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FINANCING UPGRADING PROGRAMS

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The U.N. has just released a report warning of dire consequences for third world cities: "more giant slums, more overburdened civic services, more misery, more crime and social unrest" unless something is done to provide employment opportunities and housing. Upgrading is widely held to be the most effective mechanism to expand the supply of housing for limited income groups and improve living conditions for the urban poor. By providing the support infrastructure, it opens up opportunities for new economic activity.

Projects launched since the late '70's around the world have demonstrated that compared to core housing or serviced plots, upgrading is in general both cost effective and cost efficient. Of the three prototypical housing policies, upgrading is the one that allows benefits to reach the largest number of families at the lowest cost to the government and offers the highest economic rate of return on public investment. The differential is important and can reach 5 percentage points particularly on the urban fringe where services are most lacking and growth potential is high, as documented by The World Bank in the case of Ettadamen on the outskirts of Tunis. The added advantage is the reduced risk of having benefits preempted by households other than the intended target group, a common occurrence in the other programs.

By any standard, an economic rate of return of 10-20% is satisfactory. Informal entrepreneurs who externalize the environmental costs of their uncontrolled activities can secure returns of 30 to 40% which compare favorably with the returns achieved by large investors on the international real estate markets. They do provide housing for a range of middle income groups who could not otherwise find accommodations. In the process, they force the public sector to absorb the costs of unplanned urbanization through an array of upgrading programs.

Like all other social programs in developed and developing countries, upgrading projects do entail varying degrees of subsidization, direct and indirect. Despite rigorous programming, tight budgeting and efficient implementation, full cost recovery has eluded even the most successful projects. This is not due to conceptual flaws in the approach but rather to structural flaws in the instruments of cost recovery.

TABLE 1
TUNISIA THIRD URBAN DEVELOPMENT PROJECT APPRAISAL
ECONOMIC INDICATORS
ECONOMIC RATES OF RETURN (ERR)
NET PRESENT VALUE (NPV)

	Ettadhamen		Hafsia Revitalization	
	Sites and Services	Upgrading	New Construction	Upgrading
ERR	20	25	21	14
NPV	2,223	2,732	3,103	1,173

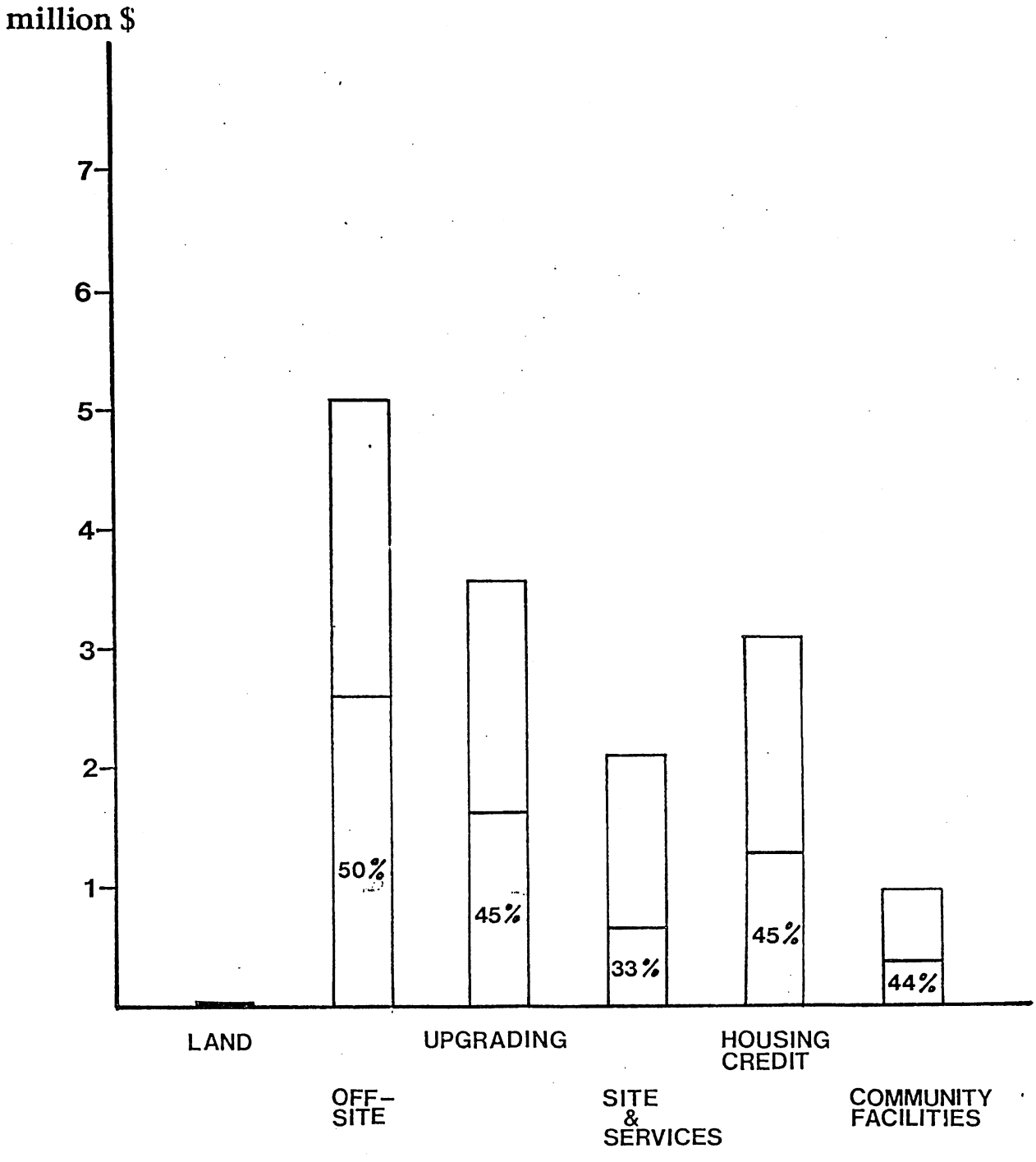
Source: Annex 15, Page 2 of 2, Tunisia Third Urban Development Project, Staff Appraisal Report, World Bank, Nov. 15, 1982

TABLE 2
TUNISIA THIRD URBAN DEVELOPMENT PROJECT APPRAISAL
PROJECT COST ESTIMATES
(US$ Millions)

	COST		FOREIGN EXCHANGE	
HAFSIA	Cost	Percent of Total	Cost	Percent of Item
Off-Site	0.24	2%	0.10	42%
Upgrading	1.44	12%	0.48	33%
Urgradings of Buildings	2.00	16%	0.90	45%
Construction Loans	2.98	24%	1.34	45%
New Construction	5.66	46%	1.21	21%
Total	12.32	100%	4.03	33%
ETTADHAMEN-DOUAR HICHER				
Off-Site	5.05	34%	2.54	50%
Upgrading	3.60	24%	1.62	45%
Sites and Services	2.08	14%	0.68	33%
Housing Credit	3.04	21%	1.38	45%
Community Facilities	1.00	7%	0.44	44%
Total	14.77	100%	6.66	45%

