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Summary

Regional Policy Seminar

on

Urban Infrastructure Provision and Finance

Hammamet, Tunisia
May 1992

USAID Regional Housing and Urban Development Office for North Africa and the Near East

and

The National Federation of Tunisian Cities

Summary

Regional Seminar on
Urban Infrastructure Provision and Finance

Hammamet, Tunisia
May 26 - 29, 1992

1.0 Background

The need to find new means of financing urban infrastructure investments has been underscored by rapidly growing urban populations and increasingly strained central government budgets. In most cities and towns in North Africa and the Near East Region, there are troubling infrastructure deficits: large numbers of the urban population do not have access to adequate water, sanitation and land for development.

Analysts have attributed these problems to a variety of reasons, generally with some combination of institutional and financing issues. Obtaining the resources necessary to fund both capital facilities and recurrent costs associated with their use is obviously a major constraint in most low and middle income countries. But even when the required resources are available, the problem remains of ensuring that institutional arrangements promote effective resource utilization.

The USAID Regional Office for Housing and Urban Development brought together 35 participants from 7 countries to discuss their respective experiences in dealing with these issues. The participants represented a broad range of backgrounds and institutions from housing banks, local governments, the private sector, public service utilities and central government ministries. The seminar provided the occasion to exchange experiences during the formal sessions and, in addition, to strengthen the regional professional network and inter-institutional cooperation through informal contacts. The objectives of the seminar were:

* to clarify the range of issues surrounding financing options and institutional arrangements for infrastructure and service provision;

* to identify successful approaches to attracting private capital for selected urban investments;

* to clarify the role of local governments in infrastructure financing and provision.

This summary document is intended to provide a synopsis of the papers and the discussions that occurred during the small group and plenary session discussions. The organization of this document follows that of the seminar: a summary of the overview paper and the discussion that followed, and then the three principal topics of the seminar--institutional arrangements, capital financing, and cost recovery.

2.0 Overview

" Issues in Financing and Providing Urban Infrastructure: the Role of Incentives"

The overview paper by Larry Schroeder, "Issues in Financing and Providing Urban Infrastructure: The Role of Incentives," supplemented the more technical material contained in the two USAID Office of Housing papers distributed prior to the conference.[1] The paper emphasized that a key to the success of policies concerning either institutional or financing arrangements is the incentives that such arrangements create. Certain institutional arrangements provide rewards (or punishments) for particular actions, thereby encouraging (or discouraging) those involved in the development and use of urban infrastructure. For example, if locally posted public sector employees are evaluated primarily by their central government superiors rather than by local officials they serve, they are likely to respond much more readily to the directions of the central government than to local interests. Similarly, water user fees that are based on the amount of water consumed will be much more effective at constraining water consumption than are flat monthly charges.

While the incentives associated with user charges can lead to more efficient outcomes, the paper and the discussion which followed its presentation noted that efficiency is but one of many possible policy objectives and that there commonly are tradeoffs among them. Thus, it is not possible for policy makers to ignore concerns for the capacity of people to pay for infrastructure services. At the same time, the seminar stressed that regardless of whether or not local users pay for services rendered, someone somewhere must pay for the cost of providing the services.

In discussing institutional arrangements, Schroeder made a principal distinction between centralized and decentralized organizational structures. While there are limitations to decentralization, public service arrangements that rely heavily on localized decision making have the potential to promote both technical and economic efficiency along with a greater user willingness to contribute resources towards the provision of public services. sentiment was echoed by several participants during the discussion of the paper; it was pointed out, however, that time is required to implement decentralization programs. Furthermore, even with decentralization, the need will remain for institutional arrangements that give higher authorities the power to coordinate activities.

Under either centralized or decentralized provision arrangements, there is also considerable scope for the involvement of private enterprises, particularly in the production of infrastructure services. The potential for such involvement depends, in part, on the degree to which appropriate private enterprises are available in any particular country to produce services.

The methods of financing both the capital and recurrent costs of urban infrastructures also create important incentives to provision units and facility users. Debt finance, where the borrower is certain to have to repay the loan, can create a stronger incentive for local accountability in the use of the funds than is an intergovernmental grant which does not have to be repaid. Similarly, use-based fees provide incentives for appropriate utilization of the infrastructure and can constitute a benefit-based equitable way of recovering the costs of the facility.

