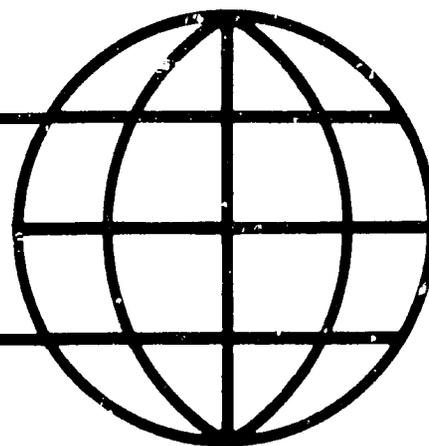


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**COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS  
AND NATURAL RESOURCE SYSTEMS ANALYSIS**

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REPORT OF THE CASE STUDIES WORKSHOP

ON REGION-BASED DEVELOPMENT

Cooperative Agreement on Human Settlements  
and Natural Resource Systems Analysis

Institute for Development Anthropology  
and  
Clark University

March 1984

Institute for Development Anthropology  
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## PREFACE

The Case Studies Workshop on Region-Based Development was held in Binghamton, New York, on 30 November - 1 December 1983. Its inception was motivated by a general feeling that the time had arrived to discuss in a colloquium form the field research efforts of the Clark University/Institute for Development Anthropology Cooperative Agreement. During a two-day period some forty participants, drawn from academia, the donor community, and host country government institutions, concerned themselves with several Cooperative Agreement studies in the areas of natural resource management, rural-urban dynamics, and settlement/resettlement. Workshop participants were asked to address a range of questions during the meetings. For example, among the countries in which we are active, which best reflect the Cooperative Agreement's research themes? What have we learned so far? What should we do differently in the future? Are there specific countries where we are not presently involved but where we should be trying to generate research activities? The following report summarizes the case-study discussions centered around these and other queries.

Institute for Development Anthropology  
Binghamton, New York

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## I. THE NATURAL RESOURCE MANAGEMENT CASE STUDIES

While diverse in their particulars, the natural resource management case studies presented in the workshop shared several themes, including the desire of host-country governments to grant regional institutions greater authority to plan and implement development efforts, the social and economic interdependence of urban centers and their rural hinterlands in developing regions, and the importance of close collaboration with host-country counterparts and institutions if the development initiatives of international donor agencies are to succeed. In addition, the discussion demonstrated very clearly that, while natural resource management may be treated as a discrete topic for heuristic purposes, within the framework of regional analysis it is not and cannot be conceptually distinct from studying and analyzing either human settlement or the role of urban centers in regional development. Indeed, the presenters demonstrated repeatedly that the divisions we create between topical areas dissolve when one is confronted with a concrete development problem in the field.

### A. Baluchistan Area Development Program

The Baluchistan Area Development Program is being conducted in the Mekran Division of southern Baluchistan, a very arid area with elevations varying from 0-3,000 feet above sea level. Baluch, a Persian language, is the lingua franca of all Baluchistan, but a large number of local languages are spoken as well. The major economic activity of the region is herding; however, agriculture has been possible in certain areas for about 2,000 years through the utilization of the karez system (called qanat in Iran and falaj in Oman). Karezs are underground channels that slope on a gradient that is less than the gradient of the ground in which they are dug in order to bring subterranean flows of water to the surface, allowing plant cultivation in restricted areas.

Since Pakistan's independence, Baluchistan has been left out of national politics. In addition, the region has been beset by declining water resources, in large part a result of the deterioration of many karezs. A variety of factors has reduced the number of traditional specialists who in the past have supervised the construction and maintenance of karezs. These factors include migration to the Persian Gulf states, which provides more

remunerative employment than their traditional specialty, and increasing difficulty experienced by the remaining karez specialists in moving between their homeland area in Afghanistan and that part of Baluchistan controlled by Pakistan. The twin problems of lack of political influence and growing impoverishment stemming from resource degradation have resulted in a general disenchantment with Pakistani rule among the Baluch, a disenchantment that has expressed itself in terms of a series of separatist movements.

In September 1982, USAID/Pakistan asked the Cooperative Agreement to begin to consider how a regional development project should be designed. USAID/Pakistan requested that a background literature survey be conducted in the United States and that a Cooperative Agreement team visit Pakistan to conduct a prefeasibility study. Supervised by IDA Associates Brian Spooner and Allen Jones, these exercises constituted the pre-PID (Project Identification Document) phase of the project cycle. The Cooperative Agreement then fielded a PID team, which included IDA Research Associate Peter Little as well as Jones and Spooner among its members. The PID team visited Baluchistan in December 1982-January 1983, and set out to identify a development project that would build upon the indigenous irrigation technology of the Baluchi.