Source: Table 1, Annex 2, Tunisia Third Urban Development Project, Staff Appraisal Report, World Bank, Nov. 15, 1982

TUNISIA - Ettadhamen - Dour Hicher
Project Cost - 1982



1. Upgrading Costs and their foreign exchange component

Upgrading projects usually include 3 major components:

1. Construction of infrastructure networks to introduce new systems or remedy the deficiencies of existing ones. This usually accounts for 30-50% of total project cost of which 30-40% is foreign exchange. To this must be added off site connections to the primary systems, sometimes the single most expensive item, and always the one carrying the highest foreign exchange cost (50-60%).
2. Building community facilities such as schools and health centers which are lacking in the area or improving existing run down facilities. This may account for up to 20% of project cost of which 40% is foreign exchange inclusive of equipment.
3. Setting up some form of credit to assist homeowners in improving their properties and small businesses in expanding their operations usually offered at below market interest rates. This component is not as crucial as proponents like to believe. In terms of mobilizing private funds for housing, the quality of the environment in which private investment takes place is much more effective than credit mechanisms which entail finance subsidies. Invariably upgrading projects trigger a wave of property improvement, usually self financed even when credit is made available as part of the project. Reliance on self help with the use of assisted loans for building materials has all but disappeared in the post '73 era.

Site location, physical characteristics and density of settlement all have a major impact on infrastructure costs. Off site connections vary according to distance from existing trunk lines. Bad soils and rough topography could double the cost of on site works while layout and density would impose or preclude specific system options.

Overall foreign exchange costs in upgrading range from 30 to 40% depending on all of the above factors. Foreign Exchange and credit finance are overriding concerns in program design. Government is forced to absorb the risk of fluctuations in

TABLE 3
JORDAN URBAN DEVELOPMENT PROJECTS
ECONOMIC RATES OF RETURN (ERR)

	Sites and Services	Upgrading	Total
UDD1	14	11	13
UDD2	14	29	14
UDD3 (Aqaba)			15

Sources: Annex 12, Page 65 of UPD1 Project Completion Report; Page 28, World Bank Appraisal Report May 1985; Annex 10, Page 2/3, World Bank Appraisal Report, May 1987.

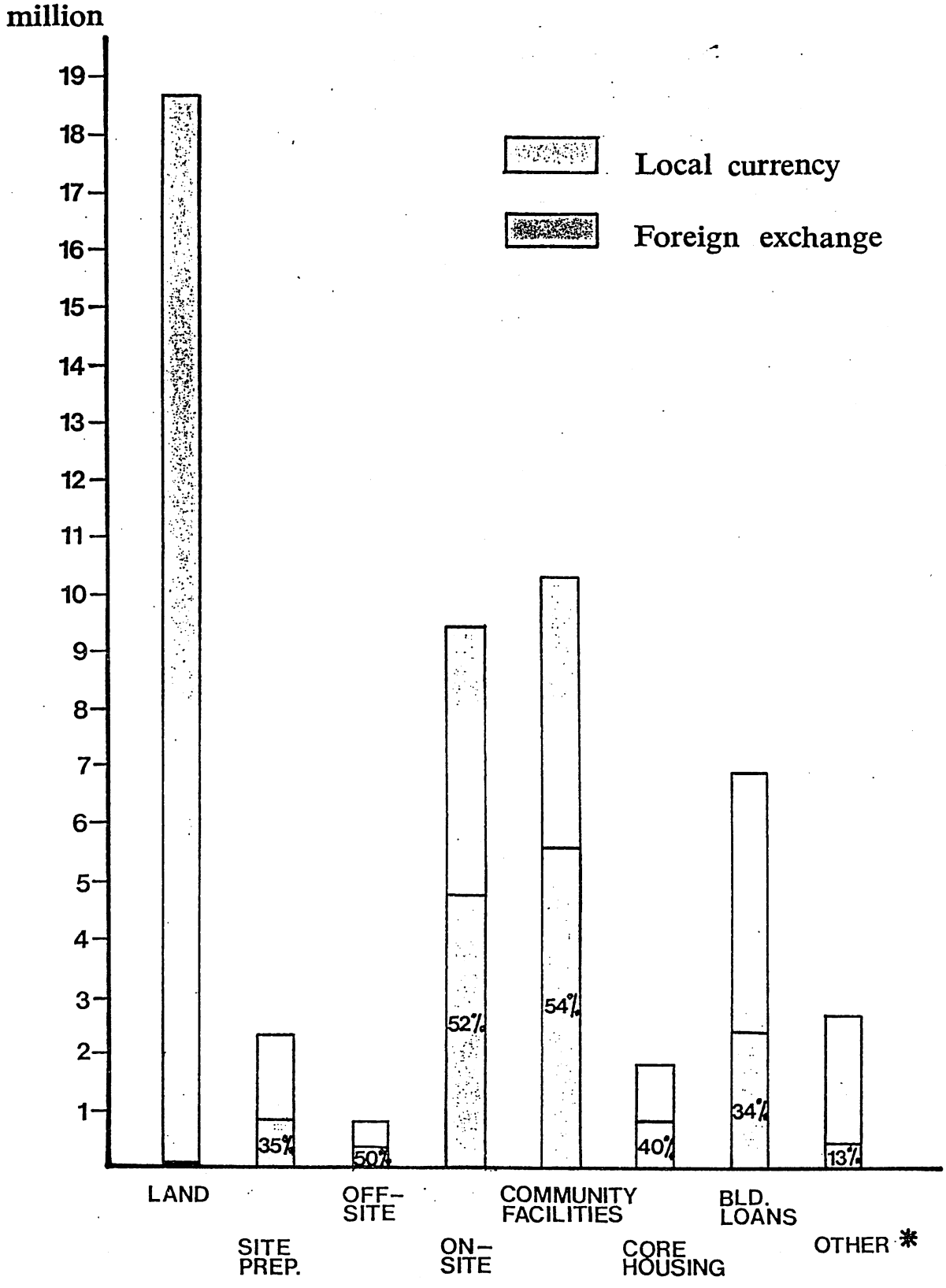
TABLE 4
JORDAN URBAN DEVELOPMENT PROJECT (UDD3)
UDD3 UPGRADING COST SUMMARY
(US$ Thousands)

	COST		FOREIGN EXCHANGE		
	Cost	Percent of Total	Cost	Percent of Item	
Land	18,712	35%	0	0%	
Survey & Site Preparation	2,258	4%	791	35%	
Off-Site Infrastructure	752	1%	376	50%	
On-Site Infrastructure	9,312	18%	4,842	52%	
Community Facilities	10,382	20%	5,576	54%	
Core Housing	2,100	4%	839	40%	
Building Material Loans	6,945	13%	2,361	34%	
Commercial Housing & Shops	85	0%	39	46%	
Design & Supervision	903	2%	270	30%	
Project Management	1,706	3%	170	10%	
Total	53,155	100%	15,264	29%	(Of Total)

Source: Annex 8, Page 1 of 11, Jordan Staff Appraisal Report, World Bank, May 15, 1987

JORDAN – Urban Development Project (UDD 3)

Project Cost – 1987



* commercial (.085), design & supervision (.9), project mangement (1.7)

exchange rates and in interest rates on the international money markets with expenditure commitments on projects locked in and credit extended locally at fixed rates. In the '80's the opportunity cost of capital in developing countries fluctuated between 10 and 12% while credit for housing was extended at rates of 3 to 10% depending on the social objectives of particular programs.