3.0 Institutional Arrangements

Case study: "Institutional Arrangements for Providing Infrastructure: Municipalities in Turkey"

It is widely recognized that institutional arrangements, including the types of organizations involved in the planning, financing and management of urban infrastructures, are extremely important in affecting the ultimate success of public capital investments. The first case study presented at the conference, "Institutional Arrangements for Providing Infrastructure: Municipalities in Turkey" prepared by Sinan Erer, reviewed aspects of this topic for the case of Turkey. His paper provided a historically based comparison of urban infrastructure before and after the Government of Turkey decided to decentralize decision making in the early 1980s. Prior to that decision, infrastructure provision responsibility was highly centralized, the responsibility of the Iller Bank and national service agencies. Despite the degree of centralization, there was little coordination among the service agencies and the service standards were high, not necessarily corresponding to the ability of the beneficiary population or local authority to pay for the investments. The reforms in the early 1980s established a two-tiered local government system consisting of metropolitan municipalities with region responsibilities and district municipalities. Both prior to and since the decision to decentralize was reached, the Iller Bank (known prior to 1945 as the Municipal Bank) has been an important organization that has financed and provided technical assistance for infrastructure development in municipal governments in Turkey.

A substantial portion of the Erer paper was devoted to a description and discussion of a pilot study initiated in 1984 that was designed to support the new decentralized municipalities act. The pilot program, carried out in five cities, was intended to overcome service deficiencies and manage urban growth by introducing replicable policies and arrangements for investment planning and implementation, cost recovery, financial management and staff development. In addition, the pilot program was to assist the Iller Bank in developing a capacity for appraising and monitoring municipal infrastructure projects.

Implementation of the project began in 1987 and is scheduled to be completed in 1994. Erer concludes that, although "what has been achieved is very minor compared to what had been intended" (p. 8), the project has still provided some important lessons that pertain to institutional arrangements. One important aspect is that under the decentralization policy and with the assistance of the project, municipalities have recognized their authority. It was observed that municipalities began charging beneficiaries more substantial amounts for water and sewer services. Privatization arrangements were also utilized with solid waste collection and disposal services contracted to private producers and with construction efforts on water and sewer facilities. Housing and urban development corporations were also established with a total of 3,000 hectares expropriated for land development.

The case also emphasizes the importance of the Iller Bank as an institution that can and should play a significant role in the urban development efforts in Turkey. Although the overall policy is one of decentralization, Erer concludes that the Iller Bank has not been as effective as it might be at facilitating this policy goal. Instead it has tended to be reluctant to give municipalities the responsibility for project preparation and contracting. At the same time, Erer acknowledges that municipalities have also failed to put forth an adequate effort on their own.

The case study makes the very important point that, after many years of highly centralized power retained by the central government, it takes substantial time to overcome long held attitudes and behavior. Municipalities have long been accustomed to looking only to the central government for assistance--both financial and technical. Such attitudes are certainly quite common in many countries throughout the world and, despite the potential advantages of decentralization, will be hard to overcome.

Erer feels that, in the Turkish context, the Iller Bank is still the key organization to change the situation. It does have substantially stronger technical skills than are available at the local level. The case study author suggests that the Iller Bank should now facilitate decentralization and try to avoid making decision directly for the local level.

Group discussions

In the small group discussions, three more general questions concerning institutional arrangements for infrastructure development were addressed. They included (a) appropriate objectives (b) common constraints and (c) successful arrangements and/or actions to establish more successful institutional arrangements. With respect to the first of these, several basic themes concerning objectives emerged. These included:

- Projects must be planned to meet the needs of users. Among the more specific suggestions within this theme area were that standards and norms be followed in plans, that users/citizens be given more responsibility, and that participatory planning be encouraged.

- Transparency is crucial. To achieve this objective the participants mentioned that well-defined terms and conditions of finance are crucial to the involvement of the private sector, establishing clear "rules of the game" including clear and consistent priorities and strategies, and clarification of the roles of institutions including the assignment of responsibilities across national/regional/local governments as well as transparent determination and imputation of cost allocations to achieve social equity.

