

PA ABC-058

69096

INTERIM EVALUATION

**HUMAN SETTLEMENTS AND
NATURAL RESOURCE SYSTEMS ANALYSIS**

(SARSA)

PROJECT 931-1135

COOPERATIVE AGREEMENT

WITH

CLARK UNIVERSITY

AND

THE INSTITUTE FOR DEVELOPMENT ANTHROPOLOGY

December 1987

EXECUTIVE SUMMARY

This report is the result of an interim evaluation of the Bureau for Science and Technology's (S&T's) Human Settlements and Natural Resource Systems Analysis (SARSA) project. The project is implemented through a Cooperative Agreement between A.I.D. and co-Cooperators Clark University and the Institute for Development Anthropology.

The evaluation focuses on four broad questions:

1. Quality of Research. What was the overall quality of research performed under SARSA?
2. Usefulness of Research. What has been learned from SARSA research that is useful to A.I.D. policy, programming, and project operations which may also be useful to the larger development community?
3. Improving Resources Available to A.I.D. Have the cooperating institutions enlarged and strengthened the base of expertise available to A.I.D. in SARSA's theme areas?
4. Strengthening Host-Country Capabilities. Has the project involved host-country professionals in the research so as to enhance knowledge and skills in the theme areas within the LDCs where SARSA has worked?

The evaluation pursued these lines of inquiry through five basic activities: field visits to Missions where SARSA has provided Mission support services; queries by cable to Missions where SARSA has worked; a review of the body of literature produced by SARSA; interviews with relevant persons in AID/W and site visits to SARSA operations at Clark University and the Institute for Development Anthropology.

The evaluation was carried out by a team consisting of evaluation personnel provided under contract with an IQC firm, an anthropologist working at S&T/RD under a fellowship from the American Association for the Advancement of Science and the current S&T/RD/RRD SARSA Project Manager, a geographer who took over as project manager in June of this year.

Overall, SARSA performance is rated very good. SARSA research and researchers have been of high quality and have produced information of high utility to the development community and to USAID Missions. The research resources available to A.I.D. and the donor community in the fields of settlement systems, rural/urban linkages, and natural resource management have been strengthened.

The project has also increased the pool of knowledgeable researchers both in this country and in the host countries whose skills and policy evaluation and formulation abilities in SARSA's theme areas have been greatly expanded. This is a consequence of SARSA activities and the particular manner in which they have been carried out under the Cooperative Agreement.

Balanced against the achievements of the project there are two deficiencies that have become apparent in the course of the evaluation. First, the intended integration of geographic and anthropological perspectives has not materialized to the degree anticipated. Second, SARSA field research activities are at times somewhat uncoordinated and at times unrelated as a consequence of a less than fully formulated and integrated long term research strategy. The problem of integration has risen to a great extent as a result of the project trying to be as responsive as possible to Mission requests.

Participants in the evaluation are unanimous in their belief that Clark University and IDA share the aspirations of A.I.D. for SARSA. They have concluded, therefore, that a strategy can be developed that will lead to fuller collaboration between the co-Cooperators, and greater integration of geographical and anthropological perspectives in the coming years.

Recommendations

The recommendations below will go a long way toward overcoming deficiencies in the quality and usefulness of SARSA research.

1. Quality of Research

a) In its research endeavors, SARSA should employ only professionals from the staffs of Clark University or IDA and their professional networks to insure the highest possible quality of research. Exceptions to this rule should be made only when the necessary expertise cannot be accessed from either institution, and only with the expressed approval of the SARSA Project Officer.

b) Scopes of work for Mission support activities should be fully detailed in writing, and cleared in writing by the requesting Mission, SARSA, S&T/RD, and, where appropriate, host-country officials. Any changes in scopes of work of field support activities and of field staff personnel should be spelled out in writing and cleared by all parties concerned, including S&T/RD.

c) New field support assignments should not be accepted by SARSA until synthesis reports in its three theme areas and a synthesis report on the integration of its three theme areas have been completed at least in initial draft. In association with preparation of these reports, SARSA, in collaboration with

A.I.D., should articulate a coherent research program consistent with the intentions of the Cooperative Agreement, and additional field assignments should be justified in writing on the basis of their consistency with and contributions to this research agenda. Exceptions to this rule may be made for extensions or expansions of current field support activities or for small-scale undertakings approved by A.I.D.'s SARSA Project Manager and judged by him to be not disruptive to the important task of synthesis and consolidation.

d) Clark University and IDA should propose a plan to ensure the collaboration between them originally envisioned for the Cooperative Agreement, for approval by S&T/RD.

2. Usefulness of Research

a) Annually, SARSA should produce a review of accomplishments related to the previous year's plans, as well as a proposed work plan, research agenda, collaboration program, and plan of dissemination and institutional strengthening activities for the coming year.

b) Special assignments in response to requests from regional Bureaus or higher levels of A.I.D. should be approved only upon concurrence in writing with written statements by senior SARSA personnel directed to the steering committee explaining how those assignments can be carried out without detriment to the approved work plan, research program, collaboration program, and dissemination and institutional strengthening plan.

c) In its synthesis reports and in its annual research agendas and dissemination plans, special emphasis should be given to support for A.I.D. policy and programming, and to the relationship of its plans to A.I.D. concerns for income generation, particularly rural income generation, and sustainability of income generation dynamics.

d) For the remainder of the current Cooperative Agreement, Steering Committee meetings should be held at least bimonthly. These meetings should include a consistent group of representatives with decision-making authority from both Clark University and IDA. When necessary, SARSA should schedule meetings of core researchers to make presentations and exchange information on current research activities for the specific purpose of ensuring integration of geographical and anthropological perspectives and of settlement, rural/urban linkage, and natural resource management concerns.

e) A.I.D. SARSA management should take an active and substantive involvement in SARSA work and an active role in monitoring SARSA field support activities. SARSA should conform to the cooperative agreement requirements that require the submission of semi-annual reports to S&T/RD summarizing the status of all current activities.

f) The synthesis efforts now under way should encompass a program of dissemination to peer groups and A.I.D.

3. Improving the Resources Available to A.I.D.

a) To the extent feasible, SARSA should take steps to involve SARSA associates from close networks of professionals and institutions in preparation of the synthesis reports on SARSA's three themes and their integration.

b) Clark University and IDA should jointly prepare a paper spelling out a strategy for sustaining the research resource base that has been created, and in particular for utilizing time and resources remaining to best advantage in this regard.

4. Strengthening Host-Country Capabilities

a) SARSA should send all relevant publications in its publication series to USAID and host-country professionals with whom it has worked in the course of Mission support activities.

b) As a means of strengthening host-country capabilities, S&T/RD should consider giving preferential treatment to requests for SARSA Mission support services from Missions interested in incorporating an effort to strengthen host-country capabilities explicitly into SARSA field work. Sincerity in this regard can be judged by Mission willingness to participate in the process of identifying and selecting among host-country candidates to participate in SARSA field research work.

PROJECT IDENTIFICATION DATA

1. Country: Worldwide
2. Project Title: Human Settlements and Resource Systems Analysis (SARSA)
3. Project Number: 931-1135
4. Project Dates:
 - a. First Project Agreement: July 1, 1984
 - b. Final Obligation Date: FY 89
 - c. Most Recent Project Assistance Completion Date (PACD): Nov. 30, 1990
5. Project Funding to Date:

a. A.I.D. Core Funds	\$2,702,421
b. Mission Buy-ins/OYB Tranfers	<u>3,552,251</u>
Total	\$6,254,672
6. Mode of Implementation: Cooperative Agreement with Clark University and the Institute for Development Anthropology (IDA)
7. Project Designers: AID/W/S&T/RD/RRD

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION AND SUMMARY	1
A. Origin and Evolution of SARSA	1
B. Structure, Purpose, and Activities of SARSA	1
C. Evaluation Approach and Organization of the Report	3
D. Overall Conclusions	5
II. EVALUATION ACTIVITIES AND BASIC FINDINGS	7
A. Field Visits	7
B. Queries of USAID Missions	7
C. Literature Review	8
D. Institutional Review Visits	8
1) Quality of Research	9
a) Mission Responses	9
b) Field Visits	10
c) Literature Review	11
2) Usefulness of Research	14
a) Mission Responses	14
b) Field Visits	17
c) Literature Review	17
3) Improving Resources Available to A.I.D.	20
4) Strengthening Host-Country Capabilities	25
a) Mission Responses	25
b) Field Visits	26
III. CONCLUSIONS AND RECOMMENDATIONS	28
A. Conclusions	28
1) Quality of Research	28
2) Usefulness of Research	29
3) Improving Resources Available to A.I.D.	30
4) Strengthening Host-Country Capabilities	31
B. Recommendations	31
1) Quality of Research	31
2) Usefulness of Research	32
3) Improving Resources Available to A.I.D.	33
4) Strengthening Host-Country Capabilities	33
IV. LOOKING AHEAD	34

APPENDICES

- A. SARSA Field Projects
- B. SARSA Bibliography
- C. Project Logical Framework
- D. Documents Reviewed by Outside Experts

I. INTRODUCTION

A. Origin and Evolution of SARSA

SARSA evolved from the Area Development Project, originally implemented through a Cooperative Agreement with the University of Wisconsin in 1978. That project, designed to explore and develop issues of rural regional development, ran into a number of difficulties, and an interim evaluation concluded that the Cooperative Agreement should be terminated. A.I.D., however, determined that the subject matter with which the project dealt remained important to Agency objectives and field operations, and therefore sought a replacement for the University of Wisconsin as Cooperator for the project.

In 1981 Clark University, known for its strengths in natural resources management, spatial analysis and geography; and the Institute for Development Anthropology (IDA), with recognized strengths in anthropology and natural resources management; signed a Cooperative Agreement with A.I.D. to continue the work initiated by the University of Wisconsin under the Area Development Project.

In light of the performance of Clark University and IDA during the final years of the Area Development Project, A.I.D. determined that a new Cooperative Agreement should be signed with these two institutions when the Area Development Project was concluded, under a new and reformulated project. The new project, known as "Human Settlements and Natural Resource Systems Analysis (SARSA)," was launched in 1984. The SARSA project is implemented through a Cooperative Agreement between Clark University and A.I.D. However, the formal Cooperative Agreement is augmented with a Letter of Understanding between Clark and IDA under which the two institutions act effectively as co-Cooperators with A.I.D. This evaluation concerns itself primarily only with performance under the Cooperative Agreement signed in 1984.

B. Structure, Purpose, and Activities of SARSA

The SARSA Cooperative Agreement was designed and is managed by the Division of Regional and Resources Development of the Office of Rural and Institutional Development of the Bureau for Science and Technology. Funding for the Cooperative Agreement consists of "core" funds and "buy ins". "Core" funds are provided for basic institutional support, basic research activity, workshops, conferences, publication, networking and related administrative costs. "Buy-ins" from USAID Missions are provided for field support activities related to SARSA's research program.

The SARSA goal is to increase the local capacity for effective management and preservation of the productive rural resource base; to increase agricultural productivity and rural income and

to provide regional employment opportunities. The purpose is to increase AID's ability to incorporate spatial and locational analysis and resource management perspectives into the design, implementation and evaluation activities of region based development projects. The Cooperative Agreement focused the work into three broad subject areas all related to regional development. These are human settlement systems (including both settlement and resettlement), the extent and the dynamics of rural/urban linkages, and the sustainability of natural resource systems.

SARSA's role is to provide increased understanding of the role of settlements, the relationship between rural farms and towns and of natural resource systems to the development of regions in developing countries. The increased understanding should be based on empirical evidence from the specific areas in which the project is working. The evidence should be synthesized into development concepts and theories. It should also lead to improved field research methods, to evidence for the formulation of policy and to better project design and implementation.

SARSA was to undertake research, provide responsive and high-quality support to USAID Missions, and disseminate results to fulfill the purposes of the Cooperative Agreement. In the course of so doing, the Cooperators were to strengthen their own capabilities and generate a larger body of expertise so as to create for A.I.D. improved and expanded support resources in the three theme areas. Moreover, through their field activities, the Cooperators were to strengthen host-country capabilities in the theme areas wherever this was feasible.

The settlement theme of SARSA was intended to address issues related to analysis, planning, and implementation of land settlement and resettlement schemes. The rural/urban linkages theme was intended to address the roles of small and medium size towns in rural development and to examine in particular their relationships to agricultural growth and how this affected the expansion of employment and enterprise development opportunities within the context of decentralized regional growth. The resource management theme of SARSA was to explore issues related to the sustained use of natural resource systems, and in particular, the implications for sustainable development and interaction between the resources and the resource user group.

Since the three theme areas are closely related to the issue of regional development, the Cooperators were authorized to address issues and to provide Mission support, when appropriate, under the general theme of rural regional development. For the same reason, the Cooperators were expected to advance the state of knowledge regarding how critical elements under each of the three themes relate to each other and can be taken into account in an integrated manner in the course of preparing development interventions in rural regions of LDCs. They were also to link the research themes into an integrated synthesis of the state of knowledge in regional development.

SARSA was designed to integrate not only the rural regional development issues through examining the interrelationships among settlement systems, rural/urban linkages, and natural resource systems, but also to integrate the combined perspectives of anthropology and geography, Clark University and IDA. The idea behind bringing together Clark University and IDA was to integrate a continuum of expertise ranging from region-wide and spatial concerns, on the one hand, to concerns with the operations of individual households, on the other.

The integration would create for A.I.D. a capability of enhancing the understanding of the aggregate expressions of economic activity over the space of a rural area and, at the same time, to understand better the operations, decision-making, and income strategies of the individual households that are the basic decision makers in determining the regional economy. The knowledge gained was considered important to improved rural regional development policy and programming.