Trade deficits and debt service combined to force a devaluation of local currency and to promote inflation. Project cost overruns became commonplace despite reasonable contingencies resulting in incomplete works and the cancellation of unbuilt elements. Finance subsidies became increasingly prohibitive. None of the programs carried rate structures with adequate risk coverage to absorb the widening gap in exchange rates and the loss of purchasing power of local currency over the term of the loan. Fixed interest rates on loans to beneficiaries even when originally set at market levels gradually deviated from the floating rates entailing a growing finance subsidy.

2. Cost Recovery Mechanisms

Few would contest the desirability of cost recovery both as a requirement of sound fiscal management and as a guarantee of project replicability. Yet there is no way in which upgrading can stand alone as a self supporting activity.

In most developing nations, health and education are provided free of charge to the user and financed from general tax revenue. The cost of the physical plant cannot be legally recovered from residents in the area in which it is located. There is no justifiable reason to impose within a specific subarea exactions which openly conflict with national policy. Even under decentralization, it is most unlikely that social service delivery systems, a highly sensitive political issue, would be overhauled in a direction aggravating social disparities.

- The real challenge in upgrading centers on recovering the capital cost of infrastructure and financing municipal services. This is no easy task. In industrialized

countries, almost all municipal services are subsidized to a greater or lesser degree. Cost recovery through user fees varies widely between services ranging from 90% for refuse collection and 85% for water supply and sewerage to 60% for roads and transport to under 15% for social services. In developing countries the contribution of user fees is even more limited due to various legal and administrative impediments.

2.1 Utility rates

Theoretically there should be an allowance included in metered use tariffs and connection fees to cover the investment needed to build and maintain treatment facilities and distribution networks. In practice the rates, at best, barely cover operating expenditures. Good collections cannot offset defective rate structures. Authorities in charge of public utilities more often than not depend on central government transfers to finance capital improvements and bridge gaps in operating budgets. An agency which is not financially viable cannot be considered an adequate source of cost recovery.

This situation is particularly distressing because revenue generating utilities have in the western countries traditionally contributed resources to cover complementary services deemed necessary for the health and safety of the community. Thus water rates would cover sewerage and power rates street lighting. Yet Colonial policies allowed profitable functions to be set up as franchises held by foreign investors leaving the newly created municipal bodies burdened with the responsibility of providing the non profitable services without an alternate source to adequately finance them. This institutional segmentation has persisted even after the nationalization of private utility companies. The subsequent deterioration of rate structures set in response to political pressures and social considerations rather than economic criteria makes it even more difficult to envisage a rationalization of service functions, costs and fees in the immediate future. A distorted rate structure prevents the establishment of an equitable framework for the definition of minimum acceptable levels of

servicing for different geographic areas and addressing social considerations through differential pricing related to the level of service consumption.

2.2 Urban property taxes

Municipalities are assumed to rely on taxation of local property to generate the revenue they need to finance their service functions. Taxation of urban real estate introduced under colonial rule had to be adapted to a tradition of rental rather than capital valuation derived from long standing practices in the agricultural sector. The system proved totally inadequate to cope with rapid urbanization processes. Municipalities were unable to expand revenue in proportion to the growth of the urbanized zone. Furthermore inadequate taxation of real estate undermined the ability to use effective fiscal instruments of land management to guide development and check speculation. Proceeds from property taxes rarely exceed 20% of total receipts in municipal budgets. In contrast they account for 30% to 60% in countries which rely on capital valuation. The more rapid and heterogeneous the expansion of the urbanized zone the more obsolete the cadastre and inadequate the valuations, depriving local authorities of the resources they desperately need.

2.3 Surcharges, betterment taxes and plot charges

The inability to relate the property tax to the capital value of urban real estate seriously impairs its performance as a cost recovery mechanism. Municipalities are forced to turn to other sources to fund key services; for example user charges for pest control and sludge removal and tax surcharges for solid waste collection and traffic management.

Similarly they have relied on Betterment taxes to help defray the capital cost of major improvements. The tax is designed to recapture the increase (unearned increment) in property value attributable to public action. It is therefore related to the use

and condition of the affected properties and not to the cost of the infrastructure improvement per se and rarely returns more than a fraction of that cost.[1]

Cost recovery in upgrading could be legally regarded as an extension of the concept of betterment. Instead of a corridor with a specified width, the impact area is defined as the geographic area covered by the project. Improvement charges are assessed on each property. These charges can be simply based on lot size or on more complex formulas combining location, access, size and frontage or any other characteristic deemed to have a significant impact on value. In the case of informal settlements, laws enabling their regularization[2] authorized municipalities to recoup the capital cost of the infrastructure provided from property owners through the assessment of charges on individual holdings. Authorities viewed these as similar to the plot charges in sites and services project. In new subdivisions, land prices are expected to absorb site development costs, but in upgrading areas, the maximum amount that can be levied may or may not cover improvement costs. Furthermore since it is usually permitted to pay assessments in installments over 8 or more years, terms which include below market interest rates can erode the anticipated cost recovery.

Irrespective of the stipulations of the laws, collection of plot charges in upgrading areas is complicated by a widespread feeling of unfairness in treatment. Residents feel they are being charged for a parcel previously purchased from presumed owners or charged for tenure rights legally acquired by prescription. Since registration of land title is made contingent upon payment of this assessment as an outstanding

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[1]Law 222/55
150m for roads, 100m for sewerage, 300m for bridges
Appreciation to be recovered 50%
Max recoverable 30% under present rental valuation at 50-60% of construction cost

