheless, open the way to a highly promising analysis of the effects on project outcome of the characteristic absence of strategy plans.

Apart from the possibility which more concerted attention to strategy planning holds for enhancing TAC effectiveness, the existing situation has significant implications for decision-makers with respect to several ancillary policies and practices. In the absence of a cohesive and articulated Team strategy, personnel turnover (roughly two-thirds stay only two years) takes on a special significance. Program continuity and cohesiveness can be provided either by continuity of the same individuals working together over a number of years or by following a definite group strategy or by leadership provided outside the Team, e. g. , USAID or Home Campus. At present, none of these three things is happening to any substantial extent.

In like manner, such questions as off-campus recruitment, pre-assignment job orientation, Home Campus backstopping, advantages to A. I. D. of contracting, etc. all require different consideration if there continues to be no Team-USAID-Home Campus strategy for a project. For example, unless a cohesive project strategy is employed, what real difference does it make whether the Team Members come from the Home Campus or elsewhere under such a circumstance? With neither a Team, Home Campus nor A. I. D. strategy, substantive backstopping would seem to have little meaning. Unless personnel recruited off campus were technically inferior or stayed abroad for shorter periods or were less amenable to the Team Leader's guidance than those who are established members of the contract university faculty, how could their attachment to that university be expected to influence their project performance? Actually, there is no evidence at present which indicates any significant differences on the criteria mentioned between those recruited off campus and those who are not.

This is not intended as an argument for off-campus recruitment as a general practice. Rather, these comments are intended merely to call to question the realism of prevailing beliefs on this subject and of the procedures employed by A. I. D. to enforce a given minimum percentage

of own-staff recruitment, under existing circumstances. And, on a broader front, to what extent do the expected advantages from contracting with universities to carry out institutional development projects abroad fail of realization because the underlying assumptions concerning the volume of institutional input per se are out of line with reality? Indications are that concerted attention to insuring that the conditions assumed as bases for major project decisions are in fact realized is the key to making specific policies and practices effective in enhancing project outcome. These and other questions growing out of this line of study are under further exploration. The results promise to be quite revealing.

3. The Team Leader function is widely underexploited

Organization theorists of the behavioral school generally view leadership as comprising two broad classes of functions (1) administrative management and (2) institutional leadership. Administrative management concerns primarily the maintenance of an organization as a smooth-running machine: Management of intra-group conflicts, providing of incentives, getting necessary jobs done at least cost, and the host of other decision-making functions which the term "administrative efficiency" connotes. Institutional leadership on the other hand centers upon the mission and role of the organization: Setting of goals, charting a strategy for their achievement, establishing an organizational ideology and character, securing commitment to the organization's purpose and philosophy, the dynamic adaptation of the organization to its environment and the opportunities which exist or can be created, etc. In short, administrative management might be said to be principally concerned with routine decisions or standard operating procedures; institutional leadership, with critical and adaptive decision-making.

Neither of these types of leadership functions is the unique prerogative and responsibility of particular positions in an organization's structure or the individuals who occupy them. It is in the nature of organizational behavior, however, that the ratio of "critical" to "routine" decisions increases with the hierarchical order of position. Subordinates can inspire and influence an organization's mission and role. The extent to which they can be effective in doing so, however, depends upon the willingness of those in positions of higher authority to take the necessary actions. Consequently, unless the top leadership of an organization sees a given change as an opportunity, the prospects of that change coming about are seldom very bright.

The preliminary judgment that the Team Leader function is widely underexploited is made against the norms implicit in the preceding view of the functions of leadership and how they are exercised. Frankly, this

is but a judgment at this stage. No other research focusing specifically upon the functions of leadership in technical assistance operations has come to light. And, much more remains to be done on this aspect of the present study before either criteria of performance or measuring devices can be advanced with confidence. Nonetheless, numerous pieces of evidence point toward the Team Leader function as a promising area for concerted attention toward enhancing the effectiveness of university-contract technical assistance projects. Among them are: (1) the high proportion of their time reported by Team Leaders to be devoted to administrative details; (2) the characteristic absence of a Team strategy noted in Section 2 above; (3) the comparatively small percentage of their time which Team Leaders seem to devote to working with top Host Institution personnel on institutional leadership matters; (4) the generally meager support which USAIDs and Home Campuses appear to give Team Leaders in overcoming external constraints on Team effectiveness; (5) the diversity of views expressed by Team Leaders themselves, Team Members, USAID officials and Home Campus Representatives as to what the role of a Team Leader ought to be and (6) the relatively short tenure of Team Leaders (about 70 percent for a single two-year tour) which provides limited opportunity for having real impact on either the institutional leadership of the Host Institution or on shaping the organizational character of the technical assistance Team itself.

Some might infer from the preceding comments that to more fully exploit the potential of the Team Leader function requires but to put "better" men in the Team Leader positions for longer periods of service. This, however, would be much too easy an answer. To be sure, cases are found where the incumbent appears to lack leadership ability and/or administrative experience. In many instances, however, failure to provide aggressive and dynamic leadership appears to have its origin outside the personality of the individual in the Team Leader position. Identifying more definitively characteristic limitations upon Team Leader effectiveness, their causes and their effects upon project outcome, are the major tasks of this aspect of the overall study in the months ahead.

4. Home Campus backstopping is predominantly logistical

Teams, USAIDs, Contract Universities and AID/W alike generally do not seem to view the characteristic absence of substantive Home Campus backstopping of their Field Teams as a problem. Put another way: They appear not to expect anything of Home Campus backstopping beyond prompt recruitment of qualified personnel and their logistical support, timely processing of commodity orders, and the filling of infrequent specific requests by Team Members for publications or similar technical aids.