The PID team identified three critical constraints to development: water, human resources, and transportation. In addressing the issue of scarce water resources it was immediately apparent that tube wells would not provide a solution because of the lack of electricity in the region. Therefore, the water management component focuses on the construction of small dams to check water runoff and create catchments for holding water that may be used for agriculture, and on improving the maintenance of existing karez systems. The irrigation engineer on the team suggested that the maintenance problem might be solved by channeling the water through pipes inside the karez, as the majority of karezes are not lined and are therefore subject to cave-ins. Piping the water would be a low-cost way to use the existing structure, and it would eliminate dependency on a disappearing occupational specialty.

The PID team suggested that the human resources constraint be addressed through the establishment of relevant capabilities at the University of Baluchistan and the Arid Zone Research Institute (AZRI), both at Quetta. USAID/Pakistan has expressed a great deal of interest in strengthening and expanding AZRI so that it could perform several functions relevant to the Baluchistan Area Development Program. These functions would include gathering baseline data on the state of natural resources and natural resource users in Baluchistan, participating in the monitoring of projects undertaken

by the program, and training Baluch students in appropriate agricultural and social sciences.

In the area of transportation, the PID team decided to focus on road construction and improvement. It is anticipated that this will enhance commercial ties between rural dwellers and urban centers of different levels. Improved roads will provide rural inhabitants with greater access to urban services and stimulate competition among urban-based traders by increasing producers' options regarding the marketing of their goods. The result might be higher prices for producers.

A principal obstacle to the success of the Baluchistan Area Development Program is the lack of baseline data needed to address intelligently any of the constraints discussed above. For this reason, the Cooperative Agreement team has relied heavily on host-country counterparts and institutions to help define the major goals of the program and identify questions that must be answered if these goals are to be achieved. Host country contributions helped the PID team decide on two major approaches to deal with the paucity of data. First, the Cooperative Agreement team has proposed that a monitoring and evaluation unit be included in the program. This unit would gather background data and assist in planning specific projects and in monitoring the impacts of those projects as they are implemented. The unit also would conduct research on issues that will affect the program in general--issues such as the level of labor migration to the Gulf States and the importance of remittances in shaping household economic strategies, the economic significance of date and livestock marketing, and the level and impact of price fluctuations for these and other commodities that play a role in household production and consumption behavior.

The PID team also has proposed utilizing the remote sensing capabilities of the Cooperative Agreement Team to conduct a quick and cost-effective inventory of natural resources and land use patterns in Baluchistan. In August 1983, Ron Eastman, of Clark University, accompanied Peter Little and Brian Spooner to Baluchistan to see if this would be a feasible approach. Eastman found that he could correlate surface rock material and vegetation with variations depicted in satellite imagery, and that surface rock material and vegetation also correlated with local land use patterns. This means that the remote sensing capacity of Clark provides a feasible way to conduct a resource inventory and develop detailed land-use maps expeditiously and at comparatively low cost.

The Baluchistan Area Development Program has become an important Cooperative Agreement activity for several reasons. First, the Cooperative Agreement has taken an early and important role in

planning the program, and the prospects are good for its long-term involvement in Baluchistan. Second, the Institute for Development Anthropology and Clark University have demonstrated that they can work together productively, with each institution making substantial contributions to the Cooperative Agreement effort. Finally, the Agreement effort in Baluchistan has emphasized the importance of designing projects that are compatible with and can build upon local social institutions, and it has explicitly incorporated these institutional issues into the program design process.

#### B. Sebungwe Regional Planning, Zimbabwe

While the presentation by ILA Director Thayer Scudder focused on his participation in designing a regional land-use plan for the Sebungwe region of Zimbabwe, Scudder also emphasized that this project shares major conceptual issues with Cooperative Agreement efforts in the Rapti area of Nepal and the Accelerated Mahaweli Resettlement Programme in Sri Lanka. These issues include:

- (1) The importance of assuring households access to the maximum diversity of natural resources that can be incorporated into their production systems;
- (2) The need to decentralize authority for making decisions about natural resource utilization in order to increase local participation;
- (3) The need to include the nature of rural-urban linkages in resource management schemes; and
- (4) The need to incorporate monitoring and evaluation units into development projects concerned with managing natural resources.