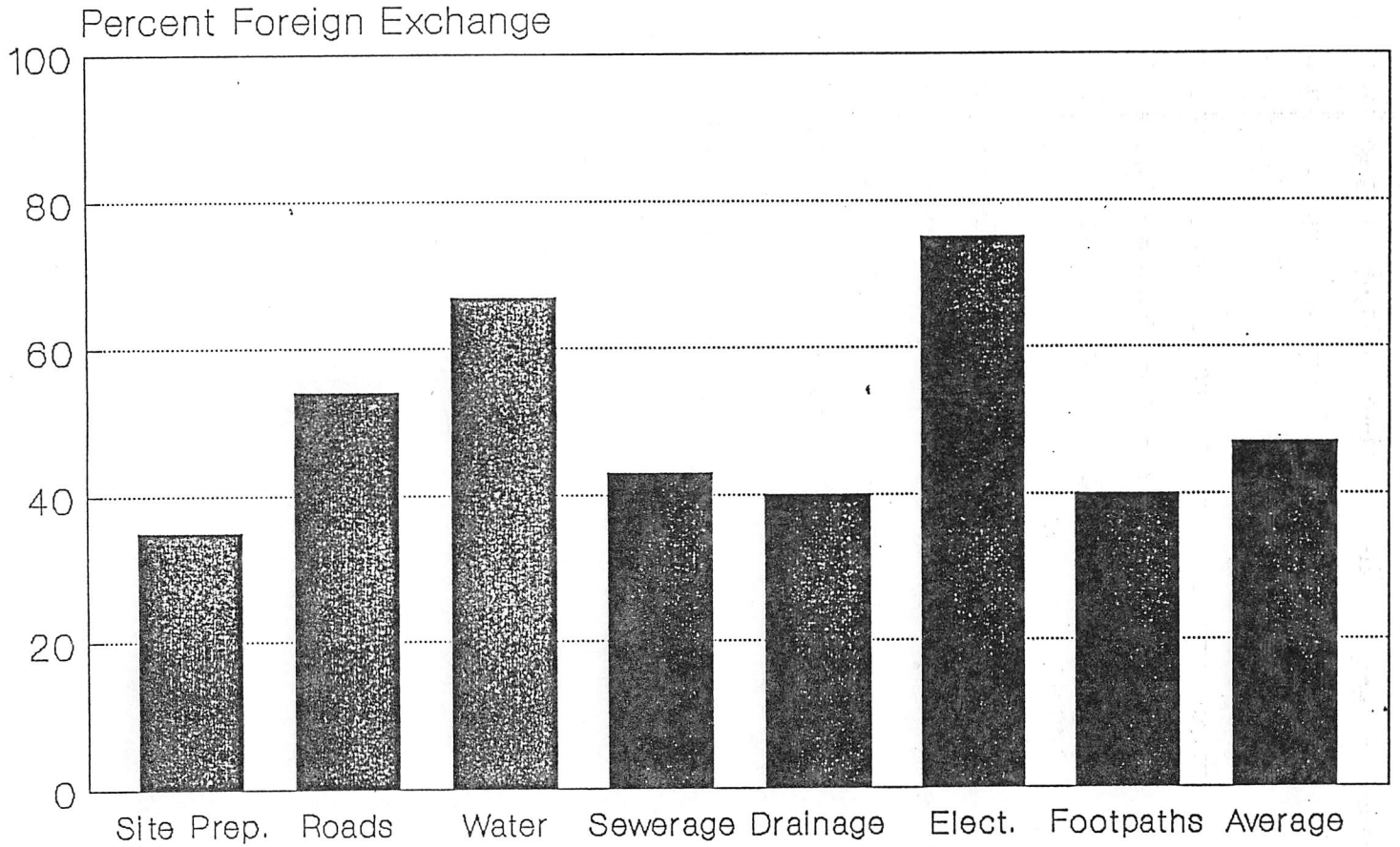
[2]Egypt law 29/66 and law 35/81

TABLE 5
JORDAN URBAN DEVELOPMENT PROJECT (UDD2)
ESTIMATED FOREIGN EXCHANGE PERCENTAGES
FOR CIVIL WORKS

	Percent
Site Preparation	35%
Roads	54%
Water	67%
Sewerage	43%
Drainage	40%
Electricity	75%
Footpaths	40%
Total Average Civil Works	47%

Source: Table III-1, Page 11, Jordan Staff Appraisal Report, World Bank, May, 1985

Civil Works-Foreign Exchange Component
Jordan UDD2 Project



lien on the property, collection is in large part a function of the importance of regularization. The degree to which residents in a project area feel secure from displacement will affect their inclination to pay. The more precarious their situation, the more anxious they will be to legalize their status and comply with official regulations.

Cost recovery analysis has devoted great attention to the ability of beneficiaries to pay for the improvements provided. In many projects elaborate financial schemes are designed to lower program reach without inflicting undue hardship upon recipients. The income spread encountered in informal settlements and the inability to accurately determine household income raise serious questions as to the validity of overly complex analytical methodologies to structure cost recovery charges.

Too little attention has been given to willingness to pay and capacity to collect without coercion. Charges that accurately reflect real costs in the '80's are likely to meet with resistance. Residents may see no compelling reason to pay a price they consider steep for a service they would only want at a lower cost or feel they can do without. The divergence between real costs and perceived benefits is difficult to overcome. The inverse relationship between land values and servicing costs generates ever widening gaps as upgrading programs seek to reach lower income groups in outlying settlements or marginal sites.

Payments to private parties for services such as hauling water, pumping out cesspits or dumping wastes are a measure of ability to pay which does not automatically translate into willingness to pay the public authorities for an upgraded service. Attitudes regarding obligations towards public sector agencies are conditioned by widely held notions regarding individual rights and social equity. People will refrain from paying for a service which they feel is available elsewhere at a lower cost or free of charge. Forcible collections and foreclosures are difficult to enforce without the cooperation of a majority of the residents.

TABLE 7
TUNISIA THIRD URBAN DEVELOPMENT PROJECT
MODES OF RECOVERY
(US$ Millions)

	Total	Loan Repayment	Direct Sale	Utility Charges& Tariffs	Frontage Tax	Not Recovered	Percent of Item not Recovered
Off-Site Infrastructure	7.8	0	0	2.5	0	5.3	68%
On-Site Upgrading Except Hafsia	12.2	0	0	2	10.2	0	0%
On-Site for Hafsia	11.2	0	3.3	1.2	6.7	0	0%
Sites/Services & Housing Credit	10.8	6.4	3.4	1	0	0	0%
Construction (Hafsia)	7.2	0	7.2	0	0	0	0%
Community Facilities	2.8	0	0	0	0	2.8	100%
Technical Assistance	4.5	0	0	0	0	4.5	100%
Project Administration	3.2	0	1.6	0	0.8	0.8	25%
Total	59.7	6.4	15.5	6.7	17.7	13.4	22%
Percentage	100%	11%	26%	11%	30%	22%	

Source: Table 5, Page 17, Tunisia Third Urban Development Project, Staff Appraisal Report, World Bank, Nov. 15, 1982

Under the most favorable conditions, the best that can be hoped for is to recover the cost of on site infrastructure. This is what Jordan's Urban Development Department manages to do and it is considered by The World Bank to be the most successful upgrading agency in the region.

