

# مشروع التنمية المحلية LD II-P

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## INTERIM PLANNING PROCESS HANDBOOK

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Prepared by:  
Chemonics/Cairo



December 1990  
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LG5-02 (E)

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# INTRODUCTION

## PURPOSE

This document presents the future directions, processes, and characteristics of LD II-P planning and explains innovations introduced in the interim LD II-P planning process. The interim system, to be followed for fourth-year planning and possibly beyond, is meant to facilitate the transition from the present subproject-based process to the new integrated planning system. It will be the basis for LD II-P planning until this new system of governorate-wide development planning is fully in place.

The overall planning process to be used in the present interim phase is presented here as a general guide. Specific technical and sectorial guidelines will be provided for the staff of each of the main infrastructure sector directorates and departments.

## AUDIENCE

The material presented will help local administration officials and staff to perform LD II-P and other local infrastructure planning more effectively. These officials include members of the Governorate Local Development Committee (GLDC), the directors and staff of the village development, planning, and concerned service directorates and technical departments at the governorate and markaz levels, and the village executive chairmen and their staffs.

Local administration staff at each level are encouraged to discuss the content of this document with members of local popular councils. We welcome feedback from local administration officials so that we may improve future editions of this handbook.

## ORGANIZATION & SCOPE

This document is divided into an introduction and four sections. Section 1, *Where We've Been and Where We're Going*, provides background about the existing LD II-P planning system and explains why a new integrated system is needed, and what its major characteristics would be. Section 2, *Characteristics of the Interim Planning System*, deals with the innovations to be introduced in

the fourth-year LD II-P planning process (a transitional stage between the past LD II-P planning process and the future integrated planning system), while Section 3, *The Interim Planning Process*, outlines the steps involved in the transitional planning process. The roles and responsibilities of government levels and departments at each phase in the interim planning process are briefly described in Section 4, *Roles and Responsibilities in the Planning Process*.

The Appendix includes technical reference entries that explain many terms and concepts referred to in the previous sections. Such terms are highlighted in bold italics when first discussed in Sections 1 through 4, to alert readers to the fact that additional information is provided in the Appendix.

Sector-specific planning forms to be used during the interim planning period will be provided in a companion volume, *Fourth-Year LD II-P Planning Forms*.

These guidelines provide a general framework and a common process for planning the different sectorial programs and subprojects covered by the LD II-P Project; however, precise planning processes may differ from sector to sector. For instance, the rolling stock sector, which concerns only moving equipment, has special requirements outlined in its own procedural guidelines.

## **Section 1**

# **WHERE WE'VE BEEN AND WHERE WE'RE GOING**

A review of the existing planning approach and a preview of concepts to be featured in the eventual integrated approach are provided in this section as a framework for understanding the interim planning system presented in Sections 2, 3, and 4.

### **THE EXISTING PLANNING APPROACH**

The LD II-P planning system has evolved from an activity that created simple wish lists to an increasingly sophisticated process involving subproject planning forms, indicative multi-year planning forms, feasibility studies, and plans and budgets for operations and maintenance (O&M).

During the BVS Project and early in the LD II-P Project, emphasis was placed on the selection of subprojects by local units based on their perceived priority needs. The need for basic services at the local level was so great that virtually any subproject was useful. Now that many of the urgent needs have been covered, more care must be taken to prevent haphazard subproject selection, prioritization, and implementation, and to ensure the best services for the funds expended.

### **Advantages of the Existing Planning System**

The existing planning system uses a "bottom-up," decentralized approach, and deals primarily with subproject planning (micro-level planning). This system has the following advantages:

- It ensures that selected subprojects correspond to real needs of local units.
- Village councils are committed to the subprojects, since they choose them.
- Some amount of local financial and physical contribution is generated.
- Local executive and popular council members participate extensively and gain experience in selecting projects and preparing planning forms.

## **Limitations of the Existing Planning System**

Despite its advantages, the system of "bottom-up" micro-level planning has these limitations:

- Long-term development goals, sectorial standards, and level-of-service targets are not well defined.
- Subprojects are not adequately prioritized, coordinated, or integrated.
- No governorate-wide estimate is made of resources needed to achieve sectorial level-of-service targets and to provide sustained service delivery.
- The spatial dimension is lacking.
- O&M costs and other considerations are not sufficiently taken into account during the process of capital investment planning.
- Coordination between the LD II-P capital investment plan and the O&M plan is nonexistent.

The result is lack of a long-range planning perspective, coordination, and integration among subprojects. This has often led to the implementation of small, low-priority subprojects, which are not cost-effective. Some subprojects have been inadequately conceived, designed and/or implemented. The lack of qualified manpower, management resources, and sources of funding has severely hampered the construction, implementation, operation, and overall service delivery of many subprojects.

## **FUTURE INTEGRATED PLANNING APPROACH**

Such problems point out the need for a more comprehensive and integrated planning system for infrastructure development in provincial Egypt. This system would integrate sectorial planning, physical planning, and subproject planning within the framework of a governorate-wide development plan. It would retain many of the "bottom-up" and participatory features of the existing system, and would combine them with "top-down" features and multilevel coordination to ensure breadth and depth in planning. Some of the features of this integrated system would include:

- A governorate-wide *socioeconomic development plan*, consistent with the five-year national development plan, that provides a framework for the development and integration of sectorial and physical plans.

- *Sectorial plans* for major infrastructure and service sectors that would provide a basis for all sectorial programs funded from various sources.
- *Physical plans* that show both the existing and projected physical situation for a specific geographic area.
- An information system capable of providing adequate socioeconomic and physical information for planning and decision-making.
- Coordination of capital investment planning and O&M planning.
- A *cost recovery* plan calling for greater contribution by users (in the form of charges) to ensure adequate continued financing of O&M and capital replacement costs.
- The establishment of local organizations to manage O&M of water and wastewater projects.
- Further integration of the LD II-P planning process with the GOE planning process.

## **Governorate Development Plans**

Through the preparation of a *governorate socioeconomic development plan*, clear development goals would be set to meet priority needs, solve significant problems, and develop the economic potential of the governorate. The governorate development plan would establish priorities, show interrelationships among sectors, and identify areas within the governorate needing special attention, either because of needs or potentials. Strategies for geographic and demographic distribution of services and subregional priorities would be identified that could help reduce social and economic disparities, ensure the efficient use of scarce resources, and encourage a spatially balanced growth.

The inclusion of such information in the governorate development plan would provide a framework for the coordination and integration of sectorial development plans. Additionally, it would provide a proper foundation for detailed programs, guidelines for investment allocation, and criteria for project selection at the markaz and local levels.

Governorate socioeconomic development plans provide the overall objectives and policy framework for the development of sectorial and physical plans, which can be considered their components and elaborations. Governorate development plans (and their component sectorial and physical plans) should be consistent with the goals, policies, and priorities of the existing five-year national development plan. A well-prepared

governorate plan can provide input from the governorate for the next five-year national plan.

Please refer to the Appendix for more information about *governorate socioeconomic development plans*.

## **Sectorial Planning**

In the future, *sectorial planning* will play a central role in LD II-P and, it is hoped, in other infrastructure planning activities in rural governorates. This process guides the development of a particular service or infrastructure sector<sup>1</sup>, such as water or roads, through the preparation and implementation of plans that consider specific sector needs, goals, and technical requirements. The steps in this process include assessing existing service delivery, setting sector objectives and targets, identifying and estimating resources, and establishing investment priority criteria.

Sectorial planning can be conducted at the national, regional, governorate, markaz, or local level, and involves intersectorial efforts for coordinating and harmonizing the objectives and targets of different sectors.

Governorate-level sectorial plans should be consistent with relevant sectorial sections of the existing five-year national development plan. Ideally, well-prepared governorate-level sectorial plans will provide input for future five-year development plans.

Although simple sectorial plans have been developed by technical directorates in some governorates, the preparation of a more comprehensive *sectorial strategic plan* usually requires the assistance of an outside consultant. This is because strategic plans, which may span a period of 5 to 25 years, require a great deal of time, effort, and expertise to prepare.

The investment of time and resources in sectorial planning is worthwhile, however, when its advantages are considered. Sectorial planning provides:

- An overall purpose and direction for the future development of a sector
- A clear assessment of the current situation in a given sector

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<sup>1</sup> A sector is a subdivision of a whole made on a functional basis. In the context of development planning, the economy is divided into agricultural, industrial, transport and communications, public utilities, housing, and other sectors for the purpose of analyses and planning. Subdivisions of the economy can be even narrower, depending on the purpose. In the context of the LD II-P Project, our discussion centers on the potable water, wastewater, roads, buildings, and rolling stock sectors.

- Sector service standards
- Targets for expanded sector level-of-service
- An overall estimate of financial, human, and physical resources needed to achieve sector targets and service delivery
- An estimate of recurrent costs of existing and planned services, and ways in which these costs can be recovered on a sustainable basis, including recommended rate structures
- Geographic priorities for providing a service based on urgency of need
- Identification of appropriate, cost-effective technologies for use in different circumstances
- Investment criteria for selecting and prioritizing subprojects within the sector
- Strategic, medium-term actions and major subprojects needed to meet urgent needs at minimum cost
- A framework for the coordination and integration of subprojects within the sector

Sectorial plans provide a common foundation on which local infrastructure development can be based, whether financed by the LD II-P Project, Bab III, or other sources of funding. Such plans would be coordinated one with another within the framework of the overall governorate development and physical plans. Individual subprojects would be based on sectorial priorities, integrated with each other within the framework of a sectorial plan.

Please refer to the Appendix for specific information about the characteristics of sectorial plans, the parties involved, and the specific steps to be performed in their development.

## **Physical Planning**

Because it is multi-sectorial, physical planning would be a valuable complement to sectorial planning in the integrated system. A physical plan shows the existing physical situation of a specific area, based on available population, building, infrastructure and other resource information. It then projects, in stages, future spatial scenarios based on various anticipated policies and programs, so that a preferred development alternative may be chosen.

The resulting physical plan provides several benefits. It enables one to visualize the current and future relationships between an area's population and its

needed services. It shows infrastructures for all sectors in a graphic manner, providing a view of how these services interrelate and influence each other—such as the need for electricity at water pumping stations. Finally, it provides a means to compare the form, needs, and implications of different future distributions of people and infrastructure in a settlement.

### **Improved Information Systems**

Developing meaningful regional, subregional, sectorial, and physical plans requires accurate information about the population being served, their current and projected needs, and the current levels of service being delivered. A reliable information system can provide accurate assessments of current service delivery, and physical information on the location, capacities, age, and condition of road, water, waste treatment, and other infrastructure systems. Decision-makers and planners can use this information to obtain a clear picture of the demographic, social, economic, and physical environment of the governorate.

In addition to delineating the existing situation, a well-planned and maintained information system supports the collection and analysis of data needed to monitor and assess progress toward goals set in regional, subregional, and sectorial plans.

### **Capital Investment & Recurrent Cost Financing**

The proposed planning system would coordinate capital investments and recurrent costs by taking into account both initial capital outlays and projected O&M expenditures. In other words, O&M costs for existing and planned infrastructure projects would be estimated during the planning phase, and sources for financing these costs would be investigated.

Under the best circumstances, user charges would provide financing not only for O&M costs, but also for capital depreciation. This would allow for future expansion, renovation, and replacement of physical plants and/or their major components.

### **Local Organizations for Subproject Management**

Future planning will, ideally, involve organizations established at the local level to manage the operation, maintenance, and repair of water and wastewater systems and projects. Also, it is hoped that the GOE will establish regional water and wastewater authorities in a greater number of governorates.

### **Integration of LD II-P & GOE Planning**

One goal for future planning is that the LD II-P and the GOE Bab III planning processes more closely resemble each other, eventually merging. This requires that LD II-P actively involve departments and councils that participate in the GOE process.

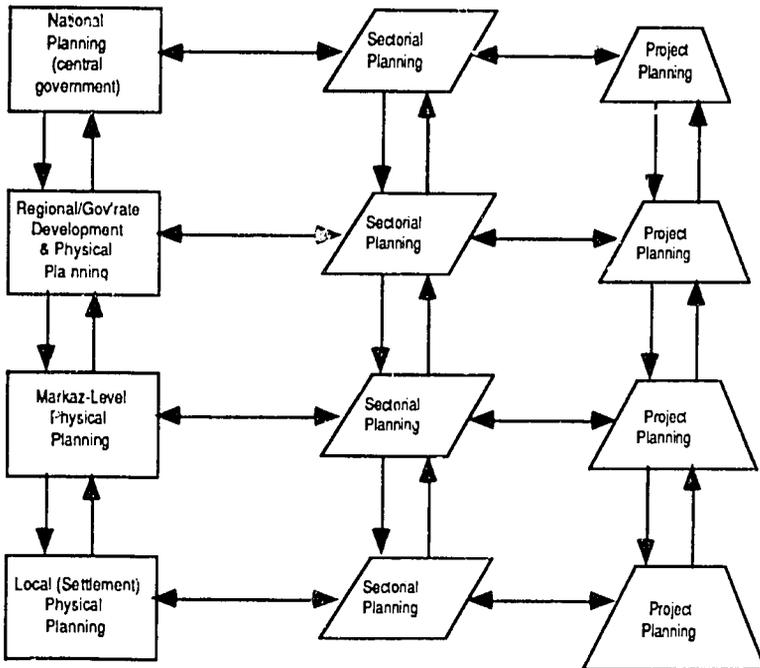
GOE planners, in turn, would be encouraged to use participatory approaches and planning methods introduced by the LD II-P Project. To the extent permissible by law, marakez and local councils would be involved more fully in the Bab III planning process.

The reason for this close integration between the LD II-P and the GOE planning process is twofold: 1) to encourage the use of some of the features and methods of the LD II-P planning process, even after the end of the project, and 2) to ensure that programs and projects funded by LD II-P and GOE Bab III complement and support rather than duplicate or conflict with each other.

**RELATIONSHIPS AMONG DIFFERENT TYPES OF PLANNING**

Different types of planning—national, regional, governorate-wide, sectorial, physical, and subproject—should not be conducted in isolation, but should interrelate with and complement one another. As shown in the diagram on the following page, each type of planning relates to other types both vertically, from one administrative or geographic level to another, and horizontally across functional categories.

**Relationships Among Different Types of Planning**



Adapted from World Bank 23422 (Colin M.F. Bruce, p. 7)

Each type of planning has its advantages and limitations, and a particular role to play within the whole scheme. However, various types of planning have different degrees of importance according to the geographic and/or administrative level.

Macro-planning, especially that of a socioeconomic nature, figures prominently at the national/regional/governorate levels, but becomes less important at lower geographic and administration levels. Physical planning remains important at all levels, but becomes more detailed at the markaz/local levels. Sectorial planning can be done at all levels.

Project planning is relatively more important at the local unit and markaz levels, and less important at the national, regional, and governorate levels. At the governorate levels only those projects considered large and complex, or those that serve two or more marakez, should be planned in detail. Project planning at the markaz level should focus on those projects that serve two or more local units, those which are located in the markaz seat but serve surrounding villages, and those which are beyond the capacity of the village to plan. All remaining projects should be planned at or actively involve the local unit level.

National and regional development plans provide the overall goals and policies, as well as a general framework for the development of governorate socioeconomic development plans and sectorial plans. In turn, well-prepared governorate and sectorial plans can provide input for the preparation of the next national five-year development plan.

The governorate development plan and physical plans can provide guidance for the preparation of governorate sectorial plans and a framework for their coordination and harmonization. In turn, these sectorial plans can provide the necessary sectorial information for the elaboration of the governorate development and physical plans.

