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and Training Center--
Evaluation and Recommendations
for Program Improvement**
690-0005

by

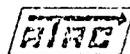
Dr. C. A. H. Thomson
R. G. Sharp

Performed for the Agency for
International Development
under Contract No. AID CSD 3376

November, 1972

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A SUBSIDIARY OF GENERAL RESEARCH CORPORATION

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The Regional Testing Resource and Training Center--Evaluation and
Recommendations for Program Improvement

American Technical Assistance Corporation

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The Regional Testing Resource and Training Center (RTRTC) was designed to establish a regional center for the development and conduct of testing in Malawi, Botswana, Lesotho and Swaziland. The team concluded that despite a need for improved testing in the area, the original program concept of developing a strong regional center with its own international staff based primarily at one headquarters does not have continuing validity without major modifications. Findings include: (1) the desirability and feasibility of a centralized regional center is questioned; (2) there is significant sentiment in participating countries that many testing problems are peculiarly national in nature; and (3) the advisory role of the Center should extend beyond Ministries of education and the universities to governmental institutions responsible for manpower planning and public service personnel selection. Recommendations include: (1) several aspects of the Center's activities should be decentralized; (2) the headquarters organization and staff of the RTRTC should evolve into an international service organization providing those services which can be provided more economically on a joint basis; and (3) participating countries and USAID should adhere to the agreed-upon schedule.

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PREFACE AND ACKNOWLEDGMENTS

In August, 1972, the US Department of State's Agency for International Development (AID) asked the American Technical Assistance Corporation (ATAC) to provide the services of two specialists to conduct an evaluation of an AID-supported project to establish a regional center (RTRTC) for the development and conduct of testing in four participating countries—Malawi, Botswana, Lesotho and Swaziland—that had commenced operations in December, 1969.

ATAC made available the services of two evaluators, Dr. Charles A. H. Thomson and Mr. Richard G. Sharp. After preliminary briefings in Washington, these evaluators studied the project in the field, visiting all the countries involved between September 11 and October 20, conducting numerous interviews with AID and country personnel, and participating as observers at the Sixth Meeting of the Center's International Board. A detailed itinerary is presented as Appendix A. The general conclusions and recommendations were briefed orally to a meeting of the International Board on October 17 and tentative findings were discussed with members of the Board, other country personnel, and AID field officials.

On the team's return to Washington, further discussions took place with AID officials. These discussions led to some modifications in the detail of the team's assessments, as well as to clarification of several points. The Report presented herewith is a result of all these steps.

ATAC and the evaluators wish to express their appreciation to all those who shared their knowledge and observations and assessments with the team, both in Washington and in the field. It goes without saying that the Report could not have been prepared in this short time—or at all—without this information and guidance.

For this help, as well as for administrative support and many courtesies, the team wishes to express its thanks and appreciation to Messrs. Marshall Fields, Edward Martin, Frank Scordato, and Calvin Cowles in AID in Washington; and to Messrs. Roy Stacy, Thomas McDonough, Samuel Rea, and Wesley Smith of AID/OSARAC.

The Honorable Charles J. Nelson, Ambassador to Botswana, Lesotho and Swaziland, Mr. Norman Frisbie, the Deputy Chief of Mission in Lesotho, and Mr. James Farber, the Political Officer in Malawi, all offered timely guidance and support.

The vital dimension of experience with the Center and the Board, and even more of the views of country officials and relationship of the Center's work to country development and educational problems, was provided by the Chairman of the Board, Dr. N. O. H. Setidisho, by present and past members of the Board from all the cooperating countries, and by a number of country officials and personnel involved in the present and potential contributions of testing to development needs. It would be invidious to select those from this group who were more helpful than others; a complete list of those interviewed will be found in Appendix B.

The team is also especially grateful for the hospitality as well as the sharing of technical expertise and broad experience offered by the members of the AIR party (and their wives) who are playing a key role in the work of the Center—Dr. James F. Snider, Dr. Paul F. Cook, and Dr. Wesley Snyder. Dr. V. J. Cieutat, Director of the International Studies Division of AIR and Project Officer for the enterprise, gave

especially valuable counsel and assistance, drawing on his experience with the project well antedating its formal inception and encompassing all meetings of the International Board.

Mr. Danton Mkandawire, the RTRTC Assistant Director for Test Development shared the unique viewpoint of a person both occupied with an important segment of the Center's technical work, and a beneficiary of counterpart training in the United States. Mr. Grey Mbau, seconded to the Swaziland office and formerly with the Swaziland Testing Center, shared his unique experience with testing, personnel selection and training, and manpower management in Southern Africa.

The team expresses special thanks to the secretarial staff of the AID/Mbabane office, who provided cheerful and prompt secretarial support.

Edmond C. Hutchinson
Edmond C. Hutchinson
Senior Vice President

SUMMARY

This summary presents a statement of the problem, background, major conclusions and recommendations of a two-man evaluation team that in September and October, 1972, studied the design and performance of an AID-supported project to establish a regional testing center for four countries in Southern Africa. The team also considered changes in the project that would improve its contribution to the development objectives sought by AID and by the countries involved.

THE PROBLEM

The problem addressed by the evaluation team included the following major dimensions:

1. An assessment of whether the purpose and the design of the project has continuing validity, in the context of institution-building concepts, and of current and projected country educational programs and objectives.
2. An exploration of perceptions of project purposes held by various participants users, and potential users.
3. An evaluation of the Center's activities, accomplishments, effectiveness, and extent of utilization by and linkages with relevant country institutions—with reference to the balance between service to educational or to other functions, and the relation of the Center's activities to curriculum and the broad future of educational testing.
4. A determination whether an adequate foundation has been established for the support of the regional program originally envisaged, and whether local resources are sufficient to maintain the Center at the conclusion of AID's support.

5. Identification of steps needed
 - a. to achieve relevant portions of the project's initial purposes, or
 - b. to terminate the project; or
 - c. to redirect it so as to achieve adequate contributions to overall developmental objectives.

BACKGROUND

This report contains the conclusions and recommendations of the American Technical Assistance Corporation team tasked by the Agency for International Development to conduct an evaluation of the Regional Testing Resource and Training Center (RTRTC) program, based in southern Africa. The evaluation was performed in September and October, 1972, with this final report submitted in November, 1972.

The RTRTC serves Malawi, Botswana, Swaziland and Lesotho, and is governed by an International Board consisting of representatives from each country and from AID. The Center was established in December, 1969, with AID providing three (later four) U.S. experts as senior staff members. These experts (under contract from the American Institutes for Research) are, according to plan, to implement an institutional development program designed to make the RTRTC a self-sustaining regional organization independent of U.S. aid by December, 1975. To support this plan, eight counterparts are to be given master's degree training in the United States in the educational testing field, two of whom are to continue such training through the Ph.D. level. These counterparts are to be assigned responsible positions in the regional testing center, eventually assuming the leadership positions now held by U.S. personnel as well as other staff functions. Participating countries are to establish the legal structure, budget, conditions of staff service and other conditions necessary to insure the survival of the regional institution beyond the six-year development period in which American Assistance is to be provided. The RTRTC is headquartered in Malawi, with a branch established in Botswana. It was initially conceived as a rather centralized institution, with a majority of staff to be permanently located at the headquarters office.

The purposes of the RIRIC, as defined in the 1969 project agreement, are to provide a variety of testing services for the participating countries. This includes such activities, as development of educational admission tests, conduct of test construction workshops, development and implementation of aptitude test programs for use by educational systems, public sector and private sector clients, and test processing. Specific priorities outlined by the project agreement are, in order:

- a. to develop a system of tests designed for pupil selection into secondary schools
- b. to advise the Ministries of Education and universities within the region on the development and use of testing programs for their educational systems
- c. to develop and implement existing public service selection procedures, and
- d. to perform a similar function for the private sector.

The primary rationale for furnishing assistance in testing is based on the judgment that each of the participating countries, like developing countries elsewhere, suffers from an acute shortage of manpower trained in those skills necessary to assure administration and development both in the public and private sectors. The rationale also rests on the view that the indigenous educational institutions lack the resources needed to train adequate numbers of candidates to meet country needs for technical, managerial, teaching, administrative, and similar positions, however successful these local institutions have been in providing Western-type academic training for some of their nationals. At the same time, it is recognized on the basis of experience in developing countries elsewhere that broad extension of education and training at the secondary level and above might not be desirable even if possible, because of the danger of training more persons than can be absorbed, and thus creating unemployment and consequent discontent and disaffection among beneficiaries of such training.

Obviously, changes in educational systems to accommodate all these requirements need to go beyond testing as such, into reform of curriculum, syllabi, teacher training and teaching methods in the educational fields.

Similarly, needed changes in testing for use outside the educational system call for improved methods of using testing in conjunction with other devices to improve the selection, utilization, and further training of manpower in the public and private sectors. But it is recognized that improved tests and testing have an especially important part to play in upgrading systems for the selection and admission of persons for educational institutions, as well as for channeling students according to aptitudes and preferences to those fields for which they are best suited. Existing test systems, it is generally agreed, are not adequate for all these purposes, and the potential impact of a professional training center appears substantial.

By mid-1972 total AID inputs to the development of the RTRTC have risen to over \$600,000 and annual contributions of the participating countries to over \$100,000. At the same time these outlays point up the urgency of answering several serious questions that have arisen by this mid-point of the institutional development plan concerning the structure, goals and impact of the Center. These questions cast some doubt on the survivability of the institution, at least as originally conceived. Of predominant importance are the issues of (1) whether it is feasible or desirable for the participating countries to maintain a centralized regional institution and (2) whether the priorities of the Center are appropriately oriented toward country needs in the educational and manpower development fields.

As a result of questions and related problems affecting Center operations, the International Board, at its June 1972 meeting, requested AID to undertake a mid-program evaluation of the regional project. AID concurred in the need for a program review and subsequently funded the evaluation reported in the following pages.

Those interested in details of RTRTC operations are referred to the project agreements, feasibility study reports, program contract documents, semi-annual contractor reports, International Board meeting minutes and other documentation which are available in Washington from the AID Africa bureau, or in Africa from USAID/Office for South Africa Regional Activities Coordination (based in Swaziland) or the RTRTC.

The evaluation team has concluded that despite a need for improved testing in the area, the original program concept of developing a strong regional center with its own international staff based primarily at one headquarters does not have continuing validity without major modifications. This conclusion is based upon the following findings:

1. There is widespread questioning of the desirability and feasibility of a centralized regional center within the participating countries and the NTRIC contractor staff. There are considerable doubts about Center prospects of survival as a centralized regional body and steps have been taken toward decentralization which make such an objective less likely to be obtained.

2. Progress toward reaching institutional development goals has been slowed by delays in implementing the full counterpart development program planned. These delays may be partially attributable to lack of firm agreement among participating countries on the future role of the Center, with some consequent lowering of priorities for selecting counterparts.

3. The participating countries have been slow in reaching agreement on such crucial questions to regional institutional development as legal status, conditions of staff service, staff salaries and methods of allocating country contributions. Continued debate on such issues, with extremely slow progress toward resolution, has had a negative effect on the substantive work of the Center staff and has inhibited participating countries in providing badly needed policy guidance on substantive testing issues.

4. The region covered by the NTRIC is not a natural region (the countries, for example, are not contiguous). They do not have a history of institutional cooperation which would increase the prospects of overcoming the structural difficulties noted above. In addition, travel distances among the countries have affected, and will continue to affect the functioning of centrally based test activities.

5. There is a significant sentiment within participating countries that many of the most important testing problems are peculiarly national in nature and there appears to be relatively little interest in common regionally developed tests at this time. While the evaluation team feels

that there is a legitimate role for tests which are not nationally developed, it has concluded that the most critical testing problems in the area are closely linked with problems, of determining national manpower needs, allocating scarce trained manpower to appropriate employment and further education/training, counseling on careers, and developing education and training curricula. It appears questionable to the evaluation team that a centralized regional testing center, given the context described above and without supportive national institutions, could be sufficiently responsive to individual country efforts in manpower allocation and curriculum reform to have major impact on development needs.

The evaluation team also feels that the originally developed list of program priorities is not now adequate, and will probably become less so. Findings supporting the above conclusion are:

6. In operations over the past $2\frac{1}{2}$ years, the RTRTC has added a priority task roughly equal in importance to any of those originally envisioned, namely to provide data processing services for primary school leaving and secondary examinations for participating countries. As this function has occupied perhaps up to 50 percent of staff time and its continuance is desired by the participating countries it needs to be formally recognized.