The SARSA combined expertise has been used to address a number of Agency concerns. One of the most significant was to promote work on "common themes" to be identified and funded by the Regional Bureaus. To cite one example, the Africa Bureau used SARSA to provide research on some activities that were common to a number of countries. The "Common Theme" research covered studies in contract farming and in river basin development. The work on contract farming was directly related to the rural/urban linkages component, and the river basin development was a regional natural resource systems problem.

C. Evaluation Approach and Organization of the Report

The evaluation focuses on four broad questions:

1. Quality of Research. What was the overall quality of research performed under SARSA? Did it contribute to knowledge in the field of development in general, in specific disciplines or theme areas, or with respect to particular applications?
2. Usefulness of Research. What has been learned from SARSA research that is useful to A.I.D. policy, programming, and project operations which may also be useful to the larger development community? Is the research presented and disseminated adequately and in a useful way?
3. Improving Resources Available to A.I.D. Have the cooperating institutions enlarged and strengthened the base of expertise available to A.I.D. in SARSA's theme areas?

4. Strengthening Host-Country Capabilities. Has the project involved host-country professionals in the research so as to enhance knowledge and skills in the theme areas within the LDCs where SARSA has worked?

The evaluation pursued these lines of inquiry through five basic activities: field visits to Missions where SARSA has provided Mission support services; queries by cable to Missions where SARSA has worked; a review of the body of literature produced by SARSA; interviews with relevant persons in AID/W and site visits to SARSA operations at Clark University and the Institute for Development Anthropology.

These evaluation activities were carried out by a team consisting of evaluation personnel provided under contract with an IQC firm, an anthropologist working at S&T/RD under a fellowship from the American Association for the Advancement of Science and the current S&T/RD/RRD SARSA Project Manager, a geographer who took over as project manager in June of this year.

The evaluation personnel also reviewed SARSA file documents, including field reports and Mission communications relating to the SARSA field support services and reports submitted by Clark University and IDA on the institutional changes under the Cooperative agreement.

An enormous volume of material was accumulated, developed, and analyzed in the course of evaluation work, which extended over approximately a three-month period. This report represents a synthesis of this material, which remains on file and available for inspection at S&T/RD.

Three chapters follow: Chapter II, "Basic Findings," provides findings with respect to the four major lines of inquiry derived from the five basic evaluation activities. Chapter III, "Conclusions and Recommendations," presents recommendations of the evaluation team for strengthening the SARSA Cooperative Agreement in light of the evaluation findings. Chapter IV, "Looking Ahead," discusses implications of evaluation findings for the themes, organization, and procedures of a possible successor project. The report has four appendices. Appendix A contains a list of SARSA field projects. Appendix B is a bibliography of SARSA publications. Appendix C is the logical framework of the SARSA project and Appendix D contains a list of the SARSA documents reviewed by outside experts.

D. Overall Conclusions

Overall, SARSA performance is rated very good. SARSA research and researchers have been of high quality and have produced information of high utility to the development community and to USAID Missions. The research resources available to A.I.D. and the donor community in the fields of settlement systems, rural/urban linkages, and natural resource management have been strengthened.

The project has also increased the pool of knowledgeable researchers both in this country and in the host countries whose skills and policy evaluation and formulation abilities in SARSA's theme areas have been greatly expanded. This is a consequence of SARSA activities and the particular manner in which they have been carried out under the Cooperative Agreement.

In addition to the improvement in the body of research and the researchers available to A.I.D., SARSA has had a number of outstanding successes. For example, the research on African river basin development has, for the first time, focused on the infrastructure providing the control of the water resource rather than the physical structures such as dams and barrages. The Panama research helped untangle and rationalize a complex project and made it possible to manage.

Balanced against the achievements of the project there are two deficiencies that have become apparent in the course of the evaluation. First, the intended integration of geographic and anthropological perspectives has not materialized to the degree anticipated. Second, SARSA field research activities have been at times somewhat uncoordinated, and at times unrelated as a consequence of a less than fully formulated and integrated long term research strategy. The problem of integration has risen to a great extent as a result of the project's trying to be as responsive as possible to Mission requests.

Overall, participants in the evaluation are unanimous in their belief that Clark University and IDA share the aspirations of A.I.D. for SARSA. They have concluded, therefore, that a strategy can be developed that will overcome the obstacles to fuller collaboration and integration, lead to achievement of the purposes of SARSA by the end of the current Cooperative Agreement and address future needs in the areas covered by the present SARSA project.

The basic elements of such a strategy are presented in Chapters III and IV. In short, they entail more frequent meetings and joint supervision of research activity among staff at Clark University and IDA, greater selectivity in field support work, and a greater emphasis on research within the framework of a carefully formulated agenda.

The strategy also sets out a focus for the remainder of the current Cooperative Agreement. This new focus has already been initiated and consists of the evaluation, synthesis and presentation of insights from SARSA's many research endeavors in a format that sets out the findings and their implications for knowledge in each of the three theme areas. Finally, the results of all the research will be drawn together in a synthesis of the relationships among the three themes.

SARSA has been and continues to be a valuable project and resource for A.I.D. It is particularly well suited to addressing Agency concerns with raising incomes, especially rural incomes, in a way that can be sustained through improved macropolicy, economic dynamics at the local level, and an enduring natural resource base.

II. EVALUATION ACTIVITIES AND BASIC FINDINGS

In this chapter we present the findings of the five components of the evaluation: the field visits, the statements of the missions, the literature review by the two outside experts, the visits by the Project Officer to IDA and Clark and the document review and interviews with A.I.D. Officers. We have focused on four questions which we believe encompass the critical evaluation criteria: 1. What is the quality of the research? 2. Is the research useful? 3. Has the research improved the resources available to A.I.D.? 4. Has the research strengthened host-country capabilities?

A. Field Visits

Field evaluations were chosen based on the depth of SARSA's involvement in a particular country in respect to time and resources. Ultimately, Mission expressions of concern on the timing of the evaluation resulted in the final choices of Jordan, Tunisia, and Kenya. An average of two weeks were spent by the field evaluator in each country. In Kenya, two SARSA projects were reviewed, one recently completed and one currently under way.

These three countries and four projects represented a mix of long-term efforts and short-term efforts; direct Mission support and regional Bureau funded research; efforts conducted through host-country institutions and those conducted independent of host-country institutions, projects in which Clark University had the lead role and responsibility and those in which IDA had the lead role and responsibility, research conducted under different themes of SARSA, research conducted predominantly by SARSA personnel and research conducted predominantly by host-country personnel.

B. Queries of USAID Missions

Cables were sent to 25 Missions where SARSA field teams provided field support activities. The cables requested information regarding the problem that SARSA expertise was called upon to help address; appropriateness, quality, and timeliness of SARSA support; reporting and dissemination of the results of SARSA research; use and usefulness of the SARSA output; participation of host-country researchers in the work; overall satisfaction of Mission staff with SARSA performance; and related matters.

Usable responses in cable form were received from 10 Missions. In addition, several Missions responded through discussions with evaluation personnel in person or by phone rather than by cable. Usable responses represented all A.I.D. geographic regions and represented as well a fairly even split between field projects in which Clark University had lead responsibility and those in which IDA had lead responsibility.

As might be expected, Missions providing the most useful responses were those where SARSA recently completed its work. In cases where research is presently under way, Missions were able to provide only sketchy and tentative observations; and in cases where SARSA support was provided some time ago, personnel turnover and the passage of time took their toll on the utility of Mission responses.

C. Literature Review

SARSA has formally published over 100 reports and monographs in addition to the reports and working papers associated with its field research activities. In addition, SARSA researchers have published five books through commercial publications based on the results of both field and literature research conducted under the Cooperative Agreement. IDA periodically publishes a journal reporting on its research activities and findings, and a steady stream of professional journal articles based on SARSA research is published by individual SARSA associates.

Of this large volume of published material, members of the SARSA evaluation team were able to intensively review 26 individually published SARSA monographs and books. These were selected to represent major publications in the four themes of SARSA (a list of publications reviewed is presented in Appendix D). One of the books, Lands At Risk in the Third World: Local-Level Perspectives, published by IDA alone, contains 18 separate monographs based on case studies, highlighting social, economic, political, and biological dimensions of environmental degradation in the Third World. Another SARSA commercially published book, Patterns of Change in Developing Rural Regions, was produced by Clark University, in cooperation with the Settlement Study Centre. It contains 12 articles on changes in rural/urban linkages, rural regional services, rural industrialization, and organizational factors as rural regions move from early to advanced stages of development.

The evaluation review produced some 130 pages of literature evaluation.

D. Institution Review Visits

As part of the SARSA evaluation, the current A.I.D. SARSA project manager paid two day visits to Clark University and IDA. During these visits he met with those directly involved in SARSA work at each institution as well as with those functioning in administrative and support capacities to the SARSA Cooperative Agreement. He also examined the physical facilities, such as office facilities and libraries, allocated to or developed in connection with SARSA work.

The purpose of the institution review visits was primarily to gather information on the capabilities of the SARSA institutions to serve as resources to A.I.D. in its work, and on specifically how, and the extent to which, the SARSA Cooperative Agreement

has strengthened their capabilities to respond to the needs of the Agency. The visits were supplemented by reports by both Clark and IDA covering the institutional changes under the Cooperative Agreement.

In these next four sections we address the four questions of the evaluation using the evidence from the Mission responses, the field investigations, the literature reviews and the visits to IDA and Clark.

1. Quality of Research

The first question addressed by the evaluation is the quality of the research. For this question we turn first to the opinions of the field Missions.

a) Mission Responses - From the perspectives of USAID Missions, SARSA seems generally to have fielded competent professionals who conceptualized and carried out research that generated valuable knowledge in SARSA theme areas.

SOMALIA (regional rural/urban dynamics study): "SARSA researchers are very competent and knowledgeable."

MALI (resettlement monitoring): "SARSA researchers were appropriate and capable."

TUNISIA (resources management analysis for regional development): "SARSA research is rated good to excellent."

PANAMA (impact assessment of urban/regional development project): "SARSA researchers were talented professionals, and their work was well done."

From the perspective of Missions, which generally request research support to obtain solutions to specific problems or answers to specific questions, it is difficult to separate quality of research from usefulness of research. Accordingly, the few exceptions to the generally favorable evaluations of the quality of SARSA research tended to take the form of criticisms that the work was too academic or insufficiently targeted to mission needs.

For example: ZAIRE (plan for sub-regional rural/urban dynamics analysis): "The academic background of SARSA researchers has resulted in a lack of pragmatism . . . This is particularly true where Mission needs do not perfectly correspond to researcher interests. . . . Nonetheless, the Mission feels that the SARSA approach has much to offer, and is still interested in trying to incorporate it into project activities."

PAKISTAN (design work for an area development project): "The conceptualization was overly academic and too far removed from

implementation-oriented issues." (This work was completed prior to the new Cooperative Agreement).

The responses suggest that while SARSA research and researchers were of high quality, additional care may be needed to ensure total convergence of Mission research interests with those of SARSA and of the particular researchers utilized in specific field support assignments.

b) Field Visits - The field visits provided a different perspective in assessing the quality of the research. Some background to the activity is important to understanding the judgments made about research quality. We have therefore included some historical information on each specific country activity.

The work in Jordan, part of the rural/urban linkages theme, was not completely successful. Some of the responsibility for the lack of success must be borne by the SARSA team, but some must be borne by the Mission for failure to supervise the relationship of the team with the Jordanian Ministry of Planning. The SARSA workplan was to provide sample surveys for limited regional areas. After the SARSA team was on site, the Ministry of Planning requested that the scope of work be changed so that SARSA experts could assist the Ministry in conducting a national survey of economic activity in all the towns and villages of the Kingdom of Jordan.

The Ministry wanted survey data that could serve as a basis for the 1986-90 development plan for all the regions of Jordan. The shift from a regional to a national plan and from applied research to a massive data gathering effort was the source of a number of problems, and represented a research project of a nature that the SARSA team was not fully equipped to undertake. As a consequence, some of the data collected in certain subject areas was of poor quality.

Deficiencies in the quality of some of the data collected under the SARSA effort in Jordan are accounted for, in part, by the short time period allowed for organizing the National Data Survey. Only one year was available during which data were to be collected, verified, entered, and analyzed using an untrained Jordanian staff. In addition, field survey enumerators were furnished to the SARSA team. Some of these had inappropriate backgrounds and attitudes for the research effort; but SARSA was not permitted to find substitutes for them. As a result of the time constraint and the use of untrained and often unsuitable staff, there is an estimated 20 percent error rate in the data.

In Tunisia a similar shift in research agendas took place after initiation of the field project. IDA experts arrived on the scene with scopes of work mandating them to conduct research under the themes of the SARSA CA in addition to acting as advisors. They found that CTDA disagreed with the terms of reference that had been worked out between themselves and IDA.

CTDA stated that research had not been part of the agreement, and rather expected that the SARSA experts were being placed within CTDA to serve as advisors and trainers in project development and evaluation. As a consequence, SARSA's fieldwork under these longterm advisor positions was conducted specifically in the context of supporting CTDA project evaluations, and while of excellent quality, began to diverge from the activities undertaken under the Cooperative Agreement.

In Kenya, the work was part of the river basin common theme research. USAID/Nairobi rated SARSA's efforts to investigate the Tana River Basin irrigation schemes to be of high quality. The client for this work was Africa Bureau, not USAID/Nairobi, and because of its marginal contact with the research work, the Mission's evaluation of the quality of the work was based more on their interest in and concurrence with the findings presented to them by the SARSA team than on first-hand familiarity with and careful review of the work.

