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Urban Development Staff

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REPORT OF A SURVEY OF URBAN DEVELOPMENT IN BRAZIL

Brazil has to be thought of as a special case in developmental terms of reference. Its geographic and demographic size, the enormous contrast between its highly developed and grossly underdeveloped regions, its vast frontier areas and determination to integrate them demographically, economically and politically, and its current rapid rate of economic growth all make for a varied and in some cases unique combination of approaches to urban and regional development. In fact, Brazil is a great natural laboratory in this respect. However, its problems in this area include the unique, the typically Latin American and the typically developmental as will be seen in the summary of problems below. This will be followed by a discussion of some of the resources and approaches being applied and of some approaches recommended for outside assistance. All of these points were articulated by Brazilian professionals and administrators in the urban development and closely related fields. They also include the views of non-Brazilian professionals working in Brazil on problems of urban development.

PROBLEMS

1. The rapid growth of urban population and the fact that this growth was not anticipated or planned for is a basic problem in Brazil. It breaks down into two components:

- a. It has caused a great deal of ad hoc urban development.
- b. Cities, particularly in the Northeast, have been unable to accommodate much of this urban growth in terms of employment opportunities, infrastructure and other basic urban services.

2. Related to this, a fundamental problem at the municipal level is financing. Cities find themselves financially unable to extend even the most basic urban services to the entire community. In some cases the marginal or unserved groups are sizeable. One result is the development of much illegal infrastructure, e.g., sewerage ditches, power line tapping, roadways, etc.

This is a source of pollution, congestion, power shortages and structural weaknesses in urban terrain. Moreover, it makes the integration of considerable segments of the urban population into the mainstream of urban life almost impossible.

3. Directly related to the problem of financing is the difficulty experienced in creating an adequate economic and social base for cities. Again, this is especially true of the underdeveloped regions of the country such as the Northeast. The problem seems to manifest itself most severely in two areas:

- a. Employment opportunities. Unemployment and underemployment, as anticipated, are serious problems in the urban areas.

However, the problem is not wholly related to a lack of financing. It was pointed out that there are enormous imperfections in urban labor markets causing much more stickiness, dislocation, malallocation and unemployment than necessary even under existing conditions. This may also be an important factor in inflation, causing apparent labor shortages in skill areas where in fact no shortages exist. Moreover, there has been very little attention paid to the condition, role and potential of tertiary industries in urban areas. This remains a singularly unexploited area of potential urban labor absorption.

- b. Infrastructure. Cities are extremely hard pressed to meet their infrastructural requirements and for some it presents an impossible problem in the short run and a serious constraint on development. For example, Fortaleza, a port city of 800,000 in the Northeast, is for all practical purposes without public sewers.

4. A weakness often cited is the structural difficulties within urban government and those agencies dealing with the problems of urban development. The problem, common throughout Latin America, is twofold:

- a. Centralization of authority and financial resources inhibits local development on the one hand, and on the other causes policy level people in state and central government to be preoccupied with epidemic type problems with little time remaining for the endemic problems which should be considered at this level.
- b. Instability of government positions for political and cultural reasons hinders continuous forward motion and professional development on the part of those agencies contributing to urban development in Brazil. This phenomenon also frustrates efforts to delve deeply into the specific problems of urbanization. Chronic instability within the government bureaucracy, although reportedly declining, may point to the greater developmental mileage to be gained by investing long-term outside technical assistance in the more stable private organizations in this area.

5. There is a need to create an awareness of the importance of urban development to overall development at the national level. The development strategy is of great importance. However, there are a number of complicating factors.

- a. Brazil is implementing a number of major urban development strategies, but often the action precedes the analysis. Hence, there is a need for more analytical work in this field. (Nonetheless, the plethora of approaches now in operation makes Brazil a significant international resource in terms of its potential as a laboratory in this field.)

- b. The national-regional dialogue is much less expensive and complex than the regional-local dialogue. This creates a built-in reluctance to focus on urban development.
- c. Responsible agencies and professionals tend to be more concerned with the "who" and the "how" of a national urban development strategy rather than the "why". Vertical integration (e.g. city-state-central or local-regional-national linkages) does not represent a sufficient rationale for national urban development strategies. Meaningful national strategies will require a stronger base.
- d. Urban - rural developmental linkages or relationships are not sorted out in Brazil, yet this is a critical developmental problem area in this country. This is particularly true given the national goal of integration, especially of the frontier, lagging regions and marginal groups.
- e. The development of the frontier presents a major problem. Some professionals fear that policy makers are lost in the whole thing because it is so complex, so vast and so unique. It involves creating rather than reorganizing an urban structure.
- f. A great deal of the responsibility and resources for urban development policy and programs rests within the National Housing Bank where housing programs and problems per se absorb the bulk of that agency's time, energy and resources. This is a common pattern. Where housing and urban development responsibilities are under one roof, housing -- the narrower, more tangible of the two areas -- inevitably predominates.