Whether it would in fact be advantageous for something more to move both ways through the institutional umbilical cord connecting a Field Team and its parent university is a question for further study. Offhand, such a substantive interchange would appear to afford mutual advantages to the universities and A. I. D. alike. Presumably one of the major reasons for contracting with a university to implement a technical assistance project is to obtain an institutional input over and above the personnel and other services required. Likewise, opportunity for strengthening its own domestic and foreign program capabilities presumably weighs into a university's decision to undertake an A. I. D. project abroad. Realizing either of these objectives would seem to require a rather substantial interchange between overseas and Home Campus staffs on the substantive aspects of the overseas project. But, as indicated earlier, these premises do not appear to accord with currently prevailing practices and attitudes. Why this is so is by no means clear. What does seem clear, however, is that overseas Teams tend to feel professionally isolated from their parent departments and these departments to be comparatively little concerned with the activities of their overseas colleagues. To infer that this reflects a necessary cause and effect relationship probably would be to stretch reality to the breaking point. It is, nonetheless, a possibility to ponder.

5. Impacts on contract-universities vary widely

That discernible effects of university involvement in A. I. D. contract programs abroad are found to vary widely among universities and among the several agricultural departments within the same university is in itself not surprising. Physical factors alone would give grounds for expecting such differences. Some universities are or have been engaged in several projects over extended periods; others have a single overseas activity, perhaps of quite recent vintage. In some instances, a substantial number of the agricultural faculty have served on their university's overseas project; in others, the cadre of returnees is small and/or thinly spread over a number of departments. Such factors, however, do not seem to explain many of the significant types of variations identified through the comprehensive Home Campus survey discussed in Section II-B above. In fact, differences in extent and duration of participation in international technical assistance activities appear in many instances to be but reflections of the same circumstances which give rise to variations in effects of involvement.

Whatever the further analyses in this area may show on this score, several general conclusions have emerged from the study thus far. There is considerable evidence that university involvement in A. I. D. contract programs has encouraged faculty and student interest in international affairs and strengthened the capacity of universities to

be of service in the international field. One sees area programs strengthened by experiences of those who have served on A. I. D. contracts and, in some cases, new area studies programs directly traceable to A. I. D. contract involvement. Returnees are teaching new courses in international agriculture and have modified existing courses to include an international dimension. They also often report more time devoted to counseling foreign students and that their foreign experience makes them more effective in working with students in general.

At the department head level, the outlook toward overseas contract projects and the climate provided for returned faculty members to pursue their international interests seem to depend in considerable part on the emphasis and support given this work by the dean of agriculture and the chancellor or president of the university. Where support at the top is lacking, department heads rarely take the initiative to encourage staff members to take foreign assignments or to help returnees see the opportunities for using their foreign experience in their domestic programs. From the individual staff member's standpoint, without administrative support and commitment a foreign experience may turn out to be lost time and a detriment to his professional career. On the other hand, where the university administration is committed to international work, the staff member returns to a quite different environment. Much appears to depend, however, upon how many members of a particular department's staff have served abroad. The "critical mass" idea seems to apply here as it does in so many other fields of human endeavor.

Overall, while there are evidences of positive effects--and also some negative ones--of A. I. D. contract program involvement on a number of universities, most universities appear not to have taken full advantage of the experience gained. Among the factors which seem to impede the development by a university of a more international dimension in its programs are:

- a. Lack of definite and generally understood university policies regarding international work leading to uncertainty on the part of college and department administrators as to what policy to follow.
- b. Administrators failing to provide effective leadership in utilizing the knowledge and experiences of returned staff members.
- c. Off-campus recruitment for filling overseas project assignments which leaves few returned staff on the campus to supply the feed-back for development of international competency.
- d. Department heads or/and deans feeling that domestic programs must continue unchanged and that there are no funds for additional staff to add international activities to the department programs.

- e. Policies in salary adjustment, promotion in academic rank and recognition by the professions which do not encourage younger staff members to build an international dimension into their careers.

These, it should be emphasized again, reflect but the preliminary indications from the analyses of this complex subject. In the course of further study, many other factors no doubt will be added to this list and some of the present ones may well be modified or dropped.

B. Conceptualizations

1. "Toward a General Theory of Technical Assistance"

A book manuscript having the above working title is under preparation by Ronald W. Jones (Wisconsin) and Melvin G. Blase (Missouri). This work presents a comprehensive behavioral theory of the technical assistance process from the standpoint of within-project decision-making. Employing techniques of systems analysis, it adapts a variety of established social science principles to coping with the two critical problems confronting all technical assistance decision-makers, (a) identifying strategic blockage points constraining project effectiveness and (b) predicting the probable consequences of changes in project inputs.

Toward facilitating and enhancing critical decisions in these areas, the study develops a conceptualized model of the technical assistance process when viewed as a system. Further, a series of logically-derived propositions regarding interrelationships among the principal variables and their behavior under differing conditions are developed. Given its rather high level of abstraction, this formulation serves mainly to help practitioners "ask themselves the right questions" about particular projects. The authors feel confident, however, that the system itself can be elaborated and the behavior of the variables empiricized through research directed toward these ends. In furthering its second major purpose of encouraging the interest of other researchers in technical assistance theory building, the study identifies topics deserving priority on the agenda for such research.

2. The role of technical personnel in the technical assistance institution building process

This conceptual formulation takes the form of a construct depicting the interrelated steps through which a technical assistance Team must go in accomplishing institution building in a Host Institution and its environment. Conceived initially by J. K. McDermott (Purdue), J. A. Rigney (North Carolina State), and B. Austin Haws (Utah State) at the June

1966 Seminar of Principal Investigators, this construct and its underlying concepts have been further refined by McDermott and Rigney and extensively field tested--particularly by Rigney in the NESAs Region. Results thus far support the expectation that this formulation can be an exceedingly useful practical guide for individual and group strategy planning as well as for analytical purposes. Additionally, the enthusiastic response given it by experienced practitioners suggests this construct has important uses as an orientation device for new technical assistance personnel.

