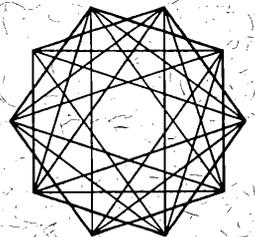


FEASIBILITY STUDY FOR NETWORKING IN URBAN AND REGIONAL DEVELOPMENT

**Office of Urban Development
Bureau of Technical Assistance
Agency for International Development
U.S. Department of State
Washington, D.C. 20523**





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Bureau of Technical Assistance
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FOREWORD

The Office of Urban Development engaged the services of Planning and Development Collaborative International, Inc. (PADCO) to make a "Feasibility Study for Networking in Urban and Regional Development". A report of the findings is submitted herewith.

The decision to engage in such a study was a result of the expressed concern of many people that ways of increasing the resource base and the service delivery and outreach capability of developing country institutions in urban development are needed. It was recognized that a wide range of disciplines and approaches is essential for dealing adequately with the number and complexity of the conditions, problems, and opportunities resulting from rapid urban growth. Since these resources seldom exist in sufficient quantity or quality any place, it was felt that networking might be a promising way of helping developing country decision-makers and institutions to use more effectively and build on existing resources, thereby improving their competence in addressing important domestic urban situations and in producing and sharing with others information on their experience.

The PADCO report provides a very thoughtful and useful basis for determining possible next steps. In structure and content, the findings and recommendations go beyond the scope and resources of the Agency for International Development and indicate ways in which other interested organizations might wish to be involved.

The Office of Urban Development and the Agency appreciate greatly the valuable professional assistance of Alfred P. Van Huyck and his PADCO team.

William R. Miner
Director
Office of Urban Development
Bureau for Technical Assistance

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It is impossible to fully acknowledge all of the individual contributions which have been made to the development of this report by the more than 45 individual interview respondents and the more than 60 individuals who took time to fill in the mail survey. Their interest and support has been a major factor in clarifying ideas and formulating conclusions.

Special acknowledgement should be given to Mr. William R. Miner, Director of the Office of Urban Development, Agency for International Development and Mr. Eric Chetwynd, Urban Development Advisor of the Office of Urban Development, Agency for International Development for their contributions to the technical substance of this report through their review of interim materials and discussions at frequent meetings with the PADCO professional staff.

Also contributing substantially to the development of the work was the consultative panel which included: Dr. Ralph A. Gakenheimer, Associate Professor, Department of Urban Studies and Planning, Massachusetts Institute of Technology; Mr. Simon Miles, Executive Director, INTERMET; Mr. Marcos Antonio Cuevas, Director of the CEURI Project, Guatemala City, Guatemala; Dr. Colin Rosser, Development Planning Unit of University College London. Dr. Robert B. Mitchell, Professor of City Planning, University of Pennsylvania (retired) was supervisor of the research and field work.

The PADCO professional staff who participated in the work were Mr. Alfred P. Van Huyck, President and Project Director; Dr. John D. Herbert, Senior Vice President; and Alfred Wells.

Appreciation also is noted for the contribution of Ms. Gail O'Gorman, Director of Publications and Information of AIP and the American Institute of Planners who undertook the mail survey of the developing countries.

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PREFACE

This project has underscored the importance of networking as a means of assisting the developing countries in improving their information, knowledge and decision-making in the increasingly important field of urban and regional development. In the course of this work we have found a strongly felt need for better networking among a wide range of professionals in the developing countries.

Two important kinds of networking have been identified. The first is intra-country networking within each of the developing countries itself. There is an almost complete gap in systematic networking activities within each developing country which leads to a failure to take full advantage of the information, methods, experience and expertise which the country has gained through its own past efforts. The second is international networking among developing countries themselves and appropriate resource institutions in the developed countries. This report has attempted to document these aspects of networking as they exist today, to conceptualize a model of what might be achieved in the future and to suggest several specific aspects of networking which might be directly supported through AID initiative.

On June 28, 1974 the Agency for International Development (AID) entered into a contract with PADCO, Inc. to undertake a feasibility study for "Pilot Networking in Urban Development". This assignment grew out of previous work undertaken by the AID Office of Urban Development which had culminated in the report "Focus on Urban Development, Perceptions, Problems, Approaches, and Needs". This report outlined the rate and condition of urban development in LDCs and emphasized perceptions and problems of urban development, present approaches and available resources, and suggested an approach for the future orientation and programs of the Agency. The report discussed and distinguished between urban problems which are "critical" for two reasons at least:

- "A. They impair the living condition in and the functioning of the urban environment and
- B. They impede the contribution of the urban environment to overall national development."

Factors in urban development which were found to be important included: perception of urban development problems and leadership in approaching them; national policy, legal framework, institutions, manpower, information, planning, financial resources and administrative capacity. A study of these factors concluded that "three emerged as having the most influence, not only on the functioning of the urban environment, but also on the linkages in national development. They are perception and leadership, manpower and information". These three were suggested as the best strategic points of intervention for Agency policy. They are accepted as limiting the scope of this networking study.

A 1973 memorandum of USAID (PD-54) says: "For these new points of intervention there will be activities involving research and development. The starting points are:

- A. An introspective study of relevant aspects of the Agency's experience . . .
- B. An analytical account of U.S. domestic experience in urban development with relevance for developing countries . . .
- C. Development research on practical and adaptable approaches to land use development and planning . . .
- D. Promotion of U.S. consortium of research, manpower, and information resources for international urban development through linked 211(d) grants to several institutions. These in turn would be linked with leading LDC institutions in joint research, training and other collaborative activities, with heavy emphasis on practical problem solving. This consortium will become an important and leading U.S. node of a new infant international network of urban development resources.
- E. Fostering of institutional capacity in developing countries for sector analysis and problem solving in urban development. This activity will focus on specific urban development institutions in developing countries to promote their growth and strengthen network linkages.
- F. Helping to overcome the lacks of established channels for systematic development and exchange of experience, information, and research in urban development by promoting an international consultative mechanism for network development."

This study deals with items D, E and F of the above list.

A 1973 statement approved by the Administration says that "as Agency resources permit, a modest set of R&D and inter-regional service activities should be supported to:

- increase the awareness and understanding of LDC decision-makers on urban problems;
- improve the quantity, quality and accessibility of information available to LDCs on urban development;
- expand the availability of skilled manpower in LDCs to guide the process of urban development . . ."

"We should encourage other assistance organizations to become more active in this field, as feasible, including private voluntary organizations. For this purpose and to strengthen the impact of AID's other efforts, we should foster building of collaborative networks of R&D and experience sharing among LDC organizations working on urban development and selected U.S. and third-country organizations best able to contribute to their efforts."

These key conclusions have formed the frame of reference for this present study. Specifically, the objectives of this study can be summarized as follows:

1. To review the field for networking in urban development -- existing efforts, strengths, weaknesses, contradictions, gaps, and potentials -- particularly as it relates to developing country needs.
2. To recommend changes in existing networking activities, processes and institutions which can improve the flow and exchange of information, personnel, techniques and experiences for their more effective use in developing countries.
3. To suggest pilot projects in networking which can increase the availability and efficient use of resources to address the opportunities and problems of rapid urban growth and development, especially in the developing countries.
4. To indicate which pilot projects in networking might be appropriate for AID to undertake.

INTRODUCTION

The Agency for International Development (AID) is undergoing an in-depth and concentrated review of its mission. Although this is naturally a continuing process, it is clear that several central concepts are emerging. AID is going to focus its attention directly on programming for the "poor majority" in the Less Developed Countries (LDCs). This is interpreted to mean a focus on programming which directly affects poor people and responds to their immediate need for better health and education services, better nutrition, and an increase in opportunities for productive work. It recognizes that there will be fewer large scale capital transfers and an end to older ideas about a "trickle down" theory of economic growth.

There also appears to be a growing desire on the part of AID to encourage the host country to take the lead in planning and guiding its own development, in achieving better income distribution, encouraging social justice and in relying on private institutions. All of these steps are oriented to seeking a more collaborative relationship between AID and the LDC hosts.

One of the techniques which appears particularly suited to support these new directions in AID is the "networking" concept. AID's commitment to networking was summarized in TAGS-1 "Research Networks", November 1972 which stated:

"The research network approach is a potent device for achieving a meshing of research and related informational and technical assistance efforts in all technical fields, and should be used for work on LDC problems as fully as circumstances permit." (p. 1)

This publication goes on to describe networking as follows:

"The linkages or collaboration between the elements of a research network may be informal or formal. Where feasible, the most potent binding force and impact comes from joint research projects on major LDC problems, linking together the science and

technology and research capacity of the advanced countries with LDC elements responsible for producing better technologies for local application. Linkages may also include casual exchanges of research materials and information, exchange visits, advisory services from the more to the less advanced elements in the network, training programs, use of common information services, provision of research sites, joint seminars or workshops, program coordination sessions -- or any kind of unilateral or reciprocal reinforcing activity from one research unit to others in the network." (p. 2)

AID is already well advanced in supporting an active program of networking in agricultural technology, and the results to date have been very satisfactory. More than a dozen agricultural research networking efforts are actively underway in a variety of important assignments. Similar efforts are either started or under active consideration in other priority areas such as family planning, health and education.

Networking achieves AID's objectives in a variety of ways. First, it must be a collaborative effort in which the LDCs are full partners and in which the ultimate planning and policy functions in the LDC remain under LDC supervision and control. Second, it is not capital intensive, but rather provides a multiplier effect at marginal cost on investments in research and programming made independently by many sponsors on a worldwide basis. It does this by capturing the results of this investment and insuring better dissemination thereby allowing others to take advantage of the positive results, to avoid negative experience, and to reduce duplication of effort thereby conserving capital and skilled human resources in the LDCs. Third, whereas networking is a process, its program content can be guided so that it focuses on the high priority issues and AID objectives.

It is the premise of this report that urban and regional development are also valid areas for the introduction of networking activities.

A Case for Urban and Regional Development

AID is currently operating with a heavy bias toward agriculture and rural programming. This is justifiable because of the twin realities -- that the vast majority of the LDCs'

population is rural and the overwhelming issue of the day is world food production. Nonetheless, it is important to keep in mind that urban development is an integral part of rural development and together they represent a continuum spanning the entire national socio-economic development effort. There is no neat way of breaking the linkages between urban settlements and their rural hinterlands. Each is actively dependent on the other.