One of the individuals from Africa Bureau primarily responsible for negotiating and developing the scope of work for the river basin study with SARSA has subsequently been transferred to the REDSO office in Nairobi, and was interviewed during the field visit. This individual has maintained close contact with the work, was particularly familiar with the Tana River Basin component of the larger study, and judged SARSA's work in Kenya as well as in other African countries under the larger river basin development project to be of extremely high quality. A number of interim reports and presentations have been provided by SARSA both to USAID/Nairobi and to Africa Bureau. These have apparently been very well received and confirm the consensus regarding the high quality of SARSA work under this project.

Because the rural/urban linkage study in Kenya is only now embarking on field work, no assessment of the quality of research was possible. However, on the basis of conceptual development of the project in collaboration with A.I.D. and GOK entities over a period of two years, and on the basis of a review of survey plans and instruments developed, A.I.D. and GOK entities have, with enthusiasm, reported the quality of work performed so far to be quite high.

On the basis of the field visits the quality of field research by SARSA teams must be considered as favorable, the one exception being some research components in Jordan. These had not been in SARSA's original scope and blame must be shared by both the Mission who allowed the Ministry of Planning to alter the scope of the effort, and by SARSA which took on work that was beyond its area of expertise.

c) Literature Review - The literature review also was used to assess the quality of the research. The criterion was: Does the literature reflect research that makes a clear contribution to the field of development?

Work under SARSA's settlement/resettlement theme has been dominated by a single SARSA researcher, Thayer Scudder. Scudder is considered probably the world's leading expert in this field and, quite apart from this evaluation, there is no question concerning the quality of his research work. This work is reflected, for example, in the publication, The Development of New Lands Settlement in the Tropics and Sub-Tropics: A Global State-of-the-Art Evaluation with Specific Emphasis on Policy Implications.

The Scudder book is widely recognized as an important work that has introduced the concept of the "New Lands Stage" to the field of development. Under this concept, investments in settlement programs should be sequenced in four phases: planning, transition, development and incorporation. Another publication by Scudder and an associate discusses a rapid survey technique for assessing settlement programs that is both longitudinal and holistic, arising out of research work in Sri Lanka.

The research carried out under SARSA's rural/urban dynamics theme challenge a problem raised in the professional literature, that investments to facilitate economic linkages between farms and urban markets do not necessarily benefit low-income farming groups. In the publication, "Marketing in Rural Development: A Model of Rural/Urban Dynamics," SARSA researchers at Clark University, Belsky and Karaska, address this issue. They present an approach to analyzing behavior of market participants and institutional features of marketing systems that permits investigators to understand more completely how a given agricultural marketing system works. To do this they incorporate variables related to social as well as economic factors.

Using this method, researchers can predict better how alternative interventions might alter the distribution of benefits among participants in the marketing system. Currently, SARSA work in this area has reached the stage of providing guidance for analyzing marketing systems, but has not yet been developed to the point of providing methodological guidance for identifying and designing interventions in agricultural marketing systems in LDCs.

Another contribution to the field of development arising out of SARSA work under its rural/urban dynamics theme concerns a focus on commodity system analysis in analyzing the functions of specific types of rural/urban exchange in the development process. Examples of SARSA publications that address commodity system analysis are "The Corn Marketing System: A Rapid Marketing Appraisal in the Bicol Region of the Philippines," by Merle Menegay, and the article "Means, Motivators, and Markets in Rural Regional Development," by Avrom Bendavid-Val. The former is based on work done in the Philippines and offers an effective, rapid, and low-cost methodology for obtaining baseline data about commodity marketing systems; the latter lays out a conceptual framework that is the basis for a

methodology for analyzing complete commodity systems and their spatial as well as economic expressions in rural areas of LDCs.

The commodity system approach to analyzing rural areas differs from traditional regional analyses in that aggregate understandings of how rural regions work are built up from research on individual commodity systems, rather than beginning with the collection of aggregate marketing data on the basis of economic sectors or locations in rural regions.

The research carried out under SARSA's resource systems management has resulted in two major contributions to the field of development. The first is documentation in support of the argument that the major cause of long-term environmental decline is not traditional resource use practices, but rather is symptomatic of more general social and economic transformations in LDCs. Research supporting this argument is well represented in the IDA "Lands at Risk" volume mentioned earlier.

The second is the clarification of the relationships among social, institutional, and ecological factors in development. The evaluators have found that although the "Lands at Risk" volume has only recently been published, it has already achieved a significant recognition in the development community and is influencing scholars in a variety of disciplines to consider more holistic approaches to natural resource analysis.

With regard to river basin development, the SARSA monograph, "Problems and Issues in African River Basin Planning," provides a good reflection of advances in knowledge in the field of development arising from SARSA research. This document employs an ecological/geographic approach that correlates human and physical components in the river basin development equation.

One of the primary lessons emerging from SARSA's river basin work and reflected in this document, is that river basin planning should be undertaken as a regional development activity and not merely on the basis of watershed management nor of the optimal management of the physical structures built as part of the river basin projects.

The focus on river basin development should be on improving the quality of life and habitat and on improving the capability of local institutions and societies to manage their own river basin resources. More work remains to be done in this area, some of which is currently being carried out in Senegal and Mali. The work completed so far, however, echoes some of the ideas presented in the "Lands At Risk" publication. The communality of the underlying principles of managing both fragile lands and of river basins is an important finding that SARSA is testing in its current work.

SARSA research literature is most impressive in the quality of research it reflects that delves in good depth in a very small number of subject areas within each of SARSA's three themes.

There seems to have been a deliberate preference for this depth over breadth of coverage integrating a variety of subjects within and among the three theme areas.

2. Usefulness of Research

a) Mission Responses - The second question posed in the evaluation was "Is the research useful?" The Mission responses were considered first. In some cases, SARSA was called upon to design a research component of a larger Mission project, rather than perform field research. Consequently, some Mission evaluations of usefulness of the research were expressed primarily in terms of SARSA's conceptualization and planning rather than data gathering and analysis. In cases where field research was not yet complete, Mission evaluations of anticipated usefulness were based on working experience with the research team to date and on interim reports.

SOMALIA: "SARSA research is identifying constraints and opportunities to growth and development in southern Somalia. USAID anticipates that the results will be useful to the GOS in formulating and implementing development policies and strategies."

BOLIVIA (information system for regional development planning): "The information system for planning is still in use."

MALI: "Results of the research were fed directly back into project implementation, allowing for modifications as needed. USAID felt on the whole that it was a valuable project, but was disappointed that data were not computerized to make it more useful immediately." (Delays in computerization of data resulted from the late arrival of computers ordered by USAID.)

PANAMA: "SARSA's participation was very useful in helping untangle and rationalize a very complex project that had become almost impossible to manage. Many of the evaluation recommendations were implemented with minimal change."

ZAIRE: "SARSA's approach, focus on spatial relationships as a function of linkages, and concern with the role of secondary urban areas in balanced development recommend it as a resource for implementing the Mission's area development projects."

BOLIVIA: "SARSA planning, conceptualization, and implementation of the research activity was satisfactory. Reporting was timely and adequate."

KENYA: "Both SARSA's river basin study and the rural/urban dynamics study (the latter is not yet complete) are rated very useful to Mission and GOK needs. In the case of the rural/urban dynamics study, SARSA research is funded jointly by USAID and RHUDO/ESA, and supports a rural development program of the former and a town development program of the latter. USAID and

RHUDO both credit development of the SARSA research effort with heightening their awareness of the interdependent nature of their respective agrarian and urban concerns; this, in turn, has led us to plan a major joint agricultural marketing systems project in Kenya, which we hope to launch in early FY 1989."

ECUADOR (rural/urban marketing systems study): "SARSA research was too far removed from the reality of Mission needs, though it may be that the research mandate from the Mission was not sufficiently clear. SARSA did not brief the Mission before departing, and took most reports and data with them."

JORDAN (regional development planning data collection and analysis): "While SARSA conceptualization of data needs was good, the subsequent location-allocation analysis of data was inappropriate to Mission needs."

On the whole, evaluations of the usefulness of SARSA research confirm informal reports that have come in from the field over the years suggesting that SARSA is adept at providing useful support to USAID Missions in its theme areas. Together with its overall responsiveness, SARSA seems also to have done a good job in working with Missions to convey an appreciation of the appropriateness of the principles underlying its approaches to its theme areas, thereby contributing to the quality of overall Mission programming.

There are some exceptions or reservations, such as those noted from Zaire and Pakistan earlier, and from Mali, Ecuador, and Jordan immediately above. These suggest the need for more careful controls to ensure a proper fit between the needs of Missions requesting support and the research agendas of SARSA and its individual researchers.

In addition, it points out the need for more and better Mission briefings. The submissions of reports should be more carefully scheduled into research work plans, types and formats of data to be delivered should be more carefully specified, and improved procedures for compliance monitoring should be developed.

Moreover, while this is not revealed in the limited sampling, Mission responses suggest that in the field there prevails a considerable diversity of perceptions of SARSA. To some extent this is understandable; Missions are more concerned with the immediate services they require than with the larger agenda of the Cooperative Agreement. But the tendency to view SARSA only as Clark University or as IDA, as a specific team of researchers, or in some cases as a vehicle for accessing the skills of a single professional, potentially deny to A.I.D.'s field operations the advantages of the combined anthropological and geographer's perspectives on development problems.

The failure to call on the combined resources of the Cooperative Agreement denies the Missions the advantages of insights into relationships between settlement, rural/urban linkage, and

resources, and aspects of development issues. Thus, while Missions seem generally pleased with SARSA field support performance, it seems that they do not reap the full benefits that SARSA's unique nature could provide. This could be addressed through measures to bring about greater collaboration, coordination, and unity within the program of SARSA field support activity.

Data collected by SARSA for the National Village Survey and the Basic Business Survey in Jordan now constitute the bulk of a data set that will become a major part of the national data bank being established by the Jordanian government. Data that were collected in association with the SARSA field effort have been and continue to be utilized by the Ministry of Planning, and must therefore be judged useful.

Data assembled under the SARSA effort were also provided to the Mission, USAID contractors, the World Bank, the United Nations, and other agencies and contractors. USAID contractors in Jordan are currently utilizing the data in connection with other USAID projects there.

Although some data were provided directly by SARSA to the Mission and others, the full data set is exclusively in the hands of the Ministry of Planning. Previous to this evaluation, the Ministry was not permitting USAID or A.I.D. contractors full access to this data set. In addition, the Mission feels that it was not briefed as extensively as it should have been by the SARSA team, nor does it have copies of the SARSA reports, and as a consequence still does not have full knowledge of all of the data collected.

Data collected during the SARSA Tana River Basin Development study have already been used by USAID in other projects, and are being used by the agricultural development officer at the Mission for reference purposes concerning the state of irrigation activities in the Tana River Basin. The data are apparently also being used by both the Tana River Basin Development Authority, and are part of the documentation being used at a conference in October, 1987 conducted jointly by the University of Nairobi and the University of Zimbabwe to develop policy recommendations for their governments on water resource management.

In the case of the rural/urban dynamics study in Kenya, all entities have been involved in defining and approving the scope of work. As a result, all expect that research results will have high utility for both USAID and the GOK. Although the towns encompassed by the RTPC investment program of the GOK are somewhat smaller in size than those included in the Small Towns program of RHUDO/ESA, RHUDO feels strongly that the understanding of farm-town relationships that will emerge from the study will have great utility for it as it expands its Small Towns program to incorporate 13 additional sites and develop investment packages for them.

b) Field Visits - The conclusion from the field visits is that the usefulness of field research undertaken by SARSA must be rated extremely high. Although, again, the evidence provided by the field visits is rather thin, SARSA appears on the whole to do a good job of conceptualizing the research program needed to respond to specific Mission concerns and host-country concerns, resulting in high marks with respect to the usefulness of SARSA field research.

The problems that were described in the discussion of the quality of research obviously also affect the usefulness of research. Scopes, and to a lesser extent, a divergence between the research agendas of SARSA and individual field team members, on the one hand, and host-country governments, on the other, resulted, certainly in the case of Jordan, in mixed opinions of the usefulness of the research. The situation in Jordan is further clouded by the fact that the data are not as widely available as would be desired, owing to the policy of the Government of Jordan.

The work of SARSA in Tunisia has apparently been important and useful for CTDA. CTDA had traditionally placed very low value on the role of social factors in planning for development. Social factors are important in relation to regional development everywhere, and especially so in the Central Region of Tunisia where the inhabitants are recently settled nomads.

Research with the support of the SARSA advisors provided important information on this population that is of critical importance for both Mission planning and for planning by CTDA. While the management and staff of CTDA are not universally convinced of the importance of socioeconomic data collection in conjunction with resource data collection, the field evaluation found, as a result of SARSA's work in CTDA, a small cadre of committed staff that have learned the techniques of collecting socioeconomic data and are employing it in regional development planning.

c) Literature Review - Here again the literature reviewers established for themselves a guiding question: Does SARSA literature reflect research conclusions significant to A.I.D. policy and program development? If it does, then is it safe to conclude that the research is useful?

In SARSA's settlement theme area, we turn again for an example to the work of Thayer Scudder, this time a publication co-authored with Kapila Wimaladharmasentis entitled, "The Accelerated Mahaweli Program and Dry Zone Development." In this publication, the authors argue that the rising net incomes of thousands of farm families is the primary fuel for accelerating the spread of benefits of development in land settlement schemes. Based on their field work, the authors present in this report a large number of recommendations that can hasten the increase of disposable incomes among settlers in new lands

development schemes. This work is directly relevant to programs under which A.I.D. attempts to support expansion of agricultural production in LDCs through the settlement of underutilized areas with agricultural potential.

