



# Practitioner's Guide:

## Systematic Planning of Resource Requirements



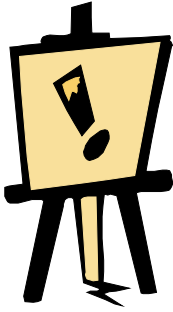
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und Entwicklung

### Systematic Planning of Resource Requirements

#### Brief Description



Resources include more than just “money”. The ability to fund a proposed development activity that has been planned also depends upon the ability of the planner to optimise between the available resources. Resources have to be allocated in a cost-effective and prudent manner in order to attain the desired result. Optimisation means “getting the biggest bang for a buck” or in other words the maximum return for a given investment. There are numerous different approaches how resource optimisation can be undertaken, including such complex approach as Critical Path Method, Project Evaluation and Review Techniques and other such optimisation techniques. However, it is not always necessary to use such sophisticated approaches, in some cases simple optimisation procedures suffice. The first step in the process is always some form of systematic planning of the actual resource requirements.



*Photo 1 and 2:  
The planning team sought alternatives to the current approach of irrigation and water extraction.*

### Systematic Planning of Resource Requirements

#### Proposed Main Users

Social and urban planner, private and public sector experts.



#### Purpose of the Method



Planners regularly only consider the need to plan the allocation of money and personnel; they often do not consider the “other” resources. Optimising the allocation of resources is a specialised component of development planning requiring some knowledge in basic economics and business management. Unfortunately these traits are not common amongst technical planners and administrators involved in development projects.

The purpose of this tool is to illustrate what the “other” resources are that require careful planning and also to highlight some approaches for optimising the use of scarce resources. In many cases when planners are confronted with the need to assess the cost of implementing the plans they are forced to re-consider the viability of the plans. There are two ways in which planning can be undertaken: without considering resource requirements initially or basing the plan on the available resources. While the latter is a more pragmatic approach it usually results in plans that are not very creative and visionary. The plans resulting from the former may be more creative and imaginative but these may not always be “affordable”.

### Systematic Planning of Resource Requirements

#### Advantages



- ▶ Plans are more likely to be implemented rather than simply shelved.
- ▶ Resource estimates force the planner to consider alternatives, some of which may be quite innovative.
- ▶ The likelihood of getting plans approved is far higher if realistic resource estimates are attached to the plans.
- ▶ The full implications of the plans are more likely to be known once the resource requirements have been assessed.
- ▶ Optimisation approaches, including shifting between resources, can ensure that innovative plans remain “

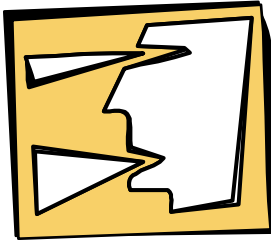
#### Limitations



- ▶ There are different ways in which the budgets can be presented: performance budgets or composite/cost account budgets. They may not always be compatible.
- ▶ Budget restrictions may be so severe that the implementation of the plan becomes impossible.
- ▶ Not all data and figures may be available, thus requiring that estimates are made, these may be inflated or unrealistic.
- ▶ It is not always clear whether everything in the public sector has to be or should be valued in monetary terms, especially the cost of civil servants and other public sector employees.
- ▶ Decision makers may be shocked when they see what the plan is likely to cost and may thus abandon the ideas rather than getting the planners to develop realistic alternatives.

# Systematic Planning of Resource Requirements

## Principles and General Procedures



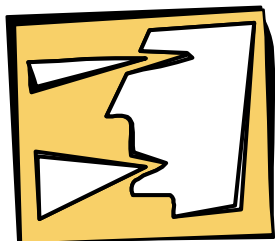
### First Step

The **first step** in systematically planning the resources is to have an overview of all the resources that are available. Resources that need to be optimally planned in order to ensure that development activity can be implemented include:

- ▶ **Money:** in its simplest form is the net amount of cash available to fund the cost of the development activity. The allocation of sufficient funds is of critical importance for the provision of services or for development activities. Critical in the organizational sense is from where the cash is expected to come from, when will it be available and the time scale it is foreseen for. Money is in many ways the primary resource; with it one is in a position to “buy” many of the other resources. Therefore all components of the plan are highly dependent upon money.
- ▶ **Human resources:** includes the number of people with particular skills who are needed to provide a service or implement activities. Manpower or personnel-management, which includes such elements as motivation, training, adequate disposition and allocation of staff, is an essential factor in the efficient provision of services. Peoples capacity for growth, that is their capacity for becoming highly motivated, loyal and diligent workers (in so far as the management is competent and successful), also has to be considered.
- ▶ **Time:** as a scarce resource is often the most determinant factor relative to the other choices within a development plan and/or organization. A trade-off is often required between time and other resources. For example, if more skilled labour can be hired to complete the activities then time can be “bought”, or if more machinery is used rather than labour then time can be “saved”. However, there is a decreasing return on investment, in other words, simply adding more and more labour in order to save time will eventually lead to a significant decrease in the returns on investment. Each additional labour unit will produce less and less until the point is reached where no additional impact is achieved (i.e. law of diminishing returns) Unfortunately, time may often figure more profoundly by being systematically under-provided as a resource than vice-versa. Thus care and attention has to be given to ensuring that it is carefully planned, as it is a “key” resource.
- ▶ **Physical resources:** include all types of equipment, machinery, facilities, buildings, bridges, etc. Physical resources may be moveable (i.e. plant, machinery) or stationary (i.e. buildings). Like the other resources, the physical ones have to be planned and managed to optimise their use, a point that is often neglected.