Contentwise, the construct is built around a necessary sequence of stages or steps through which a Team Member must go in the process of becoming effective, i. e. , the tasks or functions essential to effectiveness. Overlaying this individual (and group) action sequence is a conceptualization of the institution building process in terms of the substantive activities required at four levels of Host Institution organization to ensure optimal progress of the Host Institution toward making its maximum contribution to the clientele it is designed to serve. In effect, therefore, the model as a whole portrays the complex of interrelated actions--and likely reactions--involved in institution building from the standpoint of technical assistance strategy. While the conceptual framework as such focuses specifically on the building of an agricultural university, its authors state that only minor adjustments should be necessary to make it applicable to a purely extension or research organization.

3. Maturity indices

This conceptualization provides a basis for judging the "maturity" of a Host Institution from the standpoint of its capacity for self-generated change toward an optimal role in the economy and society it serves. Formulated initially by R. W. Roskelley (Utah State) on the basis of his intensive and extensive study of expired projects in the Far East Region, this analytical device subsequently has been refined and further tested in the NESAs Region by Roskelley and Rigney. They report that it effectively distinguishes differences in degree of maturity in a manner meaningful for strategy planning.

Although directed primarily toward establishing "phase-out" criteria, indications are that this device also can provide significant guides to decisions about the allocation of resources and emphases within institution building projects which are still a long way from becoming self-sustaining. Additionally, Roskelley reports that the process of Host Institution and technical assistance personnel thinking their way through the underlying data-questions has proven to be a highly stimulating experience for the respondents themselves. This "finding" incidentally

has emerged repeatedly in various aspects of this overall research project. Both overseas and Stateside practitioners have demonstrated a sharp appetite for involvement in conceptual discourse which serves to stimulate them to objectively analyze their own situations. In the end, this kind of by-product of "asking the right questions" may well prove to be one of the most useful contributions of the overall research effort.

Substantively, the "maturity index" schema draws primarily upon U. S. Land Grant College experience for its basing points. This is to say that "maturity" is measured along a scale toward those attributes deemed to be determinative of the Land Grant Colleges' effectiveness in meeting the needs of American agriculture. It is still too early to know in what ways and to what degree such criteria must be modified to meet the differing conditions of less-developed countries. Additional study also is required for converting degrees of maturity into predictors of need for further technical assistance. Nonetheless, the conceptualization in its present form marks a promising forward step toward making "phase-out" decisions more objective; hence, hopefully less contentious than they frequently have been in the past.

4. A matrix of relationships for explaining AID-University relations

In his special study of the history of AID-University relations with respect to cooperative international technical assistance projects abroad, John M. Richardson, Jr. (Minnesota) identified both distinct chronological periods of differing natures and a number of variables associated with characteristic issues affecting overall AID-University relations. To provide a basis for "propositionalizing the analyses", these variables are summarized in the form of a matrix of relationships ["An Analysis of AID-University Relations 1950-1965", January 1967--mimeo, p. 318]. In this context, the author states:

"From this 'matrix' it is possible in a rough way to derive the propositions which are implicit and explicit in our analysis and to make some judgment about their value" [p. 320].

Against this conceptual framework and with an eye to the extensive historical analysis which preceded it, Richardson draws the following summary conclusion:

"The most significant finding to emerge from this study is the degree to which the persistence of divisive issues in Agency-University relations must be attributed to what we have called 'environmental' and 'structural' variables. So long as these variables remain 'constant' as they have to a considerable

degree throughout the history of the university-contract program, it is difficult to see how there can be a really significant change in Agency-University relations. Recommendations which focus on the 'intervening variables' are likely to be of no more consequence in the future than they have been in the past. " [p. 320]

It is not yet clear to what extent this rather gloomy forecast will be validated or modified by the more specific research which the Minnesota Report was designed to help further. In any event, the analytical concepts and the structured view of history evolved in that study make a direct contribution to the AID-University decision-making processes as well as to enhancing other segments of the overall CIC-AID Rural Development Research Project.

C. Research Methods

1. Overall modus operandi

The modus operandi for the present research effort was based on three major assumptions: (1) data collection concentrated upon best-source testing of logically derived hypotheses, (2) concurrent data collection and analysis, and (3) progressively sharpened focus upon those lines of analysis which experience demonstrated to promise an especially high payoff. This approach was calculated to minimize the investment needed in primary data collection; to bring the results of preliminary analyses to bear promptly upon later data collection plans; and to enable an interim flow of reasonably well tested findings throughout the life of this project. Given these assumptions, the organization and budget--total and its allocation--naturally were geared to making the overall modus operandi effective.

The overall approach planned for this study represented something of an experiment in research methodology. Preliminary results from this experiment can best be summed up as: Some of the basic assumptions proved out about as well as could be expected; others missed their expected marks by a wide margin. Especially noteworthy in the latter category was the central idea of concurrent data collection and analyses focused upon sharply defined hypotheses about major factors influencing the effectiveness of AID-University contract projects in rural development. In actual practice, the planned sequencing of the analytical and data collection work has been inverted to a considerable degree. Put another way, it has proved necessary to proceed in large part with the collection of data on a relatively broad basis and to derive from these data and related conceptual work the hypotheses about functionally significant variables and their interrelationships.