Because the Mahaweli project was scheduled to be discussed the following day, as a new lands settlement case study, Scudder did not treat it in this presentation. He did, however, summarize his participation in the evaluation of natural resource management problems in the Rapti region of Nepal and his view of the Cooperative Agreement's contribution there, as well as the Sebungwe case.

In the Rapti region, which comprises five districts in Nepal, the majority of the population resides on steep hillsides. As a result of population growth and rural impoverishment, these once heavily forested slopes have been denuded. In consequence, there is a massive erosion problem that takes a large toll not only in cropland but in human lives as well, with many people dying in

landslides. Little time remains for implementing a reforestation program before the ecological damage becomes irreparable. The problem that any resource management program must overcome is how to link resource management with household management in general: that is, how to give each household access to and responsibility for forest areas. Forest resources must be incorporated into the household production system and households must be assured of a minimal level of economic security so they are not forced to exhaust forest resources and defeat long-term conservation goals in order to overcome immediate problems of survival.

To realize the combined goals of reforestation and improved economic opportunities for peasants, a natural resource management program must exist in an overall regional context that places households in control of forest resources but links the household with each successive layer of government--the village, the ward, and the district. Such an approach requires natural resource management to be treated in a regional framework that includes the study of human settlement and the role of urban centers in rural development. This was an important consensus among workshop participants.

The Sebungwe region of Zimbabwe is located along the Zambezi River, which forms the international border between Zimbabwe and Zambia. Resource management problems there go back a quarter century, to the construction of the Kariba Dam. Households forced to move because of the dam were relocated along the edge of the dam reservoir, and this concentration of people set in motion a process of resource degradation. In Zimbabwe, the resettled area is adjacent to national parks and game reserves, and, as their resource base has deteriorated, the people along the reservoir have been forced to encroach on the parks.

In 1982, the Government of Zimbabwe created a planning department for the Sebungwe region charged with designing a plan that would allow the local population to have access to the resources it needs to survive without threatening the floral and faunal resources of the parks. The major obstacle to planning for the region is that resource management problems must be addressed on both the Zimbabwe and Zambia sides of the border. However, there is presently no coordination between the two countries in developing a regional plan.

Scudder's mission to Zimbabwe in September laid the groundwork for more effective cooperation between the two countries. At that time, he met with officials from Zimbabwe and Zaire and arranged for the Cooperative Agreement to provide a person who would coordinate regional planning activities in the two countries. The ultimate

goal of this coordination is to create an international resource management authority for the entire Sebungwe region.

Regarding how a regional resource management program should address the needs of the local population, Scudder argues that decentralization of decision-making authority to the district level is not sufficient. Specific measures need to be taken that will allow households to control their own resource base. These measures include:

- (1) Allowing local people to protect their gardens from elephants;
- (2) Creating buffer zones between the parks and settled areas where people are allowed to hunt; and
- (3) Placing certain projects under local control.

An enlightened approach to planning that considers household resource requirements will allow the local population to see that managed use is preferable to poaching. At present, the Cooperative Agreement is doing an inventory of development projects in the Sebungwe region as a first step toward coordinating activities there.

## II. SUMMARY OF THE RURAL-URBAN LINKAGES CASE STUDIES

Four case studies on the rural-urban linkages theme of the Cooperative Agreement were presented at the workshop. Examples included the Tunisia Regional Planning Study, the Evaluation of the Panama Rural Growth and Service Centers Project (URBE), the Somalia Rural-Urban Migration Study, and the Ecuador Rural Market Linkages Study. Three of the four--the Tunisia Regional Planning Study, the Somalia Rural-Urban Migration Study, and the Ecuador Rural Market Linkages Study--were specific analyses requested by either the USAID country mission or a host country institution. They were not carried out as part of a specific development project. The evaluation of the URBE project, on the other hand, deals with a particular AID-financed project.

Several important themes pertinent to each of the case studies were discussed. First was an emphasis on the interconnectedness of rural and urban activities, particularly at the level of small centers in the settlement hierarchy. It is at this node that the notion of rural-urban dichotomy is most suspect and that the success of rural development programs is intricately linked to services in the smaller centers. Dr. Kerven's exposition of migration in Somalia demonstrated the futility of a fixed rural-urban dichotomy. Like earlier migration studies in central and southern Africa, the Somali example pointed to numerous economic linkages between Somalia's rural and urban sectors. These ties are in the form of investment, remittances, and migration. The Somalia Migration Study stressed the significant impact of rural-urban linkages on agriculture/rural development programs in Somalia.