Under SARSA's rural/urban linkages theme, only in the past year or so has there begun to emerge a stream of literature with clear direction. This direction evolved in part from an evaluation undertaken by SARSA of earlier work carried out for S&T/RD under its "Urban Functions in Rural Development" project. The evaluation of this work made clear to SARSA important gaps in knowledge that could be very useful in development of A.I.D. policy and programs aimed at raising rural incomes. Analysis of these gaps combined with Mission support activities led SARSA researchers to focus on marketing systems of specific agricultural commodities in rural areas.

The work also heightened the awareness, particularly of researchers, to the centrality of commodity systems analysis in developing data for development interventions that would simultaneously increase agricultural income and create employment and enterprise opportunities in towns.

At about the time that SARSA researchers were turning their attention to agricultural commodity systems, S&T/RD, through SARSA, together with Africa Bureau embarked upon a "Common Theme" initiative on rural/urban linkages. One aspect of the work under this Common Theme initiative was to engage Missions in Africa in dialogue concerning rural/urban linkages of concern to them in their development strategy formulation and project/programming work. These discussions reinforced the growing perception within SARSA that an understanding of the commodity systems of individual key agricultural commodities in any given rural area was essential to proper development intervention programming.

Some related work had already been done in Ecuador, and new projects were initiated in Somalia, Kenya, and Zaire. Out of these efforts and related work in the Philippines there began to emerge the beginnings of a cohesive stream of literature and a coherent research agenda. The literature produced to date reflects important conceptual developments, but does not yet have the benefit of extensive empirical work. Important examples of commodity systems related literature under SARSA's rural/urban dynamics theme were provided earlier. While that work has been well received within A.I.D., it does not yet offer clear policy, program, or methodological guidance for A.I.D. Work in this area is progressing, and such guidance is expected to be reflected in literature produced by SARSA over the course of the coming year.

A number of SARSA rural/urban linkages research publications by a variety of authors do offer guidance for A.I.D. policy and programs in several areas. For example, as noted earlier, SARSA work under the rural/urban linkages theme has pointed to the

importance of accounting for social factors in marketing systems analysis and identifying interventions to increase the efficiency of marketing systems to the benefit of farmers.

Work cited earlier points to the importance of not treating rural and urban "sectors" as independent. In literature produced under its rural/urban dynamics theme, SARSA has convincingly argued that development interventions that contribute most to raising farm incomes will be those made in the towns of rural areas; and that those interventions which contribute most to raising agricultural incomes are likely to be interventions that also most effectively and sustainably promote expanding income through employment and enterprise opportunities in rural towns.

SARSA publications reflect the proposition that it is not enough to concentrate on expanding production in rural areas; for purposes of raising rural incomes, the focus must be no less upon improving local income multiplication, for example through the supply of farm inputs and consumer goods and services to the local populations in rural areas. Moreover, SARSA literature contains lessons for policy and program development regarding the importance of understanding rural/urban terms of trade and the terms of trade implications of rural development interventions prior to making those interventions. That is, it is not enough to undertake measures to increase production or productivity, or to improve exchange between rural towns and farms, but care must be taken to ensure that the interventions do not reinforce terms of trade favoring urban areas. If they do, while the level of income may be increased, the bulk of the benefit of the increase will go to the most wealthy and powerful.

Contributions to the development community under SARSA's natural resource management and analysis theme, concerning river basin development and management and the relationships among social and physical factors in resource management, mentioned earlier, contain significant guidance for A.I.D. policy and programs.

The material of significance for A.I.D. found in SARSA literature is quite specific. For example, the publication, "Settlement and Deforestation in Central America: A Discussion of Development Issues," by Jane Collins and Michael Painter, addresses deforestation. The research reflected in the publication points out that deforestation, while often thought to be a consequence of traditional resource management practices, in fact is largely the consequence of LDC policies that foster export agriculture requiring the clearing of forest lands.

The study shows that North American consumer preferences for beef have led to policies promoting livestock export sectors. This emphasis on export income earnings rather than on internal food markets results in deforestation to expand grazing areas. Additional policies of Central American governments encourage the choice of ranching as an investment for those with

substantial investment capital, further encouraging deforestation.

In another example of a specific lesson for A.I.D. project design for river basin development the research shows the importance of minimizing disruption to indigenous and traditional farming systems when planning for dams. SARSA work has shown that the frequent practice of eliminating flooding through dam construction often has deleterious effects on traditional farming systems. This work points to the importance of allowing seasonal flooding after dam construction in order to allow the efficient practice of decru farming systems that rely on such flooding.

While much of the SARSA literature of greatest significance for overall A.I.D. policy and programming purposes will apparently be produced over the remaining life of the SARSA project, a great deal has already been published. Again, it seems that an effort at greater coordination and consolidation of SARSA's publication program is warranted. In addition, more of these publications should be focused on A.I.D. policy and program needs rather than addressing the academic and development communities at large.

Many of SARSA research publications reflect guidance of significance to A.I.D. policy and program development. It is not clear the extent to which these findings have been put to use by A.I.D. In great part this is a problem in dissemination. Since the evaluation team believes that the publications likely to make the greatest contribution to A.I.D. policy and program development are yet to come, there is still an opportunity to coordinate and consolidate and to disseminate more carefully the lessons learned throughout A.I.D. It would seem appropriate to develop strategies for accomplishing the coordination and consolidation and the thorough dissemination of SARSA research-based guidance within A.I.D. and the international development community.

3. Improving Resources Available to A.I.D.

The third major question addressed in the evaluation was "Has the research improved the resources available to A.I.D. in SARSA's theme areas?" That SARSA has resulted in a significant expansion in the capabilities of both Clark University and IDA to respond to the needs of A.I.D. is clear. The very large and continuing number and volume of Mission buy-ins to the SARSA Cooperative Agreement in itself constitutes convincing evidence of this.

In the case of Kenya, there is no question but that SARSA's work in the Tana River Basin (as well as in river basins in other countries in Africa) has built a base of experience, expertise, and methodology that enables SARSA to provide research support and advice on planning and management of African river basins.

The research related to development of river basins is important because river basin development activities are large scale and costly. Any insights into the appropriate institutional mechanisms for long-term management to achieve maximum development benefits are central to successful river basin development investments.

In the case of the rural/urban dynamics study, the period of development of the project strengthened SARSA's capability to articulate the integrative nature of its approach and the significance of this approach, both in conceptual terms and in terms that address traditional institutional rural/urban dichotomies. One measure of this is SARSA's success in bringing together USAID/Nairobi and RHUDO/ESA in funding, designing, and supervising its research effort from their divergent perspectives of urban development, on the one hand, and rural development, on the other.

In addition, at A.I.D./Washington, SARSA has been instrumental in developing a new S&T/RD project dealing with sustainable development in fragile land areas (DESFIL). DESFIL is of major interest to the Latin America and Caribbean Bureau, and was designed in collaboration with LAC. SARSA has also responded directly to requests for research support activities from regional Bureaus. The river basin study mentioned earlier, that has shifted the focus of Agency concern from infrastructure to institutions in African river basin development, is one example. Another example is a study of contract farming in Africa, also undertaken at the request of Africa Bureau.

Yet another example of SARSA's ability to respond effectively and expeditiously to Agency needs is its acceptance of an assignment to prepare a research report detailing the progress of the recent major drought in Africa and the response of donor agencies, and in particular A.I.D., to the emergency. The research report, exceeding 450 pages, was produced through an intensive effort over a period of approximately four months. At present, another drought threatens, and the report is very much in demand throughout A.I.D., other donor agencies, and PVOs. The study was undertaken in response to a need expressed by the Agency Administrator for information, conclusions and recommendations toward improving the A.I.D. response to such emergencies in the future.

In addition, IDA now performs services for A.I.D. under contract arrangements completely separate from the SARSA Cooperative Agreement. While this is not true for Clark University, it is true that a number of professionals associated with SARSA at Clark University now individually provide services to A.I.D. in SARSA subject areas, also through contract arrangements separate and independent of SARSA.

In an effort to assess the actual nature of improvement in Clark University and IDA as resources available to A.I.D., rather than

the performance on behalf of A.I.D., the following factors were examined: expansion of the numbers of social scientists and social science disciplines on the staffs or in the close professional networks of the institutions; expansions in library and other research facilities; expansions in training activities, seminars, workshops, and other professional gatherings mounted by the institutions; and expansions of the collaborative relationships that have been formed between the SARSA institutions and other development institutions in the United States and abroad. What follows deals first with Clark University and then with IDA.

Clark - SARSA has a prominent profile in the programs of Clark University. SARSA work amounts to approximately two-thirds of the budgeted research at the university, and SARSA has been designated as one of two research centers on the campus. Further, owing in part to SARSA activity, Clark University has determined, and publicized the fact, that international programs will constitute a centerpiece of the institution's research and teaching program.

While no direct expansion to Clark University staff has taken place as a consequence of the SARSA Cooperative Agreement, ten faculty members have been actively involved in SARSA activity. In addition, over 20 graduate students and two undergraduate students have been involved materially in SARSA related research work on the Clark University campus. As a consequence, several graduate students have focused their Ph.D. dissertations on subjects related to SARSA research. Clark University has also allocated space for SARSA administrative and research offices and library facilities; the latter are continually used by students studying international development.

Through SARSA activities, Clark has also developed a close network of senior experts in natural resource management and rural/urban linkages from universities or other research institutions located in Washington, D.C., California, Iowa, Ohio, New York, the Netherlands, Thailand, Israel, and elsewhere.

As a part of its involvement with the SARSA Cooperative Agreement, Clark University has participated in training programs at A.I.D., and has mounted conferences on natural resource management and rural/urban linkages in Africa, Israel, Luxembourg, and elsewhere. Moreover, Clark University has established collaborative activities through its SARSA program with the Settlement Study Centre in Israel, the Asian Institute of Technology in Thailand, the University of Iowa, and more marginally with a number of other institutions, such as the University of Colorado and Associates in Rural Development in Vermont.

All of this represents a significant expansion of the resources available to A.I.D. in the SARSA theme areas, as evidenced by the drawing in of personnel from the networks of professionals and institutions described in SARSA work undertaken by Clark

University. The university seems to have successfully converted a potential liability in its participation in the SARSA Cooperative Agreement into a strength. The faculty at Clark University is a relatively small one, numbering only 125; and only a very small number of these are active in Third World Development research.

Rather than allowing this to limit the scope of SARSA activity at Clark, the university has clearly made a substantial effort to reach out and draw in other qualified professionals and institutions. This network reflects a considerable diversity of backgrounds and research concentrations related to natural resource management and rural/urban linkages that is to the benefit of the SARSA Cooperative Agreement. It also reinforces SARSA as a significant and responsive resource to A.I.D. operations, and as well to Clark University programs related to the subject matter of the Cooperative Agreement. A number of individual professionals from the SARSA networks established by Clark University have provided courses and special lectures on the campus, thus strengthening Clark's international development program.

Clark University's participation in the SARSA Cooperative Agreement was also a key factor in establishing the university as a node on the Bitnet worldwide electronic mail system among research institutions. Bitnet has already been used extensively in Clark University SARSA work to exchange information and collaborate with professionals and institutions in its network. Its participation in the SARSA Cooperative Agreement was also the primary impetus for development of an innovative computer geographic information system at Clark University. This system is now being used by the Graduate School of Geography, is available for SARSA research activities, and is rapidly becoming widely recognized in the geography profession.

IDA has also experienced considerable expansion in every respect since becoming a part of the SARSA Cooperative Agreement. Its focus on empirical field research as well as conceptual/theoretical development has led to a greatly expanded social science research program at IDA. As part of the SARSA Cooperative Agreement, IDA has also significantly enhanced its capability to respond to A.I.D. research needs through SARSA, as an independent contractor, and as subcontractor to other organizations. In addition, IDA has been able, as a consequence of SARSA, to make several important staff appointments at both the pre-doctoral and post-doctoral levels, including a full-time cartographer.

In association with its SARSA research work, IDA has expanded its close network of professionals in the U.S., Europe, and the Third World. Staff members have collaborated with researchers and research institutions in over 20 countries where it has worked on SARSA projects. This network provides a diversity of perspectives and disciplines that considerably strengthens the capability of IDA to respond to a variety of A.I.D. research needs.

During the period of the Cooperative Agreement, IDA has expanded its library holdings by several hundred volumes and several thousand documents. Its holdings in topical areas germane to SARSA themes have been computerized to enable thorough access in support of research activities. In addition, IDA has established library exchange agreements with ten institutions in the U.S., Norway, Wales, Denmark, and Peru. IDA has also substantially increased its holdings of maps, and recently has begun work on a computerized cartographic database.

In addition to its participation in the SARSA publication program, IDA publishes its own periodic journal and has also published eleven working papers outside the SARSA publication program, in its own monograph series. IDA has undertaken or participated in a wide variety of training programs, seminars, and conferences on natural resource management issues, both within A.I.D. and throughout the world.

Through its participation in SARSA, IDA has greatly expanded the geographic coverage of its expertise; this has been reflected in the range of seminars and conferences in which it has participated or of which it has been a principal sponsor. On the whole, the networking of IDA appears to be concentrated far more on establishing collaborative associations with individual researchers than with institutions.

The expansion of IDA as a resource for A.I.D. has been even more dramatic than at Clark University. As is the case at Clark University, the benefits of this expansion to A.I.D. are clearly visible in IDA work on behalf of A.I.D., whether through SARSA or some other contractual framework.

The visits to Clark University and IDA have confirmed the pre-existing impression that resources available to A.I.D. in the SARSA theme areas have been greatly expanded as a consequence of the participation of Clark University and IDA in the SARSA Cooperative Agreement. It is difficult to judge, however, the extent to which the current level of resources available to A.I.D. at Clark University and IDA can be sustained in the absence of SARSA core funding.