7. While the improvement of secondary school selection procedures continues to be recognized as an important need in participating countries it does not appear that a common system of scientifically developed selection tests can have the amount of impact initially envisioned. The reasons for this include:

- a. National considerations indicate that the process of changeover from current examination systems to new selection procedures might take some years;
- b. There is some evidence that current examinations relied upon for selection purposes may be better predictors of secondary school success than initially envisioned and are as adequate devices for selecting students as substitutes tried by the Center;

- c. The improved testing for secondary school selection may be minimal or ineffective if such test improvement is not accompanied by curriculum reform, upgrading of teachers' facilities and equipment, and improved career counseling;
- d. As national educational policies and other factors tend to govern the "wastage rate" in secondary school to a greater extent than firm academic standards, better selection tests would not result in clear training cost savings based on major immediate reductions in drop-outs.

8. Among participating countries the need for improved testing at the lower and upper secondary levels (Junior Certificate and Cambridge "O" levels) appears to be at least as urgent and possibly more urgent than the original priority emphasis of testing for secondary school admissions. In particular, there appears to be a great potential for ability testing in support of the critical manpower allocation decisions taken at secondary levels to channel youths toward further education, teacher training, technical training, public sector employment and private employment.

9. As the needs for testing in participating countries relating to overall manpower development requirements now appear greater than internal needs of the educational systems, the advisory role of the Center should extend beyond Ministries of Education and the universities. In particular, the testing function should be closely related to the governmental institutions responsible for manpower planning and public service personnel selection.

10. The importance of public and private sector testing as means of furthering achievement of development goals now appears to be greater than improvements in secondary school admissions testing. This development should be recognized in restating program purposes.

RECOMMENDATIONS

Based on the preceding findings, the evaluation team makes the following general recommendations regarding the future of the RTRIC:

1. As there are currently many serious obstacles to the functioning of a centralized regional institution in the development and implementation of test services and as test programs need to be very closely correlated with other national priorities and developments, several aspects of the Center's activities should be decentralized to RTRTC offices in the participating countries, or to national country offices. The evaluation team feels that the basic responsibility for determining national test priorities and for implementing test programs belongs with the participating countries and that mechanisms should be created, if necessary, in the countries to perform these roles.

2. The headquarters organization and staff of the RTRTC should evolve into an international service organization providing those services—technical test development assistance, research on common test problems, maintenance of an item bank for test used in several countries, computer processing—which can be provided more economically on a joint basis. As it concentrates on these service functions, the RTRTC might gradually withdraw from implementation of specific national test programs and emphasize advisory support. The International Board should provide guidance to the RTRTC in setting test service priorities, but setting of priorities for national testing programs should remain the function of individual participating countries.

3. In the next few years the RTRTC should assist participating countries to develop mechanisms to provide test services appropriate to national needs. The RTRTC should be ready to help staff such centers, either by releasing or seconding talent from its own staff. National test centers should be situated in the country public service/educational systems as appears most appropriate in each individual case; they need not be parallel in functions, structure, terms of service and other institutional arrangements, or in testing priorities.

4. In five years, the RTRTC should strive to become an efficient test services organization, linked to national testing institutions in the participating countries. The International Board should set service priorities and insure that high professional standards were maintained, but should avoid involvement in setting national priorities. During

these five years, the Board should also become more of a forum of technical aspects of test service and a useful vehicle for technical coordination and liaison among participating countries.

Based upon the above, the evaluation team makes the following more specific recommendations regarding steps which could be taken to improve the RTRTC.

5. The purposes of the Regional Testing Resource and Training Center should be revised to specify the following:

- a. Technical advice and assistance to participating countries in the technical development of tests for purposes of educational selection; career guidance and selection (both private and public); measurement of achievement in education, training and employment; and for other purposes related to national development needs.
- b. Temporary assistance to participating countries in the administration of tests and implementation of test services pending the establishment of adequate national mechanisms to perform these functions.
- c. Provision of data processing services required by testing programs as requested by participating countries and as cannot be provided in a more effective manner by national or third country services.
- d. Provision of formal and on-the-job training in test development and directly related skills to personnel assigned from participating countries.
- e. Provision of a forum for technical communication and coordination on testing matters among participating countries.
- f. Provision of a forum for research growing out of the various functions of the Center, and taking advantage of the presence of technically trained personnel.

6. The RTRTC should continue to be based in Malawi, with the agreement of the Malawi Government; a legal status should be agreed appropriate to this location; and the RTRTC in Malawi should consist of the following facilities:

- a. The headquarters of the Director RTRTC.
- b. A data processing center serving test processing needs of all four participating countries.
- c. A test development center serving needs common to participating countries.

7. The International Board and AID should consider the following steps to strengthen the RTRTC office in Malawi:

- a. Completion of selection of two candidates for Ph.D. training from returned counterparts at the 7th International Board Meeting, in order to insure qualified candidates for the position of Director RTRTC at the time of AID Technical Assistance phase-out (projected date - December 1975).
- b. Selection of a candidate for U.S.-training for the position of Assistant Director-Data Processing at the 7th International Board Meeting, which should be funded by AID in addition to current counterpart training commitments.
- c. Review of subordinate professional staffing requirements (research and testing officers, programmers) and upgrading of subordinate local staff as may be required.

8. The RTRTC should encourage the development of, and provide organizational and personnel support to, testing offices in participating countries which are oriented toward particular national needs and requirements; such offices should be considered interim RTRTC branches but might develop into viable national testing institutions more loosely affiliated with the RTRTC; the recently established Swaziland office should be considered the first development in this direction.

9. Under the conditions of service for permanent RTRTC staff members recently agreed upon by the International Board, the Board

should recognize as legitimate and proper the possible eventual transfer of some counterparts and other staff members trained under the RIRTC program to national testing offices affiliated with the RIRTC; upon such transfer, the employee's conditions of service might revert to those established by the individual country.

10. The International Board should work toward placing the RIRTC on a self-supporting basis through:

- a. Fees charged for test data processing services, including PSLE, JC and other educational examination processing— as well as other public and private sector test processing.
- b. Fees charged to private users for test development, selection and administration services.
- c. Fees charged to national test centers for supporting services, as provided for in the budgets of these national centers.

11. The Board should encourage national centers to assume those test development and administrative functions which are of purely national interest and importance; and it should be considered whether subvention support to the RIRTC for performing such functions might gradually be withdrawn and integrated into individual country budgets for national test centers.

12. The Botswana branch should explore with the Botswana Government methods of transforming this office into a more effective national center, initially staffed by RIRTC personnel; such a center be directly linked to the key ministries and include adequate priority-setting mechanisms, as have been created in Swaziland; and should have as a major priority the development of test services to support the Botswana Government in its growing manpower allocation requirements, focusing on the allocation of secondary school leavers (Forms III and V) to public sector employment, further education, teacher training, technical and agricultural training and private sector employment. Such a center might be closely linked to the Botswana Department of Personnel in order to maximize impact of test services.

13. The Governments of Malawi and Lesotho should also consider the establishment of national centers, initially utilizing RTRTC resources, to be linked to key ministries as determined by the individual governments and to be guided, as required, by national coordinating and planning committees.

14. The participating countries and USAID should adhere to the agreed-upon institutional development schedule, calling for a phase-out of broad USAID organizational and professional leadership support to the Center by December 1975; and counterpart training activities should be completed by that date.

15. Further USAID support for the RTRTC and/or national testing centers beyond the current program, if required, should be in the form of individual technical advisor arrangements which can be justified in terms of specific manpower development needs in participating countries; any such support should be provided only when the technical manpower resources generated under the current programs can be clearly shown to be insufficient.

16. The next Project Agreement should be written to express in detail changes in program scope, focus and institutional development strategy.

REPORT OUTLINE

The following text is divided into five major sections. For convenience to the reader, and assuming that the report may receive considerable discussion within AID and the International Board, each major item is numbered within sections for easy reference. Also for convenience, supporting data are clearly separated from basic conclusions and recommendations.

The five sections are:

- I. Background of the Regional Testing Resource and Training Center
- II. Conclusions Concerning Validity of Project Purpose and Design in Terms of the Original Regional Institution Building Concept
- III. Assessment of the Adequacy of Center Priorities and Potential for Improving Relevance and Impact of Center Activities

- IV. General Recommendations for Changing the Emphasis of the Center to Better Fit Regional and National Conditions and Priorities
- V. Detailed Recommendations for Improvement of Program Structure

SECTION I

BACKGROUND OF THE REGIONAL TESTING RESOURCE AND TRAINING CENTER

This section discusses the background of the Regional Testing Resource and Training Center (RTRTC) serving the countries of Malawi, Botswana, Swaziland and Lesotho and supported by these countries and the United States Agency for International Development (AID). The evaluation represented in this report was requested by the Center's International Board, consisting of representatives of the above parties, and was funded by AID.

The background section following is primarily intended for those readers who are not familiar with the details of the program in question; and those intimately acquainted with the RTRTC may wish to proceed to the next section. The evaluation team, however, has attempted to outline background discussion in such a way as to introduce the main consideration taken into account in the assessment and for that reason it may be of broader interest. Each background item discussed is followed by a brief commentary on the evaluation questions arising from the item.

I. Origins of the Center. The Regional Testing Resource and Training Center was established in December 1969, under a project agreement signed by Malawi, Swaziland, Botswana and Lesotho and the United States. This establishment followed a considerable period in which feasibility studies were undertaken (by the American Institutes for Research—AIR—the firm eventually awarded the contract for technical development of the Center), AID funding plans were developed and revised and negotiations were conducted among concerned parties. The feasibility studies for the Center and initial program planning were begun in 1965 with a view toward a bilateral project between Malawi and AID. When owing to new AID funding restrictions it proved impossible to establish a bilateral project, Botswana, Lesotho and Swaziland were approached to ascertain their interest in establishing a testing organization. Once AID obtained a positive response, plans were drawn up for establishing a Center on a regional basis and the RTRTC was established on that basis at the end of 1969.

Comment: As the RTRTC was not initially envisioned to be a regional institution, and became so primarily because of internal restrictions on United States assistance, one of the primary assessment factors considered by the evaluation team was regional viability. According to the evaluation team's information, the RTRTC is the only institution jointly supported by and serving the needs of this group of African countries.

II. Initial Perception of RTRTC Priorities. The feasibility studies leading up to the creation of the Center emphasized educational testing, as opposed to testing of individuals outside of the formal school system. The contractor, AIR, first for the feasibility studies and later for key staff and support for the RTRTC, had rich and successful experience in educational testing in Africa, especially in West Africa. AIR had

also had considerable experience in developing ability tests for use in the public and private sectors (again, notably in West Africa). The feasibility studies, however, emphasized testing for educational selection above all other functions. This was found to be of high importance in Malawi because the country had scarce resources to devote to the educational system, requiring that relatively few of those completing lower level schooling would be admitted to the next higher level. This placed a great burden on the selection process to insure that students of quality filled the relatively few higher school openings and acquired the education necessary for the attainment of national development goals. In addition to improving the quality of persons passing through the education system, better selection tests were expected to result in direct cost savings through reducing drop-outs and consequent "wastage" associated with inefficient use of facilities, teachers and equipment. The feasibility studies concluded that screening procedures in use were inadequate and that use of modern selection tests (measuring ability factors as well as past school achievement) could have major impact particularly at the secondary school admission level, where (in Malawi) only about one in ten primary graduates could find places. When the RTRTC concept was required to become regional in scope, it was assumed—based on general experience throughout Africa—that the needs for improved educational selection procedures were as critical to the additional countries as to Malawi. Consequently, the 1969 project agreement listed the development of a system of secondary school selection tests for use in the four countries as the first Center priority. Other test development activities for the countries' Ministries of Education were given second priority, and testing for the public and private sectors were listed as third and fourth in priority.

Comment: Despite the fact that there is undoubtedly considerable similarity between educational problems in all the countries served by the RTRTC and other African countries (particularly former British colonies), the assumption that the apparent critical need to improve secondary school selection tests in Malawi was an equally serious requirement in the other countries was not well supported with evidence. In fact, the feasibility studies' conclusions concerning the inadequacy of such testing in Malawi were also open to some question since the existing tests had not been subjected to thorough validity studies. Furthermore, the potential value of testing outside of the educational systems of the participating countries was also not examined in detail. Consequently the evaluation team felt that an in-depth examination of the adequacy of these priorities after nearly three years of RTRTC operation was in order and considerable discussion of this point is included in this report.