The cost of off-site infrastructure is in all cases presumed to be recovered from sources other than plot charges in the project area. It is usually assumed that part will be recovered through user fees and betterment taxes and the remainder from general taxation. Shifting the burden of finance of off-site infrastructure to the responsible utilities or local authorities allows upgrading agencies to define off-site options with reference to project needs only and then conveniently remove the cost, despite its high foreign exchange component, from close scrutiny under project appraisal procedures. This expedient method is a major cause of the lack of coordination which has plagued upgrading activities. Work progress can be delayed for extended periods as numerous conflicts surface and have to be ironed out during project implementation. Failure to sustain a pace of progress commensurate with expectations undermines the success of any project. Delays whether due to procedural or budgetary causes discourage private investment and compromise the return on public investment in the area.

3. Limitations of cost reduction in upgrading

Since 1973, the sharp escalation of construction costs outstripping overall inflation, has narrowed the practical limits within which lowering development standards can be used as an effective cost reduction mechanism. If upgrading projects have exhibited lower rates of return than expected it is because land values, construction costs and interest rates invariably turned out to be higher than projected at appraisal.

Throughout the 70's and 80's the seed capital needed to enter the housing market edged upwards and is now beyond the means of 30% of urban households. As real incomes stagnated, affordability could only be maintained through accounting

TABLE 6
JORDAN URBAN DEVELOPMENT PROJECTS
COST RECOVERY
(US$ Millions)

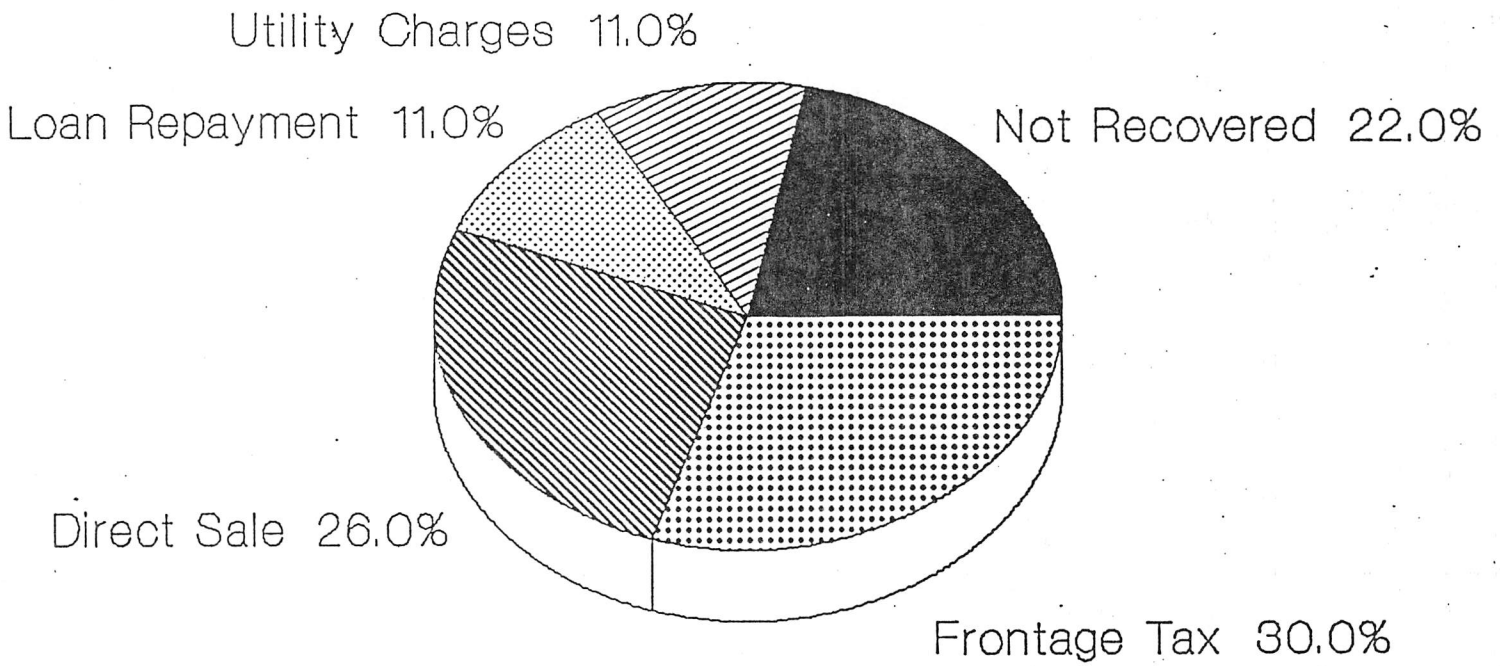
	Total Costs	RECOVERED COSTS		UNRECOVERED COSTS	
		Loan Repayments	Land Sale	Public Sector Costs (1)	Estimated % of Project not Recovered (2)
UDD 2	88.5	9.8	43.8	35.0	20%
UDD 3	93.3	10.0	50.9	32.4	15%
Total	181.8	19.8	94.7	67.4	18%
Percentage	100%	11%	52%	37%	

(1) Items include:
- a. Roads wider than 10 meters
- b. Off-Site Infrastructure
- c. Land for Public ROW's
- d. Community Facilities

(2) Estimated based on public sector agency charges and fees.

Sources: Table III-2, UDP2 Staff Appraisal Report, May 1985: and Table III-2, UDP3 Staff Appraisal Report, May 1987. World Bank

Modes of Cost Recovery
Tunisia Urban Dev. Project



devices relying on the redefinition of recoverable costs to substantiate feasibility and replicability. To meet affordability criteria, project appraisals resorted to: low cost estimates, unrealistic assumptions regarding income gains, underestimated allowances for inflation and rate fluctuations and cost projections using the consumer price index to parallel affordability instead of the substantially higher index of heavy construction applicable to public works.

Authorities struggling with budget cuts turned to reducing front end investment in an attempt to simultaneously bridge the affordability gap and stretch out dwindling resources. In developing countries infrastructure systems are bound to continue in use well beyond the limit of their economic life. Reducing short term costs by lowering design standards must be carefully weighed against compromising the long-term viability of a project.

Deferred infrastructure programs and progressive upgrading schemes allow the release of partially serviced land at a lower cost to be incrementally upgraded to full service standards according to a specified timetable reflected in the sales price. In the absence of enforceable and enforced regulatory controls, rapid appreciation of land values and uncontrolled over-densification forces a premature re-upgrading of infrastructure, disrupting system expansion plans, reshuffling capital improvement budgets, and unnecessarily draining public resources. Worse still it allows technical decisions to be taken on political grounds. After a short-lived experiment in Morocco, disaffected planners promptly suspended the program.

The scope for the involvement of non-governmental organizations in infrastructure has been limited by the technical characteristics of these systems and their indivisibility. However NGO's can be efficient private suppliers of services which do not require heavy investment in equipment and involve a degree of community organization such as solid waste collection and the management of public open space. Public agencies need to overcome their administrative reluctance to deal with what they consider to be loosely structured NGO's. Activities can be delineated so as not to

exceed their managerial capabilities and they can mobilize the energy of the community which otherwise remains largely untapped.