Comprehensive plans, such as governorate development, sectorial, and physical plans, provide guidance in the form of goals, targets, strategies, and priorities for the planning and development of subprojects. Subproject planning, in turn, elaborates, operationalizes, and sometimes modifies the more comprehensive plans, making them more precise.

## Section 2

# CHARACTERISTICS OF THE INTERIM PLANNING SYSTEM

The new integrated planning system outlined in Section 1 will take time to develop and insititutionalize. Meanwhile, a transitional planning process is needed to enable the beneficiary governorates to continue to plan and implement infrastructure programs and subprojects. This section presents the interim planning system to be used until the integrated planning system is fully implemer.ted.

The interim planning system is intended to help governorates move from the present LD II-P planning system toward the integrated planning system, beginning in the fourth planning cycle. A major characteristic of this transitional system is the introduction of sectorial planning forms, which focus planning on sector requirements. Involvement of local levels in filling out these forms (the "bottom up" approach) will ensure their later participation in development of governorate-wide sectorial plans.

The relationship of the interim system to the existing and future planning systems is demonstrated below:



The interim planning system builds on the existing "bottom-up" system and includes innovations that will improve local infrastructure planning and help move it in new directions. These innovations include:

- Preparation of a *sectorial strategy statement* for the water, wastewater, and roads infrastructure sectors. This is required from all governorates: those with existing sectorial plans, those who intend to prepare one or more plans, and those with no immediate intention of preparing plans.
- Preparation of at least one *sectorial plan* based on the strategy statement, or the updating of an

existing plan, for the water, wastewater, and/or roads sectors.

- Preparation of pilot physical planning studies.
- Simple needs assessments, developed at the markaz and/or governorate levels for the roads and rolling stock sectors, and at the local level for other major service sectors such as buildings, water, and wastewater.
- Sector-specific subproject and multi-year planning forms.
- *Cost recovery* and retention schemes developed by governorates and localities.
- Greater integration of LD II-P and GOE planning processes, achieved by increasing the involvement of planning and technical departments and markaz popular councils.

Each of these characteristics is described below. Additional information is provided for highlighted terms in the Appendix.

## **SECTORIAL APPROACH**

The major innovation in fourth-year planning is the new emphasis on the sectorial approach. This includes the introduction of *sectorial strategy statements*, *sectorial plans*, and sector-specific planning forms.

## **Sectorial Strategy Statement**

The *sectorial strategy statement* is prepared by the governorate technical directorate responsible for the sector (that is, the housing or roads directorate) and approved by the GLDC. It is meant to 1) provide guidance to the consultant team engaged to prepare the *sectorial plan* and 2) provide policy guidance and a planning framework to marakez and local units for preparing their subproject plans until the sectorial plan is completed.

As a guidance tool for consultants, the strategy statement should indicate the goals, aspirations, strategies, and preferences that the governorate authorities would like to see reflected in the sectorial plan. It should identify existing and potential sources of funding, and provide a summary of the existing sector conditions and problems, based on information available to governorate authorities.

In providing sector policy guidance to the marakez and local units, the strategy statement should address such issues as the desired service standards and level-of-service targets, the criteria for *prioritizing* and selecting subprojects within the sector, the geographic areas and

localities to receive special attention, the strategic objectives to be achieved in the medium-term, and the policy recommendations for the sector.

The strategy statement is brief (about three to five pages), and is based on information already available or easily obtainable at the governorate level. The specific content of a *sectorial strategic statement* is described in the Appendix.

### **Preparation of Sectorial Plans**

For the interim planning period, each governorate should set funds aside from the LD II-P block grant allocation to develop or update at least one sectorial plan for the water, wastewater, and/or roads sectors. Failure to do so will limit governorates to selecting only completion subprojects and new subprojects with completed and acceptable feasibility studies.

In the fourth planning cycle governorates should use these funds to hire consultants who will conduct a needs assessment study, including data collection for at least one of the basic sectors. These funds may also be used for updating, translating, and disseminating existing sectorial plans and studies. Needs assessment analysis and preparation of a sectorial plan may be started in the fourth planning cycle and completed in the fifth planning cycle.

In addition, the fourth-year planning process requires that a simple assessment of existing needs be prepared by the concerned technical departments at the markaz level for the road sector and at the governorate level for the rolling stock sector. Simple needs assessments for other sectors are conducted at the village level as part of the subproject planning process.

### **Sector-Specific Subproject Planning**

In the past, subprojects were frequently chosen and planned in a hurried fashion, with local units moving directly from the identification of needs to the completion of planning forms. The interim planning system encourages a systematic process of *subproject formulation*, including needs assessment, preliminary study, *prioritization*, *formulation*, and *appraisal*. Each subproject for the water, wastewater, or roads sector should be derived from and/or consistent with a sectorial plan, or a sectorial strategy statement if a sectorial plan has not yet been completed. This will ensure that the subproject is identified, selected, and prepared in congruence with the policies, strategies and priorities set forth in the governorate sectorial plan or strategy statement. Care should also be taken to ensure that the subproject conforms with eligibility criteria and priorities set forth in the *Guidelines for Fourth-Year LD II-P Planning*.

Major subprojects and infrastructure systems may already be identified in a sectorial plan. In such cases, subproject planning should be used to examine the feasibility of these subprojects more closely. If deemed feasible, the subproject planning process can then be used to develop the subproject in greater detail.

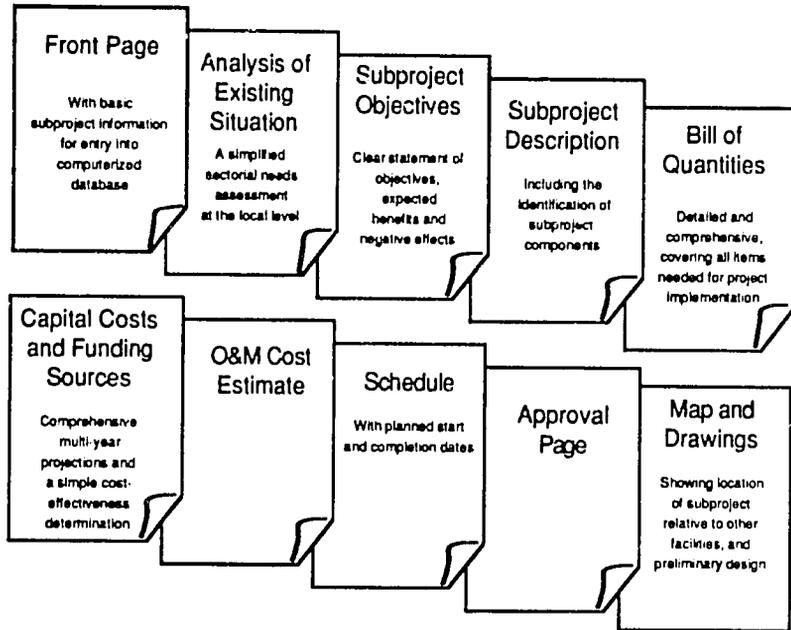
As in the past, subprojects estimated to cost LE 500,000 or more, or those of a complex or pilot nature, require a *feasibility study*, prepared with the assistance of competent consultants. Smaller scale subprojects also need to be *appraised* by local administration staff to determine if they are viable, worthwhile, and likely to be successful in providing the intended service. The checklist for subproject plan review, presented in the Fourth-Year LD II-P Planning Forms, may be used for this purpose.

Sector-specific subproject planning forms should be finalized after subproject formulation and appraisal. These new forms differ to some extent from sector to sector and call for more precise technical information than the previous generic forms. Specifically, they:

- Allow for the collection of sufficient information on subprojects, to be incorporated in the central and governorate data bases.
- Encourage local administrations to follow a logical, disciplined approach to subproject formulation and development.
- Allow for technical and financial reviews of subprojects to appraise their technical soundness and viability, and their cost-effectiveness.
- Facilitate subsequent stages of subproject design, contracting, implementation, and monitoring.

The subproject planning forms, shown schematically in the diagram on the facing page, are structured to facilitate logical step-by-step *subproject formulation*.

Copies of the subproject planning forms for the various sectors are provided in a companion volume entitled *Fourth-Year LD II-P Planning Forms*.



All parts of the subproject planning form should be filled out completely, and particular care should be taken concerning the following:

- Subproject objectives, which should be stated clearly and precisely so the appropriate activities and resources needed to achieve them can be determined (see *subproject formulation*). This will also enable persons responsible for subproject review and appraisal to judge if a project, as conceived, is likely to achieve its intended objectives.
- Capital cost estimation, which should include all items necessary to implement a subproject. These costs should not be underestimated: inflation factors and a contingency allowance should be included. Costs should be projected on a multi-year basis if the subproject will take more than one year to implement.
- Subproject O&M cost estimates, which allow local administrations to determine if such costs are reasonable, and to make provisions to find sources of funding. Estimation of O&M costs for different technical options also allows comparison of technical options from a cost-effectiveness viewpoint.
- Careful preparation of preliminary subproject drawings, which can provide much of the information needed for technical review, and can

facilitate the subsequent preparation of specifications, tendering, and design documents.

When formulating a subproject, care should be taken to ensure that various subproject components are consistent with each other. For example, in the case of potable water subprojects the capacities of the wells, pumps, and network should match.

If a physical plan does not yet exist, a map of the village unit should be used as tool for planning the location of a subproject in relation to other infrastructure, economic, and social facilities.

Because it takes time to prepare subprojects well, and because local administrators are often asked to submit subproject plans on short notice, it is recommended that governorates, marakez, and local units prepare subproject plans throughout the year. This will result in "on-the-shelf" projects that can be submitted as LD II-P and other funds become available. Such projects can also be provided to consultants for possible inclusion in sectorial plans.

### **Multi-year Approach to Planning**

Previous LD II-P planning in some governorates has used a short, one-year time horizon. Multi-year planning, introduced during the LD II-P third planning cycle, is a crucial part of infrastructure planning because reaching sectorial objectives and implementing individual subprojects often takes a number of years. Even if viable and worthwhile, all subprojects required by a local unit cannot be started in one year because of resource limitations. In some cases, the implementation of certain subprojects is a prerequisite for the implementation of others, requiring that subprojects be sequenced over a period of several years.

Sectorial and physical planning are done on a multi-year basis. Similarly, subprojects expected to take more than one year to implement should be planned on a multi-year basis. Careful multi-year planning enables local governments to estimate the resources needed to implement a sectorial program spanning a number of years, and thus to plan timely steps for mobilizing these resources. Local units with well-prepared multi-year plans have a better chance of securing funding from the GOE, USAID, and other sources.

During the interim period, marakez and local units are asked to prepare or update simple indicative multi-year plans for infrastructure development programs covering the 1990-1992 period. Information provided for the first year of the plan should be more detailed than that for the other years. Multi-year plans should be revised annually to take into account changes in circumstances and available information.

Governorates that have already completed multi-year planning forms at the local unit level during the third LD II-P planning cycle need only review and update these forms using the sector approach described below.

Multi-year planning forms should be prepared at the village and city level with subprojects grouped by sector. Thus one page of the form will be devoted to each sector—a page for the environmental engineering sector, a page for water, and so on—and one additional page will be devoted, if necessary, to other miscellaneous subprojects. These forms will be aggregated, along with the markaz-level central subprojects, on a markaz-wide multi-year planning form.

Both local unit and markaz multi-year planning forms should be provided to consultants preparing sectorial plans, as part of the information on locally-expressed needs within the sector.

The multi-year planning form appears in the volume, Fourth-Year LD II-P Planning Forms.

## **PILOT PHYSICAL PLANNING STUDIES**

As in the third year of the LD II-P project, each governorate may request LD II-P funds for a *physical planning* study of a rural or urban settlement. The governorate capital city is excluded, however, and only one study per governorate is allowed. This is necessary if the technical assistance contractor team is to extend adequate technical assistance.

Governorates considering a physical planning study are advised to consult Public Law No. 3 of 1982, which governs physical planning. Particular attention should be paid to its provision for the formation and/or activation of Governorate Physical Planning Committees (GPPCs).

LD II-P funds for a physical study may be used to employ consultants to do the entire study, to do specific portions of the study, or to extend technical assistance to local government staff in their preparation of the study. In any case, the LD II-P planning application form must specify in detail how the requested funds will be used.

Please refer to the explanation about physical planning in Section 1, *Where We've Been and Where We're Going*, and see the entry on *physical planning* in the Appendix for more information.

**PILOT 'COST  
RECOVERY  
SCHEMES**

Governorates and localities should begin developing user-funded pilot *cost recovery* proposals for major services as part of the interim planning process. These proposals, which should address retention of fees at the local level, will be reviewed and evaluated by the PLDC.

Refer to the entry for *cost recovery* in the Appendix for more information about this important topic.

**INTEGRATION OF  
LD II-P & GOE  
PLANNING**

The delayed start of the fourth-year planning process provides an opportunity for governorates to synchronize the LD II-P and the Bab III planning processes. This will allow LD II-P and Bab III plans to be prepared in close coordination, resulting in more complementary, mutually supportive plans. Additional involvement and reviews, as outlined below, will help to bring the LD II-P and the GOE planning processes closer together, and to better coordinate LD II-P plans with Bab III plans and budget.

**Planning  
Department  
Involvement**

Governorate and markaz planning departments, which are responsible for coordinating the Bab III capital investment program for local projects, should play a more important role in the LD II-P planning process, including the review of plans and subprojects. These departments are well placed to help in the coordination between programs and projects funded from different sources, because they possess information on various local development programs.

**Technical  
Department  
Involvement**

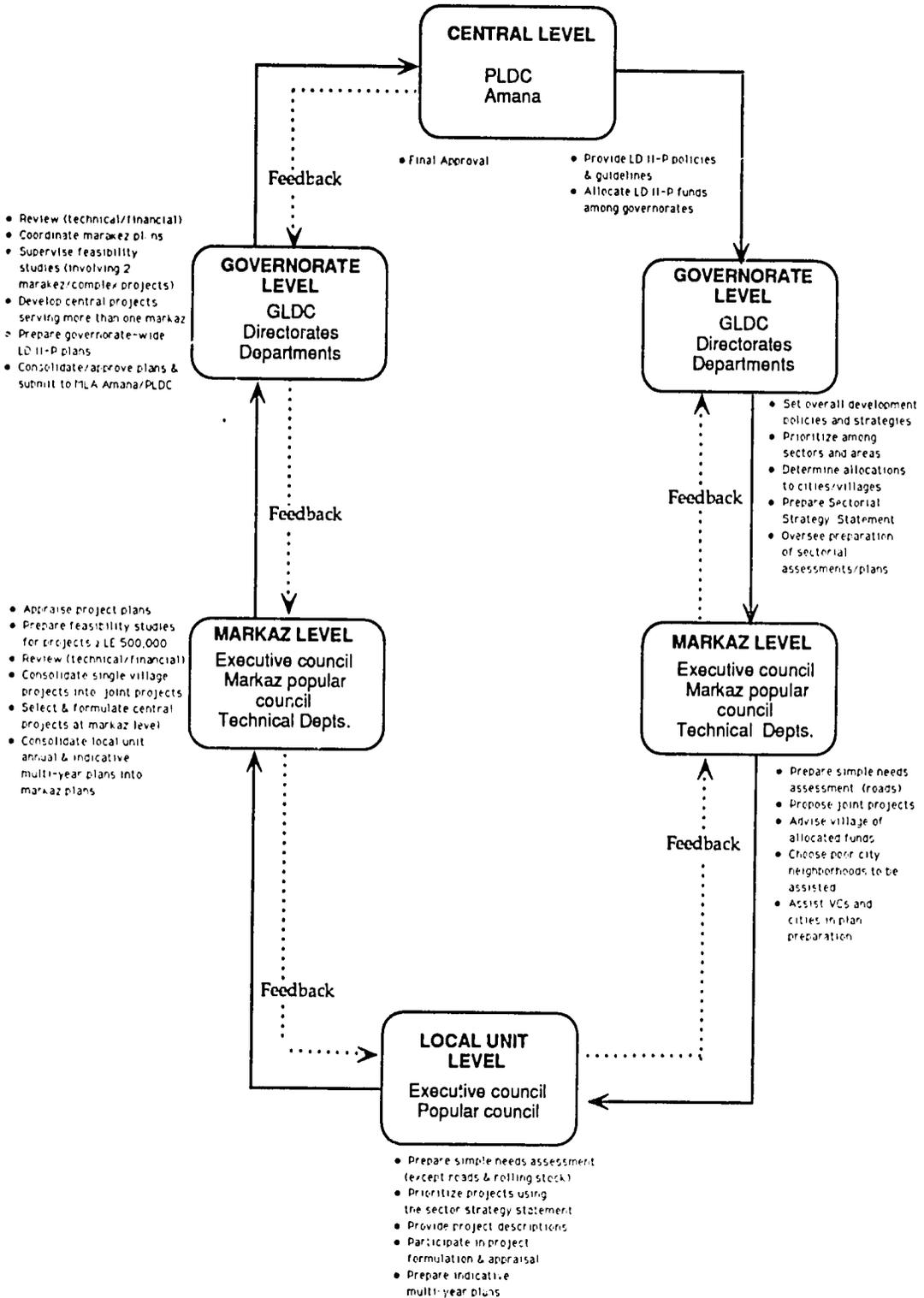
The governorate and markaz technical departments should ensure the coordination and integration of subprojects within their sector during the LD II-P transitional planning period. Technical departments should continue reviewing subprojects to ensure technical soundness and reasonableness of costs. They should also assist marakez and local units during subproject formulation, design, and cost estimation. Coordination between technical departments will ensure that subprojects in different sectors complement rather than conflict with each other.