III. Institutional Development Plan. The program as finally constituted, established an institutional development period of six years during which time AID support would be provided. By December, 1975, however, it was planned that local experts would be ready to take over the leadership and operation of the RTRTC and that U.S. technical staff could be withdrawn. To implement this plan three U.S. experts in testing were provided through a contract with AIR; the contingent being expanded to four in 1972. To develop local capabilities to assume direction of the Center, a counterpart training program was established which called for six (later eight) candidates to be given master's degree training in the United States in the testing field. Of these eight individuals (two from each country) receiving master's training, two were to be selected for Ph.D. training. These latter two professionals were expected to become the Director and Deputy Director of the RTRTC when U.S. experts serving in these roles were withdrawn. Training was to be completed as early as possible in the program, in order to provide a period of on-the-job experience prior to program transfer. Staff members (counterparts, plus subordinate technical staff not receiving U.S. training)

were to specialize to some degree in the areas of test development, research, test processing, and training.

The initial U.S. technical staff arrived immediately after the project agreement was signed, assuming the positions of Director (headquartered in Malawi), Deputy Director (heading a branch in Botswana for the three southern countries), and Assistant Director for Data Processing (located in Malawi). After the completion of a two year tour, some personnel changes occurred but the staff size remained constant. Shortly thereafter, a fourth U.S. expert was provided in order to support a new office opened in Swaziland and to help shoulder a total work load which proved somewhat heavier than anticipated. Meanwhile, the counterpart training aspect of institutional development fell somewhat behind schedule. Of the eight positions provided, two counterparts entered training only in September of 1972 and two had not yet been selected at the time of the evaluation. Three counterparts had returned from master's training and one was due to return in December, 1972. Neither of the two available Ph.D. candidate positions had been filled.

Comment: The problems encountered in counterpart training raised questions concerning the realism of institutional development targets. As of the time of the evaluation, it still appeared possible to complete training by December, 1975, with a modest period for on-the-job experience. To meet these targets, however, immediate action by the participating countries would be necessary.

IV. Organizational Structure. As specified by the project agreement, policy direction for the RTRTC is provided by an International Advisory Board, to whom the Center Director is responsible for day-to-day operations. The Board consists of fifteen members representing the Ministries of Education in each of the cooperating countries, the Ministries of Planning and Development, The University of Malawi,

The University of Botswana, Lesotho and Swaziland and a representative from the Office of Southern Africa Regional Activities Coordination of USAID. It was initially agreed that the Board would meet twice yearly on a rotating basis among the four countries, and this schedule has been adhered to throughout the first three years of operation. The Board meetings held to date were as follows: March 1970, Malawi; October 1970, Botswana; April 1971, Swaziland; October 1971, Lesotho; June 1972, Malawi; and October 1972, Lesotho.

The regular staff at the time of the Sixth Meeting consisted of the Director; Deputy Director (both American); Assistant Directors (an American data processing technician, the American technician assigned to Swaziland, one returned counterpart assigned to test development); research and testing officers (a mix of two returned counterparts, one Peace Corps volunteer, one seconded testing officer and one local hire not receiving U.S. training); and a small number of support personnel. The Center staff is currently somewhat undermanned in relation to projections, but not greatly so—understaffing being largely due to the slow development of counterpart training.

According to the project agreement, there were to be two offices—the headquarters in Malawi and a branch located in Botswana. Recently this has been altered with the opening of an office in Swaziland and the Board has agreed to eliminate the position of Deputy Director-Botswana to make the two southern offices of equal status. The project agreement has not yet been changed, however, and in fact restricts counterpart assignments to Malawi and Botswana, with a majority to be to Malawi.

Comments: The project agreement called for a rather centralized staffing structure for a setting in which there had been no prior institutional cooperation. One of the issues faced by the evaluation

team was whether such a structure was workable or would have to be altered. Also of interest to the team was the degree of success of the International Board as a policy setting mechanism and the adequacy of the current and projected staffing pattern.

V. Board Actions Impinging on Institutional Development. In addition to recruiting and training counterparts a number of other actions are necessary to create an international institution eventually independent of U.S. support. Such actions, which in this case are responsibilities of the International Board, include establishing a legal framework for the institution, developing conditions of staff service, setting staff salary structures, and establishing agreed budgetary and country contribution procedures. Since the inception of the RTRTC, progress toward resolving these issues has been slow, but the first apparent breakthrough on conditions of service and salaries occurred at the October, 1972, Board meeting. Legal status and continuing funding arrangements have not been resolved.

Comment: The evaluation team carefully examined Board actions on these structural questions as indicators of the regional viability of the Center. Even if counterpart training is completed within the institutional development period and such counterparts prove technically capable, the institution cannot succeed if organizational agreements are not reached and adequate funding is not assured (whether from fees, governmental subvention, Third country donations, or some combination of these.)

VI. Utilization of the Center. At project mid-point, the utilization of the RTRTC has been mixed. On the one hand, the Center has developed a battery of five tests for use in secondary school selection. Two countries have incorporated two of the tests into their examinations systems and the two other countries are deferring judgment until further validity studies are completed. None of the participating countries, however, appear likely to adopt the full test system. On

the other hand, test processing services have been greatly in demand (for processing standard school examination results) and have grown far beyond what was envisioned in the initial project agreement. Item writing courses given to teachers and education officials have been generally well-regarded; they have been conducted as part of developing the secondary school admissions test battery and for the more general purpose of improving national capabilities to prepare scientific objective tests. Testing for the public and private sectors has been restricted but primarily due to staff limitations and lack of publicity for the Center during its initial developing phase. Research activities have also been restricted due to other demands on staff time, but validity studies have had quite interesting results in regard to the adequacy of current secondary admissions tests and some other validity studies have been conducted. Relatively little effort has been devoted to relating Center output and priorities to national development objectives of the participating countries and to AID priorities in the region.

Comment: The mixed record of RTRTC accomplishment in its first three years was examined by the evaluation team with reference to the future potential impact of such a testing institution and to the possible need for revising Center priorities.

VII. Cost Considerations. The cost to AID of the RTRTC program has been approximately \$700,000 from project inception to time of the evaluation (roughly 2 3/4 years). With the addition of a fourth contract testing specialist, average costs will be higher for the next 3 1/4 years of the project, assuming this staffing level is retained. A projected total cost to AID for the entire six year institutional development period may be approximately \$2,000,000.

Costs for the four participating countries were 26,000 South African Rand (approx. \$34,000) for the first year of the program. Budgets have risen to 84,000 Rand (\$109,000) for FY 72/73 and a projected 100,000 Rand (\$130,000) for FY 73/74. Annual budgets appear quite likely to expand to at least \$200,000 and then level off, but given the resources a budget in excess of \$300,000 could be envisioned. The ultimate level is impossible to project as a reorientation of Center activities is now only beginning to occur and the scope of work to be given the Center in each country is far from clear. Even an annual budget of \$200,000, however, would be a substantial continuing investment for the participating countries.

Another cost factor lies in the need to revise the ratio of country contributions to the Center. In the initial program the ratio was established as Malawi, 60%; Botswana, 20%; Swaziland, 10%; Lesotho, 10%. It is becoming evident that relatively greater emphasis will be placed on operations in the southern countries in the next few years and that ratios will have to be changed to reflect this fact. There is also a need to reduce the reliance on fixed ratios by developing a service-specific accounting system. Considerable thought has been given to this by Center staff, but the subvention ratio system is still the procedure used for determining contributions.

Comments: Cost considerations were taken into account by the evaluation team in judging whether the program was of sufficient current and potential benefit to merit continued investment of AID funds and continued country support. Another important factor is whether the southern participating countries can sustain support for the Center given the necessity to assume a greater relative proportion of costs at the same time that total budget is substantially increasing and stringent restrictions on budget increases for any purpose are in force in each of the participating countries.

SECTION II

CONCLUSIONS CONCERNING VALIDITY OF PROJECT PURPOSE AND DESIGN IN TERMS OF THE ORIGINAL REGIONAL INSTITUTION BUILDING CONCEPT

This section contains major conclusions and supporting justifications concerning whether, in the context of current and projected country educational/manpower programs and objectives, the original RTRTC regional institution-building concept has continuing validity. The overall conclusion is that the original RTRTC concept, as expressed in the project agreements, is considerably out of line with participating country priorities and needs and requires major modification if a viable regional institution is to be created. The detailed conclusions outlined below support this broad general conclusion. Each major finding is listed separately, followed by a description of supporting evidence.

I. A major indicator of weakness in the original RTRTC concept is the extent of questioning of the desirability and feasibility of a centralized regional center serving the four participating countries. Serious questioning has come from at least five sources: national officials of the participating countries, members of the International Board, staff members of the Center, AID officials, and other U.S. Embassy officials. These critical perceptions of the Center have been accompanied by actions to modify the original structure of the RTRTC.

Supporting Data: The above conclusion can be substantiated by the following criticisms of the Center from the various concerned parties: (This is not an exhaustive grouping.)

- a. The International Board was sufficiently concerned with the validity of the regional concept that at the 5th International Board meeting (June, 1972) it requested an immediate evaluation of the program.
- b. The International Board has become particularly critical of the concept of a centralized RTRTC with a major headquarters in Malawi and a single small branch in Botswana and has taken several steps toward decentralization. AID has supported this tendency to decentralize by funding an advisor for Swaziland, but has not yet incorporated structural changes into project agreements needed to reflect this change of emphasis.
- c. Officials interviewed in Botswana, Lesotho and Swaziland were frequently critical of the apparent dominant role of Malawi-based operations built into the original concept, feeling that this resulted in provision of services to Malawi beyond what was justified by funding ratios.
- d. Frequent comments were received to the effect that the RTRTC had been of only marginal benefit to participating countries; this was particularly true in Swaziland and Lesotho which had had no permanent Center presence.
- e. Questioning of the value of regionalism in testing arose from several sources; this was noted particularly in Malawi and Botswana (where many of the most appreciated activities were locally based) and among AID and Embassy officials.

- f. Concern was noted among AID and Embassy officials that the RTRTC was not sufficiently closely linked to other AID objectives and country development priorities.
- g. In countries where a number of potential users were interviewed (notably Botswana and Swaziland) criticisms were made of the lack of responsiveness of the RTRTC to local requirements, with some feelings expressed that the Center was overly concerned with its internal problems and operations.

II. Another indicator of weakness in the RTRTC concept is the slow progress which has been made in counterpart development. Despite admitted difficulties faced by the countries in recruiting qualified candidates, the late selection of counterparts may reflect some lack of real priority in building the institution. Slow progress here has made the RTRTC objective of transferring Center leadership to local staff members by December 1975, more difficult to reach than initially anticipated.

Supporting Data: Initial program planning called for completion of all masters degree training in the United States within the first 2-3 years of the project and for initiation of Ph.D. training within this period. At this juncture, almost three years into the project, two masters candidates have not been chosen, two have just entered training and the two Ph.D. candidates programmed have not yet entered training. While it is still possible to achieve training goals by December 1975, the late completion will entail less on-the-job experience under U.S. experts prior to phase-out than would be desirable. This is particularly unfortunate with regard to the Ph.D. candidates who would become the senior technical/administrative cadre of the Center.

While qualified candidates for RTRTC counterpart staff are in extremely short supply, given the severe technical manpower shortage in each country, the issue of whether slow progress in filling positions is related to low priorities in building the Center is relevant. In the context of doubt and criticism of the Center's role, the evaluation team feels that relative priorities have been a delaying factor in at least some cases.

III. Weakness in the current Center concept is indicated by the fact that participating countries have not been able to deal fully with the

current and emerging opportunities for educational and other forms of testing, due to inability to dispose of fundamental structural questions. Structural issues include legal status, conditions of staff service, staff salaries and methods of allocating country contributions. At the Sixth International Board meeting progress was finally made on conditions of service and salaries, but the other two major issues remain unresolved. Continued debate on these issues, with extremely slow progress toward resolution, has hampered the substantive work of the Center staff and added to the considerable inherent difficulties met by the participating countries in providing policy guidance on substantive testing issues.

Supporting Data: The fact that many basic structural questions are unresolved at project mid-point is directly related to difficulties in reaching firm agreement on the role of the Center. Legal status, for example, involves consideration of the relationship of the headquarters to sub-offices; conditions of service, the alternatives of nationally versus internationally focused service; country financial contributions, the question of types of services to be provided and methods of calculating their value. Debate on these issues has again revealed strong interest on the part of some of the countries in decentralizing RTRTC activities to a much greater extent than implied in the original concept, and recent progress on conditions of service appears to reflect accommodation to these interests.