Whether under another set of circumstances this scheme might prove more advantageous than traditional techniques as a method of team research is conjectural. Some members of the Research Group now feel that the idea of separating detailed research design planning from the data collection activities is conceptually unsound. Others are inclined to the view that if a few more of the critical conditions were present at the outset than was true in the present case, the methodology per se would yield the advantages expected of it. Toward the end of this study, there may be some point in making a critical analysis of the overall research experience for the contribution it could make to the planning of similar research endeavors.

2. The comparability problem

This by no means novel problem is raised mainly to provide a context for commenting briefly on some preliminary findings regarding methods employed in this study to minimize the effects of project variations. Thinking at the initial planning stage was that the wider the substantive spectrum and range of projects over which data had to be assembled, the greater would be the difficulties engendered by variations in local circumstances. Experience has demonstrated the expected difficulty of deriving functionally significant relationships from the kinds and amounts of detailed data which practicably could be marshaled in a study of the feasible magnitude of this one. Originally it was planned to postpone any serious attempt to collect data until after a series of logically derived hypotheses had been developed. One of the factors promoting the planned approach was the expectation that it would help reduce the problem of data comparability. For a variety of reasons, it was impossible to follow this approach. In practice it has been necessary to proceed stepwise in the development of hypotheses and in the collection of data. Whether the more selective and theoretical approach would in fact have reduced the comparability problem is hard to say. It seems fairly clear, however, that had the companion idea of "finishing off" major topics ad seriatum been followed, there would have been far greater necessity for subsequent revisions of preliminary findings than now will be the case. The major variables in the technical assistance project system are found to be so interrelated as to essentially preclude meaningful interpretation of the behavior of any one of them outside the context of the whole complex.

Having the SORs stationed in their respective regions for an extended period (18 months in all except the Far East which was 12 months) paid real dividends. This provided opportunity for these investigators to gain a deep understanding of the circumstances surrounding the several projects in their respective areas. This together with the practice of making two or more visits to the same projects during the study period

facilitated their bringing the insights gained from one round of inquiries to bear upon those made in the next. To be sure, an investigator not infrequently found his interpretation of facts and impressions shifting between successive visits. In a way, this natural consequence of broadened experience complicated the data-comparability problem as such. At the same time, however, there can be little question that this approach has produced an understanding of significant variables and their interrelationships that could not be matched by a comparable number of man-days devoted to a one-time survey.

3. A "time-of-study" bias

From the standpoint of effect on research results, this factor is but an aspect of the larger data-comparability problem discussed in the preceding section. It is introduced as a separate topic, however, to emphasize a particularly troublesome matter with which both technical assistance researchers and practitioners necessarily have to cope. Cryptically put: "How one views a particular project depends heavily upon when he sees it."

That past decisions invariably lay a heavy hand upon current ones is well established by decision-making theory. Also to be expected in the case of technical assistance activities--where attitudes and inter-personal relations play so important a role--is that judgments about project effectiveness and factors affecting it are particularly sensitive to changes in project personnel. Co-mingled as the past and present typically are in project operations, distinguishing their respective influences at any given point in time is far from an easy task. And this may well explain why long-term technical assistance projects seem to be viewed quite differently by successive Mission Directors, Technical Division Chiefs, Host Country officials, et al.

Fundamentally, the time problem arises out of the typically short institutional memory of the respective entities concerned with AID-University contract technical assistance projects. Born of high personnel turnover rates on all fronts, it is further confounded by the characteristic lack of historical records on really meaningful aspects of project operations. Throughout this study, extensive use has been made of A. I. D., contract-university, and host country records bearing upon the various projects under study. They have helped some in putting current observations--and deductions from them--into historical perspective. Unfortunately such records are for the most part either fragmentary, discontinuous, uncomparable, or all three. Their greatest limitation, however, lies in an almost exclusive concentration upon the physical and other surface aspects of the cooperative technical assistance process. Seldom does one find more than a hint of the considerations

which went into the making of even major project decisions. Still more infrequent are revelations of the vision of the processes involved in building an institution or of the consequences of pursuing the particular strategy which was followed.

Operational reports and records manifestly cannot be expected to go much beyond the needs of those directly concerned with the projects simply to facilitate research. There is reason to doubt, however, that the kinds of materials presently being generated and retained do in fact effectively provide the fundamental information needed for making critical project decisions. As operational and research needs in this respect have much in common, there would seem to be significant opportunity for mutually advantageous collaboration between technical assistance practitioners and students of the technical assistance process toward finding a practical way for lengthening the institutional memory of the operating entities. The present study will provide some indicators of the kinds of information needed. It will not, however, more than point the way toward a solution to the larger problem.

IV. Future Work Plans

A. Operational Objectives

In a word, the primary operational objective of future work is to complete reports on the several major studies in progress by June 30, 1968--the original target date. With the data-collection activities all but completed (See Part II) the entire Research Group can now concentrate upon the analyses and presentation of findings. The three sections which follow indicate more specifically the principal components of the plan of work for the final months of this project.

B. Principal Analytic Areas

Any short summary of even the major components of this far-ranging research project can but suffer from two particular limitations. First, consolidation of lines of investigation implies a considerably narrower scope than reality warrants. Second, by omitting repeated reference to their interrelationships in the interest of brevity and clarity, listing of the eight principal areas of work tends to leave the impression that each is being approached as an essentially watertight compartment. Nothing, however, could be further from the truth. The entire research effort continues to be approached as an integrated whole and strenuous efforts made to ensure that the parts are effectively interrelated. At the same time, experience has long since demonstrated--in other similar endeavors as well as this one--that team research advances most satisfactorily when each member (or sub-group)

has a definite area of primary responsibility. The following listing indicates in a broad way prevailing areas of concentration.