6. Very little urban research is done in Brazil relative to the size of the problem. Moreover, the complaint was registered that those government agencies engaged in research tend to operate more on their biases than on facts. The notion that good urban research can influence policy was stressed and the following were cited as important areas of research: migration flows, their effect on points of origin and destination, etc.; industrial location; urban hierarchies; manpower supply and demand; the urban decision process; maximizing the utility of resources going to urban areas; the marginal sector in cities and the mechanics of integration and ascension; perception analysis -- how people perceive themselves; diffusion of innovation; and urban finance.

7. Urban development activities in Brazil tend to be dominated by architects, engineers and physical planners. An urgent need was expressed for greater involvement of social scientists and lawyers in analysis and solution of urban problems. This would be a major step in the direction of broadening the base of urban development knowledge in Brazil (*i.e.*, in conducting research as above and in creating a national urban development strategy). It would also facilitate the application of a multiple of disciplines in urban planning and problem solving, an approach which is rather uncommon in Brazil.

THE ROLE FOR OUTSIDE TECHNICAL ASSISTANCE

Despite Brazil's considerable talent in many areas, an interest in outside assistance in the urban development field was expressed by all consulted. Some of the potential contributions are obvious from the foregoing. Specific suggestions were as follows:

1. As a basis for developing its own unique approaches, a knowledge of the urban development experience, the process, the problems and the methodologies in the advanced countries is important for Brazil. Channels of information need to be developed and improved. More generally, there is a need to be in touch with urban development experts in other countries. It was suggested that this could be accomplished through high level consultants; exchange visits of professionals; seminars; publications; etc.

2. Experts are needed to assist with, stimulate and participate in important research areas, focusing particularly on those endemic problems for which policy level people have so little time (See Problems, *4a.*). Presently, there is relatively little research in urban development and such that exists is quite fragmented. Areas suggested were:

- a. Good applied research. This was singled out as an important means of influencing policy. Case study research is in the same category.
- b. There is a need to sponsor and do research on Brazil's innovative approaches to urban and regional development. Theories and notions become practice in Brazil almost instantly. Analysis and evaluation of the approaches are essential.
- c. Development of labor intensive technologies and approaches to urban development. The role of the tertiary sector in Brazilian cities is a particularly unexploited field of research.

3. There are weak areas in the social sciences in which training abroad and outside research assistance would be useful. These include:

- a. Urban economics. There are only a handful of urban economists in Brazil and only one or two in government.
- b. Demography. Brazil needs to make a breakthrough in integrating demography with the other social sciences. Also, to help promote the application of demography in urban development research and analysis, some standard measure of urban areas needs to be developed.

4. The importance of the role of urban development in national development is not fully appreciated at the policy level. External assistance can play an important role in helping to create this awareness by:

- a. Addressing the problem at various levels of activity, including any of those above.
- b. Assisting Brazilian governmental and non-governmental institutions, attempting to make progress and to consolidate national resources in this area.
- c. Assisting these organizations in developing the capability to develop national and regional urban development strategies.

5. At the level of the municipality a need was expressed for outside assistance in:

- a. Training technicians in urban planning and development.
- b. Furnishing specialists to work in these areas, and
- c. Assisting with the identification and preparation of bankable projects.

6. In the technical assistance field, it was suggested that outside assistance would help existing private institutions to develop further their capacity to render technical assistance in the urban development field.

7. In all of the above, it was cautioned that the approach in Brazil is basically different from that in more advanced countries, such as the U.S. In the latter countries there tends to be a preoccupation with urban blight, the inner city, poverty, urban decay and urban renewal. In Brazil the focus is on growth.

RESOURCES, APPROACHES AND OBSERVED PATTERNS

While there is no national or regional urban development strategy in Brazil, preoccupation with national integration has resulted in the development of many innovative approaches and the application of standard mechanisms in unique ways. As such, Brazil is something of an international laboratory in this field. Moreover, the institutions that have emerged to handle these various programs are in themselves a considerable present and potential resource in terms of their experience and, where successful, their demonstration effect. The examples below provide some notion of these Brazilian resources and give an indication of the demonstrative value of some of the patterns that have emerged.