There is widespread recognition that the slow resolution of the above issues has adversely affected the work of the Center. A considerable portion of staff time has had to be devoted to drafting and re-drafting of papers related to each issue, to the detriment of test development, research and other technical activities. In addition, the Board has found little time to discuss and provide guidance for RTRTC technical efforts. The Sixth International Board Meeting (October 1972), for example, considered legal status, budget, salary scales, conditions of service, the RTRTC evaluation, creation of a Swaziland office, staff appointments, Center fees, staff posting and USAID project support—there was no discussion of test development, research or related activities.

IV. The original RTRTC concept, somewhat patterned after the successful West African Examinations Council, has encountered serious problems due to the fact that the four countries participating do not form a natural

region. The countries are not contiguous and there are considerable political, ethnic, cultural and geographical differences among them. Nor do the full group of participants have a history of institutional cooperation, though the three southern countries do. Travel distances among the countries have affected, and will continue to influence, the functioning of Center-based test activities.

Supporting Data: One of the main problems in the original RTRIC concept has been that it attempts to create a fairly centralized institution with responsibilities for developing common test systems in a context in which there was no prior institutional cooperation of any extent. In contrast, AID's efforts to build a test development institution within the West African Examinations Council, generally regarded as a success, were placed within an international organizational framework which had been in existence for some years. Moreover, in the RTRIC case there has not only been an absence of prior institutional cooperation but also little informal cooperation and very modest development of even national testing capabilities.

The "region" comprising Malawi, Botswana, Lesotho and Swaziland is almost wholly artificial, being created more in response to AID funding requirements than to needs of the participating countries. Prior cooperation of Botswana, Swaziland and Lesotho was not entirely beneficial in this context, as it has tended to polarize positions on some issues and has the potential of creating conflict. Travel distances, particularly the distance between Malawi and the other three countries, accentuate this problem. In short, the concept of a centralized regional institution may have been too ambitious given serious obstacles to regionalism arising from absence of regional experience and geographical considerations.

V. A further problem in the original RTRIC concept lies in the sentiment that many of the most important testing problems are essentially national in nature. At this stage, there appears to be little interest in common regionally developed tests for use in the educational systems or elsewhere.

Supporting Data: All of the countries participating in the RTRIC only very recently became independent and are quite properly placing considerable emphasis upon strengthening national institutions, emphasizing unique aspects of the national character and developing national priorities and plans. In this context, the countries are understandably inclined to be quite insistent that any new steps taken in the critical fields of

education and manpower take into account the particular local conditions of each nation. This is reflected in the attitude that tests may have to be specially developed for adequate and valid measurement achievement and aptitudes of local citizens, and to fit into the particular objectives of the nation in education and manpower development.

At present, the trend is much in the direction of establishing national measures of achievement and aptitude. Malawi, for example, is in the process of reviewing its educational system and may well move toward adoption of locally developed non-objective tests to provide the basic measures of attainment within the school system. Botswana may choose to withdraw from the Junior Certificate examinations set for that country, Swaziland and Lesotho and set up its own procedures; and the other two countries may follow suit. Discussing such subjects as vocational and police aptitude tests with local officials, the evaluation team found strong sentiment that tests set for, say, Botswana might be totally inappropriate to Swaziland. In summary, the atmosphere is simply not very conducive to the introduction of regionally developed examinations.

VI. While the evaluation team feels that there is a legitimate role for tests which are not nationally developed, it has concluded that the most critical testing problems in the area are closely linked with problems of determining national manpower needs, allocating scarce trained manpower to appropriate employment and further education/training, counseling on careers, and developing education and training curricula. Testing which is not closely linked with developments in these areas will not be likely to have much impact whether such testing is national or regional in conception and use. It appears questionable to the evaluation team, however, that a centralized regional testing center given the context described above and without supportive national institutions could be sufficiently responsive to individual country efforts in manpower allocation and curriculum reform to have major impact on development needs.

Supporting Data: If one accepts the proposition that testing must be closely related to national education and manpower requirements, the case for common regional tests may be less strong than would initially appear. While the countries may be similar in general aspect there are considerable detailed differences in education and manpower requirements which impact directly on testing needs. For example:

- a. In Malawi only about one-tenth of primary school graduates can obtain admission into regular secondary schools, which have been deliberately restricted in growth in order to avoid oversupply of secondary graduates. In Swaziland up to 50% of primary graduates are able to obtain secondary school entrance, reflecting a greater immediate absorptive capacity for secondary output. The need for high quality secondary school admissions tests might thus appear greater in Malawi than Swaziland as the Malawi government is committed to a more selective approach. It is not surprising that the RTRTC priority emphasis on secondary school selection tests grew out of a Malawi feasibility study.
- b. The Swaziland government has proceeded quite far in public sector localization, whereas Botswana has yet to localize many public service positions. In Swaziland the private sector is in a position to be quite selective in localizing positions and will likely insist on fairly high qualifications. In Botswana, the private sector is quite small, but may not require the level of training (in the short run) required in the more diverse Swazi economy. As a result of these factors, it is currently true and is likely to continue to be true for the immediate future that persons who could qualify for positions with lower secondary completion in Botswana would require advanced secondary completion in Swaziland. This might mean that ability tests should be introduced at different educational levels in the two countries and that the tests might need to have somewhat different content.
- c. Swaziland has a substantial and diverse private sector, whereas Lesotho has a very small private sector outside of traditional agriculture. Testing in Swaziland might be highly oriented toward selection for private sector employment and training for such employment; whereas testing in Lesotho might be primarily for the public sector and for an educational system oriented toward individuals who will continue to live in an agricultural environment.

SECTION III

ASSESSMENT OF THE ADEQUACY OF CENTER PRIORITIES AND POTENTIAL FOR IMPROVING RELEVANCE AND IMPACT OF CENTER ACTIVITIES

This section outlines the evaluation team's conclusions regarding RTRTC priorities and directions in which priorities might be changed to improve the relevance and impact of Center operations. Each major conclusion regarding current and potential future priorities is followed by supporting data.

I. The originally developed list of program priorities, which still serves as legal guidance to the Center through the project agreement, is not now adequate and will probably become less so.

Supporting Data: The initial list of priorities as contained in the project agreement consists of four items, given in order of priority:

- a. to develop a system of tests to meet the needs of the four countries designed for pupil selection into secondary schools;
- b. to advise the Ministries of Education in the cooperating countries and universities within the region on the development and effective use of testing programs for their respective educational systems;
- c. to develop and implement a system of testing, to supplement existing public service selection procedures, and
- d. to perform a similar function for the private sector.

The listing is inadequate as an overall statement of Center purposes for at least the following reasons:

- a. In operations over the past $2\frac{1}{2}$ years, the RTRTC has added a priority task roughly equal in importance to (a) which was not originally envisioned, namely to provide data processing services for primary school leaving and secondary examinations for participating countries. As this function has occupied perhaps up to 50 percent of staff time, and is highly valued by the participating countries, it needs to be formally recognized.
- b. None of the participating countries has accorded the priority to the development of secondary school admissions tests which was given to this function in the project agreement, for reasons noted in Conclusion II.
- c. Actual national priorities for testing are not reflected in the general listing. These priorities appear to give greater weight than does the present list to testing outside of the jurisdiction of Ministries of Education and to testing in aspects of the educational system other than secondary admissions.

II. The case for assigning first priority to development of a system of tests for secondary school admissions is currently weak, and probably

was overstated from the beginning. It was initially justified mainly in terms of projected substantial savings in training costs in the participating countries by reducing "wastage" owing to excessive dropouts, and by concentrating training on those best able to profit from it. Savings from either of these do not now appear either likely or substantial.

Supporting Data: While the improvement of secondary school selection procedures continues to be recognized as an important need in participating countries it does not appear that a common system of scientifically developed selection tests can have the amount of impact initially envisioned. The reasons for this include:

- a. National considerations supporting retention of current examination systems are so well-entrenched that the process of changeover to new selection procedures might take some years.
- b. There is some evidence that current examinations relied upon for selection purposes may be better predictors of secondary school success than initially envisioned; they are good enough so the institution of more sophisticated and parsimonious tests do not promise any great improvements in the populations selected for secondary school training, so long as secondary school curricula and criteria for success are themselves unchanged.
- c. Any value of improved testing for secondary school selection may be lost if such test improvement is not accompanied by curriculum reform; upgrading of teachers' facilities and equipment, and improved career counseling.
- d. As national educational policies and other factors tend to govern the "wastage rate" in secondary school to a greater extent than firm academic standards, better selection tests would not result in clear training cost savings based on major immediate reductions in drop-outs.

In further commenting on the above, it should be noted that one of the major problems in implementing this priority item derives from the fact that it was interpreted as calling for a common system of tests for the four countries as a substitute for the currently employed, well-established and nationally-set Primary School Leaving Examinations (PSLEs). It should have been clear that such a proposed change would meet considerable resistance—the British educational tradition lies behind the PSLEs; the PSLEs are accepted as legitimate selection tests (as well as certification of primary school achievement) by officials, teachers,

students and parents; the transition from tests set nationally back to tests formulated outside is not easy; and the "American character" of the tests (due to initial American Center leadership) could have been expected to invite some suspicion. At this point the idea of substituting a center-developed battery for PSLEs (for purposes of selection) has been almost given up. Instead two countries have added specific Center tests to their PSLEs and the two other countries may eventually do the same, though this is far from certain. In the evaluation team's opinion, the Center effort would probably have had more success if the secondary school selection test effort had, from the beginning, been phrased in terms of modifying and expanding the PSLEs—that is, if it had been expressed in terms of improving the existing system rather than substituting for it.

In addition to this issue, the prospective impact of developing secondary school admissions tests has also been cast into doubt by results of the Center's own validity studies conducted on PSLEs in Botswana and Swaziland. In both cases, student PSLE results proved to be quite respectable predictors of secondary school success. Moreover, the Center's success in computer processing of examination scoring and listing of results tends to remove considerations of efficiency from the incentives to seek new and better test instruments and procedures. For the time being, therefore, there does not appear to be a strong need to seek a substitute for these tests.

This is not to say that existing examinations are selecting students with the best academic abilities and other skills to contribute to national development needs. Several interviewees, for example, felt that the correlation between PSLE results and success in the secondary curriculum might be due to a common bias—e.g., both the PSLE and later secondary tests might be measuring English comprehension more than mastery of curriculum content, as the examinations are written and much instruction given in the second-language of English. What this does point out is that criteria for secondary school success and the secondary curriculum itself would likely require change before new ability-oriented admissions tests would result in improved performance relevant to country needs.

Finally, the focus on secondary school selection tests was largely justified within AID in terms of its potential savings in training costs. These savings were to come through reducing drop-outs who did not reach mid- and upper-level secondary certificate attainment standards by screening out those not likely to succeed. As those students who failed to reach standards could be claimed to have "wasted" the teacher, facility and equipment costs devoted to their training, these costs could be said to be saved if better students who could succeed, were brought into the system through improved admission tests.

In fact, however, the secondary school systems would not be nearly so responsive to improvements in the student body. Budgets, for example, restrict the number of students who can go on from junior to senior secondary school and a fairly high forced drop-out rate at that level would continue despite improved student quality. Inadequate faculty,

equipment and facilities also would continue to result in drop-outs at this cut-off point despite higher student abilities, unless concurrent steps (involving increased costs) were taken to correct these problems. Moreover, apart from the critical transition from junior to senior secondary school, current policy appears to be to retain even marginal students and to let the intermediate examination (for the Junior Certificate) dominate selection for further education. Aside from the formal examination cut-offs the drop-out rate in secondary school is thus already low. (In Botswana, headmasters told the team that almost all drop-outs left for non-academic reasons—discipline, economic problems and pregnancies.) In summary, the secondary school systems of the four countries would not likely achieve major direct cost savings as a result of improved selection tests—the value of such tests would rather have to be measured in terms of improved student quality.

III. There is a distinct danger that overemphasis on services for Ministries of Education can isolate the Center from many of the most pressing needs for testing within the participating countries. In some respects modern testing procedures may be more acceptable outside of rather than within the formal educational system and short-term impact may be more easily achieved.