While high marks must be given for improving the resources available to A.I.D. under the Cooperative Agreement, visits to these two institutions helped highlight the modest extent of ongoing collaboration between them within the framework of the SARSA Cooperative Agreement. Thus, each Cooperator has expanded its own capabilities, but there has been only minor creation of a resource to A.I.D. composed of the two institutions operating jointly. A.I.D. has so far not received the full benefits of a resource that could jointly bring to bear on A.I.D. research needs the anthropological and geographical perspectives. In association with this, A.I.D. has also been inadequately provided through the SARSA Cooperative Agreement with a research resource that can address rural regional development concerns in

a fashion that integrates settlement systems, rural/urban linkages, and natural resource management issues.

4. Strengthening Host-Country Capabilities

The final question in the evaluation is to determine if the research activities helped to develop the capacity of host country professionals to carry out related work on their own. SARSA field work usually does not contain an explicit institution building component, since assignments involve research or research-related tasks. However, the heart of development work resides in the process of technology and skills transfer, and it would be quite inappropriate not to seek means for accomplishing this in the course of performing any development task. Moreover, involving host-country personnel in field socioeconomic research would seem essential to obtaining meaningful and valid data, and to interpreting them accurately. It would be expected that Clark University and IDA, both deeply involved in teaching and training activities at home, would be sensitive to these principles and would implement them whenever appropriate.

a) Mission Responses - Again we first turn to the comments received by the Missions:

SOMALIA: "SARSA has hired and trained a number of survey and field staff. The skills they are acquiring will remain in Somalia and likely be used in further research efforts."

BOLIVIA: "SARSA established good relationships with host-country Projects Coordination Unit personnel."

MALI: "The SARSA senior researcher worked closely with national research institute personnel to help develop a data gathering activity for the project and to train them in computer analysis. SARSA researchers also worked closely with host-country field agents."

KENYA: "The principal researcher on the rural/urban dynamics study is Kenyan, as are all field survey personnel. These are supported on a day-to-day basis by an American graduate student (PH.D. less dissertation), and three senior SARSA experts who visit individually for brief periods from time to time. The arrangement works well, makes the research essentially a Kenyan effort while ensuring high quality results, and is building a base of in-country skills that we hope within a year or so will enable us to rely exclusively on Kenyans for continuing research work of this type."

On the whole, Mission evaluations indicate that wherever appropriate SARSA field teams involved host-country personnel in their work and endeavored to impart to them knowledge and skills useful in future related research efforts, the results were successful. Consideration should perhaps be given to restricting

SARSA field support activities to situations in which the Mission expresses a clear interest in strengthening host-country capabilities and is prepared to take an active role in identifying local candidates for selecting local participation in the research effort.

b) Field Visits - In Jordan, SARSA worked extensively with officials and staff of the Ministry of Planning, and apparently upgraded competence and skills within the Ministry. The evaluation found, however, that there should and could have been more extensive computer training to allow more sophisticated analysis of data. SARSA was instrumental in basic training of members of the staff of the Regional Planning Department of the Ministry to develop and test questionnaires, conduct surveys, and verify and enter data. With the help of the SARSA field team, the local staff also now has an understanding of what is involved in preparing and conducting a national census, and some members of the staff are also familiar with computer techniques, and in particular programming and using Lotus 1-2-3. Other members of the staff received training in establishing data sets, in geo-coding of data for road system development programs, in developing location-allocation models, and in related matters.

In Tunisia, strengthening host-country capabilities was clearly the major achievement of SARSA's field work. The SARSA team worked closely with personnel of CTDA, and both Mission and CTDA management and staff agree that SARSA has made a significant contribution. CTDA is now both more willing and more capable of incorporating systematic social science research into its activities. On the basis of the work of SARSA experts, CTDA has added a sociologist to their staff, representing the first social scientist in the organization who is not an economist. In addition, a cartographic specialist from CTDA was brought to IDA in Binghamton, New York to develop further skills by participating in work on a mapping project.

In Kenya, the SARSA Tana River Basin study involved two local professionals in developing and analyzing the data. One of these professionals has since used a portion of the work as the basis of a published article and has, as a consequence of his association with the research, become instrumental in developing the conference mentioned earlier to determine recommendations for river basin development for the Governments of Kenya and Zimbabwe.

The other professional, formerly a planning officer for the Athi River Basin Authority and irrigation officer for the Mwea Irrigation Scheme has since become an independent contractor providing analytical and advisory services to the Ministry of Agriculture on irrigation schemes for small holders. He credits work on the study to his understanding of the Tana River Basin as an integrated natural resource system and of the relationships among institutions involved in planning sometimes conflicting uses of water resources.

SARSA's rural/urban dynamics study in Kenya is being conducted principally by Kenyans with support from SARSA experts. The principal investigator and field enumerators are Kenyans, receive only brief occasional support visits from senior SARSA experts, and receive guidance as well from the Ministry of Planning, USAID, and RHUDO/ESA. There is little doubt that not only are significant skill transfers taking place through the rural/urban dynamics study, but as well a detailed study methodology is being developed and tested that will be applicable with respect to other RTPCs and their hinterlands over the coming years.

SARSA appears to have done an excellent job in conveying concepts, skills, and constructive attitudes to the local personnel with whom it has worked in its field activities; and it appears as well to have expended considerable effort to find and utilize local personnel wherever possible. This is the one major area of evaluation inquiry where conclusions are clear, unequivocal, and very positive as a result of the evaluation field visits. In fact, this has emerged as such a decided strength of SARSA field support activity, that consideration should be given to incorporating training of host-country personnel more explicitly and significantly into future SARSA work or into a successor project to SARSA.

III. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

It is the nature of chapters such as this one and the next to concentrate on the ways that things that are not good can be made good, and on the ways that things that are good can be made better; exemplary performance tends to be acknowledged but not dwelt upon. This pattern will be noted in the following discussion of conclusions and recommendations. Doing full justice to the exemplary aspects of SARSA performance would require repetition of much that should be clear to the careful reader of Chapter II. The authors trust that the reader of the following pages has been made adequately aware by what has gone before of the general conclusions of the evaluation team: SARSA has produced research of high quality and high utility; it has greatly expanded and improved the resources available to A.I.D. in SARSA's three theme areas; and it has done a superb job in strengthening host-country capabilities while pursuing the objectives of the Cooperative Agreement. SARSA has been a valuable Cooperative Agreement, and what follows emphasizes ways in which its value and usefulness can be raised to higher levels in the remaining period of its operation.

1. Quality of Research

Field visits, cable queries to Missions, and the SARSA literature review all confirm that SARSA researchers are talented and have conceptualized and carried out research endeavors competently. Moreover, the research that has been executed has been well received by peers in the field of development and has contributed fresh and relatively uncontested new insights to the body of existing development wisdom.

When SARSA research fell short of its generally high standards, the reasons were these:

a) Field research projects were staffed with inappropriate personnel due to the unavailability of personnel or researchers from either Clark University or IDA staff or their close networks of professionals. In order to respond to Mission requests for field support, the institutions sometimes reached out to find professionals with whom they did not have adequate working experience. In some instances, SARSA Mission support assignments were used by these field researchers to pursue their own research agendas, rather than accommodating the requirements of the research assignment.

b) Scopes of research work had not been sufficiently worked out and cleared with all parties concerned, or changes were made in scopes of work after acceptance of assignments. In such instances, the actual quality of research may have been good, but from the perspective of the client entity, it was judged otherwise.

Moreover, SARSA research literature reflects a concentration in a small number of subject areas within each of SARSA's three themes. While the quality of research in each of these few subject areas appears high, from the perspective of each theme as a whole and of the relationships among the three themes, a higher degree of integration is necessary to meet the general goal of the Cooperative Agreement.

2. Usefulness of Research

Judging by the use that has been made of research findings generated by SARSA in its Mission support activities as well as in its Bureau and Agency research support activities, the usefulness of SARSA research must be rated extremely high. SARSA has received kudos for its responsiveness to Mission, Bureau, and Agency needs in terms both of the usefulness of its output and the timeliness of its research output. SARSA research has contributed directly to Mission programs and projects, and to Bureau policy development. It has also provided insights of considerable value for Agency policy and programming.

What is less clear is the extent to which the results of SARSA research have actually been utilized in Regional Bureaus, and especially in A.I.D. policy formulation in the SARSA theme areas. SARSA dissemination efforts within the Agency leave something to be desired. Even in the field, there have been occasional complaints that Missions have been inadequately briefed on the results of SARSA research, that research findings have not been presented in their most useful format, and that all the data resulting from SARSA research have not remained at the disposal of the Mission. While in some cases the reasons for this were beyond SARSA control, in other cases SARSA researchers did not take adequate steps to ensure that Missions derived maximum benefit from research output.

Evaluators found it particularly disturbing that in countries where SARSA has performed Mission support services there seemed to be very little knowledge of what SARSA is about. Reviewing all the information assembled from field visits and evaluation information supplied by Missions, one is reminded of the fable of the blind men reporting their impressions of an elephant. To some, SARSA is a vehicle for accessing the talents of Thayer Scudder; to some, SARSA is a Cooperative Agreement specializing in rural/urban linkages research; to some, SARSA is a Cooperative Agreement concentrating on natural resource management; and to some, SARSA is a convenient device for accessing the special talents available either through Clark University or IDA. Thus, while SARSA's research capabilities are generally held in very high regard, it is for different reasons in different places, and seldom for the reasons that the designers of SARSA had in mind. SARSA seems to have failed to impress its clientele with its actual mission, namely, to bring

to bear on rural regional development issues the combined perspectives of anthropologists and geographers (and, of course, the associated insights of economists, agricultural marketing experts, and so on), and an understanding of the interrelationships among settlements, rural/urban linkages, and the use of natural resources.

3. Improving Resources Available to A.I.D.

Since inception of the Cooperative Agreement, the co-Cooperators have broadened, deepened, and strengthened themselves as resources to A.I.D. in SARSA theme areas. They have built networks of individuals and institutions that have brought additional perspectives, backgrounds, and country experience to their work in support of A.I.D. operations. SARSA has shown itself to be available and responsive to the research needs of S&T/RD, Regional Bureaus, and the Agency as a whole. SARSA has served the Agency at every level, and has helped separate entities within A.I.D. to understand and appreciate the relationships among their individual concerns. It has as well developed special methodologies, systems, and facilities that can bring to bear on A.I.D. research needs a much higher level of sophistication and response capability than was previously available. As a result of experience and capabilities developed through SARSA work, a wider variety of resources is now available to A.I.D. through mechanisms other than the SARSA Cooperative Agreement.

SARSA evaluators feel, however, that the sustainability of the expanded resources available to A.I.D. operations is quite uncertain, and that one can only speculate on what would remain in the absence of SARSA core funding. For instance, it is not clear that the ties that have been created among Clark University and IDA, on the one hand, and their respective networks of professionals and institutions, on the other, transcend involvements with A.I.D.-supported SARSA research to the extent that they will be sustained when the SARSA Cooperative Agreement is concluded.

In addition, while Clark University and IDA have been principal sponsors of or have participated in a large number and wide variety of professional meetings on specific subjects of concern to A.I.D., SARSA evaluators have noted that none of these have been on the broader subjects of settlement systems, rural/urban linkages, or natural resource management in the context of rural regional development.

Moreover, what the evaluators have perceived is essentially two separate resource complexes at Clark University and IDA respectively, rather than a major resource base encompassing and integrating geographical and anthropological perspectives. Similarly, while the resources available to A.I.D. in each of SARSA's three theme areas have expanded substantially as a result of the Cooperative Agreement, little progress appeared to

have been made at the time of the evaluation on creating a research support resource that can provide a perspective on rural development issues integrating settlement, rural/urban linkages, and natural resource management issues.

4. Strengthening Host-Country Capabilities

The preceding chapter has made clear that SARSA evaluators have concluded that SARSA is to be commended for its efforts and success in transferring concepts, skills, and constructive attitudes to host-country researchers and professionals in places where its associates have undertaken research activities.

B. Recommendations

The evaluation team has concluded that addressing the deficiencies in SARSA performance can be remedied with relative ease. In fact, the evaluation team is aware that many of the actions necessary to accomplish this have already been initiated by Clark University, IDA, and A.I.D. For example, after a period of nearly one year during which S&T/RD/RRD was without an individual to serve exclusively as project manager on A.I.D.'s behalf, that slot has now been filled. The present project officer is an IPA who has the professional background to be substantially involved with the research agenda of the Cooperative Agreement.

A.I.D. has begun taking a more prominent role in supervision, coordination, and participation with respect to SARSA activities. A SARSA Steering Committee comprising senior Clark University and IDA SARSA personnel has begun to meet on a more regular basis under A.I.D. auspices. Under A.I.D. direction, SARSA is now focusing the bulk of its attention on the preparation of documents that synthesize what has been learned from its research work on each of the three theme areas and on how the three themes relate to each other.

Nevertheless, the evaluation team has seen fit to describe here its recommendations for addressing deficiencies as they were revealed by the evaluation to have prevailed at its outset.