A second element emphasized in the rural-urban linkages case studies was the role of decentralized planning in strengthening the positive linkages between rural areas and small urban centers. The decentralization theme provided, in part, rationales for both the Tunisia regional planning assessment and the Panama Rural Growth and Service Centers Project. The rural market linkages study in Ecuador also was conducted within a framework of political decentralization. As indicated by our Ecuadorian colleagues at the workshop (Drs. Guzman, Gangotena, and Luzuriaga), the Fondo Nacional de Preinversion (FONAPRE) has an explicit goal of supporting decentralization at the municipal level. The institution itself addresses three types of activities: (1) the development of municipal plans; (2) cadastral studies to determine local revenue-generating opportunities at the municipal level; and (3) institution building in the municipalities.

Support of local municipalities and decentralized planning also are critical ingredients for successful regional development. This point was highlighted in the discussion of regional planning in Tunisia. In that case, decentralized planning at the regional level is advocated. It is perceived as the mechanism for overcoming the considerable regional disparities in Tunisia. Per capita income in the interior of this country, for example, is 42 percent below that of the coastal zone, and the area lags behind the coast in virtually every other economic and social indicator. Because of these inequities, the Commissariat Général au Développement Régional (CGDR) was established to plan and coordinate investment activities for the poorer regions of the country: the south, the center-west, and the northwest. The Cooperative Agreement has collaborated with this organization and presently plans to assist it in conducting field studies, "state of the art" studies (including an assessment of decentralization strategies in Tunisia), upgrading the CGDR information system, and staff training.

The underdeveloped nature of the urban hierarchy in developing countries was another theme discussed during this session. This phenomenon is most apparent in countries where one or two large urban centers account for the majority of the urban population. Both Panama and Ecuador are typical of such countries. In the Panama case, for example, 45 percent of the country's population resides in Panama City. The second largest city, in turn, has only one-tenth the population of Panama City. The urban hierarchy of Panama is heavily skewed toward the primate city, and consequently, agricultural inputs and market services are not readily available in many of Panama's rural areas. The URBE project attempts to redress the polarization of investment and economic activities in the capital city by emphasizing industrial and other investment in regional urban centers. What makes the URBE evaluation important is that it assesses rural-urban linkages at the middle level of a highly centralized urban hierarchy.

The primacy factor also is severe in the Ecuador case, although in this country two large cities--Quito and Guayaquil--are entailed. These two urban centers are growing at a rate of more than 5 percent per year. Most other Ecuadorian cities are growing only at modest rates, while the rural areas are experiencing actual population declines. Seven out of every ten Ecuadorians live in either of the two metropolitan centers, or in dispersed settlements of less than 100 people. As in Panama, the middle level of the Ecuadorian urban hierarchy is underdeveloped.

The attempt to strengthen middle-sized municipalities and market centers was described by Dr. Gangotena as being motivated by the lack of development in rural regions. This stagnation in the

agricultural sector, he argues, was caused by the overvaluation of currency and the national focus on oil exploration and export. Clark/IDA has been involved with FONAPRE to help its staff identify the key factors in the development of a local region, and to determine how local municipal governments can positively affect rural development.

The Ecuador project's results to date were discussed by Dr. Thomas Carroll. According to Dr. Carroll, the objective of the first year's activities was to design methods for rapidly identifying development opportunities presented by settlements in rural regions. One of the most significant opportunities identified by the Clark team is the periodic market in small urban centers. These towns within the Ambato study region perform three major functions: (1) the generation of income through the marketing of agricultural surplus; (2) the generation of income through off-farm employment opportunities; and (3) the provision of commercial and personal services. Dr. Carroll indicated that social and ethnic differences between rural producers and urban dwellers make it problematic for the small urban centers to influence agricultural development. A sound anthropological analysis of this rural/urban tension is needed to understand the basis for these differences and how they might be ameliorated. Dr. Carroll suggests that the inefficiencies in rural marketing in the Ambato region are partially due to producers' preferences for dealing with national market entities through their cooperatives, rather than with local town markets.