Supporting Data: The evaluation team found that the RTRTC was not well known outside of the Ministries of Education. For example, the Permanent Secretary for Education in Malawi discouraged team interviews outside of the Ministry, with the statement that outside of a few exceptions other agencies and private concerns would be totally unaware of RTRTC activities. In those countries where interviews were conducted outside of the Ministries of Education this appeared to be generally borne out. To illustrate, in Botswana one outside parastatal personnel officer (for the Botswana Meat Commission) had never heard of the RTRTC in its three year existence, despite an active interest in testing and frequent visits to the institution in which the RTRTC was located. Though the Center may have not been able to absorb many outside requirements in its formative years, its focus on Ministry of Education service has resulted in a high degree of isolation from potential outside users. This is only recently beginning to be overcome through issuance of a brochure on the Center and new organizational developments such as the establishment of a new Swaziland office placed outside of the Ministry of Education.

While again recognizing that the RTRTC had to limit its activities in its early years, emphasis on Ministries of Education places the testing center within institutions characteristically cautious in changing policies and procedures. Malawi, for example, is now emphasizing traditional methods in education and acceptance of new testing approaches will take time. All of the countries, as noted previously, have well

established British-derived examinations systems which will be modified only with care, and probably in conjunction with step-by-step curriculum reform. This caution on the part of the educational systems may well be quite justified—the point is only that by their nature the systems are not particularly conducive to sudden changes in testing and major short-term impact.

On the other hand, the public sector outside of education and the private sector may find experimentation in testing and adoption of new tests rather easier. Industrial tests and procedures are not likely to be so strongly rooted in practice, or success so heavily sanctioned as are educational tests in these countries today. In the first place, the consideration of "fairness" which may limit test development activities in the schools is not so much in play in the public and private sectors. It is hardly feasible, for example, to select some students for secondary schools by one procedure and others by an experimental new procedure—both officials and the public demand uniformity as a condition of a fair chance to continue in school, with all that means in terms of social and economic status and expectations. On the other hand, a vocational training institute, a private business, or a public service upgrading program may have far fewer constraints in adopting new procedures on a trial basis or in testing alternative methods.

More important, however, there appears in all four countries to be an active interest in the public and private sectors in adoption of new tests for selection and other purposes. To provide a partial listing:

- a. The Directorate of Personnel in Botswana is interested in the use of ability tests to aid in selecting candidates for civil service positions, and possibly in job-related tests at certain stages in the promotion process.
- b. The Department of Establishments and Training in Swaziland (roughly equivalent to the Botswana Directorate of Personnel) is interested in ability tests for civil service selection and promotion and for aid in choosing in-service trainees.
- c. The Malawi Training Officer/Department of Personnel indicated a potential role for RTRIC testing to assist civil service selection, promotion and upgrading procedures in that country.
- d. The Employer's Federation in Swaziland appears interested in the use of ability, characterological and motivational tests to guide potential employees to appropriate company training programs. One large employer expressed more interest in tests designed to measure initiative and motivation than ability to perform job functions.
- e. The Apprenticeship Board in Malawi is using RTRIC tests to select students for courses in various skilled labor areas, and appears certain to continue such testing.

- f. The Botswana Training Center and the Vocational Training Center (Botswana) are highly interested in the use of tailored ability tests to select candidates for their various technical courses.
- g. The Botswana Meat Commission (employing over 1000 workers) may be interested in the use of RTRTC tests as part of promotion criteria and in selecting managerial candidates for foreign training as localization proceeds.
- h. The Swaziland Industrial Training Institute has used ability testing for selection of candidates and would employ appropriate RTRTC tests.

IV. Among participating countries the need for improved testing at the Junior Certificate (JC) level and the Cambridge General Certificate of Education (Ordinary Level)—the so called "O" Level—appears to be at least as urgent and possibly more urgent than testing for lower secondary school admissions. In particular, there appears to the Evaluation Team to be a great potential for ability testing in support of the critical manpower allocation decisions taken at J.C. and "O" levels to channel youths toward further education, teacher training, technical training, public sector employment and private employment. Improved choices at these points for these purposes, can affect development objectives more quickly and certainly than improved selection for secondary school entry.

Supporting Data: To provide needed comprehensive testing services for the public and private sectors will require selection, and possibly development of specific tests for particular customers. There appears, however, to be an additional need for testing for multiple customers located at strategic points in the manpower development process. To the extent that a common battery of tests can serve several customers, significant cost savings should result.

In all of the countries visited the evaluation team found interest in establishing a system of ability tests which could serve multiple users concerned with manpower development activities. Furthermore, there appeared to be widespread agreement that implementation of such tests within the secondary school system would be a logical approach. Each of the countries relies quite heavily on the output of the secondary system for candidates for technical training, the majority of mid-range public service employees and for skilled private sector employment. The

secondary system is tapped mainly at two points—the Junior Certificate level (completion of two to three years of secondary school depending on the country) and the Cambridge "O" level (completion of four to five years of secondary school). At both these levels decisions must be made as to whether a student will receive further academic training, will be channeled toward teacher training or will be taken out of the academic-educational stream for direct employment or technical training for employment in the public and private sectors. While the countries differ in their relative demands for lower and upper secondary output (a job requiring an "O" level degree in one country may demand only a Junior Certificate in another), there is a common need to improve channeling of secondary school products in all countries. If relevant testing and guidance can be implanted in the secondary system for administration before students depart and are dispersed, a valuable service can be performed for the diverse employers and technical institutes which otherwise must separately screen individuals or rely upon academic examination results.

Development of ability testing in conjunction with guidance within the secondary system would strengthen the link between the educational system and those responsible for manpower planning and allocation. This appears badly needed as the evaluation team frequently heard the comment from establishments and personnel officials, technical school staff and private employers that the current system leads to blind selection of personnel, inefficient operation of training programs and poor performance in positions assigned. Academic examinations have been found to provide poor indicators of many technical skills (e.g., manual dexterity) and headmaster assessments are often too general to be useful. Many interviewees felt, however, that the secondary system could overcome these weaknesses and make a much more constructive contribution to the manpower allocation process.

To provide specific documentation of country interest in the testing role just described the evaluation team can refer to several key interviews. The staff development consultant of the Botswana Directorate of Personnel specifically suggested insertion of ability tests into the secondary system to be given prior to the regular J.C. and "O" level examinations and to be used as additional criteria for determining the allocation of secondary graduates. Representatives of the Botswana Training Center and the Vocational Training Center (Botswana) made very similar suggestions. The Swaziland Industrial Training Institute (SITI) actually conducted its own ability tests in the secondary system until this year, and the head of SITI urged that such testing be continued under the RTFTC (which has taken over SITI's testing capability and should be able to improve the quality of tests used). A representative of the employers' federation in Swaziland also suggested that ability testing in the secondary schools would be valuable. International Board members from Malawi and Lesotho also saw major value in tests of this type and at this level.

The evaluation team feels that a program of professionally sound ability testing at the secondary level could have a substantial beneficial impact on country manpower development efforts, particularly if

career counseling were improved concurrently. Potential impact could occur in the following areas:

- a. Reduction of drop-out rates in technical training courses, due to closer correlation of aptitudes with technical skills required.
- b. Increased efficiency of operation of technical courses, due to increased capabilities to forecast skill levels of entrants, to project length of training required to reach standards and to obtain classes of more uniform talents.
- c. Reduction of in-service retraining and upgrading requirements resulting from poor selection of trainees and employees.
- d. Increased speed of localization programs, resulting from improved capabilities to identify nationals with appropriate talents to assume responsibilities of currently expatriate-held positions.
- e. General improvements in the quality of technical trained manpower and mid-level staff positions through better initial selection of candidates and better tests for in-service promotions.

V. Given the importance of national priorities and resistance to uniform systems of tests for all participating countries, the tasks assigned to the RTRTC in the future are likely to have a "service" orientation. Continued performance of data processing of test results will remain a major factor in retaining country cooperation. Technical test development efforts will be guided by national priorities, though these may well permit the development of common tests.

Supporting Data: In all of the four countries visited, national officials appeared to regard the RTRTC as basically a service organization. As opposed to the West Africa Examinations Council, the RTRTC is not now, and does not in the near future appear likely to become, an organization capable of establishing international test standards to which the participating countries adhere. That is, it appears quite unlikely that the Center will become involved in such activities as setting its own versions of the Cambridge or Junior Certificate examinations for the four countries.

Rather, the Center is seen as an adjunct to national testing programs. In this regard, test processing is regarded as a function of

major importance. The large-scale standard school examinations, primary and secondary, are central to the educational system and timely, accurate processing of their results essential. The Center has provided a welcomed alternative to laborious and time-consuming manual processing and expensive commercial computer processing. Despite the recent introduction of other computer capabilities in at least two of the participating countries the Center's specialized facility will likely continue to be preferred if it can meet a reasonably high standard of performance. Any attempt to withdraw the RTRTC from this activity would meet considerable criticism as well as remove a central reason for cooperation.

In reference to test development activities, there is an inclination among each of the participating countries to regard its requirements as unique in many respects. This assumption must be given due respect by the RTRTC in order to retain country support; the RTRTC could expect to encounter the same difficulties in acceptance of any centrally developed Center test battery that it has in the case of the secondary school admissions tests. In order to survive the RTRTC will need to be responsive to individual country testing requirements. This may entail development of specific test instruments for a particular country's need, selection from existing tests those appropriate to the situation or development of tests which are suitable but may be designed for uses in similar situations in other countries. This latter alternative would lead back to common tests, but the procedure of starting from national requirements would appear essential.

SECTION IV

GENERAL RECOMMENDATIONS FOR CHANGING THE EMPHASIS OF THE CENTER TO BETTER FIT REGIONAL AND NATIONAL CONDITIONS AND PRIORITIES

The following recommendations essentially provide a general plan for modifying the Center's objectives in a direction which should enhance the potential impact of the Center and improve the prospects for regional institutional survival. These recommendations lead to more detailed suggestions for structural change in the RTRIC contained in the following section. Each recommendation given below is followed by a statement of implications and rationale.

I. Despite the problems noted in previous sections, the evaluation team recommends that the participating countries and AID retain the objective of developing a largely self-sufficient regional institution by December, 1975. Another detailed review of the program should probably be conducted at that time.

Implications: This recommendation entails the retention of a Center headquarters, the counterpart training program, an international staff, the International Board, and a regional budget for the Center. Also implied is the continuation of AID support for the next three years, with the evaluation team recommending continuation of the current contract arrangement. Recognizing that further recommendations entail considerable modifications in the program, reevaluation of the effort at a later date is a logical requirement.

Rationale: Although there have been considerable difficulties in establishing the RTRTC as a workable institution, dissatisfaction with the structure and priorities of the Center and obstacles to utilizing Center output, there nevertheless remains considerable interest on the part of the participating countries in retaining some form of regional institution and some Center services have been highly appreciated. The broad commitment of the participants to the Center is illustrated by the continued country funding of rather rapidly increasing RTRTC budgets (which rose in three years from roughly 26,000 Rand country contributions to over 100,000 Rand), the expansion of Center services (e.g., the development of a major data processing effort and the opening of a new office in Swaziland), and the recent success of the International Board in resolving some of the more difficult structural issues (the Sixth Meeting saw agreement on conditions of service and staff salaries and made progress on revitalizing the counterpart training effort). Though it is generally agreed that there has not been optimum utilization of the Center nor maximum development of Center potential, many specific outputs of the Center have been regarded as valuable and useful—the test processing services provided, the conduct of item-writing workshops to upgrade local test development capabilities, improvement of Apprenticeship Board selection tests in Malawi, testing for police and nursing school selection in Botswana, and incorporation of ability tests into the Primary School Learning Examinations in Lesotho and Botswana. While the RTRTC has not by any means been uniformly successful, continued country support and some significant accomplishments appear to the evaluation team to merit following up the already substantial investment in creating the regional institution.

Secondly, the evaluation team's conclusion that there is considerable opportunity for Center impact, particularly if testing is more closely related to manpower development efforts, provides a further rationale for continuance. All of the participating countries appear to perceive an important role for ability testing in relation to technical training and public and private sector employment. The existing regional framework provides a structure on which to build relevant testing programs.

II. To increase the relevance of the program to national needs, each of the participating countries should clearly assume the basic responsibilities for determining national test priorities and for implementing test programs. Mechanisms should be created, as necessary, in the countries to perform these roles, and strong linkages should be established between these mechanisms and the RTRTC offices in each country.

Implications: For the immediate future, the RTRTC will not play a major role in setting international test standards or in developing common tests for use in similar programs in all countries. Most of the Center's activities would be in response to specific national requests. Priorities would be set individually for each country and might differ considerably among the four nations. The physical presence of Center representatives in each country would probably be required. The Center's leadership at headquarters will be faced with problems of coordination and management arising from the necessity to allocate the Center's manpower and other resources between response to individual national needs and common central tasks.