1. Quality of Research

a) In its research endeavors, SARSA should employ only professionals from the staffs of Clark University or IDA and their professional networks to insure the highest possible quality of research. Exceptions to this rule should be made only when the necessary expertise cannot be accessed from either institution, and only with the expressed approval of the SARSA Project Officer.

b) Scopes of work for Mission support activities should be fully detailed in writing and cleared in writing by the requesting Mission, SARSA, S&T/RD, and, where appropriate, host-country officials. Any changes in scopes of work of field support activities and of field staff personnel should be spelled out in writing, and cleared by all parties concerned, including S&T/RD.

c) New field support assignments should not be accepted by SARSA until synthesis reports in its three theme areas and a synthesis report on the integration of its three theme areas have been completed at least in initial draft. In association with preparation of these reports, SARSA, in collaboration with A.I.D., should articulate a coherent research program consistent with the intentions of the Cooperative Agreement, and additional field assignments should be justified in writing on the basis of their consistency with and contributions to this research agenda. Exceptions to this rule may be made for extensions or expansions of current field support activities or for small-scale undertakings approved by A.I.D.'s SARSA Project Manager and judged by him to be not disruptive to the important task of synthesis and consolidation.

d) Clark University and IDA should propose a plan to ensure the collaboration between them originally envisioned for the Cooperative Agreement, for approval by S&T/RD.

2. Usefulness of Research

If followed, the recommendations above will go a long way toward overcoming deficiencies in the usefulness of SARSA research as well as in the quality of SARSA research. In addition:

a) Annually, SARSA should produce a review of accomplishments related to the previous year's plans, as well as a proposed work plan, research agenda, collaboration program, and plan of dissemination and institutional strengthening activities for the coming year.

b) Special assignments in response to requests from regional Bureaus or higher levels of A.I.D. should be approved only upon concurrence in writing with written statements by senior SARSA personnel directed to the steering committee explaining how those assignments can be carried out without detriment to the approved work plan, research program, collaboration program, and dissemination and institutional strengthening plan.

c) In its synthesis reports and in its annual research agendas and dissemination plans, special emphasis should be given to support for A.I.D. policy and programming, and to the relationship of its plans to A.I.D. concerns for income generation, particularly rural income generation, and sustainability of income generation dynamics.

d) For the remainder of the current Cooperative Agreement, Steering Committee meetings should be held at least bimonthly. These meetings should include a consistent group of representatives with decision-making authority from both Clark University and IDA. When necessary SARSA should schedule meetings of core researchers to make presentations and exchange information on current research activities for the specific purpose of ensuring integration of geographical and anthropological perspectives and of settlement, rural/urban linkage, and natural resource management concerns.

e) A.I.D. SARSA management should take an active and substantive involvement in SARSA work and an active role in monitoring SARSA field support activities. SARSA should conform to the cooperative agreement requirements that require the submission of semi-annual reports to S&T/RD summarizing the status of all current activities.

f) The synthesis efforts now under way should encompass a program of dissemination to peer groups and A.I.D.

3. Improving the Resources Available to A.I.D.

a) To the extent feasible, SARSA should take steps to involve SARSA associates from close networks of professionals and institutions in preparation of the synthesis reports on SARSA's three themes and their integration.

b) Clark University and IDA should jointly prepare a paper spelling out a strategy for sustaining the research resource base that has been created, and in particular for utilizing time and resources remaining to best advantage in this regard.

4. Strengthening Host-Country Capabilities

a) SARSA should send all relevant publications in its publication series to USAID and host-country professionals with whom it has worked in the course of specific Mission support activities. In addition, the periodic distribution of a SARSA publications list to all USAID Missions would provide other Missions with access to valuable information that might otherwise go unnoticed.

b) As a means of strengthening host-country capabilities, S&T/RD should consider giving preferential treatment to requests for SARSA Mission support services from Missions interested in incorporating an effort to strengthen host-country capabilities explicitly into SARSA field work. Sincerity in this regard can be judged by Mission willingness to participate in the process of identifying and selecting among host-country candidates to participate in SARSA field research work.

IV. LOOKING AHEAD

Recommendations made in the preceding chapter obviously apply as well to any possible successor project to SARSA. SARSA research has advanced along many lines of promising inquiry of considerable value to A.I.D. SARSA work has particular relevance for Agency concerns for income generation and sustainability of income generation dynamics. The evaluation team concludes that it would be a disservice to the Agency not to continue, expand, and strengthen this work through a successor project.

The design of a successor project should incorporate, in addition to the recommendations listed in Chapter III above, the following:

a) The project paper should contain a more precise statement of the substantive foci of the Cooperative Agreement based on the four synthesis reports now being developed.

b) The budget for a successor project should contain explicit allocations for institutional collaboration, thematic integration, and dissemination activities, and should contain guidelines for these activities.

c) The project paper for a successor project should also contain more explicit guidance with regard to improving research resources available to A.I.D. in SARSA's theme areas, including how networks of professionals and institutions might be developed, utilized, and sustained.

d) More careful consideration should be given to the themes to be covered under a successor project. The project paper for a successor project should explain how it is perceived that these themes fit together, and should state that a major focus of a successor to the SARSA Cooperative Agreement should entail research exploring the significance of relationships among these themes in rural regional development, and particularly for the formulation of policies, programs, and projects aimed at development interventions to achieve sustained expansion of rural incomes in LDCs.

e) In reviewing SARSA work to date, the evaluation team has concluded that while considerable achievements have been made under the current settlement systems theme of SARSA, those achievements reflect essentially the work of Thayer Scudder; and that while this work should continue to be supported by A.I.D., it should be replaced in the SARSA Cooperative Agreement with a "rural town systems" theme. In addition, the current SARSA rural/urban linkage theme (often referred to as "rural/urban dynamics") as it is evolving, in fact, has more operational relevance for A.I.D. than its name implies. This theme actually deals with the various forms of rural/urban exchange and their implications for expanding farm household incomes and generating off-farm employment and enterprise

opportunities. The theme should be renamed "rural/urban exchange." Finally, the "natural resource system analysis" or "resource management and analysis" theme also carries with it sustainability of rural development and income generating processes. This theme should be renamed "natural resource management." Thus, following this recommendation, the three SARSA themes would be rural town systems, rural/urban exchange, and natural resource management.

The notion that the way rural town systems function and the way natural resources are managed by farmers and others influence each other through processes of rural/urban exchange would be easier to articulate and be perceived as an integrative framework for analysis and design of packages of development interventions than is the case with the current nomenclature of SARSA themes.

This final recommendation is perhaps beyond the normal purview of project evaluations. But the evaluation team feels that the initial conceptualization of SARSA remains valid and of substantial importance to A.I.D.'s mission, and that improvement in its basic terminology will contribute to a clarification of its basic subject matter, the complementarity of its themes, and an appreciation of the ultimate unity of its focus.

APPENDIX A

SARSA FIELD PROJECTS

SARSA FIELD PROJECTS

Countries/ Projects	Research Themes			
	Resource Analysis	Rural- Urban	Settlement/ Resettlement	Regional Development
Somalia		X		+
Kenya	+	X		
Zaire		X		
Ecuador		X		
Jordan		X		X
Tunisia	+	+	+	X
Sri Lanka		+	X	
Mali			X	
Zambia/ Zimbabwe	+		X	+
Peru	X			X
Jamaica	X			
Senegal	+		+	X
Bolivia	+		X	X
African River Basins	+		+	X
African Con- tract Farming	+	X		

X Major Emphasis
+ Minor Emphasis

APPENDIX B
SARSA BIBLIOGRAPHY

- The Agricultural and Rural Development Authority of Zimbabwe/Clark University/Institute for Development Anthropology. A proposal to Determine the Causes of Environmental Degradation and Resource Depletion in the Sabi Basin and to Prepare Effective Resource Management Guidelines for Chipinga District and the Upper and Middle Sabi Valley, Zimbabwe. 1982. 30 pp. (\$5.00)
- Appleby, G. Criteria and Methodology for the Delimitation of Water-Short Areas in Central Tunisia. 1987. 32 pp. (\$5.00) (also available in French)
- Armstrong, G., et al. Assessment of Hillside Agriculture in Two Watersheds of Jamaica. 1986. 15 pp. + Technical Annexes + Appendices. (\$8.00)
- Astillero, E.I. Spatial Planning and Rural Settlements Access to Services and Facilities: Methods and Application in the Philippines (Bicol River Basin Study). 1982. 38pp. (\$5.00)
- Barkan, J.D. Institutionalization: The Missing Link in UFRD. 1983. 27 pp. (\$4.00)
- Belsky, E.S. Review of Selected Documents on Rural-Urban Dynamics. 1985. 86 pp. (\$7.00)
- Belsky, E.S. The Urban Functions in Rural Development Project: An Annotated Bibliography. 1983. 93 pp. (\$7.00)
- Belsky, E., R. Hackenberg, G. Karaska, D. Rondinelli. The Role of Secondary Cities in Regional Development. 1983. 49 pp. (\$5.00)
- Belsky, E.S., G.J. Karaska. A Critical Analysis of Functional Integration as a Planning Construct. 1985. 61 pp. (\$6.00)
- Belsky, E., G. Karaska. Marketing in Rural Development: A Model of Rural-Urban Dynamics. 1986. 58 pp. (\$6.00)
- Belsky, E.S., G.J. Karaska. The Rural Demand for Urban Service Systems Project: The "Demand" Approach. 1983. 12 pp. (\$4.00)
- Belsky, E.S., G.J. Karaska. Urban Functions in Rural Development End-of-Project Assessment Report. 1984. 137 pp. (\$10.00)
- Berry, E. The African Family-Household: A Behavioral Model. 1985. 408 pp. (\$23.00)
- Berry, E. Area-Based Resource Analysis: Framework for Project Design and Applied Research. 1983. 13 pp. (\$4.00)

- Berry, E., J. Levy. Soil Degradation Problems and Soil Conservation Techniques and Management: Use and Implementation in Africa. Resource Handbook Series No. 1, Vol. 1 (Selected Bibliography, Annotated Bibliography, Register of Relevant Institutions). 1983. 57 pp. (\$6.00)
Resource Handbook Series No. 1, Vol. 2 (Introduction and Selection of Reprinted Papers). 1983. 360 pp. (\$21.00)
- Berry, E., B. Thomas, eds. Natural Resource Management Workshop Collected Papers. 1983. 164 pp. (\$11.00)
- Berry, L. "Natural Resource Base Planning for Regional Development: Lessons of Experience"
- Turner, B.L. "Micro-Scale Modeling of Behavior and Natural Resource Use Systems: A Trial Formulation"
- Ford, R. "Local Leadership and Local Decisions in Improved Resource Planning and Management"
- Thomas, B. "Effective Institutional Approaches to Local Resource Management: Lessons and Applications"
- Brokensha, D. "Community-Based Natural Resource Management"
- Berry, E. "Labor Availability as a Factor in the Design of Small-holder Development Projects: African Examples"
- Painter, M. "Resource Use in the Tambopata Valley, Peru: Stat Cooperatives and Community Leadership on a Coffee Frontier"
- Hanson, P. "Geographic Information Systems Design Considerations for Settlement and Resource Systems Analysis"
- Billings, M. Contract Poultry Farming in Senegal. 1987. 46 pp. (\$5.00)
- Bims, H. An Approach for Considering Intra-Group Diversity in Targeting Agricultural Development Support for Smallholding Farmers. 1985. 20 pp. (\$3.75)
- Bims, H. The Ideology of Race and Class in the Development of Smallholder Agriculture in Jamaica. 1986. 32 pp. (on file)
- Bonham, C.D. Summary of Range Management Issues in Baluchistan, Pakistan. 1982. 11 pp. (on file)
- Boyle, P. Le Developpement Zonal dans la Tunisie Centrale: Rapport Final de Consultation. 1986. 137 pp. (\$10.00) (in French)

- Brokensha, D.W., P.D. Little. Report on the Workshop on New Lands Settlement and Area Development. 1982. 13 pp. (\$3.25)
- Bromley, R. Market Center Analysis in the Urban Functions in Rural Development Approach. 1982. 57 pp. (\$6.00)
- Bromley, R. The Urban Road to Rural Development: Reflections on USAID's "Urban Functions" Approach. [Reprinted from Environment and Planning A, 15, 1983.] 1983. 4 pp. (\$4.00)
- Carney, J. Contract Farming in Irrigated Rice Production: Jahaly Pacharr Project, The Gambia. 1987. 77 pp. (\$6.00)
- Carroll, T., B. Lentnek, R. Wilkie. Estudio de Vinculaciones Rurales-Urbanas y Centros de Mercado en la Sierra Ecuatoriana. 1984. 50 pp. (\$6.00)
- Carroll, T., B. Lentnek, R. Wilkie. Exploration of Rural-Urban Linkages and Market Centers in Highland Ecuador: The Influence of the City of Ambato. [Reprinted from Regional Development Dialogue, 5(1), 1984.] 1984. 42 pp. (\$5.00)
- Chetwynd, E. Regional Analysis, Market Towns, and Rural Development. [Reprinted from Horizons Magazine, January, 1983.] 1983. 20 pp. (\$4.00)
- Clark University/Institute for Development Anthropology. Problems and Issues in African River Basin Planning. 1985. 301 pp. (\$18.00)
- Berry, E., L. Berry, G. Karaska, ARB Steering Committee. "A Conceptualization of African River Basin Planning"
- Scudder, T. "Overview"
- Berry, E., L. Berry. "African River Basin Development: Natural Resource Management Issues"
- Schwarz, H.E. "River Basin Development - The Water Management (Engineering) Issues"
- Utton, A.E. "International Legal Issues"
- Major, D.C., P.D. Little. "Economic Issues in African River Basin Development"
- Salem-Murdock, M. "African River Basin Development: Socioeconomic Issues"
- Thomas, B.P., D. Brokensha. "The Institutional Aspects of African River Basin Development"
- Scudder, T. "Recommendations"

Mascarenhas, O. (Appendix) "An Indicative Bibliography with Special Reference to the Gambia, Niger, Senegal, and Juba River Basins"