The final theme derived from the rural-urban linkages case studies is the importance of collaboration with host-country individuals and institutions. This critical element of the Cooperative Agreement also is discussed in earlier sections of the workshop report. In each of the studies, but particularly in the Tunisia and Ecuador examples, host-country counterparts played an important role. For example, the work in Tunisia is specifically related to priorities identified by the CGDR. Rather than impose theoretical models and research designs from outside, the Cooperative Agreement is working closely with CGDR professionals in support of their methodology and research priorities. As Dr. Horowitz indicated, the proposed "state of the art" studies to be done in Tunisia were identified by the CGDR Director and staff.

A similar pattern of collaboration has developed with FONAPRE in Ecuador. Clark/IDA's work has been carried out as part of the organization's policy of improving the role of small municipalities in the regional development process. The market centers study carried out by Clark/IDA was designed in collaboration with FONAPRE.

### III. SUMMARY OF SETTLEMENT/RESETTLEMENT CASE STUDIES

The Settlement/Resettlement case studies emphasized the role that such settlement programs can play in the regional development process. The session began with a summary of IDA's Global New Lands Settlement Study. The conclusions of this study provide the analytical framework that the Cooperative Agreement employs in its settlement research. Major findings summarized at the workshop include:

- (1) To justify the high investment costs of settlement programs, emphasis must be given to potential multiplier effects of settlement projects as a catalyst for promoting regional development;
- (2) If planned properly, new lands settlement programs present attractive alternatives to intensification of old agricultural lands;
- (3) The viability of a settlement scheme is enhanced when production diversification at the household level is advocated; and
- (4) The integration of settlement programs with the existent hierarchy of urban centers is essential for assuring regional development.

#### A. The Accelerated Mahaweli (Sri Lanka) Programme

The Mahaweli development program encompasses more than one million Sri Lankan farmers. It was initiated as a mono-crop scheme focused on paddy rice, but over the the last few years it has advocated a diversified farming system. The weakest components of the Accelerated Mahaweli Programme (AMP) have been its lack of nonfarm employment generation and the absence of strong linkages to the regional economy. According to discussant Thayer Scudder, both are needed to justify the high costs of the program (in excess of US \$1 billion). To maximize its development potential, the project must yield economic benefits beyond merely increased agricultural production.

The Cooperative Agreement has become involved with the AMP only in the past year. Prior to this time--since 1979-- IDA had been conducting annual evaluations of the settlement component of the program. In collaboration with his Sri Lankan colleague Dr. Kopilo Wimaladharma, Scudder has supervised this research effort. It has concentrated on an opportunistic sample of 50 settler households reinterviewed each year to ascertain socioeconomic effects of the

program. A methodology has been developed (described in IDA Mahaweli Reports 1980 and 1983: see Appendix 3) that allows for rapid appraisal and identification of the main production constraints within a three-week period.

Scudder's most recent field research in Mahaweli was in July 1983, and was conducted under the auspices of the Cooperative Agreement. At the workshop, Scudder discussed several studies that need to be undertaken in Mahaweli and that relate closely to the Cooperative Agreement's research themes. These include:

- (1) Employment potential of different agricultural diversification strategies at different levels of production;
- (2) Marketing needs as they relate to local processing and storage, transport, and local and international demand;
- (3) Urban functions needed to serve the agricultural communities and urban populations; and
- (4) Rural-urban linkages between the Mahaweli systems, between new and old settlements, and between existing regional towns.

Each of the above topics emphasizes the need for greater attention to the regional development potential--including both rural and urban sectors--of the Accelerated Mahaweli Programme.

#### B. Manantali (Mali) Resettlement Monitoring and Evaluation

Michael Horowitz set the background to the Manantali case study with a general discussion of river basin development in West Africa. Emphasizing the current enthusiasm on the part of both West African states and international donor groups for the development of river basins, Dr. Horowitz discussed in detail the Niger and Senegal river basins. He indicated the complex land and water use systems that characterize these basins and the need to examine economic development potential beyond the mere generation of hydroelectric power. In the African context, the concept of new lands settlement is metaphoric at best. With the exception of biologically sterile areas, there are no river basins in Africa without prior claimants. The critical questions are: how to improve existent uses of the basins and how to introduce novel uses (such as the generation of hydropower) that maximize both local and national benefits. In the

latter regard, there may, of course, be certain economic tradeoffs between, say, hydropower and local agricultural development.