**Markaz Popular  
Council  
Involvement**

The markaz popular council should be consulted about subprojects benefiting more than one local unit as in the case of Bab III local projects. It should approve markaz-wide annual and multi-year plans covering central and local unit LD II-P subprojects.



## The Interim Planning Process for LD II-P Subprojects



### Section 3

## THE INTERIM PLANNING PROCESS

As discussed in Section 2, the interim planning system combines "top down" and "bottom up" planning processes. Its aim is to apply the broader perspective and greater technical and professional capabilities of the central, governorate, and markaz levels to the expression of needs and knowledge of local conditions provided by local units.

Within the policy guidance and planning framework provided by the governorate, local units will assess their needs, identify and prioritize subprojects, and formulate these subprojects on sector-specific forms with assistance of markaz and governorate staff. Markaz and governorate staff will ensure that subprojects are consistent with the governorate and sectorial policy statements, and with any existing sectorial and physical plans.

The diagram on the facing page shows how the planning process involves all levels of government, beginning with the policy-setting activities at the central level. Essentially, the interim planning process can be divided into four general phases:

- Goal & policy formulation and needs assessment
- Subproject development and appraisal
- Review and consolidation
- Final approval

The roles of the various levels of government are described in more detail in Section 4, *Roles and Responsibilities in the Planning Process*.

An overview of the interim planning process is provided on the following pages.

**GOAL & POLICY  
FORMULATION  
AND NEEDS  
ASSESSMENT**

During this phase, overall goals, policies, objectives, and targets are established for the LD II-P project as a whole, for the governorates, and for individual sectors within each governorate, taking into account past plan and implementation experience. Also, the existing situation and needs are determined at the appropriate levels.

**Central Level**

The Provincial Local Development Committee (PLDC) sets overall policies and approves guidelines for the LD II-P project, and allocates LD II-P funds among governorates.

**Governorate  
Level**

The Governorate Local Development Committee (GLDC) clarifies the governorate's development goals and strategies in a brief statement of goals and policies. It reviews and subsequently approves the *sectorial strategy statement* prepared for each major sector by the concerned technical directorate. Relative priorities among infrastructure sectors may be set in an indicative fashion if desired.

The GLDC allocates LD II-P funds among local units and determines the criteria for selecting "poor neighborhoods" as grant recipients in the rural cities.<sup>2</sup> These decisions are communicated to the marakez (and through them to the villages), in a letter which specifies the LD II-P fund allocation, and the criteria for choosing poor city neighborhoods for assistance. Relevant sections of the existing sectorial plans are sent to the marakez, and through them to the local units.

The governorate housing and roads service directorates may sponsor the preparation of sectorial assessment studies by consultants, subject to the approval of the GLDC and the PLDC. In addition, a governorate-wide needs assessment should be developed for the rolling stock sector.

**Markaz Level**

A simple needs assessment and inventory at the markaz level is required for the roads sector, using the markaz level needs assessment and inventory forms provided in the volume entitled *Fourth-Year LD II-P Planning Forms*.

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<sup>2</sup>In the past governorates have usually allocated LD II-P funds among local units on the basis of population. The sectorial approach to planning favors allocations which are based on needs, as some localities or areas may have more urgent needs than others. Also, it may be more costly to provide a given level-of-service to one area than to another because of local conditions. Under the LD II-P project guidelines, it is quite acceptable for the allocation for a specific local unit to be larger than one given to another unit of the same size. Likewise, a specific local unit may be targeted for priority treatment in terms of timing of project implementation.

The water, wastewater, and buildings sectors will rely on assessments of needs at the village level performed as part of the subproject planning process. Sector-specific guidelines for conducting these assessments are provided in *Fourth-Year LD II-P Planning Forms*.

## **SUBPROJECT DEVELOPMENT & APPRAISAL**

This phase involves the identification, prioritization, formulation, and appraisal of subprojects, based on the priority criteria provided in the sectorial strategy statement or in existing sectorial plans, and taking into account past experience with subproject preparation and implementation.

### **Subproject Identification & Selection**

Village executive staff and popular councils identify single village subprojects according to policy guidance provided in sectorial strategy statements or existing sectorial/physical plans and completed needs assessments. Final prioritization and selection of subprojects should be made by the popular council, taking into account recommendations of the executive council. Subprojects selected should be included on the multi-year planning form.<sup>3</sup>

Similarly, cities should identify and select poor neighborhood projects, and markaz should identify and select central subprojects, which are located in the markaz seat but serve surrounding villages.

### **Subproject Formulation**

Subproject formulation and preparation of planning forms for single village subprojects should be done collaboratively by the village executive council chairman, his staff, and the markaz and governorate executive staff. Markaz and, if necessary, governorate technical staff should address the technical and financial aspects of subproject formulation (technology to be used, preliminary design, size, *cost estimation*).

Primary responsibility for joint subprojects lies with the markaz when the subproject serves two or more villages within the markaz. Although they are formulated at the markaz level, executive and popular councils from concerned villages should be involved throughout this process. Central subprojects located in the markaz capital city are also the responsibility of the markaz. However, when the subproject is located in the governorate seat or serves two or more marakez, the governorate is the responsible party.

Selection and formulation of poor neighborhood city projects is performed by the concerned cities' executive

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<sup>3</sup>Although some subprojects may take only one year to implement, they should still be entered on the multi-year planning forms under the year in which they are scheduled to be implemented.

concerned markaz and, if needed, governorate technical departments.

After formulation and appraisal, finalized subproject planning forms are signed by the village popular and executive council chairmen, and copies are sent to the markaz, together with the village multi-year planning forms.

### **Subproject Appraisal**

Complex subprojects (such as wastewater subprojects and large-scale water systems), or those estimated to cost over LE 500,000, require a *feasibility study*. This study is to be done during the planning year in question, with the actual subproject execution scheduled for subsequent years. Feasibility studies should be performed by qualified consulting firms and managed by the concerned technical department at the markaz or governorate level, in collaboration with the executive staff of the concerned village unit(s).

Smaller-scale subprojects require only a simple *appraisal* by the concerned markaz technical department or governorate directorate, in collaboration with the local unit executive staff, using the checklist for subproject plan review.

### **REVIEW & CONSOLIDATION**

All subprojects must be reviewed for technical and financial soundness, and for compliance with governorate/sectorial strategy and LD II-P guidelines. This, along with subproject coordination and plan consolidation, is done at both the markaz and governorate levels.

### **Markaz Level**

Markaz technical departments review the subproject planning forms submitted by village units to ensure 1) conformity with sectorial plans or strategy statements, and any existing physical plan, 2) technical feasibility and correct cost estimates, and 3) coordination among subprojects. When appropriate, markaz officials should suggest the consolidation of proposed single village subprojects into joint subprojects.

After review, plans should be consolidated on markaz-wide summary forms and approved by the markaz executive and popular councils.

Once approved, the markaz village development department sends the markaz-wide planning and needs assessment forms; the subproject planning forms for all single-village, multi-village, poor neighborhood and markaz-level central subprojects; and any prepared feasibility studies to the governorate village development department.

**Governorate Level**

The forms sent from the marakez should pass through a technical review committee, composed of representatives from the governorate village development department, the planning department, and the concerned technical directorate(s) to ensure the following:

- Consistency with sectorial strategy statements and/or existing sectorial plans
- Coordination, consistency, and complementarity of proposed LD II-P subprojects with those financed from other sources of funding (such as Bab III, multi-lateral, or bilateral donors)
- Technical soundness of proposed subprojects
- Accuracy of capital and O&M cost estimates, and overall cost-effectiveness
- Proper sequencing and prioritization rationale for subprojects included in the indicative multi-year planning forms

Governorate technical directorates should ensure intersectorial coordination of subprojects by consulting with other directorates. They may modify or reject proposed subprojects on technical grounds.

After review and, if necessary, modification by the technical review committee, the governorate village development department consolidates subprojects on the governorate-wide planning form and completes the governorate plan summary form.

This form is submitted to the GLDC along with recommendations for possible changes made by the concerned executive departments. The GLDC reviews and approves the plans, making modifications as needed.

**Computerize Subproject Information**

After GLDC approval, information about the subprojects is entered promptly into a computerized database to permit subsequent monitoring of plan implementation.

**FINA APPROVAL**

The governorate submits the following documents to the PLDC, through the Local Administration Amana, under cover of a memorandum of submission:

- Prepared sector assessments
- Sectorial strategy statements
- Cost recovery plans for at least one project in both the water and wastewater sectors.

- Certificates of deposit for the five percent MOP matching contribution and the five percent matching governorate contribution
- Aggregate governorate-wide planning form and the governorate plan summary form
- Indicative multi-year planning forms for local units, cities, and marakez
- Subproject planning forms
- Feasibility studies or other supporting documentation

The following conditions must also be met at the time of plan submission:

- The allocation of LD II-P capital investment funds for data collection/needs assessment/technical studies toward the development of a strategic five-year capital investment plan for at least one of the three basic service sectors
- Completion and prior submission of the survey of inoperational projects
- Entry of project summary data from planning forms into a computerized database at the governorate
- Entry of the previous year's LD II-P project data in the new QPR format
- Allocation of funds for construction supervision contracts for all proposed projects estimated to cost LE 500,000 or more
- Preparation of construction supervision plans for all proposed projects estimated at between LE 200,000 and LE 500,000.
- All previous LD II-P projects started
- Rates of expenditure equal to or better than 100 percent for the LD II-P first year, 80 percent for the second year, and 50 percent for the third year
- Prior submission of plan and budget for 1990/91 Local Administration Bab II funds
- Prior submission of final report on 1989/90 Local Administration Bab II expenditures

**Central Review  
& Approval**

The PLDC reviews and approves governorate LD II-P annual plans. Subprojects may be rejected if considered contrary to the LD II-P agreement or guidelines. Additional studies may be requested for unresolved technical questions, or disbursement of funds may be withheld until the governorate meets certain preconditions included in the *Guidelines for Fourth-Year LD II-P Planning*.

**Return of  
Approved Plans**

After PLDC approval, the governorate informs marakez and villages of any modifications made during the plan review process.

At the governorate level, subproject information is updated as necessary in the computerized database to reflect PLDC decisions.

**Plan  
Amendments**

Good planning reduces the need for plan and subproject amendment during the course of a planning year. However, when such amendments are necessary, governorates should follow carefully the procedures outlined in Section 3 of the *Guidelines for Fourth-Year LD II-P Planning*. Special forms for plan amendments are provided in the companion volume entitled *LD II-P Fourth-Year Planning Forms*.

**MONITORING &  
EVALUATION  
INPUT TO  
PLANNING**

A close relationship should exist between monitoring and evaluation (M&E) and planning. Information generated by the monitoring system and by the review and evaluation processes should be used for replanning subprojects as needed, and in planning future programs and subprojects.

## *Roles and Responsibilities in the Interim Planning Process*

	Goal & Policy Formulation Needs Assessment	Subproject Development & Appraisal	Review & Consolidation	Final Approval
<b>Central Level</b>  PLDC Amana	<ul style="list-style-type: none"> <li>• Set GOE policies for LD II-P</li> <li>• Review/approve LD II-P guidelines</li> <li>• Allocate LD II-P funds among governorates</li> <li>• Participate in orientations</li> </ul>			<ul style="list-style-type: none"> <li>• Review &amp; approve/reject governorate-wide plans</li> <li>• Inform governorates of plan status after PLDC review</li> <li>• Monitor implementation of approved plans</li> </ul>
<b>Governorate Level</b>  GLDC Technical Rev. Comm. Village Devel. Dept. Planning Dept. Service Directorates IS & Statistical Dept.	<ul style="list-style-type: none"> <li>• Set and implement governorate policies, goals, strategies, priorities</li> <li>• Allocate funds to local units</li> <li>• Prepare sectorial strategy statements &amp; assessments</li> <li>• Ensure governorate coordination and consistency with national LD II-P goals/objectives</li> <li>• Prepare rolling stock needs assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Select gov'te central projects</li> <li>• Select IS projects</li> <li>• Oversee major feasibility studies</li> <li>• Assist marakez/villages with technical aspects of large-scale projects</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure intersectorial coordination</li> <li>• Review/amend planning forms &amp; consolidate for submission to Amana/PLDC</li> <li>• Ensure plan consistency with other plans &amp; projects</li> <li>• Ensure technical &amp; financial soundness of projects</li> <li>• Enter plan information in computerized database</li> </ul>	<ul style="list-style-type: none"> <li>• Notify marakez of final plan approval, modification, or rejection</li> </ul>
<b>Markaz Level</b>  Executive Council Popular Council Village Devel. Dept. Planning Dept. Engineering & Roads Depts.	<ul style="list-style-type: none"> <li>• Set markaz development goals &amp; priorities</li> <li>• Transmit governorate policies, procedures, &amp; information about allocations to local units</li> <li>• Sponsor, prepare, &amp; approve needs assessment/inventory for roads</li> </ul>	<ul style="list-style-type: none"> <li>• Select &amp; formulate central projects located in markaz city</li> <li>• Suggest joint projects within markaz</li> <li>• Choose poor city neighborhoods to receive assistance</li> <li>• Sponsor/review feasibility studies for large-scale projects</li> <li>• Appraise smaller-scale projects</li> </ul>	<ul style="list-style-type: none"> <li>• Approve central &amp; joint projects</li> <li>• Collect, review, consolidate, approve, &amp; sign markaz-wide annual &amp; multi-year plans (including poor neighborhood and central markaz projects)</li> <li>• Ensure all plans are consistent with guidelines, technically &amp; financially sound, &amp; well-coordinated one with another</li> </ul>	<ul style="list-style-type: none"> <li>• Notify villages of final plan approval, modification, or rejection</li> </ul>
<b>Local Unit Level</b>  Executive Council Popular Council	<ul style="list-style-type: none"> <li>• Set local development goals &amp; strategies</li> <li>• Assess existing local infrastructures and needs</li> </ul>	<ul style="list-style-type: none"> <li>• Select &amp; prioritize subprojects</li> <li>• Formulate projects with markaz/gov'te assistance</li> <li>• Fill out project planning forms</li> </ul>		

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#### **Section 4**

## **ROLES AND RESPONSIBILITIES IN THE PLANNING PROCESS**

An effective decentralized planning system requires governorate, markaz, and local-unit levels to share responsibility, communicate well, and collaborate closely throughout the planning process. Higher levels should provide technical support and guidance to the lower levels. In turn, lower levels should provide information about local conditions, needs, preferences, and past implementation problems.