This interrelationship is well illustrated through the issue of rural/urban migration. Although there is a widespread myth among development planners that rural development will reduce migration to the cities, there is almost no evidence to support this except in isolated and unique development situations. On the contrary the evidence tends to show that the more successful rural development becomes the more it will encourage migration of the economically surplus population from the countryside to the cities. This will occur because the amount of available land is limited and, therefore, major gains in food production must come from increasing productivity through mechanization and reduction of labor per unit of production. Studies have also shown that migrants tend to be the better educated, healthier and younger members of the rural population. So improved social and physical infrastructure will facilitate migration.

This phenomenon is already evident in the LDCs where overall population growth rates are approximately 1.8 percent per year, but the urban population growth rate is 4.1 percent per year and accelerating. In 1974 the urban population of the LDCs was approximately 544 million. It is estimated to be 1,436 million persons by the year 2000.

This enormous population increase will occur in cities already in desperate condition. Often 80 percent of all urban households have monthly incomes of \$50 or less. There is widespread illiteracy, debilitating disease, threats to the public health, and serious problems of malnutrition. In many cases as much as 15 to 20 percent of the labor force of urban centers is unemployed or underemployed. The cities themselves suffer from enormous deficits in physical infrastructure, uncontrolled land speculation and the lack of trained professionals for urban management functions.

The hope that "the urban problem" will be solved by agricultural development and the development of small towns is a false hope. The arithmetic of population growth, long term agricultural export potential, the relative income elasticities of demand for urban and agricultural output and the prospects for increases in agricultural productivity suggest, to the contrary, that the future of the LDCs is likely to be predominantly an urban future.

One of the great dangers of continuing to harbor the illusion that urbanization will somehow slow down or disappear is that governments in both the LDCs and the MDCs will be slow in moving to develop constructive urban strategies. It is already obvious that a very dangerously low status is given to urban affairs and urban management in most of the LDCs at present.

Urban areas, in fact, have major roles to play in national economic and social development. The urban areas of the developing countries use scarce capital relatively efficiently. They tend to provide employment opportunities for "marginal" labor that would otherwise be completely unemployed. Urban centers constitute markets for both urban and agricultural output. They have large labor pools which make them attractive to newly emerging enterprises in particular. They help to keep transport costs low where a nation's resources are highly localized and/or where a nation is heavily dependent on exports and imports.

Urban concentrations provide opportunities for many indivisibilities in production and consumption, including economies of scale, which make them attractive as centers for economic activity. Firms locating in urban centers often are able to avoid the diseconomies of forced internalization that would be associated with locations in small townships or rural areas. Control over productive processes and bargaining for public services is generally easier and more certain in urban centers.

Concentrated urban development facilitates the face-to-face contacts that are crucial to business. Urban locations support the lifestyle preferences of entrepreneurs and key managerial personnel, together with senior public administrators. Urban environments are relatively efficient for informal education and the upgrading of skills. Urban lifestyles facilitate the entry of women into the labor force. The high levels of information exchange facilitated in urban areas tend to support innovation. The city tends to offer greater social freedom and opportunity to the mobile poor than do smaller centers or rural areas. The city also tends to keep short-run risks at low levels -- indeed, major urban centers are excellent risk-spreading devices for governments (who would be exposed to great cash flow risks if they were to try to support large new populations in outlying areas), for entrepreneurs (who have access to very flexible supplies of labor, materials and services) and for low income households (who have many more varieties of jobs to choose from than they would have in small townships or rural areas).

All too often urban development has been mistakenly thought of only in terms of the massive primate cities of the developing countries. In fact, urban development should refer to the entire hierarchy of settlements from the market towns, directly related to their surrounding rural areas, through the intermediate cities within which a range of urban functions can be stimulated, to the large urban centers. What is needed is a broader concern for the full range of urban issues within a country.

When rural development issues are combined with related and mutually supported urban development issues, it is possible to begin to deal successfully with regional planning and development. Regional development should be a high priority objective in the developing countries. Only through balanced regional development can countries hope to begin to level out enormous regional disparities, stimulate stagnant regional towns, program effectively for the poorest levels of their society and begin to develop balanced initiatives leading to rural and urban job creation and overall income redistribution. It is through regional planning, covering both urban and rural sectors, that meaningful progress can be achieved toward balanced growth.

The essential tasks do not have to do with the slowing down of urban growth but, on the contrary, with: 1) the husbanding of existing resources to upgrade the quality of urban life; and 2) aggressive and imaginative use of urbanization to increase the total national resource pool.

The Response of the Developed Countries

Assuming that the great forces of urbanization in the LDCs will eventually force increasing attention to the mounting urban crisis, what can be the response of the More Developed Countries (MDCs)? The record to date is disappointing. In most cases, and certainly in the United States, there has been a failure to recognize the scale, permanence and basic economic and social origins of the urbanization process in the LDCs. Where initiatives have been taken, they have all too often been inappropriate and ineffective. In part this is because of the limited relevance of the urban experience in the United States and the unpreparedness of the majority of U.S. urbanists and regional planners.

There are several fairly obvious features of recent urbanization in the MDCs that result in its being of very limited relevance as a guide for the LDCs. Urban growth in the MDCs has been relatively slow compared with current rates of change in the urban centers in the LDCs (where compound annual growth rates often are of the order of 5% or 7%). In the MDCs there

has been a substantial economic base to work from with populations that have relatively high incomes, high literacy rates, urban cultures and, in many cases, fairly active political participation in development decisions. Per capita national incomes in the MDCs are of the order of \$2,000 to \$4,000 per year compared with the \$50 to \$500 common in the LDCs. Urban gross product in individual centers may be of the order of \$5,000 per capita per year in the MDCs, relative to \$100 to \$200 per capita per year in centers in the LDCs. Urban growth in the MDCs has been going on in the context of relatively well-developed physical infrastructure in individual centers and nationwide. It has been going on in the context of relatively well-established financing mechanisms. And it has been going on against the background of relatively stable and competent urban administration.

In the case of urban planning professionals most have been trained in high-level, slow-growth contexts in which many of the issues are largely physical improvement issues. Problems in the urban areas of the LDCs are fundamental economic, social, administrative and political problems as well as physical problems. They have been trained in analytic methods which presume that the largest part of the decision problem is the allocation of scarce resources; whereas in the LDCs a large part of the problem, in addition to this, is the creation of resources (including human resources) and the utilization of presently underutilized resources. Their training has been associated primarily with physical forms and standards for urban facilities that are entirely unsuitable for most of the urban development necessary in the LDCs. Their formal academic training, in particular, has been primarily associated with general planning -- without enough attention to specific action programming, project preparation and support for implementation. They have been trained primarily for political and administrative contexts in which there is reasonably widespread public participation and relatively skilled and stable administrative strength which does not exist in the LDCs.

In short, the MDCs are not now in a good position to aid and assist the LDCs in coping with the urban avalanche which is coming. There is a desperate need to begin to be concerned about the development and assembly of relevant methods and techniques for handling massive, rapid urban growth in capital and scarce management situations. There is a need to systematically review world urban experience. There is a need to improve and make relevant the training of the professionals who will be charged with urban and regional responsibilities. Networking in urban and regional development is one appropriate and viable way to contribute to this need.

Chapter I

THE NEED FOR NETWORKING IN URBAN AND REGIONAL DEVELOPMENT

The definition of networking in urban and regional development as it is used in this paper is as follows:

International networking for urban and regional development is the establishment and operation of systems and facilities for communication, for exchange and for making more available and more effective use of information, methods, expertise and experience to address the opportunities and problems of rapid urban growth and regional development in the Less Developed Countries.

This definition was structured in response to the need felt among urban and regional planners throughout the LDCs that networking must be focused initially on decision-making and action. Research, training and other topics tending toward theory were considered important but of secondary priority. In this sense the kind of networking recommended here differs from the fundamental research orientation to much of the agricultural networking effort.

During the course of the networking work a systematic effort was made to solicit the opinion of professionals in the LDCs and the United States as to the need for networking, its objectives, areas of priority and forms. This information was gathered in the form of field interviews with professionals in over a dozen LDCs and through a questionnaire survey. The questionnaire was sent to 350 individuals and institutions in over 80 LDCs. Replies were received from 55 individuals from 32 countries. The number of replies itself indicates the concern of LDC professionals for networking as it took over an hour to complete the survey materials and the vast majority also added written comments as well. Throughout these inquiries our interviewers and staff members were struck with the urgently felt need for networking-type activities in the LDCs. It is clear that this is an issue of importance and one in which considerable improvement over current practice is possible (see Chapters II and III). In reply to the survey question "Is participation in an international network of urban development

information exchange potentially useful to you?" all respondents indicated that it would be "very useful" (76 percent) or "could be useful" (24 percent). No one answered that it would be "not useful".

A list of ten objectives for networking had been developed during the first phase of the work. Each of the objectives was considered to have merit and be worthy of networking activities. In analyzing the survey results it seemed appropriate to be primarily concerned by the number of "high priority" choices and the number of "low priority" choices. A simple ranking was formed by subtracting the "low priority" choices from the "high priority". This system resulted in identifying four objectives with strong support, two with moderate support and four with lower levels of support but still positive. These results followed quite closely the original priority pattern.

A. The highest ranked objectives were:

- 1) OBJECTIVE 1: To improve the capabilities of institutions, planners, administrators and decision-makers to deal with the dynamics and processes of urban development. (High priority 87.3 percent; low priority 1.8 percent.)
- 2) OBJECTIVE 5: To share relevant experience and information on approaches to urban development among cities and nations. (High priority 63.6 percent; low priority 3.6 percent.)
- 3) OBJECTIVE 2: To assist in preparation of development policies, plans and strategies and programs for their implementation. (High priority 54.5 percent; low priority 5.4 percent.)
- 4) OBJECTIVE 4: To selectively strengthen multi-disciplinary efforts of existing institutions and networks and to increase the quantity and quality of their services and outreach operations in urban development. (High priority 50.9 percent; low priority 5.4 percent.)

B. The middle ranked objectives were:

- 1) OBJECTIVE 7: To organize in-service and other training programs for upgrading competence of existing personnel and

increasing the quantity of skilled manpower. (High priority 54.5 percent; low priority 14.5 percent.)

- 2) OBJECTIVE 6: To produce methods for monitoring, adjusting and guiding key urban processes. (High priority 49.0 percent; low priority 12.7 percent.)

C. The lower level objectives were:

- 1) OBJECTIVE 3: To build on, and make wider use of, strengths and resources of institutions and individuals in both the more and less developed countries. (High priority 49.0 percent; low priority 21.8 percent.)
- 2) OBJECTIVE 9: To assist, initiate and encourage collaborative effort among institutions and individuals on key universal urban problem areas. (High priority 47.3 percent; low priority 16.4 percent.)
- 3) OBJECTIVE 8: To test theories, methods and techniques for their applicability to various local needs and situations. (High priority 36.4 percent; low priority 29.1 percent.)
- 4) OBJECTIVE 10: To develop case studies and comparative data on the processes of urban development. (High priority 29.1 percent; low priority 22.8 percent.)