Lest the wording of some of the succeeding statements may suggest otherwise, it should be emphasized that the broad objectives of this research remain substantively the same as those set out in the original Operational Plan. The first Annual Report sharpened and elaborated the original statements of objectives somewhat to take advantage of experience during the study's first year. The present statements reflect further polarization of emphases to concentrate upon those operationally significant aspects which research to date indicates to deserve highest priority attention. Implicitly, the general distinction remains between Worldwide Analysis I with its primary focus upon the overseas project and its environment and Worldwide Analysis II with its concentration upon Stateside factors influencing project outcome. These distinctions, however, have never been more than operational conveniences as optimal project progress manifestly requires optimal performance by all of the concerned entities. With the SORs now taking on analysis functions in collaboration with members of the Purdue-Indiana and Illinois Groups, the Worldwide Analysis I and II nomenclature becomes considerably less useful as a means of identifying different lines of study with particular subcontractor universities. In other words, the centers of concentration remain but there will be extensive sharing of responsibility for the analyses between Stateside Analysts and those who thus far have functioned as Senior Overseas Researchers.

With these explanations and qualifications, following are thumbnail sketches of the principal analytic areas on which attention will be concentrated throughout the balance of this study:

1. Technical assistance strategy

Summarily stated, this broad area of analysis seeks to establish a body of principles which will enhance the probability of an optimal strategy being selected and efficiently implemented. Through a combination of analytic induction and empirical deduction techniques, it thus focuses primarily upon (a) relating the institution building process to strategy planning and execution, (b) exploring the consequences of alternative strategies, administrative relationships and operational practices under varying environmental conditions, and (c) providing guidelines for practitioners on ways and means for enhancing project effectiveness. Primary but not sole attention is directed toward projects having as their principal objective the development of service-oriented agricultural colleges or universities.

These analyses approach technical assistance strategy and administration at two main levels:

- a. The Contract Team which is the primary mechanism within the Technical Assistance Complex (TAC) for creating change within the Host Institution/Host Country complex. Here particular interest centers upon the processes and actions necessary to accomplishing institution building, the administrative relationships and practices conducive to optimal Team effectiveness and considerations in tailoring Team and overall TAC strategy to differing environmental circumstances. Beyond explicating the processes per se, this line of study focuses sharply upon identifying factors presently limiting project effectiveness and devising practicable means for overcoming them. In this context, specific topics of special interest include (a) commitment (i. e. , "will" to take actions necessary to achieving project goals) on the part of the respective concerned entities as a priority factor in strategy planning and its development as a strategy goal; (b) the Team Leader function and how its performance affects project progress; and (c) the consequences of alternative Team strategies and implementation techniques.
- b. Macro strategy or the level, composition and time phasing of major types of technical assistance inputs: Technicians, participant training and the commodities. Here primary interest is upon approximating the marginal rates of substitution among types of inputs at different stages of project maturity and under differing project circumstances.

In both the above lines of study, a cost and returns analysis will be applied insofar as feasible toward providing guidance on principles and techniques for strategy choices under different local conditions. Given the intangible nature of technical assistance outputs, results on this front likely can go little beyond broad and general types of cost and return relationships. Additionally, consideration of the strategy area includes specific attention to the principal stages of a project's life from conception through phase-out with particular emphasis upon phase-out strategy planning.

2. Criteria of project progress and completion

Organization theory and operating experience alike point to "criteria" as a likely source of many of the more difficult problems which technical assistance projects encounter. This is understandable considering the vital and varied roles criteria play in the making of critical decisions at every stage of a project's life. Differences among the several parties at interest as to what constitute appropriate criteria can but lead to a lessening of administrative unity, incongruous actions, and stresses on cooperative relations. Similarly, employment of inappropriate criteria leads almost inevitably to frustrated expectations. Analyses in this area

thus focus upon the question of "what are appropriate criteria" with particular reference to institution building activities and to variations in project settings.

a. Progress criteria

It is the primary function of progress criteria to feed back into the decision-making process the kinds of information practitioners need for recurring strategy planning and implementation decisions. These analyses thus comprise basically a search for phenomena which are both operationally manageable and reliable indicators of progress in the development of foreign agricultural education and research institutions. This search necessarily includes exploring the basic nature of the processes involved in the development of such institutions in terms of the kinds of changes required, how change takes place, and how it becomes self-generating.

This complex of interrelated questions is being approached in two main ways. One is through a conceptualization of institutional development utilizing appropriate literature on organization theory and agricultural development. The second is an empirical approach derived from changes that have occurred in assisted institutions. Through a blending of these two approaches, promising new insights are being gained into such presently-obscure matters as: (1) the relation between changes in physical plant, organization, structure, attitude and professional commitment of staff, etc. and project outputs and their utilization by the publics served; (2) adaptations in criteria necessary to take appropriate account of the stage of project and Host Institution development and environmental differences; (3) time likely to be required for particular types of innovations to become self-generating under differing circumstances (i. e. , criteria for setting planning horizons); (4) the extent to which the predominant physical-change criteria typically employed at present do in fact measure progress in institutional development; and (5) the consequences of basing planning and implementation decisions on unrealistic criteria.

As part of the data-base for these analyses, a comprehensive inventory of project associated changes in Host Institutions has been assembled. An analytic summary of these data may be prepared for publication as an aspect of this phase of the overall study.

b. Completion criteria

"Completion" in the present context refers to optimal achievement of project goals. Manifestly, the goals of a project may themselves be

revised as its experience unfolds. The research problem--and that confronting technical assistance practitioners as well--is, therefore, identifying phenomena which will predict when those changes sought by a given technical assistance project are likely to become self-generating. This necessarily introduces questions concerning the effects on payoffs from prior efforts of discontinuing assistance before this critical point is reached and of the payoff to be expected from technical assistance investments beyond that critical point. Additionally, inasmuch as strategy efficiency and progress criteria have meaning only with respect to the end-state sought by a project, perceptions of "phase-out" criteria significantly influence critical decisions throughout a project's life. And, as indicated earlier, differences in how these criteria are perceived by the respective entities and individuals concerned can significantly influence both project effectiveness and inter-group harmony.