Likewise, popular council members and executive staff have distinct roles to play in the planning process, and a continuous dialogue between these groups is necessary for effective planning. In general the popular councils should 1) present information about the local needs, preferences, priorities, and conditions, 2) select subprojects, taking into account the recommendations of the executive staff, 3) provide political and popular support needed for project success, and 4) help mobilize contributions in cash and in kind.

In a complementary role, the local administration executive staff should 1) gather, update, and analyze data about community needs, 2) determine the feasibility of proposed projects, 3) formulate and design projects or oversee consultants preparing studies, and 4) prepare the required planning forms (in consultation with popular councils).

A chart summarizing the roles and responsibilities at each level of government is provided on the facing page. Specific roles and responsibilities of each department, directorate, or council at each level of government are provided in the remainder of this section.

## **CENTRAL LEVEL**

Officials and staff at the central level are responsible for setting broad policies and allocating funds for the provincial component of the LD II-P Program. They also have final approval authority. Specific roles of the involved parties are provided below.

### **Role of the PLDC**

The PLDC is chaired by a governor from a rural governorate and composed of the secretaries general from all rural governorates, the secretary of the Ministry of Local Administration Amana, and representatives from ORDEV, NOPWASD, and the ministries of finance, planning, and international cooperation.

#### **Goal and Policy Formulation**

Set the general policies for the LD II-P Project and recommend local government policy changes.

Review and approve the LD II-P annual guidelines and procedures.

Set criteria, in agreement with USAID, for allocating LD II-P funds among beneficiary governorates and allocate funds accordingly.

#### **Final Approval and After**

Review and approve/reject LD II-P annual governorate plans and the subprojects contained in these plans.

Review the implementation of LD II-P governorate plans.

### **Role of the General Amana for Local Administration**

#### **Goal and Policy Formulation**

Issue annual LD II-P guidelines after their approval by the PLDC.

The secretary general of the MLA Amana attends the meetings of the PLDC.

Participate in establishing criteria for allocating LD II-P funds among beneficiary governorates and inform governorates of their allocations.

Allocate O&M funds to governorates.

#### **Final Approval**

Review the annual governorate LD II-P plans with the technical assistance contractor, and present them to the PLDC for approval.

Inform governorates of the final approval status of their annual LD II-P plans (after PLDC review).

## **GOVERNORATE LEVEL**

Governorate-level staff and officials are responsible for setting overall goals, policies, strategies, and priorities; for overseeing/preparing sectorial statements, assessments, and plans; and for ensuring technical and financial soundness and the coordination and integration of plans and projects. The roles of the involved parties are provided below.

### **Role of the GLDC**

#### **Goal and Policy Formulation and Needs Assessment**

Set overall local development goals, policies and strategies for the governorate.

Sponsor and oversee implementation of data collection and analysis efforts aimed at supporting infrastructure investment planning.

Set priorities among infrastructure and services sectors in an indicative manner.

Identify geographic areas or localities that need special attention regarding the provision of infrastructure or services.

Set policies concerning the use and coordination of LD II-P and Bab III funds to finance local infrastructure programs and subprojects.

Request and approve sectorial strategy statements.

Sponsor the preparation of and approve sectorial assessment studies and sectorial plans. (A strategic planning steering committee may also be established at the governorate level to direct and oversee the preparation of sectorial strategic plans, as is being done in Damietta Governorate on an experimental basis.)

Select criteria for allocating LD II-P funds and identify poor city neighborhoods to be assisted. Allocate LD II-P funds among cities and villages accordingly.

Ensure coordination among sectorial plans and programs.

Review plan implementation, taking into account the lessons of experience in setting policies and guidelines for preparing new plans.

Consider the views of governorate popular and executive councils on LD II-P investment policies, priorities, and strategies. Inform councils of GLDC

decisions. Seek their support for these decisions and their assistance in mobilizing local contributions.

### **Subproject Development**

Identify and select central projects located in the governorate capital city or those which serve two or more marakez, taking into consideration recommendations made by the service departments. These recommendations should be based on needs assessments, if available.

Identify and select information system subprojects based on the recommendations of the Information System Policy Coordinating Committee.

### **Review and Consolidation**

Ensure intersectorial coordination for various subprojects.

Review the governorate-wide LD II-P annual plan, encompassing markaz and local-unit subprojects, to ensure conformity with LD II-P guidelines and governorate compliance with LD II-P preconditions for plan submission.

Review the annual plan to ensure conformity with governorate sectorial and intersectorial policies, priorities, and standards, including those appearing in completed sectorial plans or sectorial strategy statements.

Approve and, if necessary, amend the governorate-wide annual LD II-P plan.

### **Role of Governorate Physical Planning Committee**

Sponsor and oversee studies on physical planning for settlements.

### **Role of the Technical Review Committee**

The governorate technical review committee is an interdepartmental committee responsible for reviewing and coordinating LD II-P planned subprojects prior to their submission to the GLDC. Its role is to ensure that proposed subprojects are technically feasible, well-conceived, worthwhile, properly costed, cost-effective, and well-coordinated. The technical review committee is composed of the governorate O&M coordinator and representatives from the departments of village development, housing (one engineer from each of the water, wastewater, and housing sectors), roads, and planning. Each of the concerned departments has a particular role to play in the plan review process, as explained in the following sections.

## **Role of the Village Development Department**

### **Goal and Policy Formulation**

Participate in GLDC policy-setting by presenting the views and needs of local units.

Explain GLDC decisions, guidelines, and policies, including the sectorial strategy statements, to the markaz and village executive and popular councils.

Coordinate the LD II-P planning process within the governorate.

### **Review and Consolidation**

As a member of the governorate technical review committee, participate in reviewing markaz-wide annual, multi-year, and subproject planning forms to ensure conformity with LD II-P guidelines and procedures.

Consolidate markaz and village annual plans into a governorate-wide annual LD II-P plan for GLDC review.

Send GLDC-approved governorate-wide plan, plan summary, subproject planning forms, and other planning documents to the MLA Amana, under cover of a memorandum of submission, for review and approval by the PLDC.

Enter information from governorate-wide planning forms into a computerized database (if the computer is located in this department).

### **Final Approval and Distribution**

Update the computerized database as needed after PLDC plan approval, modification, and/or rejection (if the computer is located in this department).

Provide marakez, and through them, local units, with a detailed listing of their approved plans and copies of finalized multi-year and subproject planning forms.

## **Role of the Planning Department**

### **Goal and Policy Formulation**

Participate, as a member of the GLDC, in setting governorate-wide local development goals, policies, and strategies, and in setting priorities among infrastructure and service sectors in an indicative manner.

Ensure that the objectives, policies, strategies, and priorities of local infrastructure programs in the governorate (including the LD II-P Program), are consistent with overall national and regional development objectives and policies.

Help identify geographic areas with special needs or problems, important economic potentials, or those which are slated for rapid development.

Assist the various service directorates in understanding how development in their sector impacts and is impacted by development in other sectors.

Help establish sound planning methodology and standards to be followed by the marakez and local units.

### **Review and Consolidation**

As a member of the governorate technical review committee:

- Ensure that LD II-P plans submitted by marakez and local units are consistent with the five-year national development plan and the regional plan, and conform to governorate development policies, priorities, and physical plans.
- Ensure that proposed LD II-P subprojects are coordinated and consistent with, and complement those financed from other sources of funding (e. g. Bab III, other donors).
- Ensure that LD II-P markaz and local unit plans and subprojects have been prepared following sound planning methodology and practices.

### **Role of Service Directorates**

This includes the roads, housing, irrigation, education and other service directorates, as well as water authorities and physical planning departments, if they exist. Each of these organizations is responsible for the following activities pertaining to its sector.

#### **Goal and Policy Formulation and Needs Assessment**

Participate in sponsoring and overseeing the preparation of sectorial assessments (in some governorates, as a member of a governorate strategic planning steering committee).

Prepare a sectorial strategy statement for GLDC approval (the housing and roads directorates).

Identify geographic areas in urgent need of service provision or expansion.

Assist in the preparation of physical plans (physical planning department if it exists, otherwise, the housing department).

Provide relevant sections of existing sectorial plans to other concerned governments departments and to the marakez through established channels.

Sponsor and oversee preparation of sectorial assessment studies for water, wastewater, and road sectors.

Conduct needs assessment (for rolling stock sector only).

### **Subproject Development**

Identify, and suggest to the GLDC, central projects located in the governorate capital city and major joint subprojects serving two or more marakez.

Sponsor and oversee preparation of feasibility studies by consultants for subprojects estimated to cost LE 500,000 or more, or those of a complex or pilot nature, which are located in the governorate capital or which serve two or more marakez.

Provide technical assistance to the marakez and local units in the management of feasibility studies for markaz-level and local-unit subprojects requiring such studies.

Assist the marakez and local units as necessary with the technical formulation, preliminary design, cost estimation, and appraisal of subprojects, especially those estimated to cost LE 200,000 or more, taking into account past experience in subproject planning and implementation.

### **Review and Consolidation**

As a member of the governorate technical review committee:

- Check proposed LD II-P subprojects for consistency with existing sectorial plans or, if these are not completed, with the sectorial strategy statement.
- Check the technical soundness of proposed subprojects, including: the appropriateness and cost-effectiveness of the technology chosen; the correctness of capital and O&M cost estimation; and the appropriateness of the scale/capacity, location, and phasing of subprojects.
- Check adequacy of the bills of quantities and preliminary subproject drawings.
- Check the sequencing and prioritization rationale for all proposed subprojects appearing on the

local-unit and markaz indicative multi-year planning forms for the sector.

- Make recommendations to the GLDC on the approval, rejection, or modification of proposed subprojects.
- Cooperate with other service directorates to coordinate subprojects in different sectors (e.g. road subprojects with water and irrigation subprojects).

### **Roles of Information & Statistical Depts.**

#### **Goal and Policy Formulation**

Provide the GLDC with information and analyses for decision-making and planning. This might include demographic information (rate of population growth of different areas) and information on the existing service level and coverage, such as the percentage of population having easy access to safe potable water or the total kilometers of paved roads.

### **MARKAZ LEVEL**

Markaz-level officials and staff are responsible for setting markaz development goals and strategies; selecting central and suggesting joint subprojects; choosing poor neighborhoods to be assisted; providing technical assistance to local units; and reviewing, consolidating, and approving planning forms prepared at the local unit level. Specific roles of the involved parties are provided below.

### **Role of Markaz Executive Council & Chairman**

#### **Goal and Policy Formulation and Needs Assessment**

Set local development goals, strategies, and priorities within the markaz and ensure consistency with the overall governorate development goals, policies, and strategies.

Sponsor/approve a needs assessment and inventory for the roads sector in consultation with local units, using appropriate forms.

Inform the local units of their LD II-P allocation and of the governorate development policies and strategies, including the sectorial strategy statement. Provide copies of relevant sections of existing sectorial plans to concerned local units.

Ensure that local units understand the planning procedures and the time frame according to which they must prepare and submit their LD II-P plans.

Review plan implementation, taking into account the lessons learned during plan preparation and implementation.

### **Subproject Development and Appraisal**

Identify and select central subprojects which are located in the markaz city and serve surrounding local units.

Suggest joint subprojects serving two or more local units based on the recommendations of the concerned department.

Sponsor feasibility studies and review/accept them after submission by consultants.

### **Review and Consolidation**

Approve markaz-level central subprojects and joint subprojects serving two or more local units.

Review and approve markaz-wide annual and multi-year planning forms (for local unit subprojects, markaz-level central subprojects, and poor neighborhood subprojects), based on the recommendations of the concerned markaz departments.

The markaz executive council chairman signs subproject planning forms for markaz-level central subprojects, poor neighborhood subprojects, and markaz-wide annual and multi-year plans.

### **Role of Markaz Local Development Committee**

Some governorates, such as Ismail'ia and Beni Suef, have established a committee of the executive council to review infrastructure subproject plans and their implementation. The replication of such a committee in other governorates is recommended.

### **Role of Markaz Popular Council**

#### **Needs Assessment**

Express and discuss needs for markaz central subprojects and joint subprojects.

#### **Subproject Development**

Select markaz central subprojects

Help mobilize local contributions, both in cash and in kind, for subprojects within the markaz.

#### **Review and Consolidation**

Review and approve markaz-wide annual and multi-year planning forms for local unit, central, and poor neighborhood subprojects.

The chairman of the markaz popular council signs the subproject planning forms for the markaz-level central subprojects and joint subprojects.

### **Role of Village Development Department**

#### **Subproject Development**

Suggest markaz-level central and joint subprojects.

#### **Review and Consolidation**

Collect all local-unit subproject and multi-year planning forms for review, ensure that local units followed the correct procedures in their preparation, and send them to the planning, engineering, and roads departments for further review.

After review by these departments, consolidate all planning forms (including markaz-level central subprojects and poor neighborhood subprojects) into markaz-wide plan summary forms.

Submit markaz-wide annual and multi-year planning forms to the markaz executive and popular councils for approval.

After their approval by the markaz executive and popular councils, send markaz-wide planning forms to the governorate village development department.

### **Role of Planning Department**

#### **Goal and Policy Formulation and Needs Assessment**

Assist the markaz executive council and its chairman in setting development goals, strategies, and priorities for the markaz.

Provide markaz chief and executive council with information for planning and decision-making.

Provide the markaz executive council with available information useful for assessing markaz-wide needs.

#### **Subproject Development and Appraisal**

Provide the executive council with information on existing or proposed Bab III or other subprojects, for the purpose of coordinating with LD II-P subprojects.

Participate in the appraisal of subprojects estimated to cost less than LE 500,000, paying special attention to their socioeconomic desirability and cost-effectiveness.

Help oversee the preparation of feasibility studies by consultants (for markaz-level, central, and joint subprojects estimated to cost over LE 500,000 or those of a complex or pilot nature), focusing on their economic, social, and financial aspects. Assist local units in

conducting feasibility studies where required for local unit subprojects.

### **Review and Consolidation**

Review local-unit and central subproject planning forms and indicative multi-year planning forms to ensure the following:

- Sound planning methodology and standards
- Consistency with GLDC policies and existing physical plans that concern the markaz or involved area
- Coordination of subprojects funded by LD II-P, Bab III, or other sources, so that they complement rather than duplicate one another
- Availability of funds for proposed subprojects (i.e. LD II-P, Bab III, local contributions, or other sources)

### **Role of Engineering & Roads Depts.**

#### **Needs Assessment**

Prepare markaz-wide needs assessment and inventory forms for the roads sector, with the assistance of the governorate roads directorate, and in consultation with local units.

Assist in the preparation of physical plans.