- Coordination is necessary. Coordination of planning and budgeting as well as inter-municipal and inter-institutional coordination were seen as vital. At least one group argued that the best way to ensure coordination was to place infrastructure investment and management responsibilities in one institution.

- Another objective for institutions was to facilitate involvement of the private sector in infrastructure development. Groups specifically mentioned that it was particularly important to promote close banking - local government relations and to provide proper incentives for private sector involvement.

- Developing the capacity of local governments to plan, finance and manage infrastructure is important. Included in this list was the importance of developing the capacity to mobilize local resources. It was recognized that for private sector institutions to be willing to invest in public capital infrastructure, local governments must be able to demonstrate that projects are technically and financially feasible with a high likelihood of cost recovery.

Many of the constraints that were mentioned were the converse of the objectives. The constraints that were highlighted included:

- The single constraint to strong institutions mentioned by every group was lack of adequate finances. Some variants on this theme included the lack of ability to mobilize resources (presumably imposed on local governments by higher level governments), projects planned or chosen that are not affordable, and, as well, projects that are planned but are subsequently not included in budgets for some reason or another.

- The lack of technical, management and implementation capacities were recognized as serious constraints by the groups. Even the inability of local governments to respond to changing conditions was seen as an important constraint.

- Although no group used the term, intergovernmental relations, all groups noted issues that fall under this heading. Among the explicit constraints noted were intervention by the central government in local plans, overly rigid regulations for local officials, poor distribution of responsibilities, unclear norms and lack of institutional options being made available.

A long list of additional constraints were mentioned that are hard to classify neatly. Among them are: (1) overly rigid regulations for private firms; (2) dictatorships or more generally the lack of public participation; (3) bureaucracies; (4) failures to make decisions; (5) lack of coordination; (6) lack of accurate data; (7) a general distrust of the public by the private sector but also the view that local consumers are unaware.

Lessons learned

The groups came up with a variety of answers to the questions of what arrangements have worked and what actions are necessary to establish more successful institutional arrangements. Again, it is difficult to classify these mechanisms neatly; however, there are a few general items.

- **Involving the local community in setting priorities, financing and implementation** was mentioned as important as was attempting to insure that arrangements satisfy local needs. The new democratic initiatives can certainly assist in achieving this arrangement.

- **The ability to recover costs is an obvious approach to overcoming the constraint of insufficient finances.** Among the specific items related to cost recovery were to adapt standards to reflect affordability, replicate projects where costs are recoverable, increase the contributions of beneficiaries while permitting cross-subsidization and improve local capacities to recover costs.

- **Joint ventures and privatization of tax collection and solid waste activities were mentioned as possible positive actions.** It was also noted that if targeted subsidies are used, they should be made available equally to private and public sector organizations. Reliance on cooperatives and private builders may also work at least in some countries.

- **Intergovernmental relations can be improved.** Among the actions involving different tiers of government include encouraging integrated urban development projects where central agencies assist municipalities in implementation, forming interagency working groups, and providing incentives for good performance.

One of the groups, borrowing from environmentalists, noted that it is useful to "think globally (i.e., recognize national objectives), but act locally." Undertaking policy analysis may also help to insure that policies reflect current needs. Finally, certainly necessary, but unfortunately not always sufficient, is to insure that a project is well funded. That topic was the focus of the remainder of the seminar.

4.0 Mobilizing Capital

Case study: Mobilizing Public and Private Capital: the Tetouan Urban Development Program[7]

Sustained capital infrastructure investments require two types of resources--initial capital for the facility and a continuous flow of resources to meet the recurrent costs of operation and maintenance. Neither is particularly easy to mobilize. The second portion of the seminar focused on sources for capital.

The case of capital mobilization to upgrade a large site in one Moroccan city was the subject of the paper "Mobilizing Public and Private Capital: Tetouan Urban Development Program" authored by Mohamed Chraibi. A variety of technical and institutional issues in addition to the challenges of finance make this a particularly difficult project. The project area is located on the slopes of the Dersa mountains overlooking the northern part of the City of Tetouan. Due to its steep hillside location, not only are the engineering problems more difficult, but, since the site lacks good sanitation and drainage facilities, all waste and rain water that runs off the site flows through the streets of the main city. Much of population living in the area is not served by basic services--water, electricity, roads and sanitation and live in substandard housing.