It is toward illuminating these kinds of questions that studies in this area are directed. As in the preceding instance, a combination of conceptual and empirical approaches are being employed. In the former area, particular recourse is made to the institutionality concepts developed by Inter-University Research Program in Institution Building and to the "maturity indices" concepts developed by R. W. Roskelley (see Section III-B-3 above). A parallel formulation which employs manifestations of an aided institution's having acquired a dynamic technology and the supporting capabilities for keeping it dynamic also is being explored. The inventory of changes over time in aided institutions referred to in discussing progress criteria forms an important part of the empirical base for testing conclusions derived from the conceptual analyses. Experience gained by members of the overall Research Group in the course of this study and that of seasoned technical assistance practitioners also is an important part of this base. These latter sources of data appear likely to prove vital in establishing principles for adapting general conclusions to varying project settings.

3. Relevance to country needs

With primary reference to adaptability of the U. S. Land Grant College model, studies in this area center upon the basic hypothesis: Project outcome is a function of the relevance of the Host Institution's outputs to the needs of the clientele it serves--or advantageously could serve. Their primary focus thus is upon the interrelationships between aided institutions and their environments--cultural, political and economic--as these interrelationships affect and are affected by project decisions. This line of analysis has two main objectives (a) to illuminate the ways in which "relevance" of outputs--actual or planned--can frustrate the

expectations on which project decisions are based and (b) to establish principles for using relevance to country needs as a positive decision variable.

In the first instance, the underlying premise is that a project whose outputs fit poorly the perceived priority needs of its clientele will fare badly unless overt actions are taken by project personnel to alter the relevant values of the users of these outputs. Whether such actions are feasible and in the best mutual interests of the Host Country and A. I. D. is, of course, a related question. In its second aspect, this line of study explores both the circumstances governing the feasibility of such remedial actions and the circumstances conducive to enabling a Host Institution to play an optimal role in its environment.

For the most part, the interaction of Host Institutions with their respective environments concentrates upon the adaptability of the U. S. Land Grant College model to the varied economic, social and political circumstances of the less-developed countries. In this context, special attention is directed to the possibility of there being readily identifiable indicators of stage of economic development or/and culture pattern which are highly correlated with the "goodness of fit" of the Land-Grant College form and philosophy.

4. A. I. D. and university policies and practices

Proceeding from the principal functions which A. I. D. and contract universities as entities need to perform in the overall project planning and implementation process, this broad area of analysis explores the extent to which their respective policies and practices limit or facilitate project effectiveness. In the main, these studies center upon testing a substantial number of hypotheses distilled out of the myriad of informed opinions about this subject which have been generated by other studies, conferences and the formal and informal dialogue between A. I. D. and the university community over the past fifteen years. Primary emphasis is upon (a) explicating the way in which particular policies or practices can--and the extent to which they do--affect project effectiveness and (b) deriving research-based methods for improvement. The contract instrument--as the primary frame of reference within which University-A. I. D. cooperative effort is carried out--is an important focal point of analysis.

Within this overall framework, specific areas of interest include:

- a. Home campus backstopping which (1) describes the different types of backstopping organizations and practices presently employed by some 35 universities; (2) explores the implications of observed

differences to performance abroad and to strengthening a university's capability for international development activities and (3) seeks to establish guideline principles for effective home campus backstopping of overseas operations. "Executive visits" comprise an aspect of backstopping of special interest in view of the pivotal role which those performing this function can play in shaping attitudes and policies within the contract university and the university community at large.

- b. Contract Team characteristics and personnel practices which in the first instance provides a factual basis for removing from contention such long-debated items as extent of off-campus recruitment, age, turnover, vacancy rates, etc. More importantly, studies in this area focus upon the relevance of Team and personnel characteristics to the performance of necessary technical assistance functions and the extent to which contract universities' personnel policies and practices affect this performance.
 - c. Participant training which looks at policies and practices in this area primarily from the standpoint of optimizing the contribution of participant training carried out as an integral part of university contract projects to overall technical assistance objectives.
 - d. Capital and commodity assistance which similarly treats these project inputs with a special view toward finding ways of minimizing the constraints on project effectiveness which logistical and related problems seem frequently to introduce.
 - e. Project evaluation which approaches policies and practices from the standpoint of optimizing feed-back of information needed for critical decisions. Periodic progress reports and related reporting devices are given particular attention in this regard.
 - f. Pre-project planning--including contractor selection and related practices--which focuses especially upon the effects of decisions made prior to initiating a project upon its future effectiveness. Both the substance of such decisions and the methods by which they are reached are points of special interest.
5. Effects on U. S. universities

Underlying this area of analysis is the premise: A university's willingness and ability to participate effectively in international rural development activities depends upon its strategic decision-makers' beliefs about the effects of such activities upon its domestic program capabilities. It is further postulated that attitudes toward international activities depend in considerable part upon the satisfaction derived from a

university's overseas project experience and the extent to which the feedback from this experience is drawn upon for strengthening domestic and foreign program capabilities. This suggests a relation between the policies and practices discussed in the preceding section and the commitment of strategic decision-makers to international programs.