#### **Subproject Development and Appraisal**

Help identify and formulate markaz-level central subprojects located in the markaz capital city and serving surrounding local units, taking into account past experience in preparing and implementing subprojects.

Appraise markaz-level central subprojects from a technical viewpoint and fill in the technical sections of the subproject planning forms.

Play the leading role in the markaz team, overseeing the preparation of feasibility studies for markaz, central, and joint subprojects that are estimated to cost LE 500,000 or over, or that are complex or pilot projects, focusing on their technical aspects.

Assist the local units in the management of feasibility studies when they are required for local unit subprojects.

## **Review and Consolidation**

Review all local-unit subproject and indicative multi-year planning forms to ensure the following:

- Consistency with existing up-to-date sectorial plan or, if not yet completed, with the sectorial strategy statement
- Consolidation of local-unit subprojects into joint subprojects serving two or more villages, if this will result in more cost-effective subprojects, better quality, or more reliable service delivery<sup>4</sup>
- Coordination of individual village unit subprojects with other subprojects in the area
- Technical feasibility and soundness of the proposed subproject and the correct estimation of its capital and recurrent costs<sup>5</sup>
- Proper phasing and sequencing of subprojects over a multi-year period

### **LOCAL UNIT LEVEL**

The local units are responsible for assessing existing services and expressing local needs. Additionally, they should set goals and strategies for local development, and identify, prioritize, select, and formulate subprojects with the assistance of the markaz and governorates. The roles of the involved parties are provided below.

### **Role of Local Unit Executive Council & Chairman**

#### **Goal and Policy Formulation and Needs Assessment**

Set development goals and strategies for the local unit.

Collect or update information on existing infrastructure facilities, services, problems, and needs. Assess needs—particularly for potable water, wastewater disposal, and buildings—and present findings to the local unit popular council.

Sponsor, if desired, the preparation of a settlement physical plan in collaboration with markaz and

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<sup>4</sup>These departments may suggest to the markaz executive council the consolidation of some subprojects into joint subprojects serving two or more local units. However, any consolidation of proposed single village subprojects into a multi-village joint subproject must have the approval of the concerned village popular councils.

<sup>5</sup>The engineering department may make changes in the technology proposed, the size and location of subprojects, the preliminary drawings and the subproject cost estimates based on sound technical reasons subject to the approval of the markaz executive council. These changes must be communicated to the concerned local units through the markaz executive council chairman.

governorate authorities and under the guidance of the GPPC.

### **Subproject Development and Appraisal**

Identify promising subprojects based on a systematic assessment of needs and by considering subprojects previously identified in the village's indicative multi-year plan or other sectorial/physical plan.

Prioritize, in conjunction with the popular council, proposed subprojects using objective criteria such as those in the LD II-P guidelines and existing sectorial plans or sectorial strategy statements.

Formulate *selected* subprojects, seeking the assistance of the markaz engineering and roads departments or the concerned governorate service directorate as needed for technical formulation and cost estimation, taking into account previous experience in formulating and implementing subprojects.

Participate with the concerned markaz and governorate departments in the appraisal of subprojects selected by the local-unit popular council. Give feedback to the popular council to enable it to make an informed final selection.

Sponsor/oversee the preparation of feasibility studies for proposed local-unit subprojects as necessary, in collaboration with concerned markaz and/or governorate departments.

Complete planning forms, after final selection of subprojects, securing the assistance of the concerned markaz and governorate technical departments as needed.

Complete the indicative multi-year planning forms in final form, with the assistance of markaz level departments concerned.

The chairman of the executive council signs the subproject and the indicative multi-year planning forms.

Send the signed subproject and indicative multi-year planning forms to the markaz village development department, together with any needs assessments prepared at the local unit level and any completed feasibility studies.

In some governorates, there is a special committee of the local unit executive council to help in planning and supervising implementation of local infrastructure and services subprojects.

**Role of Local  
Popular Council  
& Chairman**

**Goal and Policy Formulation and Needs Assessment**

Together with the local unit executive council, set the development goals for the local unit and the strategies for achieving these goals.

Discuss the major problems, potentials, and infrastructure and services needs of the local unit with the local executive council.

Obtain the views of beneficiaries on their problems, needs, and priorities, possibly through public meetings.

**Subproject Development**

Suggest subprojects for solving problems, developing potentials, and meeting needs of the local unit.

Discuss and prioritize, with the local executive council, possible subprojects according to criteria such as those contained in existing sectorial plans or strategy statements and in the LD II-P guidelines.

Discuss and assess, with the local executive council, the desirability and viability of proposed subprojects, their costs, and their chances for success.

Select subprojects to be included in the local unit's annual and indicative multi-year plans.<sup>6</sup>

Help mobilize popular contributions in cash and in kind, and estimate the level of such contributions.

The chairman of the local unit popular council signs the subproject and indicative multi-year planning forms.

Provide advice to the executive staff during subproject formulation about the suitability of preliminary design, and the location of service delivery facilities from a perspective that considers the preferences and social habits of the beneficiaries.

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<sup>6</sup>The popular council should consider the recommendations of the executive council and the concerned markaz and governorate departments, as well as the results of any feasibility study before making final subproject selection.

**Appendix**

## **TECHNICAL REFERENCES**

This section is provided as a reference for readers who wish to obtain more information about some of the concepts discussed in earlier sections. While not exhaustive, each entry is meant to define, clarify, or elaborate technical terms such as *cost recovery*, *feasibility study*, and *sectorial planning*.

Entries are arranged alphabetically. The entries and their associated reference terms are as follows:

**Cost recovery**

partial cost recovery, full cost recovery, depreciation

**Feasibility study**

project appraisal, least-cost analysis, benefit/cost analysis, technical feasibility, financial appraisal, economic appraisal

**Governorate development plan**

**Physical planning**

spatial planning

**Sectorial planning**

strategic sectorial plan

**Sectorial strategy statement**

**Subproject plan formulation**

subproject, subproject component, completion, rehabilitation, extension, prioritization

**Subproject prioritization**

**Technical Reference: COST RECOVERY**

**Additional Terms:** Partial cost recovery, full cost recovery, depreciation

**DEFINITION** Cost recovery, an essential element in the sustainability of any public service, occurs when a service is paid for by its recipients. An example of cost recovery is a village water system that charges (and retains locally) an initial connection fee and a regular monthly fee sufficiently high to pay for the maintenance, repair, operation and possible replacement of the water wells, pipelines, and other parts of the system.

There are two basic types of cost recovery: *partial cost recovery* and *full cost recovery*.

**Partial Cost Recovery** Partial cost recovery occurs when only some of the capital and recurrent expenditures are recovered. Thus, user charges retained at the local level may cover day to day operations of a water system, but may not be enough to allow for major repairs, replacement or extension of delivery systems.

**Full Cost Recovery** Full cost recovery occurs when both recurrent costs and capital costs are recaptured over time through user charges. Projected capital costs, such as the replacement cost of a wastewater treatment plant twenty years in the future, may be difficult to determine. However, by adding an inflation factor to the original cost of the plant, and spreading this combined cost over the planned lifetime of the facility, a good estimate of the replacement cost can be obtained. This process, known as establishment of *depreciation* reserves, allows for services to be sustained for future generations.

**CONSUMER BENEFITS** When costs are recovered locally, consumers have a stronger position because they can expect and demand a higher level of service. This is especially true when full costs are recovered; the public utility has no excuse for not providing quality service, and is more accountable for deficiencies in service delivery.

**CONSTRAINTS** Unfortunately, there are constraints that inhibit cost recovery. One such hindrance occurs when locally collected fees are not kept at the local level. Another is the large cost of some projects, which, given local income levels, would be considered prohibitively high, particularly when full cost recovery is being sought. The choice of technology is, therefore, an important decision. High capital and O&M costs, combined with a shortage of sufficient funds and qualified manpower to operate the service, further hamper the development of sustainable delivery systems.

**FOURTH-CYCLE REQUIREMENTS** Each governorate must submit, with its fourth-cycle investment plan, a regulatory framework and action plan for implementing user-finance

schemes to cover recurrent (O&M) costs of one or more USAID-financed water or wastewater projects. Those projects currently in operation or nearing operationalization can be included.

In some governorates, the extent of user financing may be limited by restrictions on the level of user charges or tariffs; in these cases, charges should be set at the legal maximum. If the maximum user-finance revenues allowed by law will cover less than 75 percent of total recurrent costs, or if the governorate is unable to propose any scheme, it must present in its place a detailed description and analysis of the legal, administrative, and/or technical reasons for such schemes being not feasible at the present time; and indicate what types of interventions would be required to eliminate these obstacles.

**EXAMPLE OF  
A COST  
RECOVERY  
SCHEME**

Village xyz needs a new sewerage system. Village officials have the following information:

Village Population	10,000
Number of Households	2,000
Inhabitants per House	5
Estimated Cost of Sewerage System	1,800,000
Annual O&M Costs	48,000

Based on a 30-year expected project life, officials may wish to consider two extreme scenarios, neither of which consider inflation or population growth:

- Partial cost recovery (does not include reserve)
- Full cost recovery (includes replacement reserve)

The following assessments would recover the annual expected O&M costs and allow for loan repayment:

$$\text{Annual Charges} = \frac{\text{Annual O\&M cost/house}}{\text{Number of Households}} = \frac{\text{LE } 48,000}{2,000} = \text{LE } 24.00/\text{year}$$

$$\text{Monthly Assessment per Household} = \text{LE } 2.00$$

For full cost recovery (O&M and replacement reserve), assessments would be as follows:

$$\text{Annual Charges} = \frac{\text{Annual Depreciation Expense} + \text{Annual O\&M Costs}}{\text{Number of Households}}$$

$$= \frac{(\text{LE } 1,800,000 / 30) + \text{LE } 48,000}{2,000} = \text{LE } 54.00/\text{year}$$

$$\text{Monthly Assessment per Household} = \text{LE } 4.50$$

**Technical Reference: FEASIBILITY STUDY**

**Additional Terms:** Project appraisal, least-cost analysis, benefit/cost ratio, technical feasibility, financial appraisal, economic appraisal

**DEFINITION** A feasibility study is the examination of a proposed project and its alternatives to determine their feasibility, viability, and desirability from technical, financial, economic, social, and organizational viewpoints. It examines possible problems or obstacles that may be encountered during project initiation and implementation, and suggests possible solutions.

**WHEN PERFORMED** Under the LD II-P program, projects expected to cost over LE 500,000 (excluding road projects) require a full-scale feasibility study. Additionally, complex or pilot projects, even if less than LE 500,000 total cost, require feasibility studies.

**SCOPE** The time and effort spent on a feasibility study varies depending on the size and complexity of the proposed project. All feasibility studies, including simplified *project appraisal checklists*, should examine technical, financial, environmental, socioeconomic, social, and organizational viability issues. Alternative methods of achieving the project objectives should be examined, and the best alternative recommended. A feasibility study or project appraisal should ultimately advise whether or not to proceed with a project.

**Technical feasibility** A technical feasibility study is meant to determine if a proposed subproject is feasible from a technical viewpoint. It examines and compares the various technological options available for the design and implementation of a subproject, then recommends a preferred technological option based on appropriateness and cost-effectiveness. A technical feasibility study may also recommend the most appropriate technical design for a proposed subproject.

The scope of the technical feasibility analysis covers the following:

- Physical scale of the project
- Location and layout of facilities
- Nature and complexity of the technology, including availability of spare parts, qualified operations staff, and appropriateness of technology to local conditions

Appropriateness of technology to the environment is an important consideration in technical feasibility. Environment also enters into feasibility analyses when we consider the overall *consequences* of the project for the environment. Projects may have negative impacts on the environment—a water project may create wastewater disposal problems, or a road project may take land out of agricultural use. Essentially, these negative effects are additional costs: in one case the project will eventually require a wastewater treatment project; in the

other, members of the community have lost property and a source of income.

### Financial Appraisal

Financial appraisal is closely related to technical feasibility; the relationship is expressed as the cost-effectiveness of the alternative technologies and designs. The cost-effectiveness of a project design can be expressed as the cost (capital and recurrent) of a unit of the service to be provided. Different designs and technologies often have different unit costs—all else being equal, the technology with the lowest unit cost is the most cost-effective and is the preferred alternative. To determine cost effectiveness of alternatives, *least-cost analysis* should be used.

*Least-cost analysis.* All costs, both capital (initial) costs, and recurrent (operation and maintenance over the life of the project) must be considered. To determine the ratio of total project cost for the life of the project per beneficiary, water and wastewater and some other service projects often use the following formula:

$$\frac{\text{Total Capital Costs} + \text{Total Recurrent Costs}}{\text{Number of Beneficiaries}} = \text{Cost/Beneficiary}$$

For some other project types, the ratio of total project cost during the project life is expressed per unit of output, such as cost per km in the case of roads.

$$\frac{\text{Total Capital Costs} + \text{Total Recurrent Costs}}{\text{Total Output During Project Life}} = \text{Cost/Output Unit}$$

Costs are often discounted over time to account for the time preference of money. Since a cost of LE 100 at some future date is less, in real terms, than LE 100 today, costs must be converted to present values to make them comparable. Discounting makes this possible.

*Estimate revenue and sources of funding.* Financial analysis also includes examining revenues and other sources of funding to cover subproject capital and recurrent costs to ensure sufficient funding during implementation, start-up, and operation. Initial funds to cover capital costs may come from a variety of sources, including a combination of LD II-P Bab III allocations, and popular contributions in cash.

Some infrastructure projects, such as water, wastewater, and slaughterhouse projects, generate revenue from user's fees. These fees are often insufficient to cover recurrent costs, and are frequently transferred from the local level where they are collected, thus becoming unavailable for operation and maintenance needs. For these reasons, it is important to consider revenue and fund sources during the feasibility study phase.

**Economic Appraisal**

An economic feasibility analysis is intended to assess the direct and indirect economic benefits – or savings – of a project to the owners and/or beneficiaries and to compare them with project costs. A project that provides safe drinking water, for example, may reduce per capita expenditures on health and thereby reduce absenteeism in local industries and organizations. It may also free people from the chore of carrying water, allowing for more productive use of their time. A road project may reduce local expenditures on fuel or car repair and open new labor or commodity markets to the community.

If such benefits can be quantified and expressed in monetary values, the comparative values of proposed projects to a community could be measured in terms of a *benefit/cost ratio*. This ratio provides the total benefits over the life of the project divided by the total costs over the life of the project. A cost/benefit ratio is usually determined using the following formula:

$$\frac{\text{Total Benefits during Project Life}}{\text{Total Cost during Project Life}} = \text{Benefit/Cost}$$

If the ratio is greater than 1, the project is worthwhile and should be undertaken; if less than 1, it should not be undertaken. Both benefits and costs are often discounted, as in the case of cost/effectiveness analysis. Subprojects having the highest benefit/cost ratios normally are implemented first.

Although useful, these determinations are often very difficult, as the benefits and negative impacts of infrastructure and service projects must be expressed in monetary values in order to compute the ratio. In some cases, it is appropriate to identify benefits and negative impacts in narrative form according to importance. This process, while less exact, still provides a framework for thinking through the long-term impacts of a project to determine if it is worth undertaking in terms of its cost.

**Social & Community Support**

The proposed project and its alternatives should also be examined from a social and cultural viewpoint to determine if it is truly desired by and acceptable to the proposed users. Community support often determines ultimate success or failure of a project; the degree of this support can be judged by the extent and frequency with which the population expresses its need to the popular and executive council members, as well as the willingness of the village to make cash or other contributions. Strong opposition is also a factor that must be considered, but may be overcome by adequate explanations of project benefits.