Whenever cost overruns occur as they often do in low cost housing projects and upgrading programs, elements considered non-essential such as paving, landscaping and tree planting or not necessary at this stage such as water borne sewerage are sacrificed. In general these last minute cutbacks do not significantly alter the project's financial picture. Their major impact is to impair its liveability and mar its image.

Any definition of criticality based on current urgencies will only meet partial needs. Improvements which do not take into account the reality of future development tend to collapse when private sector response (formal and informal) surpasses the expectations of planners or deviates from predicted scenarios. The very success of a project can propel it into progressive environmental deterioration and reversion to slum conditions if the infrastructure provided is unable to support the development it triggers. Yet as long as upgrading fails to achieve a visible quantum leap in total environmental quality commensurate with the demands it places on scarce monetary and managerial resources, the concept will fail to arouse the enthusiasm needed to promote widespread adoption. It will be viewed as a temporary palliative rather than a permanent remedy. Budget allocations will be determined by political pressure and site selection by political clout or the leverage of donor agencies.

4. Generating Revenue to subsidize upgrading activities

The inability to structure upgrading programs to fully recover costs prompted the reliance on cross subsidy schemes to partially offset deficits. These schemes require the coupling of improvement of an existing built up area with the release of land for new development in an adjacent zone. Complex projects packages can combine inter and intra sectorial cross subsidies based on design concepts and differential pricing reflecting the conditions prevailing in the real estate market. Their success is directly related to the degree to which they manage to capitalize on the inherent advantages

of a geographic site rather than focus on the programmatic replicability of a public intervention. Controls and distortions which impede the functioning of the market tend to complicate the formulation of cross subsidy schemes and impair their effectiveness.

Counterproductive legislation encumbers mostly older properties and marginal areas, taxing the creativity and resourcefulness of planners struggling to structure upgrading projects. An interesting example is the mechanism devised by The World Bank for the Hafsia project to overcome the pernicious effects of rent controls. Home improvement credit was institutionalized as a commercial transaction under civil law outside the framework of national housing laws. It engaged owners and tenants as cosignatories on loan agreements in a joint commitment to undertake the repairs.

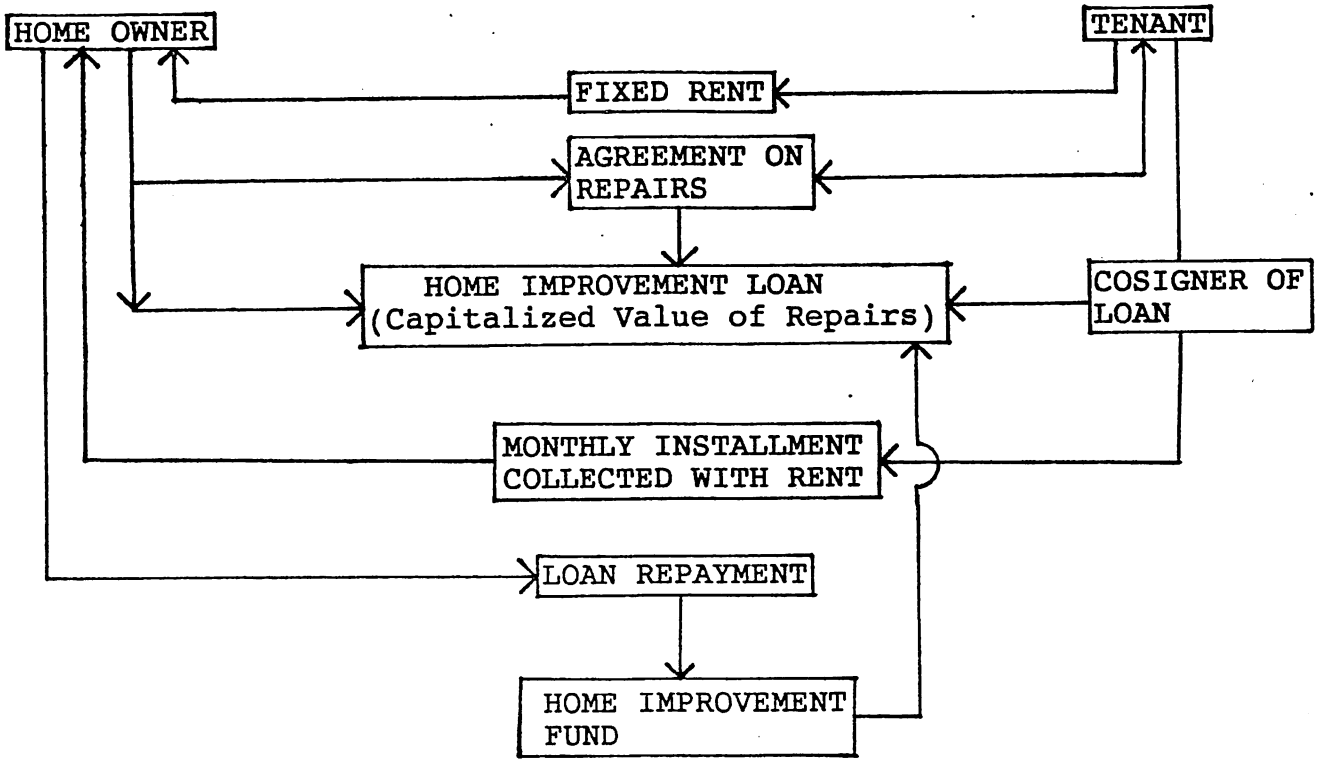
In general there is a limit to the additional revenue that can be generated by any one mechanism. Concentrating on the manipulation of one instrument is of limited usefulness. Higher charges entail amendments to existing laws which require lengthy review and approval procedures and then may or may not prove enforceable. A case in point concerns the laws governing the regularization of land tenure in informal settlements. Procedures which require residents to pay current market rates for their land proved politically unenforceable. In general, diversification of revenue source is the most effective method to improve cost recovery.

5. Upgrading as a key element in Urban Development Strategy

Despite highly publicized haranguing by U.N. Habitat, housing is no longer viewed as a priority for public expenditure by international funding organizations and bilateral aid agencies. The debt situation in developing countries implies a widening gap between urgent needs and potential resources. Demographic pressure and the economic crisis have concentrated efforts on economic development and employment generation rather than social infrastructure.