This, then, is the complex of questions with which the present line of study is principally concerned. It first seeks to classify the types of effects involved, their respective distributions and degrees; then to ascertain the factors associated with variations in those variables; and, finally, to devise means for maximizing the favorable impacts and minimizing the unfavorable ones, taking account of the costs as well as the prospective benefits likely to be derived from such practices. Two broad categories of relevant decision-makers are treated separately as well as jointly--department staff and university administrators--by reason of differences in the nature of their respective roles in individual overseas projects and international program activities in general.

6. Optimal role for U. S. universities

The central objective of this field of study is to establish criteria for determining the types of A. I. D. rural development projects appropriate for university-contract implementation. Given the variety of types and sizes of projects which are being or have been implemented through AID-University contracts, it seems reasonable to expect differences in A. I. D. and university satisfaction from cooperative endeavors to be associated with variations in the types of projects involved. Testing of this hypothesis, identifying the determining variables, and assessing the costs and benefits to the respective parties likely to result from different types of projects comprise the operational thrust of this line of investigation. A significant by-product will be a comprehensive description of the kinds of rural development projects implemented by university contracts. This should provide the most complete picture yet available of the nature and magnitude of the role played abroad by university contracts in the overall A. I. D. rural development program.

7. Regional differences

Original expectations were that differences in underlying Regional characteristics would be found to have so pronounced an influence upon significant aspects of the AID-University contract process as to warrant a separate report on each of the four A. I. D. Regions. Preparation of such reports, focusing upon adaptations in findings from the Worldwide Analyses to circumstances of the respective Regions, thus was expected to comprise the principal analytical responsibility of the SORs after completing their overseas data collection assignments. As not infrequently

happens in research, the premise on which this part of the Operational Plan was based proved to have only limited validity. Necessary revisions in the time-phasing of major aspects of the overall study also rendered the planned "regional adaptation" approach operationally impractical.

In view of these developments, regional variations will now be treated for the most part within the context of the respective worldwide studies. Each SOR will, of course, bring his specialized knowledge of the Region he studied abroad to all the different analyses carried out under the overall research project.

8. Special studies

Reference here is to specific lines of study which complement but are not subsumed under those indicated above. Those presently in process or prospect are of three broad types:

- a. Extension of general technical assistance theory, the only specific activity in process being that of Jones and Blase referred to in Part III-B-1.

A draft manuscript of that book is scheduled for completion by late December.

As the overall study progresses, it may prove advantageous to draw the contributions to general theory from other topic-analyses together for cohesive treatment. There are, however, no specific plans at this time in this regard.

- b. Minnesota Reports (See Part II) which are to be given wider distribution.

Prepared under the University of Minnesota subcontract primarily as background for other segments of the overall research project, only limited distribution of these two reports was made initially (March 1967). Now that A. I. D. has approved and recommended publication of the preliminary report on "An Analysis of AID-University Relations 1950-1965", steps are being taken to ready it for publication. The additional work which would be involved in bringing the 3-volume "Bibliography on Planned Social Change" to publication stage cannot practicably be undertaken as part of the present research project. It is, however, in the process of being reproduced for wider distribution in A. I. D. and to university libraries. This step implements the recommendation of the Project Advisory Committee and A. I. D. that this bibliography in its present form should be made more widely

available to scholars and practitioners concerned with international technical assistance programs.

- c. Case studies of a few technical assistance activities illustrating points of general interest.

Each of the SORs has identified situations in the course of his overseas studies which warrant special attention. Many of these no doubt can best be incorporated into various of the major lines of study outlined above. For any which are not fully utilized in this manner, consideration will be given to their separate treatment on a case by case basis.

C. Reports of Findings

Present plans are that reports of substantive findings from the several major lines of study will take a variety of forms, depending upon the subject matter involved and the audience to which it can most advantageously be directed. Some may focus upon emphasizing a particular point and seek to reach particular professional groups through journal articles; others will cover a broad spectrum and be organized as research monographs or even books; still others may need to be handled on a more restricted basis. Throughout, the guiding principles will be (a) to maximize effective use of the results of this study and (b) to provide members of the Research Group as much scope for originality and independent action as is consistent with optimal interrelation of the several parts of the study to produce, in concert, cohesive coverage of the primary objectives of the overall research project. Preliminary plans for each prospective report will be coordinated with AID/W at the earliest feasible stage toward ensuring its timely availability to potential users.

In addition to the topic reports, there will, of course, be prepared a summary report on the overall project of the type called for in the Prime Contract.

D. Possible Follow-up Activities

At the initiative of Dr. Frank Parker, AID/W, the Project Advisory Committee devoted a substantial part of its June 10, 1967, meeting to consideration of suggestions made for follow-up activities aimed toward maximizing effective use of the findings and experience gained from the present study. These explorations proceeded against three explicit premises: (1) "Follow-up" activities involving members of the Research Group cannot practicably be initiated prior to completion of the overall study (i. e. , earlier than July 1, 1968); (2) it is highly improbable that the potential contribution of this study to enhancing technical assistance effectiveness will be anything like fully realized in the formal reports of findings; and (3) members of the

Research Group have gained substantial personal experience which could be useful to universities and A. I. D. in dealing with particular technical assistance problems. The ensuing discussion consequently focused upon follow-up activities as adjuncts to rather than extensions of the present research project per se.