**Institutional & Managerial Viability**

A project's likelihood of success should be determined from institutional, organizational, and managerial viewpoints. A project is institutionally feasible when the qualified personnel and organizational structures and procedures to implement, operate, and maintain it already exist or can be realistically provided within a reasonable time period. These resources need not be part of the local government organization, but this organization should at least have the capability

to pay for the services needed and, if necessary, be able to monitor the performance of any private sector contractor.

In a broader sense, institutional feasibility covers policy and administrative issues related to the provision of services. Service pricing serves as an example of this. According to World Bank standards, a large number of local water projects would be considered institutionally unfeasible because services are not priced at levels sufficient to recover their costs, bringing their long-term sustainability into question. This is further complicated by the fact that local government organizations do not have the authority to raise service charges to levels required for sustainable service delivery.

## Technical Reference: GOVERNORATE DEVELOPMENT PLAN

### DEFINITION

The governorate development plan serves as a guide for integrated multi-year infrastructure investment planning, budgeting, and management. As such it 1) describes the existing distribution of basic services, by sector and subregion, 2) defines and estimates the level of funding sources for infrastructure development during the life of the plan, 3) identifies both the rationale for choosing service level targets and the targets themselves, and 4) develops an overall investment strategy based on projections of population size and distribution, and levels and locations of public and private economic investment.

Governorate-level development planning can rely on some of the concepts, methods, and tools of regional planning and should be consistent with any existing regional plan or policies.

### BENEFITS

A well-prepared governorate development plan will provide the following to governorate officials and decision makers:

- Strategies and policies to guide economic and physical development and to enhance social change.
- An interrelated set of social, economic, and physical policies, based on national and regional planning goals and objectives, that is consistent with the medium- and long-term development goals of the governorate.
- A means of successfully utilizing the resources and developing the potentials of the governorate in implementing physical and sectorial plans to achieve overall governorate goals.
- A framework which allows the integrated development of infrastructure sectorial plans.
- The means to achieve greater social justice (less social and economic disparity) between areas and income groups within the governorate.
- A proper foundation for detailed programs, guidelines for investment allocation, and criteria for project selection at the markaz and village levels.
- Priority actions needed in specific areas (marakez or villages) or sectors (such as roads or water) during the next five years.

**MAJOR  
ELEMENTS**

In general, a governorate development plan should include the following:

**Analysis of past socioeconomic trends**, including such basic measures as population size and characteristics, labor supply, employment, community patterns, income status of local residents, size and nature of specific types of public and private enterprises, sources of public revenues and expenditures, land values, infrastructure facilities, and indicators of new social economic activities.

**Profile of the existing socioeconomic base**, covering major strengths and weaknesses, comparison with other governorates, balance and diversity of economic activities, and vulnerability to cyclical fluctuations.

**Analysis of the linkage** between the governorate and the larger regional and national economies, including 1) basic trends in locally and regionally prominent industries, and social and infrastructure services, and 2) shifts in locational patterns of activities and resource allocation within the region.

**Comprehensive inventory of local assets and liabilities**, including all types of resources—physical, human, locational, financial, and organizational.

**Examination of critical development factors and forces**, both internal and external, that will affect the future of the governorate. These may include technological trends, markets, local attitudes, energy supply and cost, availability of land for development, and environmental constraints.

**Identification of major potential for growth** in the governorate, expressed in terms of types of economic activities and potential areas.

**Projection of realistic ranges of future short- and long-term socioeconomic activities** within the governorate, expressed in terms of numbers and types of projects, employment opportunities, population, housing, education and health requirements, land requirements, and infrastructural needs.

**Evaluation of specific public issues** that will arise during economic development, such as fiscal management, public utility rates, and development regulations.

**REQUIREMENTS  
FOR PLAN  
DEVELOPMENT**

Governorate development plan preparation requires public participation from local residents and decision-makers. The plans are prepared by executive departments at the governorate level (such as

the planning department, representatives of the housing and roads directorates, and local development staff), with the assistance and coordination of the markaz-level departments. Access to an up-to-date information database and maps that indicate the location of roads, power sources, water and wastewater networks and facilities, housing, commercial enterprises, and population density is necessary to ensure quality planning.

Because of their broad scope and applicability, these plans require extensive coordination. Overall policy guidelines must be developed, and proposed projects must be coordinated with plans for public schools, utilities, and services so that projects complement rather than conflict or interfere with one another. Markaz and village level needs and plans must be considered in the overall governorate scenario. Also, planning and executive agencies should coordinate with one another to avoid duplication of effort or gaps in responsibility.

During plan development, a capital budget must be prepared that considers and coordinates various sources of funding and matches expenditures to needs and anticipated benefits in a cost-effective manner. Program planning should identify activities that will produce desired results, identify target beneficiaries, and specify needed funds, personnel, and equipment.



**Technical Reference: Physical Planning**

**Additional Terms: Spatial planning**

**DEFINITION**

Physical planning is a tool for the development of integrated infrastructure and services for a settlement. It is both a planning activity that analyzes and interprets, and a planning instrument that records and communicates spatial and environmental information. A physical plan begins with the compilation of data on the existing distribution of people, buildings, utilities, services, resources, and land uses in a settlement. The relationship between these existing features and the implications of anticipated changes are presented in maps, plans, graphs, charts, and supplemental material. Maps are produced for different time projections and used to predict the possible outcomes of alternative policies and investment programs. Thus physical plans clearly show, at a glance, both what currently exists and what may exist in possible future scenarios. Comparison of alternative scenarios helps decision-makers formulate an integrated plan for development.

**BENEFITS**

The value and importance of physical planning lies in its versatility and range of usefulness. Its products—maps and documents—allow decision-makers to approach problems holistically by graphic display of existing and projected conditions. A physical plan illustrates the spatial relationships between the population and needed services, both for the present and the future. The relationships and interdependence of different types of infrastructure services, such as water and electricity, are also more apparent in physical plans.

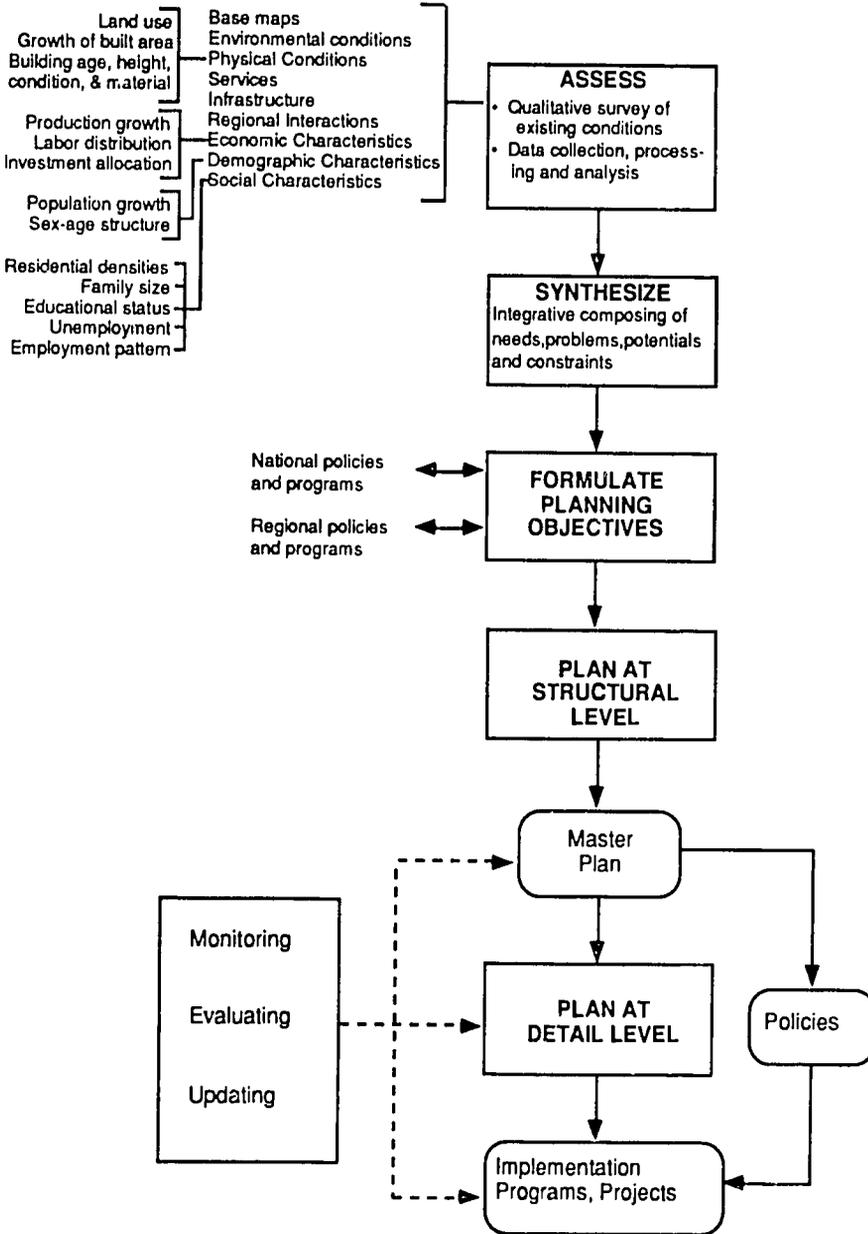
**OBJECTIVES**

A physical plan, in its final form, should provide the following items during a 10-20 year plan period.

- Delineation of existing and future boundaries of the area under consideration
- Land use patterns that provide a balanced response to competing demands of housing, economic activities, services, and other infrastructure
- Residential density and differentiated density distribution of zones and areas that sustain a spatial balance between people and activities
- Types, sizes, and locations of educational, health, administrative, commercial, cultural, and recreational services in compliance with accepted norms and efficient spatial distribution
- Infrastructure development plans for roads, water supply, sewerage, solid waste, schools, and energy that comply with existing provisions, environmental conditions, and financial capacity

**PROCESS**

Physical planning usually proceeds from a general analytical stage (structural plan) to a stage in which specific parameters are established for overall development (master plan) to a detailed plan for implementation. An initial assessment of the existing situation considers factors such as land use, physical conditions, and demographic patterns that will influence the overall development of spatial plans. A schematic view of the physical planning process and required inputs is shown below.



**LEGAL  
FRAMEWORK**

The most important laws and regulations relating to physical planning include the following:

- Public Law No. 3 of 1982 and its bylaws, dealing with physical planning
- Public Law No. 43 of 1979, dealing with local administration, as amended by Public Law No. 145 of 1988
- Decree of the Minister of Agriculture No. 124 of 1984, concerning the issuance of building permits on agricultural land
- Public Law No. 117 of 1983, concerning the protection of antiquities

According to Law 3/1982, physical planning is administered by a committee at the governorate level—the Governorate Physical Planning Committee (GPPC). This committee includes persons with expertise in planning, economic and social affairs, infrastructure and services, and members of the local popular council at the governorate, markaz, and village levels. Citizens of the involved area are also eligible for committee membership.

The physical planning committee is responsible for preparing master and detailed plans of cities and villages in the governorate, collaborating with concerned markaz departments, and obtaining approval in accordance with legal requirements. It is also responsible for ensuring that plan implementation procedures, including project listing, prioritization, and integration within the five-year plans as stated in Laws No. 3/1982 and No. 43/1979 (as amended), are followed.

**ROLE IN  
DEVELOPMENT  
PLANNING AND  
MANAGEMENT**

Physical planning is useful in helping to rationalize and integrate development efforts of different sectors and levels. It provides critically needed support for decision-making by both local authorities and private enterprises. Because its visual dimension facilitates understanding of objectives and implications of different investment scenarios, it enhances public participation, upgrades the performance of local popular councils, and opens channels for self-help efforts.

Specifically, a successful physical planning effort should:

- Guide the growth of the built environment toward the optimal use of resources and assets, while making physical structures more effective.
- Contribute to a safe, healthy, and attractive environment through rational use of local components.

- **Assess and prioritize current and future needs and allocate limited financial resources to sectors in a way that provides the greatest economic and social return on investment.**
- **Integrate planning efforts and coordinate various sectors at the local level.**
- **Support the decision-making process of both governmental and private sectors by clarifying priorities and future actions needed, and by making updated information available in a computerized database.**
- **Enhance public participation and improve the performance of popular councils through simplified development plans.**

**Technical Reference: SECTORIAL PLANNING**

**Additional Terms:** Sectorial strategic plan

**DEFINITION** Sectorial planning is an approach for preparing and implementing plans for a particular service or infrastructure sector, such as water or roads, according to specific sector needs, goals, and technical requirements. The process includes 1) assessing existing service delivery systems, 2) setting sector objectives and targets, 3) identifying resources available and estimating resources required, and 4) establishing investment priority criteria.

**WHEN PERFORMED** Sectorial planning will play a central role in LD II-P planning, and it is hoped, in other infrastructure planning. During the fourth-year planning cycle, each governorate should begin to prepare sectorial plan for at least one sector. The first step in sectorial planning, data collection and needs assessment, can be done in the fourth planning cycle. The sectorial plan can be completed in the fifth planning cycle. The sectorial planning process should include estimating and identifying the source of the resources needed to achieve targets.

**SCOPE** Sectorial planning can be conducted at the national, regional, governorate, markaz, or local unit level. It involves intersectorial efforts at coordinating and harmonizing the objectives and targets of different sectors. Sectorial plans may cover a period of five to twenty-five years, and may be of varying complexity and comprehensiveness.

**Sectorial Strategic Plans** Strategic sectorial planning is a broad yet integrated activity which involves a process of setting sectorial goals, assessing the situation in the sector, and identifying and choosing strategies to achieve sectorial goals,

More precisely, strategic sectorial planning:

- Sets clear sectorial goals and targets.
- Provides a sector assessment, based on a current database, which examines the status and characteristics of the sector, the overall environmental conditions, and the strengths and weaknesses of the organization(s) responsible for achieving sectorial goals and objectives.
- Formulates and examines policy options in setting sector targets.
- Identifies and chooses "strategic actions" to achieve sectorial objectives, including recommended technologies and priority programs.
- Introduces and institutionalizes an ongoing planning

process rather than focusing on the production of a planning document.

- Allows for the analysis of different options for choosing targets to be reached and strategies to be followed, and for examining the implications of these options using different assumptions about resource availabilities, capacities, and changing conditions.
- Retains flexibility, allowing for rapid modifications in response to changes in policy, priority, and the environment.
- Covers a five- to twenty-five-year period. The first five-year period of a strategic plan is specific and action-oriented, identifying the intermediate-term actions, and priority programs and projects required to meet the most urgent needs and problems in the sector. These actions and projects are chosen because they are expected to improve conditions significantly, given the scarce existing financial and physical resources.

A pilot sectorial strategic plan is being prepared for the potable water and wastewater sectors in Damietta Governorate. Once completed, it may be used as a model for the preparation of similar plans in other governorates.

The suggested steps involved in developing strategic sectorial plans are described in the subsection entitled *Sectorial Planning Process*, which begins on page 64.

#### **Existing Sectorial Plans**

Sectorial plans or studies for water and sanitation sectors already exist in some governorates. These should be referred to if they are up-to-date.

In some other governorates, technical departments have prepared *simplified sectorial plans* that include some, but not all, of the steps involved in sectorial strategic plans. Such plans may be called *sectorial frame plans*. They are not as comprehensive as strategic plans, and their preparation does not include all of the steps involved in strategic plan preparation. Usually, they include targets to be achieved by certain dates, localities to be covered by a given service, and perhaps a rough estimation of capital costs for the program. Detailed estimations of resources and costs, identification of and solutions for constraints, and specific sector strategy and policy recommendations are generally lacking, as is the spatial dimension of sectorial plans.