The infrastructure upgrading project is also challenged by institutional complexity. It is financed in part by the Moroccan government and USAID, involves several central government ministries, specialized agencies, as well as the Municipality of Tetouan. Each of these groups has objectives and incentives of their own. Chraibi notes that "satisfying the wish list of each of the players as well as achieving all the objectives outlined by the project's authors will take either great technical prowess or a miracle."

Among the main objectives of the project are to:

1. Upgrade a densely populated area of 146 ha. that has no basic facilities and is located on a mountainside. The effort here includes providing a road that will permit emergency and other service vehicles to enter the area; however, building the road will involve demolishing a couple hundred houses.

2. Integrated urban development in a second area of about 147 ha. which is encountering considerable uncontrolled population growth but which is not yet dominated by clandestine and unregulated housing. The intent in this area is to work with private landowners and developers and build facilities in the area. This will require coordinating various players without any legal framework in which to work.

3. Develop a "prevention" sites and services area of about 60 ha. which will provide housing access to low-income residents. This area, which has not yet been developed, is owned by the municipality. Thus by selling the plots, the municipality will be able to generate a cash flow which can also support the overall upgrading initiative.

The complexity of the Tetouan Urban Development Project is due, in part, to the diverse types of development and infrastructure investment required to support it. Of the three project components, the upgrading is expected to consume approximately 50 percent of the project resources, the "prevention" site 35 percent, and the integrated development site approximately 9 percent. The remaining 6 percent is expended on miscellaneous charges. The upgrading component will consume a disproportionate amount of the project funding (approximately 70 percent more in this case) because of the difficulty in providing basic infrastructure to a site that is already developed.

The complexity of the project has also been an opportunity in that each component has different capital financing needs and diverse financing mechanisms can be used. The three principal sources of capital financing are:

1. a loan from the *Fonds d'Equipement Communal* (FEC), provided for initial investments, particularly in the up-grading area;

2. beneficiary charges that have permitted the Municipality to reimburse the loan and serve as cross payment for other project components;

3. municipal resources to provide for own source funding for portions of the investments.

The financing plan has been modified over time to adjust for the actual cost of the infrastructure as bids from contractors came in. In general, the loan portion has been reduced and the municipal portion has increased. The combination of financing arrangements and project components has allowed the project designers considerable flexibility in structuring the financing plan. In particular, lots sales in the prevention area have provided a key source of capital that has reduced the need to rely on loans. This internal financing flexibility is facilitated by a special account which the Ministry of Interior, Directorate General of Local Government, has allowed the Municipality to establish. The special account covers the entire project, thereby permitting internal cross-financing.

Since the municipality, as borrower, is responsible for its portion of the debt associated with its participation in the urban development program, there has also been considerable effort placed on improving the capacity of the local government to mobilize and manage financial resources. An effort has been made to improve collections of the property tax, an important local resource, through computerization. Cost recovery efforts are also being emphasized. Beneficiaries in the up-grading area are expected to pay 88 percent of the costs of those efforts; however, since costs are recovered only over time, initial capital requirements were being derived from the prevention portion of the project, described above. At the same time, since all residents of the municipality are likely to derive indirect benefits from the upgrading project, 10 percent of the investment costs are to be obtained from the general budget. Investment focus on the urban development program constrains the ability of the municipality to invest in a variety of other competing needs for public sector funding, e.g., education, and promotion of tourism that result from population growth and the need to improve services overall.

This case illustrates the possibilities of raising funding for capital infrastructure projects from a variety of sources--both private and public. Chraibi concludes that the case "proves that it is possible to accomplish coherent and regulated urban development in the short-term by acting along the following lines:

- Strengthen the self-financing capability of the *communes*;
- Find funds in high-yield investments (primarily real estate);
- Use internal cross-financing as much as possible;

- Minimize the municipal investment from general funds, allowing them to be used for more productive investments.