Against this background, the Advisory Committee made three major recommendations:

1. That the Committee Chairman and Project Director explore various avenues for bringing significant results of this research project effectively to the attention of appropriate university and A. I. D. personnel. Further, that these explorations include but not necessarily be limited to (a) getting discussion of principal findings on the agenda for 1968 meetings of the National Association of State Universities and Land Grant Colleges (and/or its appropriate subsidiary bodies) and the University Directors of International Programs; (b) conveying to appropriate officials in A. I. D. the Advisory Committee's judgment that there is an urgent need in this country for a continuing program of research and education on the building of institutions for agricultural research and education in the less-developed countries and that establishment of such a program should have high priority on the use of 211d funds; and (c) identifying promising means for involving those persons in A. I. D. and the universities--at home and abroad--directly concerned with international rural development projects in discussion of the implications of the findings from this research.
2. That concerted attention be given to practicable ways and means for making appropriate members of the Research Group available on call from individual U. S. universities for confidential discussions of the findings from this research as they relate to problems of particular concern to a given university or group of universities. As A. I. D. already has the machinery for obtaining such consultant services, the recommendation as such did not include specific reference to A. I. D. However, the consensus was that A. I. D. has as much to gain from availing itself of the experience of these individuals as do the universities.
3. That the Project Director convey to appropriate A. I. D. officials the Committee's considered judgment that a series of overseas seminars in which USAID officials, university Team Members and appropriate Host Country officials were brought together for discussion of the results of this study and their implications likely would yield a higher dividend in terms of progress toward building needed agricultural research and education institutions abroad than any alternative investment of the same amount of foreign assistance resources.

Finding appropriate means and opportunities for pursuing these several recommendations holds a high place in the Project Director's personal work plan for the year ahead.

V. Administrative Report

There have been few significant changes of an administrative nature during the period under review. With the distribution of the two reports indicated in earlier sections, the Minnesota Group completed its work. That subcontract consequently was allowed to expire as planned on February 28, 1967. The few other developments of general interest are noted in the respective sections which follow.

A. Group Meetings

The Project Advisory Committee held meetings on September 2, 1966, and June 10, 1967, respectively. Participation by the senior Stateside Analysts in the latter session provided an especially useful opportunity for obtaining the Committee's counsel on progress and plans for the respective Worldwide Analyses. Now that the study is reaching the "conclusions" stage, it is expected that the Advisory Committee will be convened at increasingly shorter intervals to participate with the Research Group in interpreting the findings from this research.

A sixth workshop seminar of the entire project staff was held on the University of Wisconsin campus November 14-18, 1966. As in June of 1966, the Senior Overseas Researchers were returned from their respective overseas posts to take part. These two experiences left no question as to the wisdom of having built this feature into the Operational Plan for this study. These seminars together with periodic meetings with the SORs in their respective Regions by the Project Director and Associate Director greatly facilitated the essential interchange of ideas and experiences while the overseas data collection was in progress. Communication among the Stateside members of the project staff likewise was enhanced by informal small group meetings as circumstances warranted. Experience with the present project strongly commends building into the plans for comparable research efforts adequate provision for inter-personal contact among those engaged in it.

B. Personnel

The current membership of the Project Advisory Committee and their institutional affiliations are shown on the inside cover of this report. Two of the original members resigned during the year due to the pressure of other duties. Otherwise, the composition of this group has changed little since the study began.

Following is the roster of Principal Investigators as of mid-August 1967:

University of Wisconsin

I. L. Baldwin, Project Director
R. W. Jones, Associate Project Director

Purdue University

J. Kenneth McDermott
Harry Potter

Indiana University

David R. Derge

University of Missouri

Philip F. Warnken*
Melvin G. Blase

North Carolina State University

Jackson A. Rigney*
Charles H. Proctor

University of Illinois

William N. Thompson
Harold D. Guither
E. H. Regnier

Ohio State University

William A. Wayt*
Howard C. Williams

Utah State University

R. Welling Roskelley*
B. Austin Haws

*Posted overseas at respective Regional Project Headquarters.

This group likewise has remained essentially intact throughout the study period. As noted earlier, the Minnesota participants transferred to an "inactive but interested" status with the completion of their phase of the study. Following completion of the planned work in the Far East Region, R. W. Roskelley was transferred to New Delhi in March 1967 to assist with the data collection work in the NESR Region. All four of the SORs thus will have served abroad on this project for approximately 18 months. At Illinois, William Thompson recently was designated Study Leader and Harold Guither and Earl Regnier, Associate Study Leaders. This, however, represented mainly a change in titles. The original co-leaders of the work at Illinois University--Harold Halcrow and George Brinegar--continue to participate informally in their capacities as Head of the Department of Agricultural Economics and Director of International Agricultural Programs respectively.

C. Budget

Provision by A. I. D. of \$322,346 for third-year funding brought the total budget for this three-year project to \$1,262,346. These new funds together with a modest carry-over should make possible completion of the study as presently conceived by the scheduled date of June 30, 1968. While complete expenditure data are not yet available for the fourth quarter of FY67, indications are that the carry-over of prior-period funds will not be greatly different from that forecast in the January 1967 budget request. Details of the budgetary situation as of March 31, 1967, are shown in the accompanying table.

Financial Summary

Line Item	Firm Budget ^{1/} 6/25/65-6/30/68	Actual Expenditures ^{2/} through 3/31/67	Available for Period 4/1/67-6/30/68
Salaries	\$632,882	\$318,019	\$314,863
Reserved to A. I. D.	6,800	6,800	---
Allowances	28,619	18,844	9,775
Travel and Transportation	201,003	110,564	90,439
Equipment	2,649	2,649	---
Other Direct Costs	82,547	33,750	48,797
Advisory Committee Expenses	3,700	735	2,965
Indirect Costs (PRF)	57,083	29,074	28,009
Indirect Costs (Subcontractors)	247,063	109,652	137,411
Total	\$1,262,346	\$630,087	\$632,259

^{1/} Includes \$322,346 third-year funding provided by Amendment No. 3, June 12, 1967.

^{2/} Latest quarter for which complete subcontractor billings are available.