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## Principles and General Procedures



- ▶ **Information resources:** or the lack of it is an essential element in planning for development in the district. By information resources one means the necessary database requirements needed to carry out effective planning and management. This too has to be treated as a scarce resource and has to be taken into consideration during all steps of the planning and implementation process. How much data and information is needed varies according to each developmental activity. The tendency to underestimate the data and information needs often leads to poor allocation of other scarce resources such as money and time in order to collect the missing information. By systematically planning data and information requirements according to essential needs (as opposed to what would be “nice-to-know”) a streamlining and effective use of information and data as a “resource” can be attained.
- ▶ **Authority and power:** refers to the authority and power vested in institutions and individuals. Both formal and informal power structures need to be known and understood for effective planning and management. While a clear hierarchical authority, detailed by elaborate organizational charts exist (i.e. organizational diagram) the actual power and authority may rest in quite different hands. It is essential to know who effectively takes decisions within the organizational framework so that they can be directly addressed rather than wasting time and money on the formalized structures and procedures. Understanding the organizational requirements, rules and regulations governing the work of the various institutions and organizations also reveals additional factors that may have to be considered when valuing a development plan.

## Second Step

The **second step** in the process is to decide the type of budget that should be prepared. The choice is between a performance budget and a composite/ cost account budget.

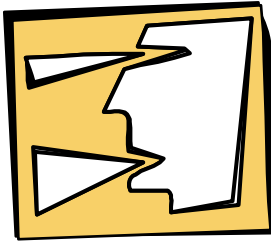


**Performance budget** accounts for money according to a completed product. For example, the complete costs (and possible revenues) involved in installing electricity system for wells would be priced. While this is relatively easy as far as material inputs are concerned it is more difficult for labour and staff. They may also be working on other projects at the same time in which case it is necessary to apportion their time and thus cost. This requires that the staff maintain time sheets.

**Cost account or composite budget:** The composite budget is made up of all revenues minus the expenses incurred. It is necessary to differentiate between expenses and costs: **expenses** are incurred the moment something has to be paid for and is usually combined with the flow of money (cash as well as cheque, bank drafts). **Costs** include the measure of what has to be given up in order to achieve something.

# Systematic Planning of Resource Requirements

## Principles and General Procedures



Two concepts of cost can be distinguished:

- a) **Opportunity cost:** In economics, it is considered appropriate to define costs in terms of values of the alternatives or other opportunities that have to be foregone in order to achieve a particular thing.
- b) **Outlays:** An accountant would define the cost of something as the total money expenditure or outlays necessary to achieve it.

Costs can be further distinguished between:

- i) **Private costs:** measures the opportunity cost to the firm of the resources that it uses. This opportunity cost is based on the alternatives that are available to the firm. If a firm uses a resource for which it has absolutely no alternative use, the private cost is zero.
- ii) **Social costs:** measure the cost to the whole society of the resources that a firm uses. This opportunity cost is based on the alternatives that are available to the whole society. If an entrepreneur uses a resource for which the society had alternative uses then the social cost of these resources is not zero, it is rather the value of the resource in its best alternative use.

### Third Step

The **third step** in the process is to formulate the budget for the project.

### Fourth Step

The **fourth step** involves bridging the gap between the planned costs and the available resources. The following approaches could be useful when trying to bridge the gap whereby each will require a complete review of the original plan in order to determine whether the objectives are still feasible after the cost cutting measure:

- ▶ Linear cut in the expenses (i.e. 10% across-the-board cut in the proposed expenditure);
- ▶ Removal of particular sections or blocks of activities from the plan (i.e. deleting cost intensive activities);
- ▶ Postponement of the implementation of activities (i.e. temporarily removing activities which can be funded at a later stage);
- ▶ Searching for possible cost reductions within the plan (i.e. more labour intensive, self-help activities rather than capital, machine intensive ones);
- ▶ Mobilisation of other public or private funds to finance the activities;
- ▶ Review of possible alternative financial sources.

### Systematic Planning of Resource Requirements

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