In reviewing the results from the survey, the common denominator underlying the assignment of priorities by the respondents appears to be the implication of the objective as stated toward specific action activities. The objectives which appear to lead toward some directly useful output are the most favored. The objectives which suggest the exchange of research or academic materials of a kind normally associated with scholarly work are ranked lowest and pick up the most "low priority" indications. From this it can be concluded that regardless of the specific objectives of future networking activities, the real need is to insure that the focus of the effort is on providing materials which are directly relevant to decision-making and application among the user groups.

Next the respondents were presented with broad topical categories of information in urban development which might be networked. For each category they were asked if networking in that category would be "very important", "useful" or "not needed" in their work. Once again the priorities seemed to correlate closely with the action orientation of the subject item. The results as determined by subtracting the "not needed" responses from the "very important" responses resulted in the following ranking:

A. The most important subject areas for networking were:

- 1) SUBJECT 1: The role of urbanization in national development (increasing the perception of decision-makers regarding the importance, complexity and challenge of urban development problems and opportunities). (Very important 72.7 percent; not needed 1.8 percent.)
- 2) SUBJECT 2A: The influence of urbanization in national development (economic, social, physical, political and cultural aspects). (Very important 60.0 percent; not needed 10.9 percent.)
- 3) SUBJECT 2B: Planning for regional settlement patterns and resource allocations as the locational expression and support of national development plans). (Very important 56.4 percent; not needed 7.3 percent.)
- 4) SUBJECT 3C: Sector planning and technology and service delivery (transportation, water supply, sanitation, education, health, housing, etc.). (Very important 54.5 percent; not needed 7.3 percent.)

B. The middle level subject areas for networking were:

- 1) SUBJECT 3A: Planning process and methods (information systems, participatory techniques, etc.). (Very important 47.3 percent; not needed 5.5 percent.)
- 2) SUBJECT 3B: Urban management and services (administration, legislation and finance). (Very important 45.5 percent; not needed 5.5 percent.)

C. The lowest level subject areas for networking were:

- 1) SUBJECT 2C: Effects of local preferences and requirements on national development plan formulation. (Very important 34.5 percent; not needed 10.9 percent.)
- 2) SUBJECT 3D: Special topics (employment and human resources, poverty, migration, ecology, etc.). (Very important 27.3 percent; not needed 3.6 percent.)
- 3) SUBJECT 4: Secondary topics (basic theories and knowledge from the social and natural sciences). (Very important 16.4 percent; not needed 21.8 percent.)

They were asked also to evaluate four kinds of resources which might be used in networking in each of the previous categories. They indicated which kinds of resources they felt would be "very important", "useful" or "not needed" in networking.

The four categories were as follows:

- A. Information. In addition to basic information required for specific uses, there are research results and empirical evidence which may be of special or general interest.
- B. Methods. Included are the approaches, techniques, procedures and more complex methodologies which are required for planning, implementation and evaluation.
- C. Expertise. This set of resources includes the people with the requisite combination of knowledge, skills, and work experience who are available, required or desirable for particular circumstances.
- D. Experience. Solutions, strategies, case studies and more prescriptive and contextual information are included which are relevant for particular situations and also for advancing the state of the art.

The results were as follows:

Chart 1

	Very Important	Useful	Not Needed
Information	65.4%	34.6%	0%
Methods	74.5	25.5	0
Expertise	40.0	45.5	14.5
Experience	58.2	40.0	1.8

The results indicate that all four categories are important, but that there is some opposition to "expertise" as a part of the networking process. This reflects the generally growing feeling on the part of professionals throughout the developing countries that they do not need foreign technical advice any longer.

The field interviews tended to reinforce the results of the mail survey. In addition, they brought to light several other factors which were not initially thought to be of concern, but which emerged as critical and central to the subject. In Korea, Pakistan, Jordan, Egypt, Zaire, Guatemala, Costa Rica and Panama it was discovered that there was no systematic effort for recording the national urban and regional experience. There was no documentation center to store information and materials. As a result the persons interviewed were seriously alarmed that the bulk of their own intra-country experience was being lost. They also felt that enormous duplication of effort was occurring because each agency was attempting to reconstruct data and experience for their individual purposes. Among the countries visited only in Indonesia was there an attempt at centralizing a documentation and information function in urban and regional development. This effort is recent and still very much in the beginning stages. In Latin America SINDU reports national centers are well started in Argentina, Chile and Venezuela.

It also became clear from the interviews that the professionals in the LDCs are particularly concerned with the lateral exchange of methods, information and experience among the LDCs themselves. Their desire is to know how other countries in similar situations handle similar problems. For example, the director of an urban development corporation, recently the recipient of a large loan from a multi-national

agency for a sites and services project, was greatly interested in knowing how other countries have undertaken similar projects. His "information" has been supplied solely by representatives of the multi-national agency (who have acted as "networking agents" in this regard), and the director remains unsure how others from the LDCs might perceive of this kind of program. He does not know how to find out. This could be a function of networking.

In this sense the much maligned international seminar, workshop or conference plays a more important role than many in the MDCs believe (international seminars are often referred to as an off-shoot of the "tourist industry"). We frequently heard that international meetings are very important to the professionals in the LDCs as it is a time, free from the pressure of their duties, when they can exchange experience with colleagues from other LDCs. It may be that we should not be critical of international seminars, but rather of the content (usually arranged by a sponsoring MDC).

The field interviews also uncovered a wide recognition that there is a need in the LDCs to learn how to manage information and to use it in their urban and regional work. This was well summed up by Dr. Gerardo P. Sicat, Director General, National Economic and Development Authority, Philippines who wrote:

"In a developing country, the art of information management is quite new. Administrators feel and see the need for such, however, local expertise availability is scarce. Moreover, an organized training program for information managers still has to be devised to develop proper information linkages among the various government offices to shorten time delay in the feedback process."

This theme was picked up in the field in Egypt, Indonesia and Pakistan as well.

There is no doubt that there is a tremendous need for networking in urban and regional development. That need is well recognized in the developing countries. If this need can be met substantially, a variety of benefits should accrue to the LDCs. Among the most important will be:

The ultimate benefit of a contribution to the improvement of decision-making in urban and regional development in the LDCs. This will occur because:

A. There will be a systematic build-up of experience, method and information in the LDCs. This will start with the immediate better utilization of existing knowledge which is not now receiving circulation and then through contributions of new knowledge and experience in the future. In this sense networking has a multiplier effect on investment in worldwide knowledge and experience from all sources at marginal additional cost.

B. There will be a contribution to the improvement in technical and professional capacity for planning and policy development through direct contributions to knowledge and through the build-up of improved skills in information management and use.

C. There will be a reduction in the duplication of effort which is now widespread through exchange of information and the collaborative approach to research on problems of common experience. (For instance, research in soil cement blocks is being undertaken in Indonesia, Pakistan and Jordan without any interaction between the research centers.)

D. There will be an improvement in communication hopefully leading to better coordination within LDCs, among LDCs and between LDCs and MDC institutions concerned with urban and regional development in the LDCs.

E. There will be some reduction in the need for foreign technical assistance experts to act as "networking" agents in the process of disseminating experience, methods and information.

It is, of course, not feasible to place a cost/benefit ratio on networking activities. As will be seen further along in this report, the costs can vary enormously and still have a meaningful program response. Even more difficult is to place a value on "improved decision-making". Nonetheless, networking which will cost several hundreds of thousands of dollars per year will be a tiny sum compared to the hundreds of millions of dollars that will be invested in the urban areas of the LDCs each year. A very small improvement therefore in how the LDCs invest in urban areas will result in a very positive cost/benefit ratio for networking. Since overall aid capital flows from the MDCs to the LDCs are level or declining, a program such as networking with its high potential multiplier effect is very worthy of active consideration.

Chapter II

THE EXISTING STATUS OF NETWORKING

Networking to aid regional and urban development is basically the formal and informal transfer of information. The content of that information may be intended to motivate, persuade, impart knowledge or "know-how". It may occur through technical assistance missions, formal or informal instruction, written documents and diagrams, or in meetings. There exist now many worldwide networking systems in which information is transferred. The subject matter of this activity is very broad, and much of it is relevant to urban and regional development.

The purpose of this chapter is to survey briefly the nature of this networking field which exists, to suggest the functions served and the activities performed, and to observe strengths and weaknesses in the present situation. The following chapter will propose a conceptual model of a networking system adapted to serve regional and urban development.

Some networking systems are highly institutionalized, such as the relationships of the World Health Organization to national and local agencies in many countries, the technical assistance programs of UNDP, USAID and others, or the "networks" centered in the Secretariat des Missions d'Urbanisme et d'Habitat (SMUH) in Paris or in the Servicio Interamericano de Informacion Sobre Desarrollo Urbano (SINDU) in Bogota. Other networking systems are informal or evanescent -- that is, they may operate on a given problem or common objective over a defined period of time, such as the inter-university training or research projects which operate across national borders.

There is already in existence an international networking system in urban and regional development which is unintegrated, incomplete, to some extent duplicating or overlapping, of which all the agencies we have studied as well as many others, are parts. There are many hundreds of nodes in this system and some well-traveled paths for certain purposes or functions. Such a system of agencies and relationships must be accepted as the setting within which specific actions to improve "networking", as we have defined it, must occur. The essence of networking is the facilitation of exchange among agencies, not the creation of a new international structure.

The Functions of Networking

Four classes of functions in the networking system have been identified: 1) the production of knowledge or techniques in usable form; 2) a switching or reference function, directing inquiries to possible sources of information; 3) the documentation, storage and actual transfer of information; and 4) the consumption, use or application of information in actual planning and management of regional and urban development. Effective networking requires attention to the capacity to perform all of these functions among the agencies involved, as well as to their institutionalized relationships.

The Production of Information

A distinction should be made between basic or theoretical knowledge which typically is produced by scholars in universities and research institutes and knowledge of experience which results from learning while at work in the development field. Both kinds are important, although useful in different ways. The former is likely to be general and in abstracted form, emphasizing applicability to some theory in the physical or social sciences or in integrative fields such as "regional science" or "urban studies". Such knowledge is useful in the field mostly as general background which influences the perceptions, attitudes or basic assumptions of planners and administrators. It may suggest possible policies or courses of action to be considered and some of their possible results. On the other hand, it cannot be used "raw" in predicting the outcome of specific, unique situations in regional or urban development without careful selection and interpretation.