1. As noted, Brazil's policy of national integration has produced a broad spectrum of programs which have a bearing on urban development. In the process, much experience has been and will be generated from which others can learn. Some of these are:

- a. Brasilia. Will the effective transfer of the national capital from Rio de Janeiro to the new city of Brasilia effectively "open-up" and "integrate" Brazil's interior? The first test has apparently been passed; the capital has been effectively transferred. The developmental results of this move, the costs and the unforeseen consequences are of considerable importance to the field of urban development.
- b. Rio-Brasilia Highway. The impact of this highway on the development of the hinterland between Rio and Brasilia and on the pattern of urbanization along this corridor is in the same league as the Brasilia project itself in terms of research value.
- c. Trans-Amazonian Highway. This is an attempt to "open-up" the Amazon Valley to the forces of modernization and to provide a northern access to Brazil's frontier with Peru. It is also intended to create a counter-magnet to the developed Southeast for the hard pressed population of the Northeast. Strategic points along the route will be fostered as urban growth nodes. The project is a classic attempt to alter existing patterns of development and will produce a wealth of experience, whether or not it succeeds. Long-term cost-benefit evaluations should be devised now while the project is only one-third completed.

- d. Concentrated Action Plan (PAC). This program was devised as a means of fostering further development in the interior area of the Northeast through designation and stimulation of growth poles. Investment incentives (a 50% reduction in taxes on profits invested in the northeast, as well as government investment in supporting infrastructure) were applied to channel investments into those areas of the Northeast designated as growth points. Already burgeoning Recife and Salvadore were excluded from the program and the incentives did not apply in these two cities. However, it was found that investments did not go to the designated growth points throughout the region as planned. Instead, they tended to cluster around Recife and Salvadore, exploiting the advantages of scale, variety, etc. of these two major cities. Two alternative approaches being considered are: (1) designating specific areas in which the incentives would apply, to the exclusion of all other areas; and (2) establishing concentric zones centered on Recife and Salvadore with incentives increasing with distance from the center zones.

These are examples of Brazilian innovations in which applied and evaluative research could make a significant contribution to the growing, but still very skimpy, body of knowledge on urban development and its role in national development.

2. Behind some of the most dramatic of Brazil's programs in the urban and regional development field are specialized government agencies. A few of these should be noted.

- a. SUDENE - Northeastern Development Superintendency. SUDENE was established in 1959 to help with the development and national integration of Brazil's Northeast. Among its programs are PAC and the tax incentive (Law 3418) and infrastructural programs geared to attracting investments into the Northeast; as mentioned earlier. (In this connection, SUDENE played a role in the ARATU development.)

SUDENE is becoming a powerful developmental force in the Northeast and is the legitimate regional development authority to whom the states of the Northeast are subservient in this sense. It commands resources for investment in infrastructure and other related projects and administers Law 3418. As such, it has power of approval over many state, municipal and private investments in the region. It sponsors and conducts a broad range of developmental research projects for use by its own programs and other developmental agencies, such as the National Housing Bank. Gradually, SUDENE has developed professional legitimacy in its relations with the national ministries (over which it has no authority), such as the Ministry of Education,

and is able to make meaningful contributions to their programs and program development. Following this relatively successful example, Brazil has now established counterpart agencies for each of Brazil's three other developmental regions, namely; SUDAM (Amazon), SUDESUL (South), and SUDECO (Center West).

- b. SERFHAO - Federal Service of Housing and Urbanism. SERFHAO was organized in 1964 in the Ministry of Interior as the government agency responsible for the preparation and coordination of national policy in the field of integrated local planning. Within the Ministry, SERFHAO is responsible to the National Housing Bank (BNA) to whom it is supposed to provide technical assistance. Its activities have included loans and technical assistance to municipalities for planning, training, studies and research. Presently the Organization of American States is providing assistance to SERFHAO in the development of the outlines for a national urban development strategy and a policy for assistance at the level of the municipality, including a training program for both activities. Legally, SERFHAO has the mandate for such activities. However, there was concern in some quarters that it lacks the technical and professional capacity to operate effectively on this complex level of policy development. Nonetheless, the fact that SERFHAO is wrestling with this problem is significant in itself.

Another project underway in SERFHAO is the Information System for Urban Development (SIDU). This computer-based project, if successful, could have considerable value as a pilot program in the area of information management for urban development. Under the project, service unit would be established to:

- (1) Present current information and data to municipalities, largely on a reference basis.
- (2) Keep track of municipal development programs and assistance available to Brazilian municipalities.
- (3) Explore Brazilian legislation bearing on municipal development.
- (4) Assemble information generated by SERFHAO and other projects at the municipal level.