Group discussions

The small group discussions considered a variety of questions related to capital mobilization experiences and constraints in the participants' countries. Among the particular issues discussed were the degree to which public and private lending programs have been successful in meeting urban infrastructure needs as well as the appropriateness of the terms that are used in allocating these funds. The issue of debt capacity was also a principal topic of discussion. A final set of issues concerned the technical assistance that is provided in conjunction with lending activities since it is common to find that technical capabilities are often lacking in many local governments in developing countries.

Before discussing lending programs, most groups pointed out that there are many different types of infrastructure and different levels of infrastructure (primary, secondary, tertiary) that lend themselves to differing types if financing mechanisms and conditions. It was noted, for example, that public sector lending institutions should limit the amounts of their scarce capital lent to productive infrastructure. Such projects can and should be forced to compete for private sector funds. On the other hand central and local government financing for primary infrastructure is appropriate.

While participants generally agreed that the resources available for capital infrastructure investments were always short of what could be used, there were also some important points made concerning the overall availability of funds. Specific examples of adequate financing include upgrading funding through the UDD and the Iller Bank's programs, particularly with small municipalities in Turkey.

Current conditions for lending were determined to be generally inappropriate. For example, repayment periods of ten years are not appropriate for major infrastructure with an expected long life such as sewage treatment plants. Many participants identified high interest rates as a constraint although there was disagreement over how and when municipal lending should be subsidized. For example in Portugal, municipal lending is kept as a purely banking operation in the National Housing Institute. Central government support for local governments is made outside of the loan process. In Tunisia, the municipal credit operation (CPSCL) provides varying conditions and levels of subsidy depending on the type of infrastructure.

The seminar identified two potential routes for attracting private capital to supplement limited public capital. One mechanism is to attract private capital to public (central) development banks that on-lend to municipalities. In this case, the development bank (central government) assumes the credit risk that may be associated with local governments. The second option, generally extremely limited in the region, is for direct private sector involvement in urban infrastructure lending. With only a few exceptions, e.g., some water projects in Morocco and housing rehabilitation in Portugal, the institutions willing and able to lend to local governments are special organizations designed specifically for that purpose. Current liberalization programs, such as in Morocco, are intended to attract more private capital for investment.

Participants recognized, however, that a principal reason for this limited involvement of the private sector is the lack of debt carrying capacity of local governments. Local governments generally be capable of incurring reasonably heavy debt loads only where the local economic and fiscal base is strong. Lack of debt carrying capacity is often further limited by central governments which place limits on the ability of local governments to mobilize resources of their own, e.g., by limiting tax rates.

Reducing the risk in municipal borrowing is a function of improving local resources and management capacity as well as ensuring borrowing within municipal capacity. One issue addressed by some participants concerned how municipalities were treated if they had incurred excessive debt. In some instances, e.g., Portugal, such local governments are denied further debt; in others, e.g., Turkey, past debts have been forgiven. Obviously a problem with debt forgiveness is that it can create expectations that it will occur again in the future, thereby lessening the willingness of local jurisdictions to engage in cost recovery or other local resource mobilization efforts.

Reliance upon only a single lender to local governments puts these jurisdictions in a rather vulnerable position since no alternative credit sources are available. As a result, the policies of the lending institutions may not be adapted to the specific needs of particular localities. This was seen as a problem with capital mobilization in some countries. A corollary of this situation is that such institutions often focus their efforts on only a few urban areas, most commonly the largest cities. This can leave smaller regional cities with substantial shortages in funds.

It is common for public lending institutions to provide technical assistance to cities for the preparation and implementation of capital projects. While in some countries this technical assistance is judged to be inadequate, participants from some countries, e.g., Jordan and Portugal, noted that the technical assistance was reasonable and included such activities as good technical reviews, seminars, and regional technical assistance bureaus.

Lessons learned

Among the lessons from these rather wide-ranging discussions of capital mobilization efforts are:

- **Improving debt-carrying capacity of local governments**, including the cost recovery mechanisms discussed below, must go hand in hand with efforts to funnel capital infrastructure funds to municipalities. Closely linked to this issue is for central governments to provide greater fiscal autonomy to local governments. These improvements may also increase the likelihood for local governments to mobilize capital from private sources.