Not all knowledge produced in universities and research institutes is of this nature. Many scholars are studying whole, real situations and trying to draw general development principles from them. Some scholars are also gaining experience by participating in the actual planning or management of development. This may produce two kinds of products: theoretical advance and practical "know-how".

Similarly, the development of methods and techniques for planning, analysis and policy development may produce products suitable for theoretical formulations which may be inappropriate for application in real situations in less developed countries without considerable adaptation. Their logic or ways of thinking about problems may be helpful even if data may not be available for refined quantitative formulations.

A second kind of knowledge, produced largely in governmental activity but compared and interpreted in research centers, comes from the observation and evaluation of experience in meeting development problems in the field. Unfortunately, much of the possible learning which could occur in this way does not produce useful knowledge because: 1) there is no regular process of observing, evaluating and accumulating experience; and 2) plans and programs may be produced by visiting teams of experts without an opportunity for the building of indigenous participation and expertise.

Another aspect of information production is the selection, interpretation, reorganization and integration of knowledge to apply either to generally experienced urbanization problems or to specific local situations. This is a "middle-man" function which is necessary between the cultivators of abstract knowledge and the potential users. It may take place in research centers or government agencies serving various users, or in a special research unit established by a LDC government to study its own development problems, or indeed in the work of a planning agency. This selection and transformation may occur also in the preparation of teaching materials for academic institutions or for short courses and seminars.

Switching or Reference Functions

Switching or reference functions point out paths through the networks. They may refer potential users of knowledge to sources of information or act in a bibliographic manner. They are sometimes performed in helping to define problems or specify questions. They may occur in the assignment of an expert or a technical assistance contractor. Another example is assistance in selecting locations for study given to potential students or in the assignment of faculty resources to a university in an LDC.

An important example of these functions is the proposal of the United Nations Environment Program to establish an international, computerized information reference system within which an inquirer who requires a certain kind of knowledge would be referred to persons or institutions from whom the knowledge could be obtained. Similarly, other existing or proposed systems are intended to provide bibliographical reference.

Knowledge Storage and Transfer

Storage and transfer functions include the filing and computer storage of documentation and library sources; furnishing of copies of documents (sometimes in microfiche); publication of articles, abstracts, books and journals; correspondence with information seekers; and provision of actual consulting services, conferences, workshops, committees, etc. They may also be said to include actual instruction in professional curricula, short courses, etc.

A number of international and regional agencies, as well as national agencies in larger and more developed countries, have undertaken documentation, classification and storage of information pertinent to regional and urban development. Some of these publish bibliographies and summarized news bulletins. Some exchange their information. There is some question about the extent to which these classification systems are compatible and recognize the difficulties imposed by language differences.

Ability to Consume or Apply Knowledge

Consumption of information, of course, involves local situation appreciation, problem or issue diagnosis and question definition. An important aspect is the interpretation of the meaning or significance of knowledge or experience from outside in the light of the local situation. Often adaptation must be made at the time of the application of imported knowledge, and careful judgement must be applied to imported standards, norms and valuations. Similarly, students studying in foreign countries with more developed economies or different political or legal systems must have the maturity to make these adaptations.

Effective consumption of knowledge or "know-how" depends also upon the personnel and organizational resources available -- in short, the competence in the receiving country.

The respondents to the mail survey were asked to rate their involvement in the four major aspects of networking as being "much", "some", "little" or "none". The results based on the 55 responses were as follows:

Chart 1

	Much	Some	Little	None
Production	38.2%	40.0%	18.1%	1.8%
Switching	16.4	32.7	32.7	16.4
Storage	12.7	29.0	32.7	23.6
Consumption	49.1	32.7	9.1	7.2

It can be seen that most respondents are involved in the production and consumption of information and knowledge, but much less with its switching or storage functions. This highlights one of the significant problems. Most of what is produced in urban and regional development activity is rarely circulated beyond the group immediately concerned with the work. This leads to an enormous loss of knowledge and experience. This point was also made repeatedly during the field interviews. What is produced is often lost or not circulated and therefore not known about by others who may require the same information.

The respondents all complained of the ad hoc methods they used to obtain data and information for their work. The vast majority start out with an assignment and then undertake an informal data search by contacting other agencies or friends.

The failure to link production and consumption functions systematically through the switching and storage functions is at the heart of the problem. Until this is done systematically, it will be difficult for the LDCs to build up a data base and make full use of their own experience.

The Activities of Organizations

Organizations in the field which were observed perform a variety of activities intended to serve some or all of these functions. Some limit the range of functions served; others limit the range of subject matter or geographic area. Some work independently and others consciously become parts of networks which they try to establish and maintain.

The organizations may be placed in one or more of these seven categories:

1. Agencies which produce knowledge through research or through recording experience. The first group is mainly universities and research institutes and to some extent government. The latter are the agencies which plan, program or administer aspects of urban development. The recording of this experience may be done by the agency involved, or by an auxiliary research center. The term "university" as used here means an institution or a formal department or institute within it or a collection of academic individuals with particular skills and interests.

The agencies and their research differ according to their distance from the points of knowledge application. A number of universities and centers for research and training in less developed countries are actively engaged in research intended to help solve development problems in their own or similar

countries. These would include such institutions as the Asian Technical Institute in Bangkok, the University of Ibadan in Nigeria with its Planning Studies Program and many others. Among non-university centers are the FUNDACOMMUN in Venezuela and a number of other research and training institutes which are currently being established. Certain agencies with multi-national or international fields of responsibility also conduct such research. These include the U.N. Center for Regional Development in Nagoya, the Institute for Social Studies in the Hague, Netherlands, the Development Planning Unit in University College, London, the Secretariat des Missions d'Urbanisme et d'Habitat (SMUH), Paris and a number of others. Finally, the agencies of the United Nations family undertake much of this research which is reported in their publications.

2. Agencies which select, adapt, interpret, reorganize or recombine knowledge for application in generalized, commonly experienced situations (e.g., studies of land development patterns or institutions) or in specific, unique, local situations. This capacity requires a feedback of knowledge and interpretation of local situations (local problem definition) and some evaluation of experience.

These activities may be undertaken by university groups, by research institutions, by specialized technical assistance agencies for general application, or by special policy study centers being established in a number of developing countries. Such agencies may be tied together in a network to exchange information and methods.

In some countries this function might be performed in a university setting. In other countries when the relations between universities and government are not cordial, special institutes may be established.

This service is performed in the United States within the Planning Advisory Service of the American Society of Planning Officials both in response to specific inquiries and for incorporation into publications whose focus concerns some generally experienced problem. Many North American policy research institutes also assist governments in this fashion.

3. Agencies which document, store, exchange, transfer or publish knowledge. There is a considerable trend toward the establishment and operation of organizations for this purpose in the United States and internationally. In the U.S. we have the Environmental Protection Agency, the Department of Health, Education and Welfare, the Department of Housing and Urban Development, the Library of Congress, the National Technical Information Service, the Smithsonian Scientific Information Exchange, the National Academy of Sciences, and

a number of professional organizations and corporation which perform these functions. A new national educational network for sharing of teaching programs, data banks, etc., is being established at EDUCOM in Princeton, N.J. Others which have been mentioned in connection with other activities include SMUH and CIDHEC (Centre Intergovernmental de Documentation sur l'Habitat et l'Environnement pour les Pays de la Commission Economique pour l'Europe des Nations Unies) in Paris, UNCRD in Nagoya and SINDU of the Organization of American States in Bogota. The International Development Research Centre in Ottawa is attempting this in a much broader field.

Publication of information is also done extensively by professional associations such as the Inter-American Planning Society.

4. Agencies which require and use knowledge in planning and management of urban development and treatment of urban problems. Much of the effectiveness of information networking depends upon the capacity and structure of the receiving agency or agencies. The quality of the planning process, the appreciation of the urbanization process and problems on the part of policy-makers and the extent to which sectoral or topical planning and project implementation are integrated at the regional and local level must determine the nature of networking assistance and its effectiveness. The level of receptive capacity (as well as problem definition ability) varies by country and agency. Planning agencies, ministries of local government or public administration, governmental agencies or corporations are all receptor bodies. An institution to select and interpret inputs of information and to help in diagnostics and question definition in the local country can be most helpful. This might be in a planning agency or in an independent institute.

An important concern here -- and perhaps one of the most urgent networking needs -- is the establishment of relations for exchange of knowledge, experience and even personnel among the consumer agencies in LDCs.

5. Agencies which sponsor seminars, workshops and conferences. These include professional associations, international agencies or national governmental agencies whose activities are well known. Special agencies which undertake this work include the U.N. Center for Research and Training in Regional Development in Nagoya, Japan, the Institute for Social Studies in the Hague, Netherlands, the Development Planning Unit of University College, London and many others including SMUH in Paris and the Society for International Development in the United States. A special study of the training programs provided by these agencies over several

years, those who have attended, the coverage of topics and some measure of effectiveness would be worthwhile.

Some of these agencies (e.g., SMUH) provide short courses for technicians going abroad on technical assistance missions and for those returning in order to record their experiences. Some (e.g., Nagoya) provide special training for government officials and policy-makers on the role of planning for urban and regional development.

In 1972 the United Nations held an international seminar in Nagoya for directors of national and international centers for research and training in regional development at which training needs were discussed.

6. Agencies which perform educational or training services in regularly organized courses. Requirements for professional and sub-professional training in urban or regional planning and related special subjects such as law, public administration, building, ecology, economic development, etc., have been discussed in a variety of conferences in recent years. Most agree that for all but the most highly specialized training or education it is preferable to have this take place in the home country or a country of a similar nature.

For some years the Organization of American States sponsored a training program for the Latin American Region in Lima, Peru. Recently this has been superseded by the establishment of two or three university level programs in sub-regions of Latin American which are still under OAS auspices.

7. Agencies which counsel and guide students toward educational programs include the Institute for International Education. The United Nations provides some advice for its Fellows. Some agencies such as the U.S. Department of State or the Eisenhower Fellowship Program advise on contacts and supervise study tours which may or may not include residence for a period of time in a university.

Institutionalized Networking Paths

Institutionalized networking paths are maintained or proposed by a number of agencies. Some of these are described more fully in Appendix I of this report. We shall review them briefly here:

1. The Secretariat des Missions d'Urbanisme et d'Habitat (SMUH), Paris, maintains a documentation and information system, conducts services and short courses and sends technical advisory missions. The original focus is on Francophile Africa, but the network is being extended to other parts of the world.