Manantali, located on a tributary of the Senegal River system, is the proposed site of a large dam. The Cooperative Agreement was asked to design a monitoring and evaluation unit in connection with the resettlement of approximately 30,000 local farmers from the flood catchment zone. Dolores Koenig visited Mali in July-August 1983 to work on the design of such a unit. Her presentation highlighted several of the major problem areas connected with the dam construction. These include:

- (1) Changes in the local labor market created by employment opportunities for 150 expatriate and African professionals and for 1,450 African workers;
- (2) A high inflation rate for food and lodging caused by the large influx of workers: the cost of food and lodging in Manantali, for example, is now equivalent to that in Bamako;
- (3) Health problems associated with the influx of workers and new diseases into the area; and
- (4) The question of whether or not the resettlement zones will have all the specific ecological features needed to reestablish the diversified production system.

Dr. Koenig emphasized that monitoring should be directed toward the question of whether the population has been able to reestablish its pre-project quality of life. Yet, because a different mix of resources and opportunities will have been available, this is a complex issue. In consequence, the monitoring and evaluation unit must collect several different types of information. The monitoring component should develop indicators that "track" not only cropping, household income, and other micro trends but also region-level developments, such as the presence or absence of linkages between the resettled population and the economic opportunities (food marketing, employment, and other) associated with the dam construction.

Merely to maintain the present standard of living among local farmers, agricultural development assistance should be made available to the settlers. The monitoring unit will be in a position to make recommendations on appropriate farm-level technical assistance. It also will be able to recommend project linkages on a broader scale with other rural development programs in the area.

### C. New Lands Settlement Evaluation in Latin America

Michael Painter and William Partridge discussed one particular settlement program in Bolivia--the San Julian Settlement Project--that the Cooperative Agreement proposes to evaluate during May-August 1984. Dr. Partridge visited the field site in July 1983, exploring at that time the possibilities for research collaboration between local social science institutes and the Cooperative Agreement. Much of the actual field research in 1984 will be a collaborative effort between Cooperative Agreement staff and Bolivian social scientists.

The San Julian research effort has three major goals:

- (1) To provide detailed information on the major policy issues confronting the San Julian project and colonization efforts elsewhere in Bolivia;
- (2) To systematically examine the lessons learned from the San Julian project and evaluate it as a possible model for organizing other colonization projects in the tropical lowlands of Bolivia and elsewhere in South America; and
- (3) To recommend a resource management strategy that will help insure the long-term economic and ecological viability of the colonization zone.

The evaluation of San Julian could help improve the track record of Bolivian colonization efforts and contribute to the development of a general colonization strategy for the region. Based on a review of the available literature and Dr. Partridge's recent visit to the area, San Julian appears to have the potential of becoming a successful project. For this to occur, however, questions about the long-term management of the region's resources need to be addressed, and the lessons that can be applied elsewhere should be made explicit and incorporated into a colonization strategy.

The conceptual framework for the San Julian Evaluation derives from the previously mentioned Global Evaluation of New Lands Settlement by Thayer Scudder. Similar to this research, the San Julian investigation will attempt to provide a comprehensive statement of which rural development goals can be achieved through colonization and which ones cannot. Both Drs. Painter and Partridge highlighted the main components of such a statement. Its recommendations would focus on the following points:

(1) Minimal conditions that must be found in the national political economy if colonization is to have an opportunity to succeed;

(2) The most effective means of selecting and orienting colonists;

(3) How to design tropical forest production systems;

(4) The kinds of linkages that need to be established with markets, credit agencies, and other external institutions, and how such linkages should be timed; and

(5) What sorts of project design features will help insure that colonization projects do not perpetuate inequities or create new ones.

#### IV. WORKSHOP SUMMARY

The final session of the workshop attempted to summarize the salient issues derived from the case studies and, especially, to identify general themes requiring more research, to indicate other potential collaborative arrangements with host-country institutions, and to delineate a strategy for the publication of fieldwork results. Discussants for this session were David Brokensha and Eric Chetwynd.

In his presentation, Dr. Brokensha emphasized several important themes derived from the case studies. First is the unique contribution that integration of macro and micro perspectives can make to region-based development and to social science research in general. Clark brings a macro perspective to the Cooperative Agreement, while the Institute's strength is in micro-level studies. The case studies presented at the workshop highlighted the significance of linking micro analyses of social/economic organization and process with the larger region and state. This dynamic merits further systematic attention.

A second case study theme that Brokensha noted was the importance of the household as a focal point for managing natural resources. The Zimbabwe, Baluchistan, and Bolivian case studies all illustrated this theme.