Rationale: This recommendation is derived from preceding conclusions that the environment is not conducive to a highly centralized institution conducting its own testing programs in a fairly uniform manner across participating countries. Flexibility and responsiveness to individual country needs are central to continued institutional viability. Given the distances between countries and the necessity for close contact with local educational and manpower programs utilizing testing, maintenance or establishment of adequately staffed national offices appears essential to achieve responsiveness. While this rebalancing of the Center's structure may create difficulties for its Headquarters, it may also provide a more realistic and stronger basis for the identification and solution of genuinely common problems, perceived and accepted as such by the cooperating countries.

III. The RTRTC headquarters should evolve into an international service organization concentrating on services—such as technical test development assistance, research on common test problems, maintenance of an item bank for tests used in several countries, and computer processing—which can be provided more economically on a joint basis. The International Board would provide guidance to the RTRTC in setting test service priorities, but each participating country should set priorities for national testing programs.

Implications: A service orientation would be a subtle, but highly important, departure from the original RTRTC concept, which envisioned the Center as playing a more dynamic leadership role in area test development (e.g., developing a secondary admissions test system which participants would then adopt). If the above recommendation were implemented, leadership in development of test programs would fall upon the individual countries, leadership in setting service priorities would fall upon the Board, and the RTRTC director would assume technical and administrative responsibilities. The RTRTC would have leverage on the conduct of national test programs in an advisory capacity rather than through any delegation of authority to the RTRTC.

Rationale: Conditions are far from favorable to the development of a highly centralized regional institution, providing services; they are far less favorable to endowing such an institution with independent authority or standard-setting powers. The participants currently regard the RTRTC as playing a technical service role, and to develop, the institution must be responsive to this perception. The de facto power to set international standards, or the function of setting international examinations, will develop later, if it all, as the Center proves its usefulness in service roles.

IV. In the next few years the RTRTC should assist participating countries to develop their own test services appropriate to national needs. National test centers should be situated in each country's public service or educational system as appears most appropriate in each case; they need not be parallel in structure, terms of service and other institutional arrangements.

Implications: This recommendation emphasizes the need to retain flexibility as RTRTC activities would permit national offices to be differently structured and located in order to best serve local needs. Testing priorities would vary from country to country according to manpower development requirements; and testing for secondary school selection need not be the dominant test activity for each national center. Offices would not necessarily be located within the Ministry of Education (in fact the new Swaziland office is not). Relative emphasis on testing in the academic education system, technical training institutes, public and private sectors would likely vary extensively between national offices. The relationships between these national offices and the RTRTC headquarters might also develop differently.

Rationale: The rationale for this recommendation also rests on the view that specific testing requirements differ considerably among the participating countries and the RTRTC can only be responsive if flexibility is built into the organizational structure. In particular, local testing mechanisms must be so situated as to permit close operating relationships with the primary customers for test services in each country.

V. In five years, the RTRTC should be organized to provide efficient test services linked to national testing institutions in the participating countries, and to conduct research and innovation looking toward improved satisfaction of their testing needs. The International Board should set service priorities and insure that its staff maintains high professional standards, but should avoid direct involvement in setting national priorities. By the end of five years, the Board should be a forum for discussion and a clearing house of information about the technical aspects of test service. It should be an increasingly useful means for technical coordination and liaison among participating countries.

Implications: This recommendation summarizes the preceding, setting the major goal for the institution as the creation of a viable technical service organization linked to functioning national mechanisms setting test priorities. The evaluation team does not expect the Center to expand much beyond the service/advisory function within a five year time-frame; the departure of American advisors after three years will undoubtedly require a period of consolidation. The team does not feel that it can predict the potential role of the Center beyond five years.

Rationale: The rationale for this recommendation is based on those preceding.

SECTION V

DETAILED RECOMMENDATIONS FOR IMPROVEMENT OF PROGRAM STRUCTURE

The following is a detailed list of recommendations relating to improvements in the Regional Testing Resource and Training Center structure. Each recommendation is given in a slightly expanded form over that appearing in the summary and is supplemented by paragraphs on the implications and rationale of the recommendation.

I. The purposes of the Regional Testing Resource and Training Center should be revised to specify the following:

- a. Technical advice and assistance to participating countries in the development of tests for educational selection; career guidance and selection (both private and public); measurement of achievement in education, training and employment; and for other purposes related to national development needs.
- b. Assistance to participating countries in the administration of tests and implementation of test services pending the establishment of adequate and national mechanisms to perform these functions.
- c. Provision of data processing services required by testing programs as requested by participating countries, that cannot be provided in a more effective manner by national or third country services.
- d. Provision of formal and on-the-job training in test development and directly related skills to personnel from participating countries.
- e. Provision of a forum for technical communication and coordination on testing matters among participating countries.
- f. Conduct of research related to the above-listed functions.

Implications: This recommendation recognizes explicitly the current scope and content of the RTRTC's functions and provides a framework for future functions, both during the period of AID support and afterwards. It rests on the judgment that central RTRTC functions should place more stress on service-oriented activities than envisioned in the original project agreement. It explicitly embodies the function of providing data processing services for participating country test programs (a major Center activity which is nowhere mentioned in the project agreements) and places the major responsibility for setting national test priorities and administering and implementing tests upon the individual participating countries. The recommendation also broadens the range of Center services beyond that indicated in the original project agreement, which placed a clear emphasis on the development of secondary school admissions tests and on other testing assistance to Ministries of Education.

Rationale: Interviews in all of the participating countries revealed widespread sentiment that country needs for testing are more diverse than have been envisaged and addressed and that some requirements may very well be unique to individual countries. For example, developments in Malawi may very well necessitate an emphasis on essay rather than objective tests in the educational system. Botswana may develop a major unique test requirement in replacing the Junior Certificate Examination now common to Botswana, Lesotho and Swaziland with procedures for that country alone. Swaziland may require development of ability tests for use in private sector employment screening to a greater extent than the other participating countries. It appears, therefore, that in the immediate future participating countries will insist on setting their own test priorities and guidelines regarding the type and content of tests needed, and that construction and administration of tests will also have to be responsive to perceived differences in national conditions. Consequently it appears imperative to recognize that the participating countries will make their own decisions about priorities in the development and application of tests, while the central RIRTC emphasizes technical test development and support activities in response to those national decisions. Test processing services have become one of these functions which is regarded by participating nations as necessary and highly useful for the central RIRTC to perform, and should hence be formally recognized as a Center function and continued as core activity around which the institution can be strengthened.

Broadening of the RIRTC statement of purposes is a logical extension of present and probable Center functions. The original priority of developing secondary school admissions tests is simply no longer recognized as the most important activity of the center—and none of the participating countries appear likely to adopt the full battery of tests which have been developed by the RIRTC. Moreover, it is not at all clear that test development for the Ministry of Education will continue to be more important than testing in support of other national departments and sectors (indeed, the Swaziland office recently established is under the Deputy Prime Minister rather than Education). The recommendation for broadening the scope of the RIRTC statement of purposes is intended to give the Center greater flexibility to respond to testing needs of the participants, wherever these requirements may occur in the structures of the individual countries. Research related to all the foregoing activities—ranging from item analysis to more critical and comprehensive tasks of evaluation of alternative approaches to testing needs—will take advantage of the combined capabilities of the Center's technical personnel to respond to common and varying national needs, and thus contribute to institutional strengthening as well.

II. The RIRTC should continue to be based in Malawi, with the agreement of the Malawi Government; a legal status should be agreed upon

appropriate to this location; and the RIRTC in Malawi should consist of the following facilities:

- a. The headquarters of the Director RIRTC.
- b. A data processing center serving test processing needs of all four participating countries.
- c. A test development center serving needs common to participating countries.

Implications: This recommendation would require that a greater number of RIRTC staff be assigned to Malawi than to any other individual country, that the headquarters facility be in that country and that the RIRTC computer be located in Malawi. Malawi would obviously receive certain advantages from this arrangement, including peripheral uses of staff, facilities and equipment not so readily available to the other countries and general ease of access to regular Center services. One of the most notable advantages to Malawi would be availability of the Center computer, including use of the computer for non-testing processing requirements. The Malawi location would continue certain disadvantages for the other participants, primarily resulting from the relative remoteness of the headquarters. Continued location in Malawi would require the RIRTC to give careful attention to procedures to lessen the problems created by travel distances, communication difficulties, and location outside the Republic of South Africa currency and customs area.

Rationale: The alternative to continued location of the RIRTC headquarters in Malawi would be relocation in one of the southern countries, of which Botswana might be the most likely choice (the Botswana government is proceeding with plans to provide a new physical facility for Center operations in that country). Any move of the Center to the southern area would, however, create the same problems for Malawi that are currently encountered by the southern nations, and Malawi will likely remain the largest single user and supporter of Center services, chiefly because of its considerably larger population. To illustrate, the RIRTC processes more than 30,000 PSLE tests for Malawi per year, or more than the southern three countries combined. Malawi is also a good choice for the performance of test development functions, whereas location in Botswana or elsewhere could raise such problems as difficulties in staffing item-writing workshops, establishing pre-test groups of adequate size, and so forth. A further consideration is use of the computer facility, as Botswana and Swaziland have new facilities in place and Lesotho may have limited demand in the immediate future. In Malawi, however, there should be a considerable demand for use of the computer facility for both test-related and non-related services (the latter might be sold at rates which could buttress RIRTC finances). Finally, a shift in RIRTC location would endanger progress which has been made in institutional development, including work toward obtaining a legal status for the Center, which has been going forward on the assumption of continuing location in Malawi.

III. The International Board and AID should consider or complete the following steps to strengthen the RTRTC office in Malawi:

a. Selection of an additional candidate for Ph.D. training from returned counterparts at the 7th International Board Meeting, in order to insure qualified local candidates for the position of Director RTRTC on or before December 1975; and immediate selection of two Masters candidates to insure completion of that training program.

b. Selection of a candidate for U.S.-training for the position of Assistant Director-Data Processing at the 7th International Board Meeting; training which the evaluation team recommends should be funded by AID in addition to current counterpart training commitments.

c. Review of subordinate professional staffing requirements (research and testing officers, programmers) and upgrading of subordinate local staff as may be required.

Implications: Parts (a) and (b) would enable counterpart training in the United States to be completed within the six-year institutional development period planned by AID and the four participating countries. With no attrition, completion of this training program would leave the RTRTC with a staff of eight professionals with U.S. masters degrees in the educational/ability testing field, two of whom would have Ph.D.s. In the Part (b) recommendation, the evaluation team also calls for the separate training of a counterpart in data processing, which if accepted would give the RTRTC a total U.S.-trained cadre of nine at the end of 1975. As the International Board is now planning for a central RTRTC senior staff of five (a director and four assistant directors—one in data processing), the training target would allow for considerable attrition or, more hopefully, senior staffing for national test centers to supplement central RTRTC activities.

Part (c) recommends a review of subordinate staffing requirements; four research and testing officer positions and two computer programmer positions were called for in mid-1971 Center documents, although requirements may have shifted significantly in the last year. A senior research and testing officer, for example, has been added to the Center staff (currently seconded) as a result of establishing a Swaziland Office. As a temporary measure research and testing officer positions are being partially filled by returned U.S.-trained counterparts, while U.S. staff serves in Director and Assistant Director positions; but it would seem

likely the Board might wish to fill all four or five such positions with non-U.S.-trained staff in planning for AID personnel phase-out. If this were done, a Center staff of 15-16 professionals would result (8 senior U.S.-trained testing specialists, 4-5 locally-trained junior test specialists; 1 senior data processing expert, two subordinate programmers). This manning level will be sufficient to discharge Center tasks remaining after devolution of major testing responsibilities to the participating countries, without the need for additional U.S. training for Center staff, and leave a modest pool of manpower that might also be drawn on to provide cadres for national Center.

Rationale: The original planning for eight counterparts implicitly assumed attrition of some staff members, as only six senior positions were planned (Director, Deputy Director, four Assistant Directors). As the scope of the RTRIC is broadening and moving in the direction of decentralization, it appears essential to train all eight counterparts and attempt to avoid any attrition if at all possible. The alternative of national service may limit loss of trained personnel to testing functions, as participating governments can be quite strict on internal personnel assignments if testing is given priority. The evaluation team feels that with no attrition, the addition of a data processing slot and filling subordinate staff positions with non-U.S.-trained personnel, the immediate requirements of staffing national centers can be met. The Board has decided to eliminate the Deputy Director position, leaving a central senior RTRIC staff of five and thus freeing four U.S.-trained counterparts for national service. The junior positions called for in previous plans, with the possible addition of positions as has occurred in Swaziland, should provide adequate lower staff.