2. Intergovernmental Centre of Documentation on the Habitat and Environment for the Nations of ECE of the UN (CIDHEC), Paris was established to serve primarily western European countries but intends to expand its services to less developed countries.

3. The Society for International Development, Paris is establishing a "Development Reference Service" which is intended to provide elements of reply to questions for developing countries in the field of economic and social development, sometimes directly but more often through cooperating individuals or agencies in its related network.

4. The UN Environmental Program is proposing to establish an International Referral System which would refer inquiries to sources of information. It hopes to work with national and international regional centers.

5. The UN Program for Research and Training in Regional Development, to which the Nagoya Center is officially related, performs documentation and bibliographic services and relates to multi-national and national centers worldwide which provide research and training in regional development.

6. The UN Centre for Housing, Building and Planning, in addition to its technical assistance function has proposed the establishment of a formal, worldwide information network. It says that experience demonstrates that activities should begin in the various nations, not be imported from international sources.

7. The Organization of American States maintains and assists exchanges of experience and personnel through its Urban Development Program, and more recently through the establishment of the Servicio Interamericano de Informacion Sobre Urbano (SINDU) in Bogota which serves as a focal point for information exchange and helps establish national centers for urban development.

8. The UN Center for Regional Development in Nagoya has hosted a meeting of the East Asia Regional Organization for Planning and Housing Planning Commission at which time recommendations were made that the Nagoya Center should continue to assist those countries which want to establish their own national training and research centers, to initiate the development of a network of national centers within Asia, and to strengthen its information and clearinghouse functions.

9. The International Association for Metropolitan Research and Development (INTERMET), Toronto is made up of a worldwide network of groups of citizens in large metropolitan centers and a secretariat. About 30 to 45 metropolitan

areas are associated in the group. The network is intended to provide for channeling of information, exchange of ideas and sharing of experience among the groups.

Some adaptation or enhancement of the support for and programs of these centers may be needed to make them fully effective in meeting the needs of a worldwide networking system. However, their work is effective, and they have substantial strength. Other world regions would need the establishment of comparable institutions.

The functions which might be needed in the various world regions and which should be performed by regional centers may depend upon what is being done at the time by other existing agencies such as the regional programs of the United Nations Social and Economic Council, regional banks or by other international agencies. Both UNCRD and SMUH have suggested that they find considerable advantage in combining programs for documentation, information transfer, training, research and advisory services. On the other hand, SINDU has been able, in a short time of concentration on information programs, to begin to build centers in Latin American nations for an extensive information network.

Design and Operating Concerns

There are many formal and informal networks to serve urban development in the world. They are being established, are growing, changing, declining, while some are largely composed of good intentions. They vary from informal associations of interest to well institutionalized agencies and associations, from purely national or regional groupings to worldwide operations.

Most of these networks are underfinanced and need more personnel and facilities. In their cumulative experience, however, much is being learned about what works and what does not, and where major needs lie.

There are two levels of networking that have been identified during the course of the field work. There is or needs to be an intra-country network, and this network should be supplemented by an international network. The latter itself having two recognizable, but related parts -- networking among the LDCs themselves and networking among LDCs and MDCs. The overwhelming conclusion of all the field interviews and the survey support the need for these various kinds of networking. Field observations and interviews have identified many roles already established at all levels in this networking framework. Yet networking is not being done on a

widespread or efficient basis. This is because of a set of design and operating concerns which must be overcome.

1. There is a tremendous volume of material to be dealt with even at the individual country level. At the international level the volume is almost unlimited if the subject is given its broadest definition. This, in turn, sets up other complex problems.

a. Experience has shown that there are great differences in the capability of LDCs to make effective use of knowledge or technology imported through networking. This capability depends upon awareness and definition of urban and regional development problems, the institutional structure of planning and management functions, and the availability of well trained personnel. The critical area of a networking system, therefore, is at the national level where knowledge and techniques must be selected and interpreted for their relevance and usefulness in the local situation.

b. Appropriate interventions to aid networking will vary from nation to nation and from region to region. For example, Latin America is more advanced in experience and intellectual preparation for urban development than East Africa. And within a region the appropriate and effective institutionalization of development capability will vary from nation to nation (e.g., Cambodia and Singapore in Southeast Asia).

c. Knowledge must be specifically wanted before it can be effective. Effectiveness of networking depends most upon the receptivity to assistance or communications in the receiving institution and its ability to make use of the knowledge or skills transferred. This is true regardless of whether the links are between agencies within the same country or are international.

d. Knowledge and techniques from more developed countries should be carefully screened, selected and adapted before being introduced into LDCs. As in the past, the introduction of advanced industrial and public works technology has proven inappropriate. This screening might take place at national, regional or even, in generalized form, international levels.

2. The material to be useful at the national and particularly the international level must be able to provide for a wide variety of uses which may suggest the need for material to be stored in a disaggregated form. It also presents problems

in formulating specific inquiries which can isolate the actual material required. For example, PADCO recently received two inquiries for information. One from Brazil asked to be sent a specific publication on seaport planning and included the title and publisher. The other from Saudi Arabia asked to be sent "all materials on regional planning". Obviously, the Brazilian inquiry could be met, but nothing could be done for the Saudi Arabian inquiry because it could not be determined what materials would be appropriate and useful out of the vast literature in the field.

3. The need to place a value on material to be networked since the value varies drastically from user to user and varies by the timeliness of the response to any given user. Information inquiries usually have time-specific deadlines which if not met render the information valueless. The costs of information through networking, of course, increase as the time frame of response is shortened.

4. The storage, retrieval and dissemination of information are extremely costly. It is estimated that it costs \$10 for each bit of information installed in a computer-based system before allowing for operating costs. In all cases these functions, even if manual, require space, administrative infrastructure, staffing and operating budgets. These costs cannot be made up in user charges alone, except in unusual cases.

5. In the LDCs trained staff in information management and use is not generally available. Furthermore, because of overall shortages of professional skills the operating or production agencies take priority by the de facto demands of the situation.

6. There was also a widespread feeling expressed during the field interviews that intra-country networking is frustrated frequently because of deliberate lack of cooperation among agencies. This phenomenon is based on the fact that information is power for the agency which holds it, and they are reluctant to share it freely with others. There are also legitimate concerns about confidentiality of information which need to be safeguarded.

7. Networking at the international scale also faces unique problems in language compatibility and translation needs. One respondent in a field interview reported that he receives anything which comes to his agency in English because he is the only one capable of working in the language. Although he is pleased to receive this material, he does nothing with it because he does not have time to make translations to circulate to his colleagues. This, of course, frustrates any networking benefits.

8. A major problem related to international networking is the almost unlimited theoretical number of users in the LDCs. Most of the international networking efforts reviewed do not have well developed relationships with the LDCs and certainly are dealing with only a minor fraction of the potential users. This is because there is no systematic way in which the international node can link with all of the many potential users who are not even aware that the international node exists, not to mention what services it can provide. This problem is caused by the lack of intra-country networks in the LDCs and because of the budget limitations of the international network nodes.

If networking is to respond to the felt needs of the LDCs on an efficient and expanding basis, these primary constraints must be overcome.

Chapter III

A SUGGESTED CONCEPT FOR NETWORKING IN URBAN AND REGIONAL DEVELOPMENT

The need for networking is well recognized. There is also general agreement as to what networking actually means in terms of objectives, functions and activities. There is little recognition, however, of how networking should fit together as a series of overlapping and mutually supportive systems. In short, there is presently no "global concept" of how all the present and possible participants should be related to each other conceptually. This might be called a "network of networks".

It is, of course, premature to suggest that there is only one useful global concept or model which should be established for networking in urban and regional development. It is not intended that the material presented in this chapter should be interpreted as a proposal for a monolithic structure which would work worldwide. It is rather an effort to think through how greater efficiency and support can be achieved by individual centers or nodes working independently but still conscious of the larger relationships involved. The strength of any networking concept is flexibility and informality. This can only be achieved by many independent and individual actions among the thousands of potential participants involved.

In thinking about an overall guiding concept to networking there is a great temptation to conceive of a hierarchial structure starting with individual LDC intra-country networks linked to regional networks, linked to worldwide networks, etc. This approach would be wrong for several reasons. First, all participants whatever their location are both producers and consumers of networking activities. The flows should be in all directions and not just from the "top" down. Second, initiatives can be made anywhere in the system and connect with any other part of the system for either one transaction, a series of transactions or, in some cases, permanent associations. There is no single set of paths through the network which should take precedence over any other possible paths except as individual needs demand.

It is better, therefore, to think of a global networking system as a worldwide telephone exchange. The telephone systems, although under separate ownerships, are linked together so that anyone participating in the system by having

access to a telephone instrument can communicate with anyone else through established lines. The individual connections are routed through exchanges (nodes) both within countries and internationally. Once a conversation is complete the connection is broken, but it can be re-established again if required. Individual costs can be assigned to users commensurate with benefits received. It is this worldwide flexibility and efficiency which should be the ultimate objective of networking in urban and regional development.

In Diagram I a schema of a suggested concept for networking in urban and regional development is presented. The diagram is greatly oversimplified because the portrayal of all of the possible networking paths which might be established and the listing of all of the possible nodes within the system would make the picture incomprehensible. The diagram tries to suggest the variety of networks and possibilities for their interaction.