- Coffey, W.J., L.A. Lewis. Upper Artibonite River Basin: Identification and Assessment of Planning Units. 1984. 39 pp. (\$5.00)
- Coffey, W.J., L.A. Lewis, A.B. Hauge. Social Institutional Profile of the Cayes Plain Basin Towards a Coordinated Rural Regional Development Strategy. 1984. 200 pp. (\$13.00)
- Collins, J. Land Tenure, Institutional Factors and Producer Decisions on Fragile Lands. 1984. 13 pp. (\$3.25) (No longer available. Issued as Smallholder Settlement of Tropical South America: The Social Causes of Ecological Destruction. [Published in Human Organization 1986 45:1-10.])
- Collins, J. and Painter, M. Settlement and Deforestation in Central America: A Discussion of Development Issues. 1986. 42 pp. (\$5.00) (also available in Spanish)
- Daddieh, C. Contract Farming in the Oil Palm Industry: A Comparative Study of Cote d'Ivoire and Ghana. 1987. 57 pp. (\$6.00)
- Davis, S. Employment Generated by Projects of the Central Tunisia Development Authority. 1985. 28 pp. (\$10.00) (also available in French, without appendices) 82 pp. (\$7.00)
- De Treville, D. Contract Farming, the Private Sector, and the State: An Annotated and Comprehensive Bibliography with Particular Reference to Africa. (Includes review essay by D. de Treville and M. Watts.) 1987. 375 pp. (\$22.00)
- Dias, H.D. A Study of Rural-Urban Trade Relations in Asia: Can Small Towns Help Farmers Get Better Income? 1983. 8 pp. (\$4.00)
- Downs, R. Report of an Assessment of Research Needs for USAID Project 660-0102 in Bandundu, Zaire on Behalf of SARSA, August-September 1985. 1985. 19 pp. (on file)
- Downs, R., C.K. Daddieh. Area Food and Marketing Development Project, Zaire. 1985. 33 pp. (\$5.00)
- Evans, H.E. An Assessment of Urban and Urban-Related Activities of the Latin American/Caribbean Bureau of the Agency for International Development. 1984. 28 pp. (\$6.00)
- Evans, H., D. Siglin. Making Planning More Effective in Developing Countries: Lessons from Potosi, Bolivia. 1983. 33 pp. (\$5.00)

- Evans, H.E., D. Siglin. The Urban Functions in Rural Development Project: Its Application in Potosi, Bolivia. 1983. 17 pp. (\$4.00)
- Fakhfakh, M. Cartographie des Ressources en Eau et de la Population en Tunisie Centrale. Forthcoming. (in French)
- Fass, S.M. Development Assistance: Ruined Hopes and Great Expectations in Africa. [Reprinted in Studies in Comparative International Development, 19(3), 1984.] 1983. 34 pp. (\$5.00)
- Gervais, R. Population and Water in Central Tunisia. 1987. 274 pp. (\$17.00) (also available in French)
- Goebel, J., et al. An Assessment of Watersheds Flowing South of Pic Macaya Les Cayes, Haiti. 1985. 192 pp. (on file)
Order from Robert J. Walter, S&T/RD, USAID, Washington, DC 20523.
- Grimm, C. Institute for Development Anthropology Associates Network. 1983. 32 pp. (on file)
- Grimm, C.D. Report on the Collection of Base-Line Socio-Economic and Natural Resource Data on Mekran Division, Baluchistan. 1983. 38pp. (\$5.00)
- Hackenberg, R.A. Microurbanization: An Optimizing Strategy for Rural and Regional Development. 1984. 135 pp. (\$10.00)
- Hackenberg, R.A., B. H. Hackenberg. Developing Intermediate Cities as Agro-Industrial Processing Centres: A Project in Western Panama. [Reprinted from Regional Development Dialogue, 5(1), 1984.] 1984. 50 pp. (\$6.00)
- Hackenberg, R.A., R. Hinojosa, B.H. Hackenberg. Centros Rurales de Crecimiento y Servicio: El Componente Agroindustrial. 1983. 108 pp. (\$8.00)
- Hackenberg, R.A., R. Hinojosa, B.H. Hackenberg. Crecimiento Rural y Centros de Servicio: El Componente de la Pequena Empresa. 1983. 135 pp. (\$10.00)
- Hackenberg, R.A., R. Hinojosa, B.H. Hackenberg. Employment Planning and Generation: The BNP Supervised Credit Program. 1983. 177 pp. (\$12.00)
- Hackenberg, R.A., R. Hinojosa, B.H. Hackenberg. Rural Growth and Service Centers: The Agro-Industry Component. 1983. 106 pp. (\$8.00)
- Hackenberg, R.A., R. Hinojosa, B.H. Hackenberg. Rural Growth and Service Centers: The Small Scale Enterprise Component. 1983. 174 pp. (\$12.00)

- Hamilton, S. An Unsettling Experience: Women's Migration to the San Julian Colonization Project. 1986. 84 pp. (\$7.00)
(also available in Spanish)
- Hammam, M., M. McNulty, F.M. O'Regan. Methodology and Institutional Framework for Community Development (Jordan): A Study at the Micro-Regional Level. 1983. 22 pp. (on file)
- Hansen, N. The Roles of Infrastructure and Secondary Cities in Unbalanced Regional Development Strategies. 1984. 30 pp. (\$5.00)
- Hansen, N. Rural Development and the Urban System in Mexico: Issues and Policies. 1984. 17 pp. (\$4.00)
- Holtzman, J.S. Annotated Bibliography of Cassava Production, Marketing Processing and Consumption in Africa with Particular Attention to Zaire. 1986. 35 pp.
- Horowitz, M., P. Little. African Pastoralism and Poverty: Some Implications for Drought and Famine. Colloquium on Drought and Hunger in Africa, National Center for Atmospheric Research. 1985. 40 pp. (\$5.00) Being published in Drought and Hunger in Africa, 1986. Edited by Michael Glantz, Cambridge: Cambridge University.
- Horowitz, M.M., J. Nellis, F. Young. Mission to the Commissariat General au Developpement Regional (Tunisia): Report and a Proposal to USAID/Tunis. 1983. 31 pp. (\$6.00) (also available in French)
- Horowitz, M.M., M. Salem-Murdock. Report on the Tunisia Mission, January 10-27, 1983.
- Horton, J. Characteristics of the Horticultural Export Enterprises Utilizing Contract Farming Schemes in Senegal. 1987. 92 pp. (\$7.00)
- Household Studies Group (Berry, E., et al.). Household Dynamics and Development: Annotated and General Bibliographies, Focus on Africa. 1986. 170 pp. (\$12.00)
- IDA/Clark University. Report on the Case Studies Workshop on Region-Based Development. 1984. 23 pp. (\$4.00)
- Jaffee, S. Case Studies of Contract Farming in the Horticulture Sector of Kenya. 1987. 153 pp. (\$11.00)
- Jarosz, L. "The Traffic in Women": Buying and Selling Labor Power in African Contract Farming. 1987. 64 pp. (\$6.00)
- Jones, A.K., R. Laporte, Jr. Report on Administrative Structure, Management, and Training for Baluchistan Area Development Project (BADP) PID. 69 pp. (on file)

- Kane, J. Contracting Animal Protein Production. 1987. 80 pp. (\$7.00)
- Karaska, G.J. Rural-Urban Dynamics in Regional Planning: Examples from Underdeveloped Regions. 1986. 17 pp. (\$4.00)
- Karaska, G., B. Lentnek, R. Wilkie, E. Belsky, H.O. Calkins. Rural-Urban Dynamics in Ecuador: Agricultural Marketing in the Ambato Region. 1985. 139 pp. (\$10.00)
- Klein, W.B. Local Organizations in Haiti and Effective Community Development: Specific Reference to the Central Plateau. 1984. 50 pp. (\$6.00)
- Koenig, D. Manantali Resettlement Monitoring Trip Report. 1985. 9 pp. & Appendices. (on file) (also available in French)
- Koenig, D. The Manantali Resettlement Project: The First Year Move. 1986. 44 pp. (\$5.00) (also available in French)
- Koenig, D. Monitoring Plan for Manantali Resettlement Project Paper (USAID No. 625-0955). 1983. 28 pp. (\$4.00)
- Larson, B. Rapport d'Evaluation des Impacts Socio-Economiques dans le PPI de Garaat Ennam. 1986. 50 pp. (\$6.00) (in French)
- Larson, B. Rapport d'Evaluation des Impacts Socio-Economiques dans le PPI de Bled Debbiche Rohia (Tunisia). Forthcoming. (in French)
- Lee, M., et al. Centro de Informacion de CORDECRUZ. Tomo II. 1985. 79 pp. + Appendices. (\$15.00) (in Spanish)
- Lee, M. Sistema de Informacion para la Planificacion de un Modelo de Organizacion. Tomo I. 1985. 88 pp. (\$7.75) (in Spanish)
- Lewis, H.S., C. Kerven, N. Southerland. Urbanization and Outmigration in Somalia. 1983. 70 pp. (\$6.00)
- Little, P.D. Adding a Regional Perspective to Farming Systems Research: Concepts and Analysis. [Reprinted from Human Organization, 44:4, 1985.] 1985. 8 pp.
- Little, P.D. Local Resource Management in Kenya: An Issues Paper. 1984. 77 pp. (\$6.00)
- Little P., D. Brokensha. Local Institutions, Tenure, and Resource Management in East Africa. Cambridge University, Conference on the "Scramble for Resources: Conservation Policy in Africa, 1884-1984." 1985. 29 pp. (\$3.75)

- Little, P.D., R. Eastman, B. Spooner. Resource Planning, Monitoring, and Evaluation in Baluchistan, Pakistan (AID Project No. 391-0479): A Preliminary Assessment. 1983. 55 pp. (\$6.00)
- Little, P. and M. Horowitz, eds. Lands at Risk in the Third World: Local-Level Perspectives. Boulder, CO: Westview Press. 1987. 416 pp. (Available from Westview Press. \$25.85)
- Ludwig, A.K. The Hierarchy of Central Places in the Highlands of Guatemala, Their Periodic Markets and Tributary Areas. 1983. 33 pp. (\$5.00)
- Ludwig, A.K. A Review of Iowa State University's Technical Assistance Contributions to the Integrated Area Development Studies Project in Guatemala. 1983. 15 pp. (\$4.00)
- McKee, M. Flood Flow Modeling in the Bicol River Basin. 1983. 14 pp. (\$4.00) (Appendix on file)
- McKee, M. A Preliminary Assessment of Proposed Flood Control Mechanisms in the Bicol River Basin. 1983. 39 pp. (\$5.00)
- Menegay, M., et al. The Corn Marketing System - A Rapid Marketing Appraisal in the Bicol Region of the Philippines. 1987. 117 pp.
- Minot, N. Economic Aspects of Contract Farming in Less Developed Countries: An Annotated Bibliography. 1986. 22 pp. (\$4.00)
- Minot, N. Inventory of Contract Farming Schemes in Africa. 1987. 42 pp. (on file)
- Murphy, A.D., R.A. Hackenberg. Centros Rurales de Crecimiento y Servicio: El Componente de Viviendas. 1983. 73 pp. (\$6.00)
- Murphy, A.D., R.A. Hackenberg. Rural Growth and Service Centers: The Housing Component. 1983. 73 pp. (\$6.00)
- O'Regan, F.M., T.C. Schmidt. Recommendations on the Development and Execution of a Micro-Regional Planning Study (Jordan): A Rural Village Survey and Revenue-Generation Study. 1983. 52 pp. (on file)
- Painter, M. Ethnicity and Social Class Formation in the Bolivian Lowlands. 1985. 24 pp. (\$3.50)
- Painter, M. Resource Use in the Tambopata Valley, Peru: State Cooperatives and Community Leadership on a Coffee Frontier. 1983. 18 pp. (\$3.25) (also available in Spanish)

- Painter, M. Spatial Analysis of Regional Marketing Systems in the Third World. 1985. 21 pp. (\$3.75) (No longer available.) (Forthcoming in Human Organization 1987 [47]. Also in Patterns of Change in Developing Rural Regions, ed. by R. Bar-El, A. Bendavid-Val, and G.J. Karaska. Westview Press. ????. pp. 49-60)
- Painter, M., et al. Fragile Lands in Peru: Report to the S&T-LAC Fragile Lands Working Group. 1985. 36 pp. (\$4.75)
- Painter, M., C.A. Perez-Crespo, M.L. Albonoz, S. Hamilton, W. Partridge. New-Lands Settlement and Regional Development: The Case of San Julian, Bolivia. 1984. 56 pp. (\$6.00) (also available in Spanish)
- Painter, M., W. Partridge. Lowland Settlement in San Julian, Bolivia: Market Linkages, Regional Underdevelopment, and Project-Level Success. 1985. 35 pp. (\$4.25)
- Palmer-Jones, R. Buying Time and Staggering Along: Plantations and the Smallholder Tea Authority in Malawi. 1987. 140 pp. (on file)
- Perez-Crespo, C.A. San Julian: Balance y Desafios. 1985. 30 pp. (\$3.85)
- Perez-Crespo, C.A., M.L. Albornoz. Informes Preliminares Sobre la Colonizacion en San Julian, Bolivia. 1984. 15 pp. (\$3.25)
- Perry, E. The Cameroon Urban Function in Rural Development Project: Country and Regional Profile. 1983. 46 pp. (\$5.00)
- Perry, E. The Cameroon Urban Functions in Rural Development Project: Final Report. 1983. 50 pp. (\$6.00)
- Perry, E. The Cameroon Urban Functions in Rural Development Project: Sectoral Studies. 1983. 94 pp. (\$7.00)
- Proceedings of the First Conference, SARSA and Settlement Study Center, Rehobot, Israel. Rural-Urban Dynamics in Developing Rural Regions. (18-22 April, 1984) 1985. 198 pp. (\$13.00)
- Weitz, R. "Integrated Rural Development: The Rehovot Approach"
- Prion, I. "The Image of a Rural Town According to the Rehovot Approach: An Integrated Link in the Regional System"
- Wilkansky, R. "Alienation and Collaboration in Rural-Urban Relationships in Israel"
- Margulies, J., A. Rokach. "Urban-Rural Relations in the Lakhish Region - Planning and Reality"