The needs assessments on which these simple sectorial frame plans are based are not as systematic as those used for sectorial strategic plans. Such assessments often consist only of available information and needs expressed by marakez and villages.

Governorate technical departments may prepare simple sectorial frame

plans. Sectorial strategic plans, however, should be prepared with the assistance of a competent multi-disciplinary team of consultants under the sponsorship of a governorate technical department. This is necessary because of the significant time, level of effort, and expertise involved in their preparation.

**WHO SHOULD BE INVOLVED?**

The consultants should work closely with local government decision-makers, implementing and supervisory departments, and the beneficiaries and their representatives. Input concerning the values, preferences, and aspirations of these parties is critical to the plan's success. Consultants should explain their approach and methods clearly to governorate authorities, and report on their progress at regular intervals. Several possible scenarios for the development of the sector should be submitted by the consultants, taking into account the goals, priorities, and strategies highlighted in the sectorial strategy statement.

The final decision about the sectorial plan normally rests with the GLDC. A governorate strategic planning committee may also be established to provide direction and to oversee the preparation of sectorial strategic plans as is being done in Damietta Governorate on an experimental basis.

The consultant team should be interdisciplinary, including, as appropriate, engineers (roads, water, sanitation, environmental, or mechanical, as applicable), an architect/physical planner (if appropriate), an economist/financial analyst, a sociologist/anthropologist, and an institutional/organizational analyst. Some members of the team may, however, cover more than one speciality. For example, the sociologist/anthropologist may in some cases be able to act as an institutional/organizational analyst. Model terms of reference (TORs) for the consultants will be prepared by the technical assistance contractor for each sector and provided to governorate authorities.

**Local Government Input to Plans**

**Sectorial Strategy Statement.** At the outset of the planning process, the consultants should be provided with a governorate sectorial strategy statement that includes the following:

- General sector goals that the governorate wants to achieve
- Desired service standards, service coverage, and levels of service
- Estimated levels and sources of funding likely to be available
- Preferred criteria for subproject selection and prioritization
- Areas and communities with priority or urgent needs
- Ways in which the sector is expected to support developments in other sectors
- Major developments in other sectors that are expected to affect the level of service to be provided by the sector, such as the effect of industrial and tourism development on roads, or housing development on water supply

**Use of Existing Information.** Consultants should be provided with up-to-date demographic data and other social and economic information, sectorial needs assessments and studies (if available), descriptions of existing projects and projects under implementation, and existing multi-year and subproject planning forms. They should use the knowledge and experience of local government staff, work with them collaboratively on a regular basis, and report to governorate authorities at regular intervals.

**Participation of Beneficiaries and Officials.** The views and preferences of beneficiaries should be considered during preparation of sectorial plans. Local units and marakez may be asked early in the process to identify and prioritize their needs for a particular service over the next five or ten years. Also, they should be consulted about their views and preferences for the function and design of user-end service delivery facilities, such as the type and location of standpipes, public toilets, and washing facilities.

Meetings with governorate and/or markaz executive officials and popular council members, and with village popular and executive council chairmen are encouraged. Such meetings allow participants to express their needs, priorities, and preferences to the consultants. The sociologist/anthropologist member of the consulting team could also interview a sample of beneficiaries to ascertain their needs and preferences.

Concerned governorate and markaz technical departments should screen and consolidate the needs expressed by the local unit and markaz councils into joint projects. These projects should then be assessed and prioritized according to objective investment criteria, with the assistance of the consultants.

This participatory approach to sectorial planning will ensure that the resultant sectorial master plan meets the actual needs of beneficiary communities and has their commitment and support.

**SECTORIAL  
PLAN  
COORDINATION**

Development in one sector affects and is affected by developments in other sectors. For example, the need for potable water is determined by developments in the housing, commercial, and industrial sectors. In turn, potable water projects create a need for increased capacity in the electricity sector and in the production of pipes. Also, the need for wastewater facilities is determined by the level of consumption in potable water. Because of these interrelationships, it is important to ensure that various sectorial plans are coordinated and harmonized.

Such coordination is best performed at the governorate level within the framework of a governorate development plan, and at the local level within the framework of physical plans. In the absence of such plans, the service department and its affiliated consultants should contact related service departments to coordinate development among sectors. They should also obtain information on overall governorate development from the governorate planning department and the regional planning office.

The GLDC is also well placed to achieve coordination and harmonization of sectorial plans.

**INFORMATION  
NEEDS OF  
SECTORIAL  
PLANNING**

Preparing a meaningful infrastructure sectorial plan requires accurate information about the existing and projected situation. Frequently required information includes the following:

- Population statistics (size and growth) for the governorate and for various localities
- The pattern of development in the governorate, including areas slated for rapid development
- Existing levels of service and their adequacy
- The location, capacities, utilization, age, and condition of existing infrastructure facilities such as roads, water storage and distribution facilities, and wastewater treatment and disposal facilities
- Major environmental conditions throughout the governorate, such as the level of the groundwater table, that may affect infrastructure subprojects
- Ownership and land use patterns that may affect roads or other development
- Projection of funds available to finance the sectorial plan, divided on an annual basis.

In addition, information about existing and planned economic and social activities in various localities is useful. This type of information can be used for identifying infrastructure needs, as well as for planning and designing infrastructure programs and subprojects.

**SECTORIAL  
PLANNING  
PROCESS**

The recommended steps involved in the sectorial planning process include the following:

1. Defining the broad goals for an individual sector
2. Assessing present service levels and the performance of the present service delivery system
3. Deriving targets for growth in sector output or level of service
4. Estimating resources needed to achieve these targets
5. Identifying and suggesting ways to overcome resource and institutional constraints
6. Reviewing and revising targets as needed
7. Setting investment priorities and identifying major

projects within the sector

8. Preparing an operations, maintenance, and repair (O&M) plan, based on the capital investment program
9. Recommending policies and standards for sector subprojects
10. Providing for plan revisions

Each of these recommended steps is described below.

**Step 1:  
Define  
Goals**

Set the general development goals for the sector, including the projected socioeconomic benefits. All goals should conform to the applicable sectorial portion of the national five-year development plan.

**Step 2:  
Assess  
Existing  
Services**

Conduct a governorate-wide assessment of existing service levels in the sector.

*Example 1.* The water sector might determine the percentage of population now served by house connections and standpipes, the hours of service, the quality of water in various areas of the governorate, and the age and state of repair of various facilities.

*Example 2.* The roads sector might determine the percentage of different classes of roads that are paved and the kilometers of roads that need repaving.

**Step 3:  
Set Service  
Standards  
& Targets**

**a. Establish service standards** for the sector, taking into account national standards, if they exist, and the governorate service standards included in the sectorial strategy statement.

*Example 1.* For the water sector, this may consist of determining the standard daily per capita consumption of water for users of house connections and of standpipes, the percentages of rural population that should be served by house connections and by standpipes, the hours of service, and the water quality standards.

*Example 2.* Some service standards for the roads sector might include the types of roads that should be paved based on category and traffic volume, frequency of repaving, and minimum road width.

**b. Estimate future demand** for the service based on the chosen standards of service.

*Example.* For the water sector, a simplified estimate would be based on the population not presently covered by services, added to the projected population increase by the end of the planning period (or the appropriate intermediate date), and multiplied by both the percentage of population to be covered by the specified type of service (that is, house connections or standpipes) and the standard per capita consumption of water for that type of service. In other words:

$$\text{Demand} = (P \text{ not covered} + P \text{ increase}) \times \%P \text{ to be covered} \times \text{consumption}$$

**c. Set level-of-service targets**, given the chosen service standards and the projection of future demand.

*Example 1.* For the water sector, a level-of-service target might be to provide, by 1995, 80 percent of the rural population with access to potable water through house connections, and 10 percent of the population with standpipes. Another target might be the production, by 1995, of a specified number of cubic meters (per day) of a specified quality of water.

*Example 2.* For roads, a sectorial target might be to pave, by 1995, 500 kilometers of category 2 and 3 roads. Another target might be to repave 300 kilometers of roads by 1995.

**Step 4:  
Estimate  
Resources**

Estimate the resources needed to achieve sectorial level-of-service targets. This includes the following:

- Capital investment funds needed to achieve sectorial level-of-service targets, both for the whole planning period and by fiscal year.
- Operations, maintenance, and repair (O&M) expenditures for new and existing services, for the whole planning period and by fiscal year.
- The manpower required, by type, for achieving sectorial objectives and targets.

**Step 5:  
Identify &  
Overcome  
Constraints**

**a. Identify constraints and resource gaps** by comparing resources required to meet sectorial targets with those likely to be available. Also, identify technical and institutional factors that constrain program implementation and limit absorptive capacity. This includes the following:

- Compare capital investment funds required to achieve sectorial targets with those likely to become available from various sources (such as GOE and LD II-P), and identify the gap between the two.
- Compare the estimated O&M costs for the sector with those revenues likely to be available to cover these costs, and identify the gap between the two.
- Compare the manpower, by type, required to implement the sectorial plan and deliver services with the manpower likely to be available during the plan period, and identify the gap between the two.
- Identify other technical, administrative, and institutional constraints that impede program implementation, service delivery, and reduce absorptive capacity.

**b. Identify and recommend solutions** to overcome resource gaps and constraints.

- Identify possible sources of funding to finance the sectorial

capital investment program.

- Prepare a "cost recovery plan" to cover O&M and capital replacement costs through increases in users' charges and Bab II allocations.
- Prepare a plan for the different types of manpower needed to achieve sectorial objectives and to provide sustainable service delivery.
- Make recommendations for strengthening the organization, management, and implementation ability of the sector for improved performance and greater absorptive capacity.

**Step 6:  
Test  
Targets**

Review sectorial level-of-service targets in light of remaining constraints. If the targets appear over- or under-ambitious, revise as needed.

**Step 7:  
Set Priorities  
& Identify  
Subprojects**

**a. Set criteria for investment priorities** and selection of subprojects within the sector. This process should take into account the LD II-P project priorities and other criteria contained in the governorate sectorial strategy statement.

*Example 1.* For the water sector, priority criteria may include the size of population served, the urgency of the need and the inadequacy of present facilities to meet demand, the per capita cost of providing the service, the importance of health and other benefits, and the relative priority given to areas to be served by a project.

*Example 2.* For roads, priority criteria may include the economic importance of a road, the volume of traffic, and the current state of repair.

**b. Identify systems and subprojects** to be included in the sectorial plan based on selected criteria, as described below.

- Identify major priority systems and subprojects to be implemented in the medium-term (five-year period), such as water and wastewater treatment plants, main water lines, proposed wells, and road networks.
- Estimate, in aggregate, the small subprojects and subproject components such as water distribution pipe networks, standpipes, and fire hydrants. These need not be identified specifically; however, a cumulative total, such as how many kilometers of 150 mm distribution pipes will be laid by the end of five years, should be provided.
- Examine alternative technologies and recommend appropriate, least-cost technologies usable under different circumstances.
- Suggest an optimal strategic sequence for implementing major subprojects in the first five years of the sectorial plan.
- Identify the location of major subprojects and facilities, and show them on a map, taking into account existing and planned facilities of other sectors, and the land-use patterns established by existing physical plans.

**c. Identify additional information** needed for the subproject planning and feasibility phases.

**Step 8:  
Prepare Plan  
for OM&R**

Prepare an O&M plan for the first five years of the sectorial plan, based on both existing and planned infrastructure facilities. This plan should incorporate projections for financial, human, and physical resource requirements.

**Step 9:  
Recommend  
Policies and  
Standards**

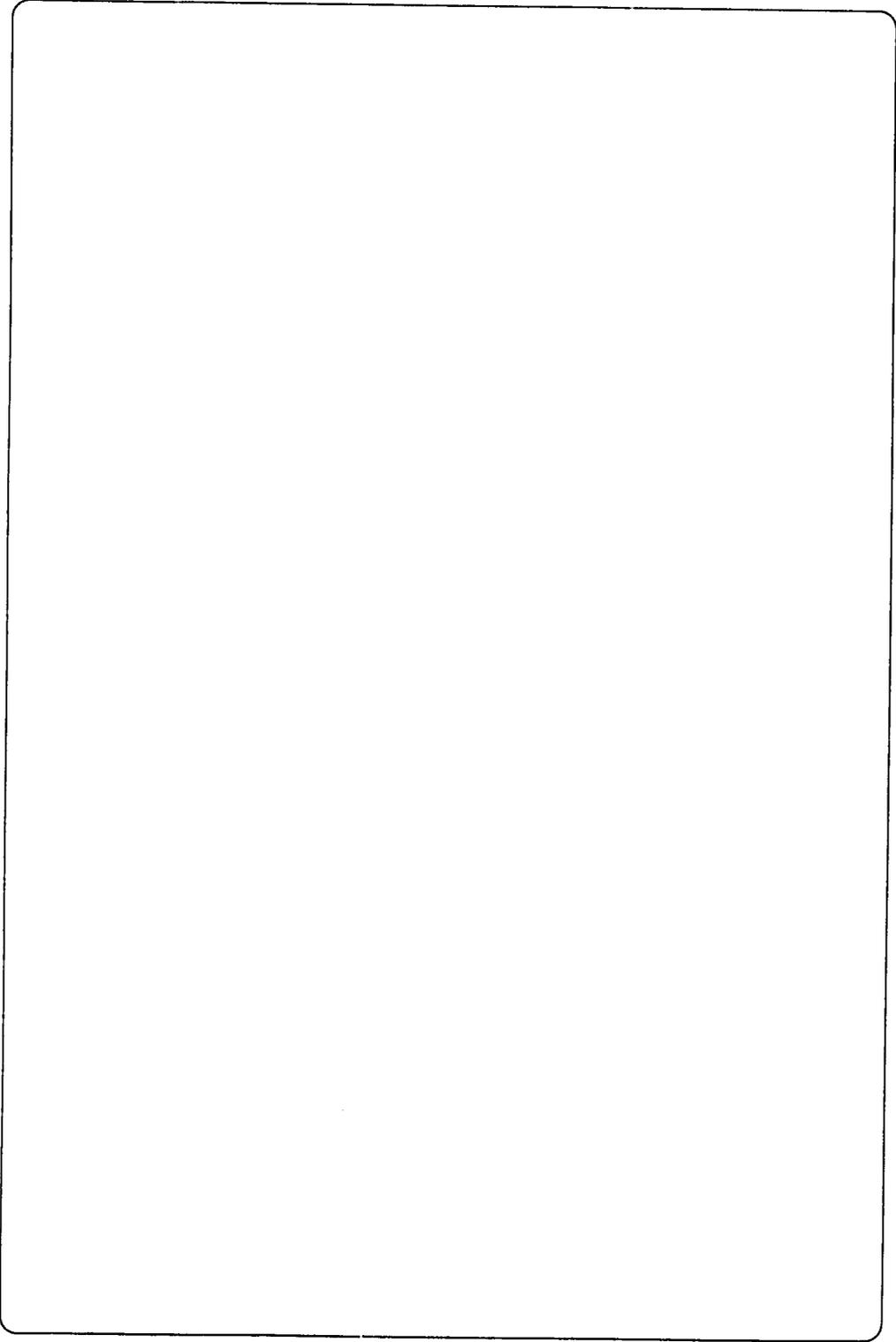
Recommend specific policies and general standards for the planning, design, construction, and O&M of subprojects within the sector.

*Example 1.* For water sector planning, this might include checking the capacity of sources before extending pipe networks, checking for consistency among different components of subprojects, and combining subprojects into a large subproject, where possible, to reduce operating costs.