Third, the role of methodology in the Cooperative Agreement's research program was exemplified at the workshop. Methodological issues proved especially pertinent to the Mahaweli, Bolivia, Ecuador, and Baluchistan projects. Several methodological approaches have figured importantly in the studies discussed at the workshop. They include: (1) monitoring and evaluation; (2) the use of an opportunistic sample of farmers; (3) the use of participatory evaluation measures; and (4) the role of microcomputers. This last approach is at a preliminary stage of development, but we expect a great deal from it in the future. Each of these approaches needs to be supplemented with other methodologies and improved during future research endeavors.

A final issue raised by Brokensha is the Cooperative Agreement's emphasis on close collaboration with host country nationals and institutions during all phases of our programs. In most of our research efforts, this theme has been a key priority, as is evidenced in our fieldwork to date. Collaborative research efforts should continue to receive emphasis in the future.

Eric Chetwynd's presentation addressed issues of country prioritization and publication/dissemination of research findings. Regarding the former, he suggested a prioritized list based on long-term research goals. In this schema, Category 1 countries are those where long-range cooperation is under way. They include: Sri Lanka, Ecuador, Mali, Pakistan, and Tunisia. Countries where long-term research possibilities have recently arisen make up Category 2. These include Bolivia, Jordan, Sudan, Nepal, and Jamaica. In most Category 2 countries the Cooperative Agreement has initiated short-term fieldwork that, it is hoped, will lead to longer-term collaboration. The final group, Category 3, are countries (Panama, Somalia, and Philippines) where work has been carried out, but where long-term research possibilities are questionable. Chetwynd emphasized the need to target research efforts toward countries where long-term research was most probable (Categories 1 and 2). In the future, the Cooperative Agreement should limit the number of countries in which it works.

There was a general consensus that the Cooperative Agreement must make its research findings and reports more easily accessible to AID officials in the regional bureaus and in the Missions. Chetwynd suggested a more systematic approach for achieving effective information dissemination within the AID organization. This entails debriefing USAID Mission personnel prior to leaving the country; promptly contacting and debriefing AID/Washington regional bureau personnel upon return; producing reports in a timely fashion; using informal seminars at AID/Washington to discuss research findings with AID personnel; and writing reports with two audiences in mind--the "operations" personnel/practitioners and the academics. Regarding this dichotomy, it should be recognized that each audience has a different tolerance for style, theoretical emphasis, and wordiness. Considerable thought must go toward selecting the most effective format for report preparation and publication.

In sum, the Case Studies Workshop achieved its stated purpose: to provide a forum for discussing Cooperative Agreement fieldwork to date. Virtually all of the country research efforts are at early stages of implementation. Within the next 24 months, however, we expect to have a firmer empirical basis for our research program. It is anticipated that on completion of these field studies an edited volume on Case Studies in Region-Based Development will be published.

APPENDIX I: WORKSHOP AGENDA

INSTITUTE FOR DEVELOPMENT ANTHROPOLOGY  
CLARK UNIVERSITY  
AGENCY FOR INTERNATIONAL DEVELOPMENT

Case Studies Workshop: Cooperative Agreement on  
Human Settlement and Natural Resource Systems Analysis

November 30 -- December 1, 1983  
Binghamton, New York

AGENDA

All sessions at Conference Suite, Marine Midland Bank,  
Marine Midland Plaza, Binghamton, New York.

November 30

Introductory Remarks - M. M Horowitz and E. Chetwynd

Session I  
9:00-12:30

Natural Resource Management Case Studies  
Chaired by: R. Eastman

1. Baluchistan Area Development Program: P. Little,  
R. Eastman, B. Spooner, N. Buzdar
2. Sebungwe (Zimbabwe) Regional Planning:  
T. Scudder

Rapporteur: M. Painter

Lunch

Session II  
1:30-4:30

Rural-Urban Linkages/Regional Planning Case Studies  
Chaired by: G. Karaska

1. Ecuador Market Linkages Study: R. Wilkie,  
T. Carroll, R. Gangotena, A. Guzman  
C. Luzuriaga
2. Tunisia Regional Planning: M. M Horowitz,  
E. Madoud, J. Nellis, F. Young
3. Panama Service Center Evaluation: R. Hackenberg,  
B. Hackenberg
4. Somalia Rural-Urban Migration Study:  
N. Southerland, C. Kerven