- Nesher, A. "Beer Sheba: A Town with Non-agricultural and Sparsely Populated Hinterland"
- Vitkon, G. "The Organization Process of a Rural Population: The Case of the Bedouins in the Negev Region"
- Bar-El, R. "The Role of Rural Towns in the Industrialization of Rural Areas: Empirical Evidence from Northeast Brazil"
- Sherman, N.P. "Development of the Ugandan Dairy Industry: Subordination of Rural Development Policy to Urban Interests"
- Ragragio, C.M. A Report on the Dissemination of the "Urban Functions in Rural Development Project." 1983. 11 pp. (\$4.00)
- Reeser, R. Economics of Water Point Development in Central Tunisia. 1987. 90 pp. (\$7.00)
- Rondinelli, D. Applied Methods of Regional Planning: The Urban Functions in Rural Development Approach. 1983. 259 pp. (\$16.00)
- Rondinelli, D.A. Intermediate Cities' Role in Industrial Decentralization, Employment Generation, and Economic Development in South Korea. 1983. 88 pp. (\$7.00)
- Rondinelli, D.A. Regional Cities, Agricultural Productivity, and Employment Generation: the Challenges of Urban Transition and Rural Development. 1984. 155 pp. (\$11.00)
- Rondinelli, D. Small Towns in Developing Countries: Potential Centers of Growth, Transformation and Integration. 1982. 34 pp. (\$5.00)
- Rushton, G. Indian Planning of Urban Functions for Rural Development. 1983. 51 pp. (\$6.00)
- Rushton, G. Location-Allocation Algorithms as a Method of Locating Facilities in Developing Countries: Extensions to Cope with Identified Policy Constraints. 1984. 65 pp. (\$6.00)
- Rushton, G., L. Yapa. Review of USAID Bolivian Urban Functions in Rural Development Project in Potosi, Bolivia. 1983. 9pp. (\$4.00)
- Salem-Murdock, M. Household Dynamics and the Organization of Production in Central Tunisia. 1985. 81 pp. (\$7.00) (also available in French)

- SARSA Team for the Jordan Regional Planning Department, Ministry of Planning. Proposed Institutional Changes to Implement a Regional Development Strategy for the Planning and Implementation of Employment, Income and Revenue Generation Projects for the 1986-1990 Five Year Plan. 98 pp.
- SARSA Team. Subregional Planning and Project Design: A Development Study of the Balqa Governorate, Jordan. 160 pp.
- SARSA Team. Technical Assistance to the Ministry of Planning for Regional Planning in Jordan. 1986. 107 pp.
- Sanders, R., ed. Rural-Urban Dynamics in Africa: Common Themes Initiative: Background, Issues and Concepts. 1985. 50 pp. (\$6.00)
- Sanders, R. "Rural-Urban Dynamics in African Development: A Collaborative Research Initiative"
- Brown, L.A., V.A. Lawson. "Rural-Urban Interface in Third World Settings: A Discussion of Current Issues"
- Sly, D. "Migration in Africa: the State of Research and Conceptual Issues"
- Trager, L. "Markets, Marketing and Distribution in Africa"
- Fass, S. "Market Towns and Creation of Secondary Cities"
- Scheliga, J. Reconnaissance Water Resources Survey of Sened and Gafsa North Delegations and Southern Kasserine (Tunisia). 1987. 57 pp. (on file)
- *Scudder, T. The Development Potential of New Lands Settlement in the Tropics and Subtropics: A Global State-of-the-Art Evaluation with Specific Emphasis on Policy Implications. Executive Summary. AID Program Evaluation Discussion Paper No. 21. 1984. 46 pp.
- Scudder, T. A History of Development in the Zambian Portion of the Middle Zambezi Valley and the Lake Kariba Basin. 1985. 84 pp. (\$6.50)
- Scudder, T. Regional Planning for People, Parks and Wildlife in the Northern Portion of the Sebungwe Region, Zimbabwe. 1982. 39 pp. (\$4.50)
- Scudder, T. From Relief to Development: Some Comments on Refugee and Other Settlements in Somalia. 1981. 41 pp. (\$4.50)
- Scudder, T., Howe, C., and Horowitz, M. Senegal River Basin Activities Report for FY86. 1986. 54 pp. (on file)

- Scudder T., K. Wimaladharma. The Accelerated Mahaweli Programme (AMP) and Dry Zone Development - Report Number Four. 1983. 34 pp. (\$4.50)
- Scudder T., K.P. Wimaladharma. The Accelerated Mahaweli Programme (AMP) and Dry Zone Development - Report Number Five. 1985. 45 pp. (\$5.75)
- Scudder T., K.P. Wimaladharma. The Accelerated Mahaweli Programme (AMP) and Dry Zone Development - Report Number Six. 1985. 53 pp. (\$6.00)
- Silcox, S.C. and M. el-Hadid. Analysis of Local Institutions in Balqa Governorate (An Institutional Analysis from a Regional Planning Perspective: A Case study of the Governorate of Balqa, Jordan). 19__ . 116 pp.
- Spooner, B., L. Glickman. Baluchistan, Pakistan: A Socio-Economic Literature Review and Analysis. 1982. 174 pp. (\$11.00)
- Spooner, B., A. Jones. Baluchistan: An Introduction. 1982. 40 pp. + Appendices. (\$6.50)
- Spooner, B.A., P.D. Little, W.R. Walker, S.H. Johnson, III. Toward the Identification of a Baluchistan Area Development Project. 1983. 71 pp. (\$6.00)
- Stocks, A. Fragile Lands Development and the Palcazu Project in Eastern Peru. Forthcoming.
- Sudan, Regional Government of Kordofan/University of Khartoum/Clark University. A Proposal to Prepare a Regional Resource Overview on Settlement and Resource Systems Analysis and Management Including Land Use and Land Potential Maps for Kordofan Region, Sudan. 1984. 21 pp. (on file)
- Watts, M. and Contract Farming Study Group. Contract Farming in Sub-Saharan Africa: A Research Proposal. 1986. 70 pp. (on file)
- Wilken, G.C. Southern Perimeter Road, Lesotho: Social Analysis and Environmental Assessment. 1983. 27 pp. (\$4.00)
- Wilkie, R., B. Lentnek, T. Carroll. Progress Report for the Ecuador Project on Urban-Rural Linkages (Urban Dimensions of Rural Development in Ecuador). 1983. 135 pp. (\$10.00)
- Wilkie, R.W., A.K. Ludwig. Central Place Systems in Guatemala: The Findings of the Instituto de Fomento Municipal (A Precise and Translation). 1983. 18 pp. (\$4.00)

Williams, L.S., L. Cooperband, and B.J. Walter. Agricultural Terrace Construction: The Valles Altos Project of Venezuela as an Example for A.I.D. 1987. 177 pp.

Yapa, L.S. Regional Issues in Strategies for Increasing Rural Employment. 1984. 35 pp. (\$5.00)

Yapa, L. The Social Element in Spatial Planning. 1983. 26 pp. (\$4.00)

Zola, A.M. Market Research and Development/Marketing Extension Approach for Irrigated Agriculture: The Case of the Lam Nam Oon Irrigation Project. 68 pp.

APPENDIX C

PROJECT LOGICAL FRAMEWORK

PROJECT DESIGN SUMMARY—LOGICAL FRAMEWORK

Project Title and Number: Human Settlement and Natural Resource Systems Analysis (formerly Rural Area Development)

Life of Project: From FY 1981 to FY 1986
Total U.S. Funding: 3.0
Date Prepared: 7/11/83

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Within a region-based context, increase:</p> <ul style="list-style-type: none"> - Local capacity for effective management and preservation of the productive rural resource base. - Agricultural productivity and rural income. - Regional employment opportunities. 	<p>Measure of Goal Achievement:</p> <p>Region-based projects helping preservation and efficient management of rural resources base, increasing agricultural productivity and stimulating employment opportunities.</p>	<p>A review of specific project impact evaluations produced by LDCs, AID and other donor agencies.</p>	<p>Assumptions for achieving goal targets:</p> <ul style="list-style-type: none"> - Adequate policy commitments by host governments. - Sustained commitment to region-based approach by AID and donor agencies. - Theoretical and methodological content of project is valid.
<p>Project Purpose:</p> <p>Enhance AID's ability to incorporate spatial and locational analysis and resource management perspectives into the design, implementation and evaluation of region-based development projects.</p> <p>Strengthen capacity of cooperating institutions to service agency in these areas.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ul style="list-style-type: none"> - Improved region-based projects in Agency portfolio dealing with local production, settlement or resource problems. - Strengthened CA institutions capable of providing TA to AID and LDCs in project areas on sustained basis. 	<p>Survey and evaluation of agency policy guidance, sector strategies, project papers and evaluations to verify achievement of EOPS. Comparison with selected region-based projects through FY 1982 which will serve as baseline. Evaluate also relative capacity of cooperating institutions over same periods.</p>	<p>Assumptions for achieving purpose:</p> <ul style="list-style-type: none"> - AID/W and Missions receptive to approaches and innovations introduced through project. - Collaboration and receptivity of host countries. - CA institutions absorb and institutionalize knowledge, approaches and experience produced through project.
<p>Outputs:</p> <ul style="list-style-type: none"> - Long-term, country-specific applied R&D products - Research enhancing TA missions - Handbooks/manuals - Concept papers - Training sessions - Information dissemination/professional networks - Common-theme products 	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> - Long-term research production in 5 countries - Up to ten missions per year - Two manuals/handbooks - Six to eight concept papers - One to two training programs per year - Network includes seasoned/skilled talent in all fields/regions covered - Two common themes with regional bureaus 	<p>Review of CA quarterly and annual reports, annual work plans, and periodic evaluations, plus direct monitoring by S&T/RD/FRD.</p>	<p>Assumptions for achieving outputs:</p> <ul style="list-style-type: none"> - CA has necessary capacity. - Regional bureaus/missions continue or exceed present level of interest and participation in project. - S&T/RD/FRD continue with planned level of management and budget support. - People exist with skills necessary for network.
<p>Inputs:</p> <ul style="list-style-type: none"> - CA extension with Clark/ADA - Regional Bureau and Mission add-ons and Common Theme agreements - Continued feedback from AID user group - S&T/RD/FRD staff and budget to manage project - Collaboration by host country institutions 	<p>Implementation Target (Type and Quantity)</p> <p>Budget of 2.2 million plus mission and regional bureau add-ons over four year period. CA extension of four years.</p>	<ul style="list-style-type: none"> - Annual S&T/RD ABS plus annual PIQ/T for core funding. - PIQ/Ts for mission and Regional Bureau add-ons and common themes. 	<p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> - Budget available and CA mechanism approved. - Missions and Regional Bureaus able to find funding and appropriate mechanisms for common themes and add-ons.

APPENDIX D

DOCUMENTS REVIEWED BY OUTSIDE EXPERTS

SARSA Documents Reviewed by Rowland Illick:

1. Problems and issues in African river basin planning. March 1985. (Reviewed by both Illick and Reyna.)
2. Belsky, Karaska. Urban functions in rural development end-of-project assessment report 1984.
3. Belsky, Karaska. Marketing dynamics in rural regions: A spatial model of rural-urban dynamics. 1986.
4. Menegay, et al. Corn marketing system: a rapid market appraisal in Bakool region of Philippines. April, 1987.
5. Technical assistance to the Ministry of Planning for regional planning in Jordan, March, 1986.
6. Berry, Thomas. Natural resource management workshop, collected papers. 1983.
7. Berry. Area-based resource analysis: framework for project design and applied research. 1983.
8. Hackenberg. Microurbanization: an optimizing strategy for rural and regional development. 1984.
9. Karaska, Lentnek, Wilkie, Belsky, Calkins. Rural-urban dynamics in Ecuador: agricultural marketing in the Ambato region. 1985.
10. Sanders. Rural-urban dynamics in Africa: common themes initiative: background issues and concepts. 1985.
11. Rondinelli. Regional cities, agricultural productivity and employment generation: challenges of urban transition and rural development. 1984.

SARSA Documents Reviewed by Steven Reyna:

1. Lands at Risk. The evaluator focused on papers by those authors who have been directly involved with SARSA activities. These include: Introduction and Chapters 1, 3, 5, 7, 8, 9, 15, 16, and 17.
2. Collins and Painter. Settelement and deforestation in Central America: a discussion of development issues. November, 1986
3. Scudder et al. Senegal River Basin Activities for FY 86.
4. Problems and issues in African river basin planning. 1985. (Reviewed by both Reyna and Illick.)

5. Contract Farming in Africa Working Papers nos. 1, 8, and 12.
6. Painter et al. New-lands settlement and regional development: the case of San Julian, Bolivia. 1984.
7. Scudder. The development potential of new lands settlement in the tropics and sub-tropics: a global state-of-the-art evaluation with specific emphasis of policy implications. Executive summary. 1984.
8. Scudder et al. The accelerated Mahaweli programme (AMP) and dry zone development - report number 5. 1985.
9. Scudder et al. The accelerated Mahaweli programme (AMP) and dry zone development - report number 6. 1986.
10. Balterzersen et al. Household dynamics and development: a bibliographic review. An annotated bibliography focusing on Africa and a selected general bibliography. 1986.
11. Sanders. Rural-urban dynamics in Africa: Common themes initiative: Background, issues and concepts. 1985.