Once the program is operative (planned for 1971), the contract firm (PADCO) assisting in project development intends to consider the international implications of such a system.

c. The Brazilian Institute of Geography and Statistics (IBGE). The Institute falls under the auspices of the Ministry of Planning and is in large part a service agency to that Ministry. It has had a long history of involvement in the development of a usable data base in Brazil, is responsible for the national census and is engaged in a wide range of research activities in the field of demography and geography. It has developed a high degree of professionalism and maintains good linkages with the universities. Some of the research in which it is currently engaged is of considerable interest from the standpoint of urban development. Examples are:

- (1) Importance of the administrative hierarchy element in Brazilian cities. The state capital is the most important city in every state in Brazil except two.
- (2) The correlation between city growth and the process of regionalization. Preliminary studies indicate that the State of Minas Gerais is becoming more independent of Rio in step with the growth of its capital city, Belo Horizonte. This growing regionalization is also correlated with the growth of the tertiary sector.
- (3) The spread of innovations by cities. Studies of the cattle industry in the Northeast link the spread of innovations with important cities of the area.
- (4) Emergence of new socio-economic classes and technical groups within the cities. A longitudinal case study is being prepared on the emergence of new skills in the city. It is found that many of the entrepreneurs are now college graduates. Children of important families of the Northeast are now tending to return to their home towns after completing their education in Rio and Sao Paulo. This represents a new trend.
- (5) Origin and destination of migrants in Recife. Over time, the percentage of migrants to Recife from within a 50 km. radius has decreased. The percentage coming from large cities to Recife has increased and the percentage leaving Recife for larger cities has increased.
- (6) The "Von Thunen Rings" of Brazil. One study has indicated that Brazil conforms to a form of the Von Thunen model in terms of zones of specialized production radiating out in concentric rings from the Rio-Sao Paulo area. However, the Northeast was found to fall completely outside of the model. In the first ring fruits and vegetables are grown. Successive rings produce: cotton, coffee and sugar; corn, beans and wheat; rice; and, cattle in the outer ring.

- (7) Classification and mapping of Brazilian cities. An urban typology is being developed for 210 cities on the basis of some 60 variables.
- (8) Linkages within and between areas. To determine these linkages, a questionnaire will be used addressed to 5 specific areas; industry, banking, commerce, transport, and the individual. A separate study along these same lines is being done to determine the functional relationships between the 9 major metropolitan centers of Brazil.

3. The private sector is of enormous importance in terms of Brazil's overall development. As such, there are numerous examples of private or joint private-government efforts in the urban development field which have had considerable impact. A few cases in point are:

- a. Sao Paulo. This city is somewhat of a developmental phenomenon. Its population is already in excess of 7 million and there are estimates of a population of 20 million before the end of the century. It has become a commercial and industrial giant in Latin America and is the strongest such center in Brazil. Most of this development derives from the private sector. Complementing vigorous private sector activity, Sao Paulo has a very strong and competent Municipal Planning Department and is in the midst of developing a computerized municipal employment service to help overcome serious imperfections in the labor market. In this latter respect, it will be one of the first cities in Latin America to initiate such a system.

To the extent that Sao Paulo is succeeding in addressing its problems of dramatic urban growth, it is of interest to examine the responsible factors. Its failures are of equal international importance. Perhaps in no other city are the dynamics of urban growth, economic development and modernization so compressed in time and space.

- b. In little more than one decade, 158 new towns have been created in the State of Parana in Southern Brazil. While most of these towns have had their respective urban plans, this whole scheme of cities was developed without thought of any regional system of cities or pattern of regional development. Functionally, their interrelationships are accidental. Did Brazil's public and private developers miss a unique opportunity for more effective development in the south? What has been the impact of such rapid and wholesale development of new urban centers? What are the elements of those new towns that are succeeding, of those that are failing? The new towns of Parana are a unique resource to the urban development field to the extent that answers to these and similar questions can be found.

- c. Industrial-urban complex. The new industrial urban settlement of ARATU in the Bahia State of Northeast Brazil is one of the most striking examples of private and government developmental cooperation on record in Brazil and perhaps in all of Latin America. The center, located 10 miles outside of Salvadore, is a well-coordinated, integrated balance of heavy industry, light industry, commerce, residential, recreational and natural areas. The area has been planned and developed to create the most effective combination of industrial, business, living and recreational circumstances. Moreover, the pattern of development has taken into account a broad range of environmental considerations.