The greatest significance of the recommendation, however, is that existing training openings must be filled in the immediate future if the above projections are to remain valid. The evaluation team feels that, given continued and intensified competition for AID funds, it is unlikely that AID will extend U.S. support beyond the planned institutional development period, especially if a request were the result of participating country delay in filling available counterpart positions. If trained counterparts are not available to fill RTRIC leadership positions by December 1975, a serious crisis could result and the continued existence of the Center threatened. The evaluation team believes, however, that the participating countries can and will take steps to complete counterpart training within the specified time period. The 6th International Board meeting approved one candidate to depart for Ph.D. training in January 1973, committed the Board to select the other Ph.D. candidate at the next Board meeting, and reaffirmed its intent to select the remaining two Masters candidates in the near future.

Separate selection of a counterpart for specialized training in data processing is highly desirable. The six counterparts already selected have, or are being given, advanced education in testing. This includes some exposure to data processing, but insufficient training to take over responsibility for the computer facility in Malawi. The remaining Masters candidates are to be selected from Botswana and Swaziland,

both of which may develop vigorous national testing programs which would require additional expertise in testing. If, however, the RTRTC is to become self-sufficient, a qualified Assistant Director for Data Processing will be required. In the absence of a trained local expert, there will be a continued demand for expatriate assistance. The evaluation team therefore recommends the added funding for such a position. Selection of a Malawi candidate might have some advantages if the computer facility is to remain in that country, but is not essential. If such a training position is funded, a candidate should be selected to enter a U.S. educational program no later than September 1973, with an eighteen to twenty-four month program projected.

IV. That the office of Deputy Director RTRTC, headquartered in Botswana be abolished.

Implications: Elimination of the Deputy Director position would be consistent with a recent decision (5th meeting) of the International Board to discard this position. This action reflects the desire of the participating countries to decentralize and create national testing mechanisms—as the Deputy position was created to provide regional supervision for RTRTC responsibilities in the three southern countries, Botswana, Lesotho and Swaziland. With plans for offices in each country, the Deputy position was deemed superfluous by the Board. The Board did, however, consider appropriate means for discharging the responsibilities of the Director in case of absence or incapacity. Such arrangements, mutually satisfactory to the participating countries, should be perfected at the next Board meeting.

Rationale: The evaluation team initially felt it desirable to maintain this position during the remaining period of U.S. support, as the position is established in the existing project agreement and the team felt modification might create some problems. The proceedings of the 6th Meeting of the International Board convinced the team, however, that there was acceptance among all four participating countries of the need for building up their national capabilities and that modification of the project agreements to reflect this change should be possible without undue difficulty. In the interim period in which national offices are being placed on a sound footing, the senior U.S. professional in the southern area can assume coordination responsibilities without retaining the Deputy Director title.

V. The RTRTC should encourage the development of, and provide organizational and personnel support to, testing offices in participating countries which are oriented toward particular national needs and requirements; such offices should be considered interim RTRTC branches

but might develop into viable national testing institutions affiliated with the RTRTC; the Swaziland office should be considered the first development in this direction.

Implications: This recommendation follows on the suggested revision of project purposes, indicating that the Center should encourage the establishment of national testing offices. If this were done, the overall structure of the RTRTC would consist of the headquarters in Malawi and three national offices; or four, if Malawi comes to feel the need for a national office in addition to the headquarters. This structure is already coming into existence despite project agreement wording calling for the Malawi headquarters and one branch in Botswana. The Botswana branch is becoming a national office for that country. An office has been established in Swaziland with the assignment of a U.S. professional to that location and the secondment of one individual previously engaged in testing in Swaziland, and Lesotho has requested an office.

The evaluation team leaves open the question of the ultimate character of these offices' affiliation with the RTRTC. While they may currently be considered RTRTC branches and the Board has determined that there should be common conditions of service for all personnel, whether assigned to a branch or to Malawi headquarters, this arrangement might well be changed in the future. It may, for example, eventually prove desirable to integrate the national offices into the local public service and to detach staff from international conditions of service. This could have advantages both in terms of budgeting and in reducing attrition of those individuals who feel unable to accept international service conditions. The evaluation team feels that the International Board should remain flexible on this point and periodically review the structure of these offices and their relationships to national agencies.

Rationale: The need for national offices is fairly well elaborated in the section describing recommended changes in project purposes. In brief, there is greater interest among participating countries in testing related to individual country educational and manpower development needs than there is in common systems of tests. National mechanisms appear necessary to fulfill these requirements, as tests must be developed in close conjunction with national efforts in curriculum development, teacher training, manpower planning, etc.

The question of whether such national offices should be branches of the RTRTC or should be more loosely affiliated is a difficult one. While there are distinct advantages to the former (e.g., interchangeability of personnel and opportunities for specialization), budgetary and staff retention problems may be more readily solved under the latter arrangement. The budgetary problem is central as the growth of RTRTC staff, the broadening of its scope of work and shifts of priorities to the needs of agencies outside the Ministries of Education, and the eventual phase-out of U.S. support will result in rapidly increasing

costs. Though foreseen, these are already creating problems in supporting the installation. Moreover, it will be difficult for any government agencies to seek more than nominal percentage increases in their total budgets, given local pressures to keep government budgets from rising while the participating countries seek to free themselves from external budget support. It may well prove the case that such increased costs may be more easily borne if a significant proportion are incorporated within individual national budgets rather than totally allocated through international subventions.

VI. The Board should be permitted to station members of its personnel in offices in all of the participating countries. Under the conditions of service for permanent RTRTC staff members agreed upon by the International Board, the Board should provide for the [eventual] periodic posting or secondment of some counterparts and other staff members trained under the RTRTC program to national testing offices affiliated with the RTRTC; upon such posting, the employee's conditions of service might be those established by the individual country while the Center employee retained status and seniority on the Center rolls; and such posting should not preclude temporary duty secondment of such personnel back to the RTRTC for special assignments.

Implications: This recommendation is essential to implementation of the preceding item. The current project agreement calls for assignment of counterparts only to Malawi and the branch in Botswana and for assignment of a majority of staff to Malawi. This recommendation would permit assignments to any participating country according to work requirements and would also allow for transfer of staff to national conditions of service should the Board decide to move in this direction and the participating countries would be agreeable.

Rationale: The conditions of the project agreement calling for assignments to only two countries are no longer valid or consistent with the policy directives of the International Board. Greater flexibility is needed by the Board to assign and determine conditions of service for personnel.

VII. That the International Board should work toward placing the RTRTC on a more self-supporting basis through:

a. Fees charged for test data processing services, including PSLE, JC and other educational examination processing, as well as other public and private sector test processing.

b. Fees charged to private users for the development, selection and administration of tests. Such fees should at a minimum cover added marginal costs to the Center for such services, and preferably should cover full costs over the long run.

c. Fees charged to national test centers for supporting services, to be provided for in the budgets of these national centers.

Implications: This recommendation is intended to reduce RTRTC reliance on quota subventions. This is an issue recognized by the Board and Center staff, and a movement toward support through fees is strongly supported by the evaluation team. Fees to private users might somewhat reduce governmental costs, particularly if private computer services were placed on a for-profit basis, or at least bore significant overhead charges. More important, however, is the need for a public sector fee system based on services provided to each participating country. The objective of the fee system would be to reduce to the minimum quota subventions based on vague estimates of services.

Rationale: Reliance on subventions has posed extremely serious problems for the Center and the International Board. Because country contributions are not closely tied to specific services rendered, disputes over correct and fair levels of subventions are inevitable. Moreover, lack of concrete data on services and associated costs creates problems for RTRTC supporters in each country in justifying subvention requests to their governments, as there are extremely tight budgetary restrictions in all participating countries. If the Center does not move toward a more explicit cost-service accounting, the institution could very well flounder on the subvention issue.

VIII. In encouraging national centers to assume those test development and administration functions which are of purely national interest and importance, it might be considered whether subvention support to the RTRTC for performing such functions should be withdrawn and integrated into individual country budgets for national test centers.

Implications: This recommendation concerns another approach by which large country subventions to the central RIRTC institution might be reduced. Whether national offices are to be regarded as RIRTC branches or are to become looser affiliates, it would be useful to make the distinction between these office budgets and the headquarters budget as clear as possible.

Rationale: The evaluation team feels that the more closely test functions can be linked to specific national purposes, the fewer problems should be encountered in obtaining country financial support. In addition to setting the Center budget on a fee basis for specific services, the preparation of separate budgets for individual country offices should help achieve this end. Development of national office budgets would also ease the transition to looser affiliation of such offices with the Center, should the Board and the participating countries eventually decide to move in this direction.

IX. The Botswana branch should explore with the Botswana Government the possibility of transforming the current office into a national Center, initially staffed by RIRTC personnel; such a center should be directly linked to the key ministries and Botswana should provide adequate priority-setting mechanisms, as have been created in Swaziland; the Center should have as a major priority the development of test services to support the Botswana Government in its growing manpower allocation requirements, focusing on the allocation of secondary school leavers (Forms III and V) to public sector employment, further education, teacher training, technical and agricultural training and private sector employment; and should be closely linked to the Botswana Directorate of Personnel in order to maximize impact of test services and their interactions with counselling, guidance, placement, training and career management.

Implications: The Botswana branch has in the past served as a subordinate regional center serving the needs of the three southern participants. Current Board planning, however, is in the direction of transforming the Botswana branch into a national office primarily serving the needs of that country. The evaluation team feels that this is an appropriate decision and that there are many testing opportunities in Botswana which are closely linked to manpower development requirements of the country. The recommendation is directed toward strengthening the

Botswana office as a national testing institution through building closer links to appropriate government agencies. A policy-setting committee, such as established in Swaziland, would be a valuable planning and coordination mechanism, and some type of special link with the Botswana Directorate of Personnel would also assist in policy guidance. The recommendation also proposes an increased focus on testing within the secondary school system beyond the stage of secondary school admission, based upon widespread interest encountered in Botswana in testing at this level.

Rationale: The establishment of a national office in Swaziland and probable establishment of a small office in Lesotho in the near future largely eliminate the need for the Botswana branch to serve as a regional center. At the same time, the evaluation team found more widespread interest in national testing projects in Botswana than in any other country. Possible test projects include assistance to the Ministry of Education in developing a substitute for the Junior Certificate examination now common to Botswana, Lesotho and Swaziland, institution of ability testing in conjunction with counseling at the secondary level, preparation of special tests for public service selection, and trades and occupational testing. The Botswana Government is also proceeding with plans to build a new facility for the RTRTC office in that country. Consequently, strengthening the Botswana Center in a direction which is responsive to national needs appears timely and appropriate. It is highly recommended.

One of the main requirements in strengthening the Botswana office should be to improve the linkage of the office to governmental institutions with testing needs. At present the RTRTC is not well known outside of the Ministry of Education, but many of its potential users lie outside that ministry. The Directorate of Personnel and various technical and vocational training Centers appear especially interested in ability testing and steps should be taken to strengthen office connections with these potential users. A national policy-setting committee with broad representation should be useful, but other organizational links should also be considered.

X. The Governments of Malawi and Lesotho should consider the establishment of national centers, utilizing RTRTC resources, to be linked to key ministries as determined by the individual governments and to be guided as required, by national coordinating and planning committees.

Implications: Establishment of offices in Lesotho and Malawi would complete the development of national testing mechanisms in the participating countries (Lesotho will likely establish an office in the near future, Malawi has no plans at present). Creation of a Lesotho office alone would give the RTRTC a permanent presence in all participating countries. Eventual establishment of an office in Malawi in addition to

the headquarters would permit separation of national versus international budgets in all countries and might further ease the funding/subvention problem.

Rationale: The recommendation is based on the conclusion that national offices in each country are required to meet each country's testing needs; that establishment of offices in Lesotho and Malawi would balance the RTRTC structure; that a national office in Malawi (even if colocated with the headquarters) would remove some ambiguities concerning the functions of the headquarters; and that the development might be useful for budgetary reasons.