LDC Networking Potentials

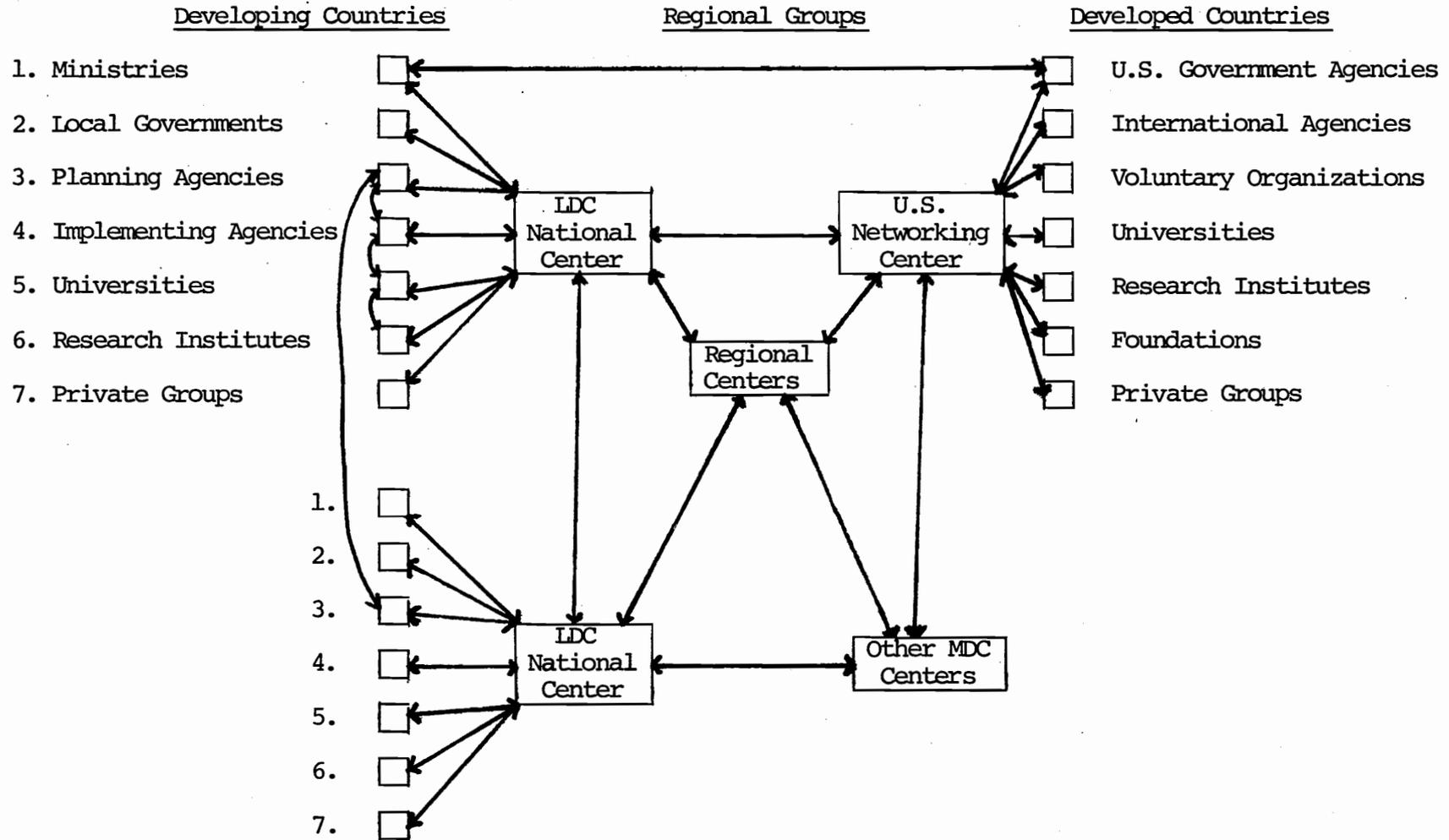
Starting on the left side of the diagram under the general title of "Developing Countries" (of which there are over 100 potential participants) a series of seven kinds of agencies are listed. Each kind is really a group in itself which requires networking activities for its own interests, objectives and priorities. For example, there are usually at least six ministries involved in aspects of urban and regional development which should be carrying on mutually supportive networking activities. There can be from several to several hundred local governments in a developing country which should be networking on mutual issues in urban and regional development. And so on with the other categories listed, each of which is to a greater or lesser extent a group with mutual interests which lends itself to networking.

Next there is a need for networking activities directly among the seven categories. For example, universities should be linked to local governments, ministries or planning agencies. These networking activities should be direct and specific and need not be "routed" through any other center or node. Internationally there are potential benefits in linking directly with similar agencies in other developing countries for the exchange of methods, information, experience and expertise. In this sense specific housing agencies should be networking internationally with each other, specific universities or ministries. These kinds of networking activities are going to be for very specific purposes.

A different kind of networking more related to the larger multi-disciplinary policy issues requires the establishment of a national center or node in order to link the required networking paths together efficiently. It is this LDC national

Diagram I

SCHEMA OF A SUGGESTED CONCEPT FOR NETWORKING IN URBAN AND REGIONAL DEVELOPMENT



center shown on the diagram which is so often lacking today and which is of special concern in this report (see Chapter IV for a fuller discussion of the needed national centers). The LDC national centers should be actively networking with other LDC national centers, with relevant regional centers and with resource centers established in the MDCs.

International Networking Potentials

The regional centers, of which there are only a few at present and more in various stages of planning, should also have mutually supportive networking activities among themselves and with the MDC resource institutions. The objective should be to insure that each major geographic region is served by a strong regional networking institution such as SINDU for Latin America. This will require the establishment of new institutions or major modification of existing institutions on the sub-continent (India, Pakistan, Bangladesh and Sri Lanka); the Middle East and North Africa; and Anglophile Africa assuming that SMUH in Paris is serving this function for Francophile Africa.

The MDC resource institutions, of which there are several in various stages of planning or development, should be networking with each other and with the relevant regional and LDC agencies concerned. In reviewing the MDC resource centers there were several noted in Europe and Canada which have multi-purpose networking objectives in urban and regional development related to the LDCs. There is no such comprehensive center in the United States. This gap in the United States participation in international networking is a second special concern (see Chapter IV for a fuller discussion).

There are a number of institutions and agencies located in the U.S. that are involved in various aspects of networking activities in urban and regional development concerned with the LDCs. Seven such groups have been identified and are listed on the right side of the diagram. These include the international activities of U.S. Government agencies such as found in HUD, HEW, DOT and, of course, AID; the international agencies based in the United States such as the World Bank, IADB, OAS and the United Nations; voluntary organizations working with the LDCs; universities with international programs and research activities; research institutes, foundations and private groups. Each of the individual units within a given classification carries on some kind of networking activities, usually directly with a given participant in a specific set of LDCs. To some extent there are networking activities among the groups such as joint university programs, etc., but these seem to be relatively few in number.

The suggested concept for networking in urban and regional development presented here has been useful in identifying the two major gaps in the present networking system. First, the lack of LDC national centers to stimulate networking within a country and to link to regional and MDC resource centers. Second, the need for a U.S. networking center in order to link U.S. resources more effectively to the LDCs. These two areas have been selected for AID priority consideration and are discussed in Chapter IV.

Some Overall Observations

Networking in urban and regional development within the global concept suggested here cannot be thought of as a "project" or within a time specific framework. It is rather a fundamental part of overall programming for on-going improvement in urban and regional development planning, policy and implementation in the LDCs. As such, no one agency or funding institution can or should be the dominant sponsor. It is an area in which a high priority should be given to encouraging the participation of many countries and international agencies. Each has a specific role to play as a cooperative supporting member of an informal consortium working to improve the kinds and quality of networking activities throughout the world.

It must be recognized at the outset that networking of the kind suggested here is going to require a long-term build-up. It will require constant adjustment and repair. Already there are examples in some countries where centers with networking functions have been started, only to lose support and gradually disintegrate within a few years. Special attention must be given to making these centers increasingly relevant and useful to decision-makers within the LDCs.

It is disappointing, therefore, to find that even though there are many individual initiatives being undertaken by the United Nations, the Organization of American States and other similar groups on a bilateral basis, there is very little coordination and exchange among them. For those concerned with networking a high priority should be the coordination of activities so as to avoid duplication of effort, but more importantly to insure that all activities are mutually supportive. If AID elects to participate in networking for urban and regional development, it should insure that its activities are supplemental to the existing efforts. This is the focus of the suggestions for AID consideration presented in Chapter IV.

The Role of the Universities in Networking

Special mention should be made of the role of the universities in possible networking activities. As seen in Diagram I the universities in both the developing countries and the developed countries are among the groups for which networking is proposed. It is not possible in the diagram, however, to show all of the relationships between universities which might be developed through networking.

Early in this study it became clear that two general kinds of networking were repeatedly being intertwined. There was an emphasis on action and decision-making on the one hand and on research and training on the other. This report elected to focus more on the action/decision-making kind of networking because this seemed to be of higher priority among developing country respondents and more compatible with AID's emerging objectives. Nonetheless, research and training networking needs were recognized and deserve further study and consideration.

The universities in the United States have tremendous resources which could play a very useful role in networking with universities in the developing countries in the general subject areas of urban and regional development research and training. Many similar programs have been started in agricultural research and in other sectors. One possible vehicle for this kind of networking would be through support of the program suggested by the Association for International Cooperation in Higher Education and Research (AICHER). This network is now in the early stages of development. If an urban and regional component were included in AICHER or a similar network it might include the following kinds of activities:

1. Foster direct university to university relationships between the United States and LDCs. Both would benefit.
2. Form and support a coalition of U.S. universities to work jointly with a group of LDC universities on curricula and teaching materials. A system could be worked out for professional training in LDCs with a smooth transition to more advanced or highly specialized work in the U.S.
3. Foster exchange of training course materials among the centers for research and training in regional development now operating special educational programs under UN encouragement. Perhaps arrange for transfer of their experience to other LDCs through pairing of universities.

4. Support a U.S. center to advise and monitor the progress of LDC fellows sent to the United States for training. The center could work with and advise American universities on better fitting their programs to the needs of LDC students. It would also arrange study tours and work experience for traveling fellows.
5. Arrange for faculty exchange between U.S. and LDC universities to increase understanding and improve course materials.

In the chapter which follows, Possible AID Networking Priorities, no special mention is made of networking in research and training. This is a priority judgement that the kind of networking proposed should be commenced before specialized networking activities are undertaken. If AICHER is to move forward with AID support, however, urban and regional research and training elements should be included from the outset.

Chapter IV

POSSIBLE AID NETWORKING PRIORITIES

It is the premise of this report that networking in urban and regional development is a logical area for programming by AID consistent with the Agency's overall objectives and priorities. In the earlier chapters the need for networking has been established, the state of networking today reviewed and a conceptual model for improved networking outlined. It now remains for this report to suggest at what point AID can most usefully intervene to support improved networking activities.

Suggested priorities for AID programming are shown in Diagram II. The diagram proposes that the ultimate objective of AID networking activities should be to support LDC national centers for intra-country and international networking. To accomplish that objective it is proposed that AID support three separate but related initiatives on a long-term program basis. These objectives in turn are supported by a series of immediate action recommendations for specific activities which can be initiated quickly. In the text which follows each of these areas of possible AID concern is discussed.

The overall idea is that AID should support the process of networking as its major concern. It has been the conclusion of this report based on interviews in the field and within the U.S.A. that there already exists an enormous stockpile of methods, information, expertise, and experience in urban and regional development. The first problem then is to establish processes whereby this knowledge can be circulated through networking to user, or consumer groups. The focus initially should be on stimulating flows through networking. Later on, as the networking process matures, AID might consider assisting in the production functions for contributing appropriate new knowledge which has been demonstrated to be required through networking feedback. This is of secondary importance now and is probably several years away.