Largely private, the project has had the cooperation of the Federal and State governments in terms of tax breaks (see 1(d) above, page 7), infrastructure, enabling legislation and credit availability. As of now, 136 industries are installed or are in the process of construction in ARATU. Profits have exceeded expectations and by 1974 just 13 years after project conception, the government will have received its total investment in the project through profit taxes and will begin to realize clear revenues. All aspects of the project, from financing to special industrial skills training programs for workers, have exceeded expectations. ARATU is clearly an example to be studied by others.

- d. Satellite Cities. A large number of satellite cities have developed around Brazil's major metropolitan areas, particularly Rio and Sao Paulo. Some of these have prospered and others have, in a relative sense, failed. Given the potential importance of satellite cities in developing countries, exploration of the factors involved in the success and failure of Brazil's satellite cities would be very instructive.

4. Whether by default on the part of the government or by design, private institutions have played a significant role in the development of the country. Some of the most progressive work in the municipal government and urban development field has been done by private institutions and it appears that this trend will continue, despite increased government interest in the urban development field. Two very prominent examples of this are the Brazilian Institute of Municipal Administration (IBAM) and the Catholic University of Rio (PUC), both of which have international reputations.

- a. IBAM is a private, non-profit organization initiated in 1953 for the purpose of improving local government and urban services in Brazil. Through the years it has conducted hundreds of studies, provided training for thousands of municipal administrators in Brazil and elsewhere, and has provided technical assistance to municipalities

in the form of technical information and consultant services. In 1969 it established an Urban Research Center which has been pursuing a course aimed at creating a better foundation in knowledge for improved planning and development of Brazilian cities. The Center has prepared studies on relevant urban statistics, water supply, refuse collection and disposal and public lighting. It is in the process of identifying the categories of urban problems on which it should focus in the future.

In addition to the Center, IBAM has established a National School of Urban Services. This school already has served thousands of municipal employees with classroom and correspondence courses. A post graduate program, eventually going as high as the Ph.D., is in the planning stages (except for the field of Law, no Brazilian institution currently offers the Ph.D degree in any field). Presently, no academic institution in Brazil offers a degree program in urban development.

As an information medium in the urban development field, IBAM publishes a bimonthly journal and a monthly newsletter. The latter is available to IBAM's more than 1000 member municipalities and provides information to the local level on federal government activities and programs and other developments of interest to or affecting municipalities. Another important IBAM publication is a loose-leaf compendium of all federal legislation and Supreme Court decisions pertaining to municipal administration and development. This is posted regularly by IBAM.

In terms of breadth of services, depth of local and international experience and quality of professional personnel, IBAM has to be one of the outstanding resources in the urban development field in this hemisphere.

- c. The Catholic University of Rio (PUC), has proposed a program for the development of an Urban Development Studies Center involving a consortium of universities in the region. This research and training consortium would undertake a multidisciplinary effort to create a degree program and a concerted system of research in the urban development field. It would systematically explore the national, regional and local implications of urbanization and urban development in Brazil.

The rationale for the consortium approach is that no single university in Brazil can cover adequately all of the topics relevant to urban development. As such, the strong regional planning and urban economics elements at the University of Minas Geras and the strong Department of Sociology and CEBRAP in Sao Paulo would join the Social Science Departments of Catholic University on a consortium basis to conduct research and provide a well rounded multidisciplinary curriculum. Two specific targets of the program would be to strengthen the role of the social sciences in urban development in Brazil through a multidisciplinary approach and to lay the groundwork for a considered national urban development strategy. It is proposed that PUC, being more flexible than the various government departments, would be in a better position to contribute to the development of a national strategy. Moreover, it could involve those elements in the government which are now somewhat competitive in this area, such as SERFHAU, BNH and the Ministry of Planning's Institute of Applied Socio-Economic Research (IPEA).

The project would have a pipeline to the policy level through the Ministry of Planning to whom PUC has applied for sponsorship and through the proposed center's board of directors which would include SERFHAU, BNH, IBAM, and IPEA. The board of directors would have a major role in setting research and training priorities within the broad outlines of the project.

The program is now under consideration by IPEA and by the Ford Foundation which also has been asked to provide some assistance to the project. If approved, the Center would represent a significant step in the direction of orchestrating some of Brazil's diverse resources in the urban development field. It would also help to sensitize decision makers at the policy level to the important role of cities in economic and national development.