As previously noted, the evaluation team feels that establishment of these offices is within the capability of the RTRTC with its current manpower. Lesotho's requirements appear fairly limited at this point and that office could initially be staffed with a single U.S.-trained counterpart (one returned and one in-training counterpart are from Lesotho) without a requirement for U.S. professional staff. The Malawi office would probably be established somewhat after that in Lesotho and might initially be only an administrative device for allocating RTRTC time to national versus regional tasks. Once all counterparts are returned and subordinate research and testing officer positions are filled, there should be adequate staffing for the headquarters and four offices. One illustrative staffing pattern:

Headquarters:	Director, 4 Assistant Directors, 2 Research/Testing Officers, 2 Programmers
Malawi:	Counterpart (Office Head), Research/Testing Officer
Botswana:	Counterpart (Office Head), Research/Testing Officer
Swaziland:	Counterpart (Office Head), Research/Testing Officer
Lesotho:	Counterpart (Office Head)

(The four assistant directors all would have specific functional responsibilities—research, test development, training, computer processing—and would be available to provide services to national offices as required. National offices could also be supplemented by seconded local personnel.)

XI. The participating countries and USAID should adhere to the agreed-upon institutional development schedule, calling for a phase-out of broad USAID organizational and professional leadership support to the Center by December 1975; and counterpart training activities should be completed by that date.

Implications: After December 1975, all RTRTC leadership positions—Director, Assistant Directors, national office heads—would be filled by trained nationals of the four participating countries. A senior staff complement of nine U.S.-trained professionals would be available, assuming

no attrition and addition of a data processing counterpart. The RTRTC budget would be dependent on fees and participating country subventions, with no U.S. financial support.

Rationale: Despite past delays, it appears feasible to complete counterpart training within the planned institutional development period. The leadership potential within the counterpart group appears sufficient to support the program without the continued commitment of U.S. expertise, although the relative youth of the counterparts may pose some problems. The size of the current counterpart group appears adequate and there is no strong justification for training of additional counterparts. The RTRTC budget should be within the capacity of participating countries, if the testing program is given reasonable priority, if problems of the ratio of country contributions are solved, and an adequate fee system is in place and the Center is fully used.

In summary, there should be a quite reasonable chance for the independent institutional survival of the RTRTC by December 1975, and major AID support should not be essential after that date.

XII. Further USAID support for the RTRTC or national testing centers beyond the current program, if required, should be in the form of individual technical advisor arrangements which can be justified in terms of specific manpower development requirements in participating countries; and any such support should be provided only when the technical manpower resources generated under the current program can be clearly shown to be insufficient.

Implications: After December 1975, it is conceivable that conditions will arise under which a case can be made for U.S. technical assistance to specific testing activities. Such assistance might be in the form of expert participation in a project, technical evaluation of RTRTC activities, or advice in setting up new projects. Such post-1975 technical assistance might be predominantly short-term in nature and might require quick response. In these conditions, traditional contract arrangements would not be appropriate and AID might consider use of Overseas Personnel Exchange (OPEX) personnel and/or short-term contracts under standing indefinite quantity contract arrangements.

Rationale: Given the junior age and experience of RTRTC staff after phase-out of U.S. personnel in December 1975, needs for qualified outside expertise may arise in the development of testing programs. The evaluation team feels that AID should remain responsive to such requests, provided that the activities concerned are clearly justified in terms of manpower development and related requirements. While the evaluation team

feels that the selection of a single contractor is justified and required during the institutional development period of the RTRTC (concluding that a single contractor is better equipped than individual experts to undertake detailed organization-building tasks), other arrangements should be anticipated in the post-1975 period. To the extent that any AID support is provided, dispatch of individual experts and quick-fix efforts appear most likely and AID will want to go to flexible arrangements which can deliver a timely response.

XIII. The next Project Agreement should be written to express in detail changes in program scope, focus and institutional development strategy.

Implications: A revised project agreement is necessary to bring the internationally agreed guidance for the program to a closer approximation of the current organization, priorities and policies of the RTRTC and the International Board. A carefully revised agreement should eliminate many potential sources of conflict over the conduct of the RTRTC.

Rationale: The existing project agreements are seriously out of date. The initial agreement signed in 1969 is still binding on most items, but does not reflect current conditions and is unduly restrictive on Center operations. To illustrate:

- a. The project agreement calls for offices only in Malawi and Botswana; but the Center has already established an office in Swaziland and will probably create one in Lesotho.
- b. The agreement restricts assignments of counterparts only to Malawi and Botswana, with a majority in Malawi, but greater flexibility is needed in order to provide staff for national offices.
- c. The agreement specifies the development of secondary school admissions test as the Center's first priority, but this is no longer clearly accepted as such by the participating countries.
- d. The agreement specifies a fixed country subvention ratio which is not currently acceptable to all participating countries.
- e. The agreement does not recognize the provision of data processing services as a Center function, despite the current magnitude and importance of that RTRTC function.

Modifications of these and other out of date provisions are badly needed.

APPENDICES

APPENDIX A

ITINERARY

Itinerary

8 September 1972	Depart Washington, D.C.
10 September	Arrive Johannesburg, RSA Preliminary Conference, Drs. Snider and Cook
11 - 15 September	Conferences with AID, AIR personnel, Mbabane
16 - 23 September	Conferences with Embassy AID, AIR, RTRTC personnel, Blantyre Conference with Permanent Secretary, Ministry of Education, Malawi Observation of functioning of RTRTC Headquarters
23 September	Return to Johannesburg
24 - 29 September	Conferences with Embassy, AID, Government of Lesotho personnel and advisors, Maseru
1 - 8 October	Conferences with Embassy, AID, Government of Botswana personnel and advisors, Gaborone Conferences with RTRTC personnel and observation of RTRTC Sub-Office Conferences with governmental, para- statal, and private-sector users and potential users, Gaborone and Lobatse
10 - 14 October	Conferences with AID, AIR, RTRTC personnel, Mbabane Conferences with Government of Swaziland users and potential users Conferences with potential private- sector users Observation of Swaziland Testing Office, visit to Swaziland Industrial Training Institute

Itinerary (continued)

15 - 20 October 1972

Attendance as visitors at 6th Meeting,
RTRIC International Board
Conference with Board members
Conferences with Embassy, AID staff
Conferences with Government of Lesotho
personnel and technical advisors

20 - 22 October

Return to U.S. via Nairobi, Kenya
Conferences with V. J. Cleutat and
party en route and in Nairobi

APPENDIX B

LIST OF INTERVIEWEESU.S. Government Personnel

FARBER, James	Pol Off	Blantyre
FRISBIE, Norman H.	DCM	Maseru
McDONOUGH, Thomas	OSARAC	
	Reg Edn O	Mbabane
NELSON, Charles J.	AEP to BLS	Gaborone
REA, Samuel S.	AID Asst Program O	Gaborone
SMITH, Wesley S.	Regional Food/Agric O	Maseru
SHAFER, Ronald K.	Asst Program Officer	
	AID	Mbabane
STACY, Roy A.	Reg Prog O, AID	Mbabane
WARD, Charles	OSARAC Reg Devpmt O	Mbabane

Project and RIRTC Staff

CLEJENT, Dr. V. J.	Project Officer, AIR	
COLLINS, James H.	Computer Specialist, RIRTC, AIR Party	Blantyre
COLLINS, Mrs. James H. (Chris)	Consultant, Computer Programming, RIRTC, AIR Party	Blantyre
COOK, Dr. Paul F.	Deputy Director, RIRTC AIR Party	Gaborone
SNIDER, Dr. James G.	Chief of AIR Party Director, RIRTC	Blantyre
SNYDER, Dr. C. Wesley	Secretary, Int'l Board Assistant Director, RIRTC Office, AIR Party	Swaziland

Personnel from Participating Countries

AASTRUP, Mr. Ake	Ministry of Works and Communications	Botswana
ANTHONY, Lawrence P.	Permanent Secretary, MOE former RIRTC Bd. Member	Malawi
BARRITT, Mr. R.	Director, Ag Extension	Botswana
BERRIMAN, Mr.	Personnel O, Botswana Meat Commission	Lobatse
BRANDEN-CLARK, Mr.	Personnel Manager, Bamangwato Concessions, Ltd.	
BRANDT, Mr. S.	Chief, Technical and Vocational Training O	Botswana
CAMPBELL, Mr. B.	UNDP/ILO Vocational Trng Project Manager	Botswana

Personnel from Participating Countries (continued)

COLCLOUGH, Mrs.	Dept of Extramural Svcs UBLS	Botswana
COOLEY, Lawrence	Ministry of Planning	Lesotho
CORRIGAN, Fr J.	Headmaster, St. Joseph's College	Botswana
CROWLEY, David	Dep/Dir, Dept of Extra- mural Services, UBLS	Botswana
DARLING, David	Peace Corps Advisor, Ministry of Agriculture	Botswana
GLYNN, Frank	Deputy Headmaster, Secondary School Staff Development Consultant to President and to Director of Personnel	Caborone Botswana
HIRSCHFELD, Mr. S.A.	Commissioner of Police	Botswana
HUNTER, Dr. P.	Professor of Education, and Director of School of Education, UBLS, Roma Campus, former Bd. Mbr. RTRTC	Botswana
HURST, Mr. D. H.	Commandant of Police Training College	Lesotho Botswana
KACHIKUWO, Mr. D.P.W.	Chief Personnel Officer in Office of President M o E	Malawi Malawi
KANYUKA, Mr. J.N.T.	M of E, representing Univ of Malawi, Soche Hill College	Malawi
KAWONGA, Mr. B.H.	Chief Edn O, M of E	Botswana
KGAREBE, A.W.	Teacher, Lobatse Second- ary Sch, Secy Teachers Union, RTRTC Bd Member	
KGOROBA, Mr. G.	Managing Director, Bamangwato Concessions Ltd.	Botswana
KNAPP, Mr.	Chief Nurse, Medical Services	Botswana
KUPE, Mrs. S.S.	Headmaster, Sacred Heart HS, Bd Mbr RTRTC	Lesotho
LAVIGNE, Bro. F.	Personnel Manager, Central Transport Org.	Botswana
LORD, Mr.D.	Director of Mgmt Svcs, Off of Prime Minister	Swaziland
MACKINSON, Ian	Headmaster, Molefi Secondary School	Botswana
MAINE, Mr.	Senior Testing Officer Swaziland Testing Off, RTRTC Office	Swaziland
MBAU, G. Grey	Vice President, Usutu Pulp Company	
McKENZIE, Mr.		

Personnel from Participating Countries (continued)

MILLAR, Mr.	Principal, Swaziland Indus. Trng Institute	Swaziland
MKANDAWIRE, Danton S.J.	Assistant Director, RTRTC	Malawi
MOETSI, Joel	Permanent Secretary, M of E	Lesotho
MOHAPE, Mr. E. S.	Chief Inspector of Schools and Head of Research, M o E, RTRTC Board Member	Lesotho
MOHAPELOA, Mr. J. M.	Professor of Educa- tion, Roma Campus, UBLS	Lesotho
MOLEFE, Mr. J. J.	Perm Sec, M of E	Botswana
MOTHA, Mr.	Labor Commissioner, new RTRTC Bd Member	Swaziland
MPEDI, L. M.	Exam O, M o E, Adm. of Primary School Leaving Exams	Botswana
NAYLOR, Mr. A.	Asst Personnel Off, Central Transport Org,	Botswana
NKONYANE, Mr. Tennyson M.	Manpower Planner, Economic Planning Off, RTRTC Board Member	Swaziland
PEPPER, Roy	Planning Officer Ministry of Finance and Development Planning	Botswana
SEBATANE, Mr. Eliachim M.	RTRTC Board Member RTRTC Staff	Botswana
SEBINA, Dr. B. C.	MA Counterpart Trainer Director of Medical Services	Lesotho
SEHERI, Mr.	Asst Principal Edn O M o E	Botswana
SEJANAMANE, Mr.	Sr. Agric. Economist Ministry of Agriculture	Lesotho
SETIDISHO, Dr. N. O. H.	Sr Education Officer M o E	Lesotho
SHAW, Mr. C.	RTRTC Board Member Principal, Botswana Training Center	Botswana
SITHEBE, Mr. L.	Director, Professional Services, Ministry of Education, RTRTC Bd Mbr	Botswana
SMITH, Mr.	Principal, Moeding Col	Swaziland
STEVENS, Mr. M. L. O.	Sr Planning Officer, Min of Finance & Devop- ment Planning	Botswana
STIRN, Mr. Dale	Peace Corps Volunteer Testing/Research Officer RTRTC Center	Botswana

Personnel from Participating Countries (continued)

ULIN, Professor D.	Exchange Professor, Dept of Ed, UBLS Botswana Campus	Botswana
WILSON, John	Training and Localiza- tion Officer, Ministry of Training	Lesotho
WOOD, Bernard	Farmer Training Adv	Lesotho