- **Ultimately the ability of local governments to repay loans depends substantially on their ability to mobilize and manage resources.** This underscores the importance of recovering costs associated with public infrastructure.

- **Some community education** is also in order so as to insure that demands for capital are realistic in the sense that the debt can be repaid without creating long term problems for local governments.

- **Lending institutions should be encouraged to be more flexible** in their approach to local governments.

- **Technical assistance to many localities is an appropriate service** for lending institutions to provide. Furthermore, if such TA is effective, it can increase the ability of local governments to repay their debts.

5.0 Cost Recovery

Case study: "Jordan's Experience in Urban Development Projects: A Case Study in Cost Recovery"

While a variety of mechanisms *may* be available to finance the recurrent costs of operating and maintaining urban infrastructure, it was stressed by numerous participants at the seminar that, ultimately, someone pays even if not the direct users. Indeed, even the absence of recurrent spending creates costs that someone has to bear, e.g., the increased transport costs associated with deteriorated streets and highways or increased health care costs if water quality declines.

Although all cases recognized the importance of cost recovery, the case which focused on that issue was "Jordan's Experience in Urban Development Projects: A Case Study in Cost Recovery" by Hidaya Khairi.[2] Urban issues in Jordan are particularly pronounced, given the high degree of urbanization of its population (80 percent of the populous lives in the three largest urban areas). As is common in many countries, the poor living in squatter areas constitute a major social problem. Estimates suggest that 200,00 people live in squatter settlements within the Amman-Zarqa area.

To address the problem of these areas, a special agency, the Urban Development Department (UDD), was created in 1980. The UDD was set up in the Municipality of Amman to:

1. Upgrade specific locations by improving and extending dwellings and raising services of water, sanitation, drainage and social amenities;

2. Create new sites and services for the lowest income groups;

3. Provide complementary programs in health, education, small business development and income generating projects (through loans), and vocational training.

A long list of agencies participated in the financing of this upgrading project. They included, in addition to the UDD, the Jordan Housing Bank, the World Bank, the Greater Amman Municipality, the Cities and Villages Development Bank, the Ministry of Municipal and Rural Affairs and Environment, the Land and Surveys Department, the Ministries of Water and Irrigation, Education, and Health, the Vocational Training Corporation, Jordan University (particularly the sociology department) and a variety of international institutions.

The case provides considerable detail regarding the steps followed in the upgrading process. Two aspects of that process are particularly relevant. One is that considerable survey research was conducted to understand the scope of the problem and the characteristics of the residents. The understanding gained from this research will permit adequate and realistic project design and planning. Another important aspect, particularly with the regard to the incentive effects that it has for cost recovery, is the land registration certificates are delivered to all residents upon their repayment of debt to the UDD. Khairi notes, however, that the high prices of land and construction costs together with religion-based objections to interest payments and low and unstable incomes, have at times created financing difficulties. Nevertheless, beneficiary financing remains at the heart of the financing process.

The sites and services project entails purchase of a large (20-30 ha.) plot of land by the UDD, subdividing it into separate plots (150-300 m^2), connecting all plots to water, sewer and electricity networks, providing stairs and paved footpaths as well as roads networks, constructing public infrastructure facilities such as schools, health centers, community centers, and women's training centers as well as commercial facilities, shops and workshops. This last group of facilities are sold to private investors, the profits from which are used to cross subsidize plots reserved for low income residential sites. In addition, some residential plots are sold at market prices also to cross-subsidize lower income residents.

Beneficiaries bear a variety of the costs including that for the plot (together with some proportion of the common land used for the public facilities), connection charges for utilities, and some portion of the costs of roads, footpaths, and drainage. The government bears the remainder of the costs as well as costs for the main service lines of the utility networks, the schools and community buildings and the interest and administrative costs associated with these latter activities.