At a time of intractable budget deficits and perennial shortages of both foreign and local currencies it is inconceivable to contemplate the expansion of current

HAFSIA - HOME IMPROVEMENT LOANS
FLOW OF FUNDS



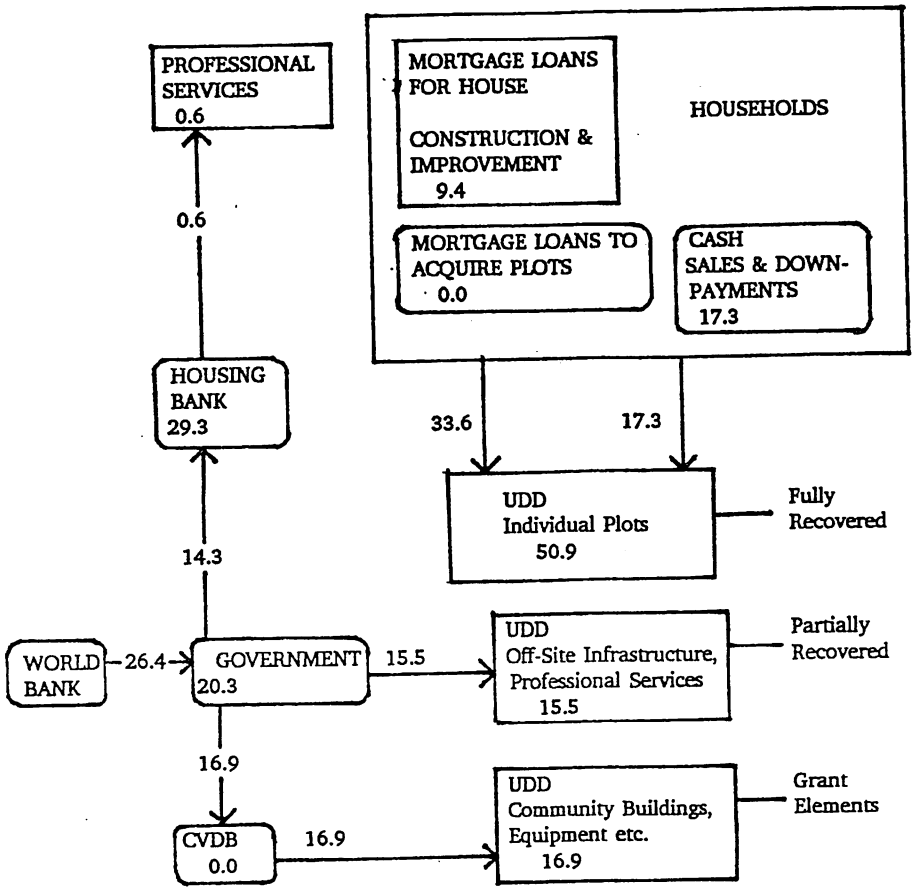
social programs. Shifting the incidence of subsidization from one agency to another or from one level of government to another does not make upgrading less expensive to the State. As poverty alleviation programs, minimal shelter solutions and upgrading are not particularly cost effective. Safeguarding the public interest mandates the formulation of strategies that allow recovery of the appreciation in value created by public action. Upgrading or releasing land at artificially low prices amounts to a large scale transfer of wealth from the public to the private sector in the form of windfall profits to a select few.

Given that under the best circumstances, 20 to 30% of the cost of upgrading activities are still not recovered, to perpetuate upgrading as a stand alone housing policy forces implementing agencies to rely on a continuous infusion of funds from higher levels of Governments. Since no less than one third of the cost of a typical upgrading project is foreign exchange, transfers may or may not be forthcoming depending on the severity of the economic crisis and the imperatives of the moment. In difficult situations, agencies have been instructed to reduce their dependence on foreign aid offered in the form of loans and to refrain form drawing down on existing credit lines to fund social programs for fear of aggravating an already untenable debt burden. Strapped in perpetual financial constraints these agencies can quickly loose the momentum imparted by the first adequately financed projects which launched their operations.

If upgrading is to continue as a public sector activity it must be promoted on grounds other than social value or contribution to low cost housing alone. It must be justified on economic grounds despite the high cost of retrofitting, its significant foreign exchange component and the need to subsidize 20-30% of program cost. A radical departure from established approaches is needed to redefine a legitimate role for upgrading within the context of a coherent urban policy.

- Upgrading can neither rationalize uncontrolled and chaotic development patterns nor can it alleviate the housing shortage. It should not come to be viewed as

FLOW OF FUNDS
JORDAN UDD3 PROJECT



Notes:
1) Amounts inside rounded boxes represent net financial contribution by that source. Amounts on solid arrows represent long term financial flows. Amounts in rectangular boxes are costs of components.
2) Mortgage loans for acquisition of plots would also include about US$ 13 million in interest during construction.
3) CVDB is the Cities and Villages Development Bank.

the politically expedient instrument for legalizing violations with or without funding to make true on promises. This would negate its role as an effective mechanism to help structure growth and channel development in the desired direction.

Since resources fall far short of both need and demand there is little justification in locating upgrading activities with reference to the characteristics of potential beneficiaries only. Attempting to reach the lowest income groups and opening up avenues of home-ownership to them is a laudable objective. But the subsidies required are difficult to justify in the present economic climate. Upgrading agencies should refrain from expanding their activities in marginal fringe settlements despite the attractiveness of such locations by current project selection criteria. They should instead redirect their activities towards priority nodes and corridors, where upgrading could help shape growth in these sectors and be integrated within a planned framework coordinating housing, transport and economic activity. Viewed as a key element in urban development strategy, upgrading can be both justified and funded.

Upgrading projects would benefit from a sharper focus and simplified institutional arrangement through:

1. capitalizing on off site infrastructure investment in priority development zones to reduce total subsidy and foreign exchange costs;
2. coordinating with infrastructure construction plans in the program ming of improvements to increase cost efficiency;
3. achieving higher levels of cost recovery since the leverage offered by prospects of legalized ownership and security of tenure is higher when property values are expected to appreciate rather rapidly;
4. opening up new revenue generation possibilities transcending the limiting cost accounting approach of conventional cross subsidy schemes.

Conversely settlements to be upgraded would help mitigate the uncertainties of population build up in the early phases of new development by:

1. providing immediate users for idle infrastructure capacity;
2. generating a service population to support the construction of community facilities needed to attract investment;
3. bolstering purchasing power in the sector to provide a wide range of commercial facilities.

Infill or new development in one sector of a zone could help support upgrading in another in order to enhance the total unrealized potential of land in the zone and hence the value that could eventually be recouped by the public sector. The current emphasis by donor agencies on financing tied to program rather than projects offers new opportunities to make a case for flexibility in site selection criteria based on speed of implementation, visibility of results, and most importantly, significance of impacts on urban land management policies. When upgrading and new development act as mutually reinforcing strategies, transfers of funds from one to the other can be considered more as revenue sharing and less as outright subsidy.

The shortfall on cost recovery in upgrading has to be offset by increasing the productivity of public investment measured by its multiplier effect i.e. the private investment it manages to generate. The integration of a community into a wider economic and social structure unleashes productive capacities which transcend self improvement on a serviced site. It opens up opportunities for public/private working relationships to the mutual benefit of both the individual and the community at large. The expenditure of public funds can even be made conditional on community willingness to invest and commit time and effort to undertake specific improvements. Well structured upgrading programs in priority development corridors could achieve leverage ratios of 3 to 4 taking into account first and second round impacts.

