

# Public sector productivity measurement

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The most important levers that the public sector has on productivity are

- improving resource utilisation (labour, material and capital equipment),
- quality as perceived by external and internal users of services,
- timeliness of service

Administrative productivity measurement usually covers four dimensions – efficiency, quality, timeliness and utilisation

Efficiency is measured in conventional economic terms, while quality and timeliness are measured against standards that may be set by policy, law or agreement, or management set subjective standards commonly known as organisational performance standards. Utilisation refers to the actual usage of available staff and equipment.

## Measuring efficiency

Efficiency is usually measured by the ratio of real output (physical number of goods or services) to input (costs of labour, capital, energy, etc) over a specific period (month or year). This is then compared to a base period

For example, the licensing department processed 5 000 licenses at a cost of R1 000 000 during 1998 (5 000 licences/ R1 000 000 = 0,005 licenses processed per R1 labour input)

During 1999 the department issued 5 100 licenses at a cost of R900 000 in constant 1998 rand values. Thus 0,005667 per constant R1 of labour input, being a labour productivity increase of 13,1%.

## Measuring quality

Quality is often measured by accuracy or error-free rates, since a large part of routine government activity is specified in rules, regulations, and operating procedures that must be followed to produce accurate work. There is often a direct relation between quality and efficiency where the quality measure measures accuracy. Fewer errors should improve efficiency rates since less work would have to be re-done due to errors and fewer complaints related to the errors would have to be handled.

Where it is difficult to measure output objectively, other measures, usually subjective judgements of the supervisors, have to be used. Factors that require supervisory judgment should be made explicit and should be explained as clearly as possible to avoid judgements that appear arbitrary. Feedback from clients through questionnaires and surveys is possibly a better method to measure service quality and should be internalised in any productivity programme.

## Measuring timeliness

Timeliness is usually a straightforward turnaround measure. It measures the time it takes to transform input into the output, or in other words, to provide the service. There is usually a direct relationship between timeliness and efficiency rates. If a service is rendered or a product produced more quickly, the number of outputs should increase, thus increasing efficiency. Managers would have to take

remedial action if efficiency or timeliness increases were made at the expense of product quality, quality of service or operational effectiveness

### **Organisational performance standards**

To ensure that employees of an organisational unit understand the rate of efficiency and the level of quality and timeliness they are expected to attain, managers set standards covering each of these elements. Such standards are called organisation performance standards.

Efficiency, quality and timeliness measures tell the manager 'what is happening' in the organisation, organisational performance standards tell the employees 'what ought to happen' in the organisation. Both are essential to the success of a department's productivity improvement programme.

Work measurement enables managers to determine what activities or tasks are absorbing the greatest resources or consuming the most time. Managers can then decide where changes could be made to bring about improvements.

### **Outputs**

The development of measures should focus on functions, which result in the final output as it reflects the primary purpose of the organisational unit being measured.

Groups outside the producing unit use the outputs the producing unit produces/delivers. The users of these services/products include the public, other governmental entities or even other sections within the department, for example facility maintenance units.

Numerous activities may therefore be performed as intermediate steps in a process before the final output is counted. Examples of such activities are clerical support, management support and data processing functions. These intermediate tasks and activities can, however, still be

manipulated or changed to enhance the productivity of organisational units, but are not counted as a final output.

Ideally the collection of output data should form part of a management information system.

If outputs cannot be measured in any of the above mentioned ways and therefore only in subjective terms, the subjective measures used should be independently verifiable.

### **Inputs**

Inputs are the resources used to produce the output. The following methods are usually used to calculate the input:

#### **Costs from**

- a) Salaries and expenses of all employees directly and indirectly involved in producing the output. Indirect labour such as clerical, supervisory and management employees who are employed in the unit producing the output, is included. However, top management expenses are not included in the cost of production/service delivery because top management is too far removed from the production of the final output.
- b) Apportioned automation and other capital costs. For example, machinery, equipment etc.
- c) Other costs that do not form part of a) or b). For example, costs for consultants or products or services purchased.

Outputs associated with many functions (for example medical care, inspections, prison management) will have to include the inputs of multiple organisational units.

Input costs should be tied to the budget process and verified by the Department of Finance or its proxy. Input and output measures identified for productivity measurement purposes should be those used for resource management and budget formulation.