For cost recovery purposes, an initial 5 percent down payment is required; monthly payments are limited to 33 percent of the total household monthly income. Nearly two-thirds of the purchasers use Housing Bank loans which permits them to repay over 18 years and also allows them to use loan proceeds for building materials. Some buyers (approximately one-third), who have saving or other sources of funds, pay for their plots in cash. The small remainder (1 percent) either make regular monthly payments to the UDD since they cannot fulfill the loan requirements of the housing bank or are extremely poor and without incomes. These very poor individuals (often elderly single men or women) do not pay; however, they also do not gain title to the land. As mentioned above, since not all plot costs are covered by residential housing buyers, some percentage of the plots are designated as commercial and sold at market prices.

Khairi notes several important lessons that have been learned from the UDD upgrading and cost recovery experience. Among them are:

1. In order to secure a real commitment from beneficiaries to repay the costs of upgrading, it is necessary that they participate in setting objectives and priorities so that the results meet their needs. To accomplish this, organizers should not simply confer with "local leaders" but should consult with all affected families. In a similar vein, the agency must recognize cultural and religious habits and values in designing projects.

2. Repayment arrangements need to be facilitated. The UDD accomplished this by using site offices as payment points.

3. Demolition cases need to be compensated even if not legally mandated. This facilitates beneficiaries to commit themselves to alternative new sites.

4. Insuring that there is supporting, social/physical infrastructure, e.g., the community and women's centers, where local women could become involved in small-scale, income-producing activities also helped in cost recovery.

Furthermore, these sites permitted additional services, for example, family planning activities to be provided effectively.

5. Rather than defining certain sites as being commercial, it may be preferable to consider all plots as being residential. If buyers then wish to open commercial facilities on the site, extra fees can be levied in order to achieve the previously-mentioned cross subsidization objectives.

Group discussions

In the small group discussions of cost recovery, participants were asked to analyze cost recovery practices for two or three services: what costs are generally recovered (capital, recurrent), what are elements of successful cost recovery, and what are principal constraints to cost recovery. While some services, such as water, have the characteristic that use-based fees can be applied relatively easily, this is not the case for all urban infrastructure. Instead, either flat-fees (that are not related to service usage) or local general taxation is used for cost recovery. The other possibilities include reliance upon central governments for operating subsidies or, particularly in the case of roads, maintenance is simply deferred (which places additional costs on road users).

The country experiences suggest that all of the above are used to some extent or another. For example, it was stated that user-based cost recovery mechanisms for water services (at least the O&M portion) had proceeded quite well in Algeria and Tunisia. In order to avoid undesirable equity implications, Tunisia has imposed progressive rates (based on water consumption) under the assumption that high income residents consume greater amounts of water. In at least some countries, e.g., Morocco, it was acknowledged that even the full O&M costs of water services were not being fully covered.

Water meters provide a reasonably low cost way of measuring service use so that equitable charges can be applied. Water is demanded by everyone; therefore the consumers' willingness to pay reasonable charges is high and they are unwilling to allow their water bills to become delinquent lest water authorities terminate their service. The same cannot be concluded for sewer services. But since there is a high correlation between water consumption and use of sewer services, tying the costs of sewerage to water bills is definitely feasible and is used in some countries. In other places, e.g., Morocco, the operating and maintenance costs of sewerage is borne by local taxes. It was also noted that, where central governments bear the up-front costs of sewer connections and anticipate amortizing the expenditures from local users over time, there is considerable risk that such payments will not be forthcoming. Instead, up-front connection fees are probably more likely to be successful.

Since the use of streets and roads do not generally lend themselves to direct use-based fees, road maintenance costs are nearly always based on some form of either general taxation or vehicle-based taxes or fees. The participants were, however, nearly unanimous in stating that local governments were generally not successful in fully meeting these costs. As was noted in the Tetouan case, a potential constraint to cost recovery mechanisms directly supplying the resources necessary for O&M expenditures arises where there are many competing service needs, e.g., education, health and other social service demands, which are perceived to have a higher priority than is road maintenance.

Participants from Turkey noted that in a few instances private companies can be used for cost recovery. For example, a major bridge is being built by a private investor who will retain the right to collect user fees to amortize the capital and maintenance costs of the bridge (as well as earn some profit on the investment). Unfortunately, there are relatively few opportunities for such innovative cost recovery measures given the nature of most public infrastructure.