By integrating their activities within a wider urban development framework and relating them to a structured land management policy, upgrading agencies will achieve

better targeting and have a more productive and visible impact. In the process they may also achieve higher standards at a lower cost and help generate an appropriate return on public investment in infrastructure.

ANNEX 1, TABLE 1 DETAILED PROJECT COSTS
TUNISIA THIRD URBAN DEVELOPMENT PROJECT APPRAISAL
SUMMARY COST ESTIMATES FOR HAFSIA
(US$ Thousands)

OFF-SITE INFRASTRUCTURE	Cost	% of Off-Site	Percent of Total Base Cost
1. Earthworks	8	3%	
2. Roads	54	22%	
3. Sewerage	2	1%	
4. Stormwater Drainage	14	6%	
5. Electricity	50	20%	
6. Telephone	112	45%	
7. Gas	8	3%	
Sub-Total	248	100%	2%
ONSITE UPGRADING	Cost	% of On-Site	
1. Earthworks	134	13%	
2. Roads	254	24%	
3. Water Supply	148	14%	
4. Sewerage	300	28%	
5. Stormwater Drainage	48	4%	
6. Electricity	62	6%	
7. Connections	126	12%	
Sub-Total	1,072	100%	9%
NEW CONSTRUCTION	Cost	% of New Const.	
1. Land Acquisition	786	14%	
2. Phase I Superstructure	3,020	53%	
3. Phase II Superstructure	1,840	33%	
Sub-Total	5,646	100%	46%
UPGRADING OF SIDI BAIANE & SIDI YOUNES	Cost	% of Upgrading	
1. Land Acquisition	244	5%	
2. Indemification	106	2%	
3. Demolitions	12	0%	
4. New Housing	2,756	52%	
5. Addition of Floors	208	4%	
6. Upgrading Existing Buildings	2,002	38%	
Sub-Total	5,328	100%	43%
TOTAL BASE COST	12,294		100%
CONTINGENCIES			
1. Physical Contingency	1,846		
2. Price Contingency	4,168		
Sub-Total	6,014		
TOTAL COST	18,308		

SITE CHARACTERISTICS
Site: 13.5
Population: 4,088

Source: Table 5, Annex 2, Tunisia Third Urban Development Project, Staff Appraisal Report, World Bank, Nov. 15, 1982

ANNEX 1, TABLE 2 DETAILED PROJECT COSTS
TUNISIA THIRD URBAN DEVELOPMENT PROJECT APPRAISAL
SUMMARY COST ESTIMATES FOR ETTADHAMEN DOUAR HICHER
(US$ Thousands)

OFF-SITE INFRASTRUCTURE	Cost	% of Off-Site	Percent of Total Base Cost
1. Roads	2,696	53%	
2. Sewerage	772	15%	
3. Stormwater Drainage	1,406	28%	
4. Electricity	176	3%	
Sub-Total	5,050	100%	34%
ONSITE UPGRADING	Cost	% of On-Site	
1. Roads	818	27%	
2. Water Supply	384	13%	
3. Sewerage	572	19%	
4. Stormwater Drainage	134	4%	
5. Electricity	400	13%	
6. Connections	752	25%	
Sub-Total	3,060	100%	21%
SITES AND SERVICES	Cost	% of Sites/Serv	
1. Land Acquisition	570	28%	
2. Roads	384	19%	
3. Water Supply	180	9%	
4. Sweerage	268	13%	
5. Stromwater Drainage	64	3%	
6. Electricity	96	5%	
7. Connections	508	25%	
Sub-Total	2,070	100%	14%
HOUSING CREDIT	3,036	100%	21%
COMMUNITY FACILITIES	1,000	100%	7%
EXTENSION TO HOUSING	546	100%	4%
TOTAL BASE COST	14,762		100%
CONTINGENCIES			
1. Physical Contingency	1,628		
2. Price Contingency	3,752		
Sub-Total	5,380		
TOTAL COST	20,142		

SITE CHARACTERISTICS
Site: 48 Hectares
Population: 11,150

Source: Table 4, Annex 2, Tunisia Third Urban Development Project, Staff Appraisal Report, World Bank, Nov. 15, 1982

ANNEX 1, TABLE 3 DETAILED PROJECT COSTS
JORDAN URBAN DEVELOPMENT PROJECT (UDD3)
UDD3 UPGRADING COST SUMMARY
(US$ Thousands)

	Cost	Percent of Total
Land	18,712	35%
Survey & Site Preparation	2,258	4%
Off-Site Infrastructure	752	1%
On-Site Infrastructure	9,312	18%
Community Facilities	10,382	20%
Core Housing	2,100	4%
Building Material Loans	6,945	13%
Commercial Housing & Shops	85	0%
Design & Supervision	903	2%
Project Management	1,706	3%
Total	53,155	100%

Source: Annex 8, Page 1 of 11, Jordan Staff Appraisal Report, World Bank, May 15, 1987

ANNEX 1, TABLE 4 DETAILED PROJECT COSTS
JORDAN URBAN DEVELOPMENT PROJECT (UDD3)
UDD 3 AQABA BASE COSTS
(JD Thousands)

	Cost	Percent
AL HADWAH (10 Hectares)		
Land Acquisition	390	39%
Survey and Site Prep.	10	1%
Off-Site Infrastructure	24	2%
On-Site Infrastructure	270	27%
Schools	0	0%
Core Units	0	0%
Building Loans	299	30%
Sub-Total	993	100%
SALAHADDIN (8.9 Hectares)		
Land Acquisition	65	9%
Survey and Site Prep.	10	1%
Off-Site Infrastructure	19	3%
On-Site Infrastructure	197	27%
Schools	0	0%
Core Units	238	33%
Building Loans	196	27%
Total	725	100%
SHALALLAH (NORTH) (11.4 Hectares)		
Land Acquisition	170	9%
Survey and Site Prep.	12	1%
Off-Site Infrastructure	63	3%
On-Site Infrastructure	421	22%
Schools	570	30%
Core Units	187	10%
Building Loans	455	24%
Sub-Total	1,878	100%
OLD TOWN (7.8 Hectares)		
Land Acquisition	80	6%
Survey and Site Prep.	5	0%
Off-Site Infrastructure	35	3%
On-Site Infrastructure	241	19%
Schools	570	44%
Core Units	13	1%
Building Loans	355	27%
Sub-Total	1,299	100%
TOTAL UPGRADING		
Land Acquisition	705	14%
Survey and Site Prep.	37	1%
Off-Site Infrastructure	141	3%
On-Site Infrastructure	1,129	23%
Schools	1,140	23%
Core Units	438	9%
Building Loans	1,305	27%
TOTAL	4,895	100%

Source: Annex 2, Page 1/2, World Bank Appraisal Report, May 15, 1987

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