DIAGRAM II

POSSIBLE AID NETWORKING PRIORITIES

The Ultimate Objective
of AID Networking Effort

Support LDC National Centers
for Intra-Country and Inter-
national Networking Activities

Long Range AID
Objectives and
Programs

Establish USA Networking
Center to Link Full
Range of US Resources to
Support LDC National
Centers and Coordinate
with Other International
Networking Activities
(Priority I)

Contract for
Services with
Regional Cen-
ters to Support
LDC National
Centers
(Priority II)

Utilize Other AID
Programs to Stim-
ulate Networking
Efforts of Regu-
lar Agency Activ-
ities in LDCs
(Priority III)

Immediate Action
AID Priorities

Design Configuration of
USA Networking Center
and Draft Terms of Ref-
erence for Competition
Among Non-Profit Groups

Facilitate the
Establishment
of Regional
Centers in Mid-
dle East and
Africa

Facilitate Publi-
cation of Rele-
vant AID Materials
on Method and Ex-
perience for Dis-
tribution in LDCs

Undertake Study on Role
of Training in Informa-
tion Management and
Use in the LDCs

Join with UN to
Sponsor an Inter-
national Seminar
on Networking as
Part of Prepara-
tory Work for
Vancouver Con-
ference on
Habitat

Support of National Centers in the LDCs

It is clear from the study to date that the greatest weakness in networking in urban and regional development is the lack of a central node in the LDCs themselves. In no country visited during the project was there found a functioning center within or outside of government which fulfilled the necessary functions which should include:

1. The systematic build-up of documentation on the urban and regional development of the country -- its data base and experience.

2. The provision of a forum for linking agencies and institutions together for the exchange of information, experience and policy discussion on the critical issues of urban and regional development within the country.

3. The stimulation of relevant training and research to be provided by the center or by others depending on individual circumstances. In this sense it acts as a service bureau for the operating agencies.

4. The central country contact for linkages with all international networking activity in urban and regional development, including contact with other LDC national centers, local regional centers and worldwide international centers sponsored by the MDCs.

There is no one pattern for developing the functional capabilities itemized above. Each country will require an individual solution depending on its current status of development, government organization and priorities and financing. The kind of national centers suggested here could be organized within an appropriate central government ministry, as a separate public institutional body or as an institution connected to an university. In most cases it would be appropriate to choose an existing organization and seek to strengthen it in order to fulfill the necessary functions.

There should also be complete flexibility in the staffing and organization of the national centers depending on local conditions. In very small countries at early stages of urban and regional development the national center might be limited to one or two professionals and play almost an entirely catalytic role. In other countries a larger, more diversified center would be appropriate which could be staffed so as to provide services to operating agencies in the form of information management, information manipulation, training and research.

What is important initially is that a specific national center be created as the central node for intra-country networking and as the main contact point for international networking. It is recommended that AID play a major role in stimulating and supporting the formation and development of national centers. AID can play this role through the utilization of a variety of program initiatives, both direct and indirect. Three such initiatives are discussed below. They include: 1) the establishment of a United States node for international networking; 2) the purchase of networking services for selected LDCs from existing regional centers with networking capabilities; and 3) the inclusion of networking activities within other AID program initiatives.

Establish a United States Networking Center (Priority I)

The United States has much to offer in terms of resources for urban and regional development. A wide variety of institutions in both the public and private sector (voluntary agencies as well as profit and non-profit private groups) are actively engaged in aspects of urban and regional development concerned with the LDCs. Many U.S. universities are involved in training and research activities concerned with urban and regional development in the LDCs. The results of this effort are not systematically connected with any networking activity. The benefits from the effort are therefore not made widely available outside of the immediate producer/client relationship.

Functions of a U.S. Networking Center

A U.S. networking center would, therefore, have as a central responsibility the progressive development of links between U.S. resource groups and LDC national centers and other LDC user groups. The U.S. networking center would fulfill this mission by playing a catalytic role. It would:

1. Seek to establish contact with all sources of urban and regional development material relevant to the LDCs and monitor their activities.
2. Assemble and maintain information source lists, abstracts, bibliographies, catalogues, etc., concerned with the work of U.S. groups in urban and regional development relevant to the LDCs and periodically circulate this information to the LDC national centers and other user groups.
3. Work with U.S. resource groups to focus their work on the most relevant issues in research and applied development planning and practice as perceived through feedback

sources in the LDCs. In this sense it would seek to promote a U.S. consortium of research, manpower and information resources.

4. Assist the multi-lateral and bi-lateral donor agencies in circulating relevant information on their programs and projects and the results of their technical assistance efforts. This service could tap the reserve of knowledge and experience from these groups which is not now in circulation. It could also serve to foster recognition of the potential role of the international donor community in urban and regional development.

5. Facilitate the circulation of better information on training support needed and available. The U.S. networking center would not itself be a training agency, but it could encourage specific kinds of training by others.

6. Act as the U.S. counterpart to work with established regional networking activities such as the U.N. Nagoya Center and the OAS-sponsored SINDU in Colombia. It could also act as the counterpart to established centers in the MDCs such as SMUH in France and the soon to be established center in Canada sponsored by the IDRC.

The second major function of the U.S. networking center would be to provide direct services to LDC national centers and other LDC user groups. These services might include such things as:

1. Technical assistance in the establishment and development of LDC national centers of the kind suggested earlier. This should be a major and continuing effort.

2. Attempt to fill specific information requests that are sent in by LDC national centers which require or are related to U.S. support capabilities. For this service, special country budgets might be established related to specific LDC national centers for the purchase of materials or knowledge.

3. Stimulate the direct exchanges between LDC participants in the network wherever such exchanges would appear to benefit both parties. For example, the U.S. networking center could alert LDC national centers which are requesting similar information to have direct contact on problems of current interest to both. It could bring LDC and/or U.S. resources together where it is known that similar lines of inquiry are under way. It would attempt to stimulate conference and seminar-giving organizations to focus on problems of known interest and see that country-specific agencies sharing that interest participate. In this sense the U.S. networking center would play a catalytic role in stimulating direct exchanges, under the sponsorship of others wherever possible.

It can be seen from the above that the concept being advanced here is that of the U.S. networking center as primarily a transfer agent seeking out sources of information and knowledge and matching them with user needs. There would be no basic information generation or direct information storage. The resources needed by the U.S. networking center need not have any formal or contractual ties. The U.S. networking center should be able to purchase resources or information as required or, if possible, stimulate others to bear the cost. All potential sources can therefore be linked together efficiently and at minimum cost.

Organizational Considerations

The U.S. networking center could best be undertaken by installing the functions as a separate unit within an existing organization. The establishment of a new institution is a time consuming and difficult process. If that institution is a separate, independent body, then much of its infrastructure and administrative costs must be internalized into the institution itself. This is expensive, delays its effective start-up and constricts its flexibility. Therefore, it is recommended that if AID decides to sponsor the establishment of a U.S. networking center in urban and regional development that it do so by inviting proposals from appropriate non-profit institutions which, by the nature of their central purpose, could be an appropriate host. There are a number of such organizations which might be appropriate which have been identified in the course of the study. We have interviewed some, but not all of these institutions. We did not, however, raise the possibility of their hosting such an undertaking as proposed here. It seemed premature at the time given the lack of AID review and commitment. It would be appropriate if AID elects to pursue the matter further to develop terms of reference for the establishment of a U.S. networking center and to interview possible candidate institutions. Those institutions which indicate an interest in the undertaking and demonstrate the prerequisite capabilities could then be invited to submit proposals.

It will be noted that no university institutes have been included on the above list. Our discussions with universities suggested that they would be inappropriate vehicles for the kind of U.S. networking contemplated. They would and should play an active role as potential resources to be called upon by the U.S. networking center. The reason universities appear

inappropriate is their administrative difficulties in flexible contracting arrangements; their focus on the more academic aspects of training and research rather than on the practical kinds of transfer functions called for here; and their difficulties in maintaining staff continuity. Similarly, profit-making groups were considered inappropriate because of the inherent conflict of interest involved in using such a central position in an international network for commercial purposes and the difficulty of profit-making groups in linking productively with the range of non-profit and academic institutions which must be involved in the system.

Staffing and Financing

The specific configuration of the U.S. networking center will need to be formulated during a further study specifically for the purpose of preparing the terms of reference. Nonetheless, it is likely that a three-man professional staff will be required initially along with secretarial and administrative support. This manpower plus allowable overheads and operating expenses suggest that approximately \$250,000 per year will be required for the U.S. networking center to fulfill its prescribed functions.

In addition, funds could be usefully added to establish within the U.S. networking center budgets for meeting foreign exchange requirements of selected LDC national centers. These budgets would be used for the purchase of information, knowledge and services related to urban and regional development requested by the particular LDC. The fund will be in dollars. Initially the country specific information purchase fund can be established by grant monies -- perhaps \$10,000 each to cover the first year. Each country will be encouraged to add funds to their account either by direct foreign exchange transfers, grants or loans from other sources, or through the sale of their own generated information. For example, if one country sells information to another through the network it would be possible to debit the buyer's account with the international agent and credit the seller's account.

Such a fund would give the U.S. networking center a useful program device to support relationships with LDC national centers. It would be extremely useful to the LDC national centers in that it would overcome foreign exchange difficulties in participating in international networking activities. The above is only one specific program idea related to the U.S. networking center. Others will come to mind as further study is given to the subject.

It must be assumed that long-term financing for the U.S. networking center must be assured. A minimum period would be three years, and it would be better to have a five-year commitment. Anything less would make the initiative of marginal value. AID could take the initial burden of financing for this period (which would be in the range of one million to 1.5 million dollars), but other sources of finance could actively be pursued as well. For instance, the U.S. networking center once established would be a likely candidate to support some of the program activities being contemplated by the United Nations, the Organization of American States and possibly some of the development banks. Various forms of foundation support could fit into the work program particularly from the Ford Foundation and the National Science Foundation.

In addition, it is likely that the U.S. networking center could begin to sell its services both to LDC groups and to other MDC user organizations. Certainly countries which have achieved satisfactory foreign exchange positions, but are still in great need of urban and regional development assistance could be expected to pay for the services offered.

Long range financing possibilities would be one of the subject areas in need of further investigation if AID desires to pursue this program suggestion.

Support of Regional Networking Groups (Priority II)

Whereas the cornerstone of any major effort on the part of AID to support the build-up of LDC national centers for urban and regional development should be the creation of the U.S. networking center described above, there are other program initiatives which can be attempted. Support of regional networking groups is one such initiative. It could be undertaken independently of the establishment of the U.S. working center, but ideally it would have a supplemental role.