Lessons learned

From the experiences shared among the small groups, some general findings emerged concerning the utilization of cost recovery mechanisms. Among these were:

- **Current accounting and budgeting systems are inadequate.** A major stumbling block to the effective application of user fees is the accounting and budgeting systems available at the local government level in most countries. Current general fund accounts do not permit easy determination of the real costs of specific services. Furthermore, when a single account is used for a variety of purposes, there is some likelihood that user fees paid for a particular service will not be reinvested in that service. Special purpose accounts, cost accounting techniques and earmarking of funds may be necessary to overcome this problem.

- **Cost recovery systems should be transparent.** Decision makers and the users should know what costs are being recovered. In addition, there should be an obvious link between the quantity and quality of service and the payments rendered. Unfortunately, the above-mentioned lack of adequate budgeting and accounting systems make it harder to achieve this objective.

- **Cost recovery systems should be relatively easy to implement.** A common problem is that current laws are either not adequate or are poorly enforced.

- **The need for political will.** The enforcement problem is linked closely with what many participants saw as another difficult constraint: the unwillingness of politicians to impose and enforce user fees. It was argued that perhaps the most effective way of overcoming this obstacle is through good analysis and showing political decision makers successful examples of cost recovery mechanisms. It is also necessary to convince decision makers that service levels will suffer if costs are not recovered.

- **The need for generalized cost recovery policy.** One common argument against cost recovery mechanisms is that they have undesirable impacts on the poor. This then leads to the conclusion that subsidies should be used. The consensus of the participants was that it is most common for such subsidies to provide the greatest benefit to higher income residents than to assist the poor. Cost recovery for a specific project should be put in a larger context of cost recovery policy and efforts to improve cost recovery in general.

- **Tailoring cost recovery to users.** Cost recovery mechanisms should be designed in ways that are acceptable to those required to pay. As was demonstrated in the Jordan case, developing a civic sense and tailoring the systems to the legal and cultural basis of country is crucial.

6.0 Conclusions

Provision and financing of urban infrastructure is an extremely broad and difficult topic. Nevertheless, the RHUDO seminar provided an effective forum for those directly involved in these issues to exchange views and experiences. Even though specific cultural, political, economic and institutional details differ across countries, there were still certain generalizations and commonalities that arose throughout all of the discussions. Regarding institutional arrangements, infrastructure provision will be improved as institutional roles are clarified and, preferably, responsibilities devolved to the local level or at least defined to permit local preferences to be heard in decision making. Increased capital is necessary to meet the current and future infrastructure challenge: attracting private capital is a key as will be improving the credit worthiness and management capacity of local governments, the primary borrowers for urban infrastructure investment. Increased transparency and accountability, aided by management tools such as clearer budget structures and cost accounting, are vital to improved cost recovery. However, political will must inevitably be the key element in improving cost recovery policy in general.

The seminar was successful in clarifying many issues regarding infrastructure finance and provision and in identifying solutions for expanding capital resources and improving local management capacity, including many innovative approaches from within the Region. It also provided an environment for strengthening a network of professionals, senior managers and decision makers and promoting cooperation among institutions. A number of follow-up visits, exchanges and other activities among the participating countries and institutions were planned at the conclusion of the seminar.

ENDNOTES

1. George E. Peterson, "Volume I: Financing Urban Infrastructure in Less Developed Countries," Working Paper Prepared for the Office of Housing and Urban Programs. (Washington D.C.: U.S. Agency for International Development, 1991) and Peterson, George E., G. Thomas Kingsley and Jeffrey P. Telgarsky "Volume II: Institutional and Macroeconomic Issues." Working Paper Prepared for the Office of Housing and Urban Programs. (Washington D.C.: U.S. Agency for International Development, 1991).

2. The case was made strikingly realistic through the presentation of a video which illustrated both pre- and post-upgrading of sites along with the importance of the community centers and participatory planning efforts.

ANNEX I

LIST OF PARTICIPANTS

20.

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Regional Policy Seminar
On Urban Infrastructure Provision and Finance

Seminaire Regional Sur Les Politiques
De Fourniture Et De Financement Des Infrastructures Urbaines

Hotel Sheraton, Hammamet, Tunisia, May 26 - 29, 1992

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