*Example 2.* For roads, standards might include a minimum 5.5 meter road width, shoulders, proper road alignment, and traffic signs.

**Step 10:  
Plan for  
Revisions**

Make provisions and a schedule for periodic reviews of plan implementation, and for revising and updating the sectorial plan in the light of changing circumstances and experience gained.



**Technical Reference: SECTORIAL STRATEGY STATEMENT**

**DEFINITION**

A *sectorial strategy statement*, as described in Section 3, *Characteristics of the Interim Planning System*, contains sectorial policy for guiding the preparation of a *sectorial plan*. In the absence of a plan, this policy statement is also used to guide the development of subprojects along chosen sectorial lines. The statement is based on information already available at the governorate level or information that can be procured without an extensive level of effort.

**CONTENT**

A sectorial strategic statement need not be long (three to five pages is adequate), but should, as far as possible, address the following :

**Role of the sector in governorate development.** Sectorial contributions toward reaching the development objectives of the governorate, including its role in supporting the development of other social and economic sectors. Relative priority accorded to the sector as compared to other sectors.

**Standards of service.** Governorate preferences concerning per capita water consumption, hours of service, water quality, the use of public standpipes, categories and types of roads that should be paved, etc.

**Level-of-service targets.** Projected targets such as the percentage of population having access to safe water by 1997 from house connections and public standpipes, or the kilometers of roads to be paved by 1997.

**Resource estimates.** A preliminary "order of magnitude" estimate of resources needed to achieve desired sectorial targets.

**Sources of Funding.** Identification of sources (Bab III, NOPWASD, LD II-P, bilateral donors, World Bank and other UN agencies) likely to finance the sectorial investment program.

**Constraints.** Identification of impediments to the achievement of sector objectives and suggestions on how to overcome them.

**Specific Objectives.** Strategic sectorial objectives to be achieved in the medium-term. For the water sector these might include reducing the number of source works, improving the continuity of supply, reducing water loss, and increasing storage capacity.

**Subproject priorities.** Criteria stated in the *Guidelines for LD II-P Fourth-Year Planning* (completion, rehabilitation/upgrading versus new subprojects) and additional governorate-specified criteria, such

as urgency of need, importance of the subproject's economic and social benefits, cost-effectiveness in providing a given level of service, and ease of implementation.

**Geographic Priorities.** Particular geographic areas and communities with special or urgent problems needing priority attention.

**Specific policies and recommendations.** Sector-specific guidance, such as recommendations for the water sector to check the source capacity before extending a pipe network, implementing larger-scale, more cost-effective joint subprojects when appropriate, and giving priority to replacing leaking pipes. For the roads sector these recommendations could include a road width of 5.5 meters, the standard use of shoulders and traffic signs, and proper road alignment.

**Subproject coordination.** Suggestions for achieving inter- and intrasectorial coordination among subprojects at each level of local government.

**O&M costs.** Planning considerations for O&M costs and how these affect selection of subprojects.

**Lessons of experience.** Noteworthy lessons from the implementation of BVS, LD II-P, Bab III and other subprojects--common mistakes to avoid in planning, designing, implementing and operating subprojects.

**NOTE FOR THE  
FOURTH-YEAR  
PLANNING  
PERIOD**

Because the sectorial strategy statement is a new requirement beginning with the fourth-year planning cycle, governorates may at first have some difficulty covering all the features listed above. They are encouraged to address as many as possible, keeping in mind that some items are essential. For instance, in the case of the water sector, it is essential that the governorate sets standards of service as described above. Specific formats and guidelines on preparing sectorial strategy statements for the water, wastewater, and roads sectors have been distributed during fourth-year planning orientations and can be found in *Fourth-year Planning Forms*.

**Technical Reference: SUBPROJECT PLAN FORMULATION**

**Additional Terms:** Subproject, subproject component, completion, extension, rehabilitation, prioritization

**DEFINITIONS**

As used in LD II-P planning, a *subproject* combines financial, human, and material inputs in well-defined activities for the purpose of attaining intended objectives. Subprojects are temporary activities taking place at defined geographic locations.

*Subproject components* are the major parts of a subproject. If the subproject is a village water system, its components might include a pipe network, a pump and pumphouse, and a water tower.

*Completion* is a term used to describe additional work that must be done to make a project operational. This contrasts with *project rehabilitation* or *extension*, which involve operational projects.

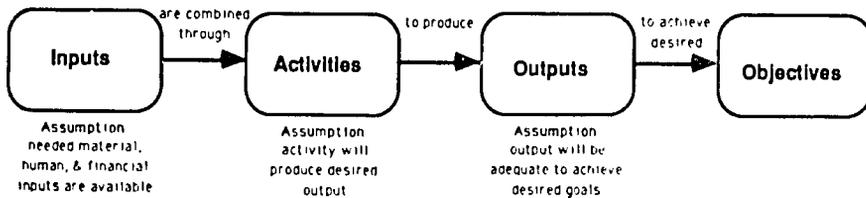
*Prioritization* of subprojects should be performed using objective criteria derived from the sectorial strategy statement or the sectorial plan, if it exists. Local government units may wish to use the subproject prioritization form, which has been successfully implemented by some governorates. See the technical reference entry entitled *subproject prioritization* for more information about this important activity.

**LOGICAL APPROACH TO SUBPROJECT FORMULATION**

A logical approach to subproject formulation requires that you must know what you want to achieve before you begin deciding what to do. In other words, you must first set your objectives—what it is you hope to achieve. Once these are set, you should determine the outputs or facilities needed to attain your desired objectives. Only after completing these two steps can you adequately determine the inputs and activities needed to achieve the desired outputs.

Logical subproject formulation also identifies and examines assumptions—those factors necessary for success, but beyond immediate control—made when predicting outcomes. Such assumptions should be reasonable under existing conditions. In other words, you should not assume that you will suddenly have double the number of skilled mechanics at the markaz maintenance center, unless there is a good reason for believing this possible, such as a planned training course.

The following diagram illustrates the interrelationship of various aspects of subproject formulation.



**THE  
FORMULATION  
PROCESS**

There is always uncertainty as to whether a project, as conceived, will be successfully implemented to achieve the intended results. By following the steps provided below, and ensuring that assumptions made at each stage of project formulation are reasonable, the chances for success are increased.

**Step 1:  
Define  
Objectives**

Subproject objectives must be clearly defined, and should be compatible with sectorial goals as presented in the sectorial plan (or strategy statement). Objectives provide the "big picture" for the subproject, and should include specific statements about the desired levels-of-service and delivery dates. Thus, the main objective of a potable water project may be to provide "clean" water to 300 persons in village xyz by December 1991.

**Step 2:  
Determine  
Outputs**

Once the subproject objectives are defined, the specific outputs required must be determined. These should be reasonable, precisely-stated quantities and qualities necessary for attainment of the desired level of service. To attain the objective of the water subproject referred to above, it may be necessary to produce 30,000 liters of a specified quality of water per day. This quantity is based on the assumption that each person will not use more than 100 liters/day on average.

**Step 3:  
Define  
Activities**

After determining reasonable outputs based on realistic assumptions, the activities necessary to produce these outputs must be identified. Such activities should be feasible, and their duration and sequence should be well-thought through. The logical time sequence for activities is critical; for example, a pump cannot be installed before a pumphouse is built. Alternatively, it may be advantageous to perform several activities simultaneously. To avoid delays, for instance, a pump should be ordered while the pumphouse is under construction, and personnel should be trained while a water treatment plant is being built.

**Step 4:  
Identify  
Inputs**

Inputs are the human, financial, and material resources that must be available for successful implementation of a project. An accurate estimate of capital costs requires the identification and description, including quantity and type, of all project inputs. Incomplete or inaccurate information about inputs may lead to insufficient funding for, and ultimate failure of the subproject. Because there are often alternative choices for project inputs (asbestos versus PVC pipes, for instance), careful thought should be given to which choice is most suitable.

**ISSUES IN  
SUBPROJECT  
FORMULATION**

Major issues to consider during subproject formulation include appropriate subproject scale, location, technical options, and relationship to other subprojects. These issues can have a tremendous impact on capital and recurrent costs, and are critical to successful implementation.

**Subproject Scale** To be economically and technically feasible, certain facilities, such as water and wastewater treatment plants, must be of a minimum size. Up to a point, as the size of such facilities increases, the cost of producing one unit of output decreases. Because of this, it may be advantageous to plan a joint subproject to serve a broader geographic area than a single village unit. Village councils are encouraged to pool their resources and to request joint projects if it will result in better services and less cost per unit output or beneficiary.

**Subproject Location** Possible locations for a subproject should be identified during subproject formulation, and a preferred location should be recommended. Choosing the optimum location can significantly increase benefits and reduce costs. The location of other existing and planned projects, and the social and economic implications of site choice should be considered. The final recommendation should be compatible with any existing sectorial or physical plans.

**Subproject Technology** Generally, more than one technology is available to design and execute a subproject. Each possible technology should be carefully examined and compared with other options in terms of capital and recurrent costs, and ease of design, construction, operation, and maintenance. After weighing these factors, the most appropriate technology should be chosen.

**Subproject Coordination** To avoid wasting resources, subprojects should be planned to complement and coordinate one with another. For example, a planned road subproject should be coordinated with a planned water pipeline in the same area, so that the pipeline can be installed before the road is paved. Otherwise, time and money is wasted digging up the newly completed road to install the pipeline.

Likewise, each component of a subproject should reinforce the other components. For example, the addition of aprons and drainage ditches to public standpipes can, for a small cost, reduce negative effects such as pools of stagnant water.



**Technical Reference: SUBPROJECT PRIORITIZATION**

**DEFINITIONS**

Prioritization refers to a process that allows local administrations at different levels to rank subprojects according to a set of objective criteria. This is necessary because resources are always limited, and it is important to choose those subprojects that will meet the most urgent needs in the most cost-effective manner.

**WHEN PERFORMED**

After diagnosing problems and identifying their causes, subprojects providing adequate solutions to these problems should be identified. Ideas for these subprojects may come from a number of sources, including governorate, markaz, and local unit executive officials and staff, and popular council members. Major subprojects may have already been identified in existing sectorial or other plans, *and sectorial studies*.

Once a list of subproject ideas has been generated, a preliminary screening is useful for weeding out those ideas with little chance for approval and/or success. In particular, subproject ideas that are not eligible under current LD II-P guidelines or guidelines for other sources of funding, or those that are inconsistent with up-to-date sectorial plans should be dropped. Those subproject ideas that have little chance of being implemented successfully or that are not justified in terms of the size of the local population or demand (this is especially important for wastewater projects) should also be dropped during this preliminary stage.

Even after this preliminary screening, there may be too many subproject ideas to implement during one annual planning cycle because of scarce resources and limited implementation capacity. Also, each proposed subproject may have several alternative technologies that could be used for its design and implementation. Prioritization according to objective criteria such as that in the LD II-P guidelines and sectorial plans/strategy statements is therefore essential.

**EXAMPLES OF CRITERIA FOR RANKING**

Examples of subproject prioritization criteria are provided below to help local administrative units rank subprojects both within and across sectors.

- Whether the project meets a basic need
- The relative urgency of the need to be met
- The number of beneficiaries to be served
- Nature of the subproject—whether completion, upgrade, rehabilitation, extension, or new

- Extent of the positive impact of this subproject on other subprojects
- *Negative impacts that might affect overall feasibility and benefits*
- The logical implementation sequence of this subproject in an overall development program
- Relative availability of inputs needed for the subproject, including spare parts, staff, and other support
- Relative ease of subprojects implementation, operation, and maintenance
- Extent to which it will be practical to secure funds for subproject investment and O&M costs
- Degree of willingness of beneficiaries to contribute to the subproject costs

Each of these criteria is discussed in more detail below.

**Satisfaction of Basic Needs**

In general, focus should be on a subproject's contribution to satisfying the basic needs of the population. For instance, priority should be given to a subproject meant to provide potable water to a village with no existing water system, rather than to a subproject that would provide a community hall for the same village.

Another factor that must be considered is the urgency of the need. For example, a locality where the capacity of the existing potable water system barely meets present demand should be given priority over a locality where the existing water system still has some excess capacity.

**Size of Population Served**

Priority should be given to subprojects serving the greatest possible number of people or extending significant service coverage. Thus, the completion of a school or health unit building may be given priority over a short road extension or paving project that would serve only a small number of households.

**Nature of Subproject**

Subprojects may be classified as either completion, rehabilitation or upgrade, extension, or new (refer to the technical reference entry for *subproject formulation* for explanations of these terms). A completion subproject should be given top priority because the costs involved to make it operational are less than those for extension or new subprojects. Furthermore, if a subproject has been started but not completed, all of the resources that have gone into it will be wasted unless it is completed.

Rehabilitation subprojects should be given priority over extension or new subprojects because they are usually less costly to implement. The lower cost means a lower per capita share of subproject service costs. Also, it means that additional financial resources can be appropriated for other subprojects.

As an example, the completion of water storage tanks has priority over laying new pipelines where no water storage capacity currently exists. Likewise, upgrading a road project is more cost-effective, and thus should receive a higher priority, than beginning a new road project.

**Relation to  
Other  
Subprojects**

Subprojects do not exist in isolation; each relates to and impacts other subprojects. In addition to direct positive and negative effects, a subproject may have indirect effects on economic and social activities. Subprojects that will facilitate the implementation and operation of other projects and increase their efficiency are significant from a priority viewpoint. For example, a subproject for the replacement of old water lines may be essential not only for reducing water loss and decreasing the groundwater level, but also for increasing the efficiency of the existing water station. Likewise, paving an existing dirt road may both reduce crop losses because of higher transport efficiency, and improve attendance at a nearby school because of easier access.

**Negative  
Impacts**

The potential negative impacts of a subproject must be considered during ranking, as some negative effects may be quite significant. For example, the extension of a water pipeline network in a certain region may lead to a higher groundwater table, which may damage existing structures, and lead to environmental pollution, resulting in the spread of disease if no wastewater system is in place.

Most subprojects have some negative aspects, and it is important not to automatically reject a subproject because of these. However, the severity of the negative effects and the possibility of decreasing these must be considered when determining its priority ranking.

**Proper  
Subproject  
Sequencing**

The logical time sequence of subprojects should be considered when determining priorities. Some subprojects cannot or should not be implemented until after a related subproject is operational. Laying a water pipeline to a remote region, for instance, should not be considered until a water source is known and a water station, tanks, and network are constructed. A slaughterhouse should not be planned before ensuring the existence of a paved road for transporting animals to and from the facility, and a wastewater treatment plant should not be designed for a region lacking potable water systems. Also, it is desirable to lay potable water pipes crossing a road before the road is paved.

**Availability  
of Inputs  
& Support**

Availability of subproject requirements cannot be ignored during prioritization. Such requirements include both construction and O&M needs. Availability of funds to cover capital and O&M costs, qualified labor, and spare parts, are some of the factors that must be considered when evaluating the feasibility or probable success of a subproject, and its relative priority. Availability of technical support may also be important, especially for subprojects requiring relatively sophisticated

experience and skills such as wastewater or water treatment facilities. All else being equal, subprojects whose inputs are readily available, and which are relatively easy to implement, operate and maintain should receive priority.

**RANKING  
PROCESS**

To use these criteria in determining subproject priority, a relative weight may be given to each criterion, and a point system may be applied to determine actual rank. The subproject prioritization form, available in the volume entitled *Fourth-Year LD II-P Planning Forms*, will help local administrations to prioritize more easily and objectively.