As previously described, there are a variety of regional centers already involved in networking activities for a specific set of countries. Two such centers are of particular merit -- the OAS-sponsored SINDU program in Colombia for Latin America and the UN-sponsored Nagoya center for Asia. Both centers are constrained by budget limitations on the networking and outreach services they can provide. AID could consider contracting directly with these centers for services in support of building up the LDC national centers of the kind previously described as a step toward the ultimate objective of the networking effort. SINDU currently is specifically involved in attempting to create national centers in Latin America similar to the kind recommended here. They have developed a small

trained staff with expertise in information management and use and provide limited technical assistance to individual countries. An AID contract to provide these kinds of services to Latin American countries of priority could have several beneficial results.

First, it would bring the needed technical assistance to the countries selected in order to assist them to set up their own national centers, thereby accomplishing the ultimate objective recommended in this report.

Second, it would assist the regional centers to increase their own usefulness to the region and expand and stabilize their operations which would be a desirable program objective in its own right. In this case the level of financing required would be totally flexible given the amount and kinds of services required.

Although not essential, this could obviously be done best as part of a broader initiative involving the U.S. networking center which could play a role in collaboration with the selected regional center programs for support in individual LDCs.

In reviewing the current situation of regional networking, it was discovered that two major regions of the developing country world are without regional institutions that could play this role in a total networking concept. These regions are the Middle East and Africa. Further consideration could be given by AID to facilitating the establishment of regional institutions similar to SINDU for these regions. In the Middle East it might well be possible to encourage one of the Arab countries to undertake this institution-building assignment as a contribution to regional development. In that case AID could participate through reimbursable technical assistance along the lines of present programs under way in Kuwait and Saudi Arabia. This would be in keeping with State Department initiatives in the area. It would be highly desirable in facilitating the formation of the kind of worldwide networking model described in Chapter III. In this case there would be no direct AID financial contribution. This program initiative could, if favorably received in the Middle East and by AID, fall within the assignment of the proposed U.S. networking center and could be used to provide additional budget support.

The United Nations has for some time been considering the establishment of a regional center or centers in Africa. They presently have a small unit concerned with problems of urban and regional development working out of Addis Abba. AID might consider a collaborative approach to regional institution building with the UN in this area.

It is highly desirable to see strong regional institutions actively participating in the kind of networking activities described in this report. A regional institution can facilitate direct exchanges between the LDCs of their region. Their close physical proximity gives them a sense of immediacy which is vital to the success of networking. Since their staffing is made up of professionals from the regions concerned, they bring a strong sense of local experience and knowledge to their work. Overall, they provide a logical and practical intermediate point between the LDCs and MDCs for program initiatives. It is well within the overall spirit and direction of this report for AID to consider an active supporting role through these organizations.

Utilizing Other AID Programs for Networking (Priority III)

The third major area for AID initiative in supporting the development of LDC national centers is within AID's own regular programming activities. AID is not heavily involved in urban development programming, but does have several significant regional planning initiatives under way or contemplated. AID is also supporting various sector programming which has an urban component -- in housing, health, education, family planning, etc. In each of these programs there is frequently reference to training, information systems of various sorts, research, etc. If AID elects to support the development of LDC national centers in urban and regional development, it would be logical to recognize support for such centers in the various contracts and loan agreements prepared.

For example, AID is actively supporting a major urban metropolitan planning initiative in Panama which calls for the establishment of an information system. It might have been possible to recognize the creation of this information within the context of a Panamanian National Center and provide additional support to complement the information system with the other activities proposed for such centers. The same kind of support for a national center might have been initiated in the Nicaragua urban program for Managua. We, of course, do not have access to documentation on these specific agreements, so we are using them as hypothetical situations in which regular AID programs might have been used to contribute to the creation of national centers while still accomplishing the program objectives and at no additional cost.

Another kind of direct networking support could be developed within those AID programs which are dealing with a specific set of client agencies in the LDCs on a continuing basis. For example, the Office of Housing has developed

a set of close relationships with National Housing Corporations and National Housing Finance Institutions in the LDCs and in some cases regional units (i.e., in Central America). The Office of Housing already holds regional conferences with agencies such as COPVIDU in Central America and the series of African Housing conferences. This already is a form of networking and the Office of Housing could consider formalizing a networking activity which could greatly assist in the sharing of experience between these agencies which share a common set of problems and opportunities in a specific urban sector. This function could either be done directly by the staff of the Office of Housing or through an outside agency such as the proposed U.S. networking center.

AID also has established a reference center which is capturing AID experience and building up knowledge gained from field projects. Consideration could be given to expanding the mission of the reference center to become an active networking agent (perhaps in more subjects than just urban and regional development). Certainly, given the massive investment represented by the materials within the reference center, the marginal costs of utilizing these materials within a networking system would appear justified. Once again a U.S. networking center working in collaboration with the reference center could make use of those materials which deal with urban and regional development subject matter through a publications program.

AID also sponsors the publication of the Development Digest which is a most worthwhile journal. Consideration could be given to reviewing the circulation and content of the Development Digest to insure that it is maximizing its networking effects.

Overall, what is being suggested here is that AID seek to review its current programs and activities related to urban and regional development to see whether at marginal cost this knowledge and experience could be utilized in networking activities either formally or informally. It might be added that other international agencies also should be stimulated to see how better use of their experience could be made through networking activities. It is possible that if AID took the lead and initiated discussions with the concerned agencies, an important flow of useful material could be generated. Of course, the real value of placing these materials in circulation will best be captured if there is a strong set of LDC national centers to receive the material and see that it is made available to appropriate groups within the LDCs.

Immediate Action Proposals
for the Office of Urban Development

The three major areas described for possible AID participation in the support of LDC national centers for networking in urban and regional development constitute a major commitment. In a sense they are collectively a philosophy about how to provide a useful set of services within the context of the realities of development assistance in the 1970s and beyond. It would not be surprising if AID wanted to test the feasibility of these concepts further before committing itself to what should be an on-going, long-term program activity. It is appropriate therefore to suggest a series of steps which would further specify the kind of networking activity which is appropriate and hopefully furthers the concepts proposed in this report. Three specific activities can be suggested besides the general review and discussion of this report with AID.

1. The Office of Urban Development could join with the United Nations Centre for Housing, Building and Planning to sponsor an international workshop on networking in urban and regional development. Mr. Wilson Garces, chief of the research division of the Centre, has already developed a preliminary prospectus for such a conference and is seeking a country sponsor for the program. This AID report could well be one of the working papers for such a meeting. Several of the respondents to the survey and interviews undertaken in this study urged that such a meeting take place so that the LDCs can represent their own views on networking and share experience on the current programs of the various countries. Such a workshop would also prove useful in bringing together other international networking efforts of the kinds described in this report. One of the findings of the study was that these various networking efforts are not now well connected and a workshop is justified for the possible benefits in stimulating coordination between existing agencies in the United States and elsewhere. There are also several multi-purpose networks now under development in which urban and regional development topics will be an ancillary part (i.e., the DEVIS system in Canada and the Earthwatch system in UNEP). These agencies could make a useful contribution to the kind of meeting contemplated.

A joint AID/UN workshop on networking might also be a useful contribution to the preparatory work for the Vancouver Conference on Habitat to be held in May 1976. The conclusions of the networking workshop could be presented to the conference perhaps as a part of the United States participation. Certainly the subject of networking will be of concern in the Habitat conference. The topic is very critical at this time.

2. The Office of Urban Development could undertake a special project to detail the configuration of the U.S. networking center proposed in this report. There are, of course, many questions which must be considered before preparing the terms of reference and inviting proposals for interested institutions. It is beyond the scope of this contract to pursue these detailed issues, but they do need study before the proposal can become operational.

3. The Office of Urban Development could sponsor a study of the skills required within the LDCs for the management and use of information and the methods of developing those skills within the LDCs. It was recognized by several LDC professionals that skills in information management and use were not generally available and that to attempt to establish LDC national centers for urban and regional development of the kind proposed here will require a training program to insure a supply of skilled manpower to meet the staffing requirements. There is obviously little value in stimulating an active networking program if the LDCs are not able to take advantage of the opportunities the program affords because of the lack of trained personnel. The dimensions of this potential problem and specific strategies for overcoming it are appropriate subjects for a special study. The results would be a useful input into the international workshop in networking proposed in point one of this section.

Summary

It is the conclusion of this report that networking in urban and regional development is a useful and important contribution to improving decision-making in the LDCs. Furthermore, it is a logical area for AID programming compatible with its overall objectives and priorities. The specific program ideas presented in this report are only the first steps in preparing for the needed AID commitment and participation. The proposals are not all inclusive, and other ideas should develop as the Office of Urban Development and AID continue their consideration of networking in urban and regional development.

Appendix I

DATA COLLECTION AND METHODOLOGY

The work of this contract has extended from July 1974 to February 1975. During this period a variety of individual tasks have been undertaken.

1. Over 40 institutions in the United States and Europe were visited and interviews held in order to obtain a sense of what networking activities were currently being undertaken. These materials have been written up and submitted as a part of the two Interim Reports.

2. A series of meetings were held with the Office of Development, AID, to allow integration of Agency thinking into the work at each stage. AID participation also included several other meeting sessions with concerned people from other Bureaus with regard for networking and for overall AID objectives and strategy.

3. The consulting panel met with PADCO staff and representatives of the Office of Urban Development, AID, to discuss their views on the direction and nature of the work. These meetings were very useful in further sharpening the focus of the analysis. Each consultant prepared a memorandum on his overview of the situation which was submitted as a part of the Second Interim Report. However, the main benefit from the consultants participation came from the dialogue with PADCO and many of their ideas are woven into the final report without giving individual credit.

4. The mail survey questionnaire was sent out in November 1974 to 350 individuals and institutions in over 80 LDCs. Some 55 replies were received before the cut-off date of February 8, 1975 and have been used in the tabulations. Another five questionnaires were received after the cut-off date and have been reviewed. They do not appear to change the conclusions to be drawn from the survey. All of the questionnaire forms have been submitted to AID separately along with a special report on the results of the survey.

5. In January 1975, a series of field visits to selected countries was undertaken to hold discussions with individuals from the LDCs on the feasibility of networking. Professor Robert B. Mitchell visited Guatemala, Costa Rica, Panama and

Colombia. Mr. Alfred P. Van Huyck visited Korea, Indonesia, Pakistan, Jordan, Egypt and Zaire. In Zaire Mr. Van Huyck had the opportunity to discuss networking possibilities with representatives of five other African countries who were attending a housing conference at the time. The results of these interviews have been used to illustrate points throughout the text.