Rapporteur: P. Little

6:30

Dinner

8:00

Reception at Institute for Development Anthropology

December 1

Session III  
9:00-12:30

Settlement/Resettlement Case Studies  
Chaired by: T. Scudder

1. Mahaweli (Sri Lanka) Settlement Program:  
T. Scudder
2. Manantali (Mali) Monitoring and Evaluation:  
D. Koenig, M. M Horowitz
3. New Lands Settlement Evaluation in Latin America:  
W. Partridge, M. Painter

Rapporteur: M. Salem-Murdock

Lunch

Session IV  
1:30-4:30

Workshop Summary and Results  
Chaired by: D. Brokensha, E. Chetwynd

1. Priority Countries for Long-Term Field Research:  
Present and Future Considerations
2. Identification of Major Research Themes
3. Collaboration with Major Host Country Institutions
4. Information dissemination/strategy for publishing  
fieldwork results, including possible monograph on  
Case Studies in Region-Based Development

Rapporteur: T. Painter

## APPENDIX II

### List of Participants

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Cornell University  
Ithaca, NY

## APPENDIX III

### Cooperative Agreement Background Documents for Case Studies

#### A. Natural Resource Management

Bonham, Charles

- 1983 A Summary of Range Management Issues in Baluchistan, Pakistan. Binghamton, NY: Institute for Development Anthropology.

Eastman, J. Ronald and John Callahan

- 1983 Natural Resources in Baluchistan, Pakistan: A Bibliographic Review. Worcester, MA: Clark University.

LaPorte, Robert and Allen Jones.

- 1982 Reports on Administrative Structure, Management, and Training for Baluchistan Area Development Project. Binghamton, NY: Institute for Development Anthropology.

Little, Peter D., Brian Spocner, Wynn Walker, and Sam Johnson.

- 1983 Toward a Baluchistan Area Development Project. Binghamton, NY: Institute for Development Anthropology.

\_\_\_\_\_, J. Ronald Eastman, and Brian Spooner.

- 1983 Resource Planning, Monitoring and Evaluation in Baluchistan, Pakistan. Binghamton, NY: Institute for Development Anthropology.

Scudder, Thayer

- 1982 Regional Planning for People, Parks and Wildlife in the Northern Portion of the Sebungwe Region of Zimbabwe. Binghamton, NY: Institute for Development Anthropology.

Spooner, Brian and Leah Glickman

- 1982 Baluchistan, Pakistan: A Socio-Economic Literature Review and Analysis. Binghamton, NY: Institute for Development Anthropology.

\_\_\_\_\_, and Allen Jones

- 1983 Baluchistan: An Introduction. Binghamton, NY: Institute for Development Anthropology.

#### B. Rural-Urban Linkages

Carroll, Thomas, Barry Lentnek, and Richard Wilkie

- 1983 Progress Report for the Ecuador Project on Urban-Rural Linkages. Worcester, MA: Clark University.

Hackenberg, Robert

- 1983 Panama Regional Growth and Service Centers (URBE): Project Evaluation Report. Worcester, MA: Clark University.

Horowitz, Michael and Muneera Salem-Murdock  
1983 Report on the Tunisia Regional Planning Mission. Binghamton,  
NY: Institute for Development Anthropology.

\_\_\_\_\_, John Nellis, and Frank Young  
1983 Mission to the Commissariat Général au Développement Régional  
(Tunisia): Binghamton, NY: Institute for Development  
Anthropology.

Lewis, Herbert, Carol Kerven, and Nancy Southerland  
1983 Urbanization and Outmigration in Somalia. Worcester, MA:  
Clark University.

### C. Settlement/Resettlement

Koenig, Dolores  
1983 Monitoring Plan for Manantali Resettlement Project Paper.  
Binghamton, NY: Institute for Development Anthropology.

Scudder, Thayer  
1981 The Development Potential of New Lands Settlement in the  
Tropics and Subtropics: Global Evaluation with Specific  
Reference to Policy Implications. Binghamton, NY: Institute  
for Development Anthropology.

The Accelerated Mahaweli Programme (AMP) and Dry Zone  
Development: Some Aspects of Development. Report No. 3.  
Binghamton, NY: Institute for Development Anthropology.

1983 The Accelerated Mahaweli Programme (AMP) and Dry Zone  
Development. Report No. 4. Binghamton, NY: Institute for  
Development Anthropology.

\_\_\_\_\_, William Partridge, and Michael Painter  
1983 A Proposal to Evaluate the San Julian, Bolivia, Colonization  
Project. Binghamton, NY: Institute for Development  
Anthropology.