Concerning Inputs and Outputs: Action Capacity by Police Services in Ethiopia

Derese simegnew Alehegn

Ethiopia
p.o.box 56196
Addis Ababa
dereseenkopa@yahoo.com
tel. +251913286839

Abstract: the review of the approaches employed by police agencies in Ethiopia indicated that agencies faced a number of decisions when designing their activity measurement systems. Decisions in each jurisdiction reflected differences in reporting requirements, as well as other concerns such as the availability of data from existing sources. Output based budgeting seeks to improve the efficiency of agencies by making them accountable for the outputs that they produce. Activity measurement systems record the amount of time that staff spend attending to a range of activities. Activities are defined to correspond with the outputs of the agency in output based budgeting. Information collected for internal reporting requirements is most useful if the activities describe the outputs of the business units or cost centers. Agencies therefore faced a choice of how to specify those activities that most closely resemble the outputs of the agency and the outputs of its business units and cost centers.

Keywords: Action Capacity, Police, Ethiopia

1. Introduction

Government agencies provide a range of outputs that seek to address economic and social objectives. These outputs include the provision of law and order, emergency management and safety, health services, education, community services and public housing. Governments and agency managers constantly face the challenge of prioritising competing objectives. Managers must choose those inputs that will meet their output objectives, subject to the constraints on the agency's budget allocation. Similarly, governments must choose the optimal set of outputs to meet their desired outcomes, subject to the constraint of their budgets. Such decision making can be enhanced with detailed and accurate information on how resources are used and what outputs are produced.

Many government agencies increasingly find their funding explicitly linked to the quantity of services (or outputs) they provide. This is a direct result of the general shift in government focus to output based budgeting. The requirement for government agencies to cost their outputs, along with the growing need for agencies to better understand their resource use, has heightened the need to implement effective management information tools. One such tool is activity measurement.

1.1 Activity measurement

Activity measurement provides agency managers and government with information that helps them better understand the relationships between inputs and outputs. Activity measurement involves monitoring the allocation of an input (typically labor time) to a range of activities or outputs. It is most useful for services where staff are responsible for the delivery of multiple outputs, rather than being dedicated to delivering a specific product. Activity measurement instruments include surveys, rosters and timesheets.

The information generated by activity measurement can:

- ❖ assist management in measuring the allocation of the agency's resources to specific outputs;
- ❖ cost the outputs of the agency, and assist government in meeting outcomes;
- ❖ assist line staff in better understanding how their work contributes to the broader, corporate goals of their organization; and
- ❖ Provide the community with information on the range and cost of services that an agency provides.

The purpose of this paper is to highlight the recent lessons from Ethiopia police use of activity measurement. These lessons will allow police agencies to learn from one another, and will assist other government services for which activity measurement may be relevant. The emphasis is on design and implementation issues, as well as how the results can be used to improve internal management and external reporting. Guidelines for developing and implementing activity measurement for other areas of government are included within chapters 2 and 3.

1.2 Police use of activity measurement

Police services are the principal means through which governments pursue the following objectives:

❖ people can go confidently about their lawful pursuits in safety;

❖ people who break the law are dealt with under the law;

❖ road users behave safely; and

❖ Safe custody for alleged offenders, and fair and equitable support to judicial services.

In meeting these objectives, police are involved in a diverse range of activities aimed, for example, at reducing the incidence and effect of crimes against people and property. These activities include investigating crimes, maintaining a visible and continuous profile, and providing community safety and education programs.

Police also respond to more general needs in the community — for example, assisting emergency services, mediating family and neighborhood disputes, delivering messages regarding death or serious illness, and advising on general policing and crime issues (Criminal Justice Commission 1996). Police agencies throughout Australasia have widely adopted activity measurement systems to measure the allocation of labor (sworn officers, public servants and forensic staff) to these activities and outputs.

Box 1.1 **Activity measurement instruments**

There are a number of activity measurement instruments available to measure the allocation of resource effort (primarily associated with human resources) to the outputs of an organization. Police agencies use activity surveys, timesheets and rosters, and each of these tools may be relevant to other services depending on the circumstances.

Activity surveys
An activity survey is primarily used to collect information on the activities and tasks that staff have undertaken during the survey period. Staff complete a survey form by nominating how much time they spent on specific activities during a shift. Staff time spent delivering activities can then be applied to an organization's budget to determine the total cost of delivering each output.

Police use surveys for activity measurement. They generally conduct the surveys over a one or two week period, once or twice a year.

Timesheets
Timesheets also record the activities and tasks that staff have undertaken during their shift. Unlike activity survey forms, timesheets require separate storage of a range of codes which correspond with various activities, tasks and times. Timesheets typically provide a greater level of detail than provided by activity surveys.

Staff complete a record for each half hour of duty undertaken. They code the 'task', along with the 'activity' associated with the task. Timesheets provide a continuous picture of activity within an organization. A separate process is used to aggregate the detailed data. Concerning Inputs and Outputs: Action Capacity by Police Services in Ethiopia Police use timesheets for activity measurement.

Rosters
All police services use rosters to record those activities that police expect to perform during a given period. A roistering system provides staff with a single description for the general activities they are meant to undertake throughout their shift. The roster is amended if the activities completed on the day differ from those specified. The roster system provides a continuous picture of activity within an organization.

Ethiopia Police use roster data for activity measurement. They are expanding their roster system to include detailed information on activities and tasks that were actually undertaken.

Most State and Territory police Ethiopia (including the Ethiopia Federal Police, which is contracted to provide community policing functions for the ACT) have introduced activity measurement to overcome the limits of existing instruments. Some police agencies previously used other management information tools to obtain resource allocation information — for example, patrol logs and duty books/diaries. These proved resource intensive and intrusive, and they were abandoned in favor of activity surveys.

Most police found these other approaches unsuitable for monitoring inputs and output costing. Computer aided dispatch systems, for example, often record information for centrally allocated tasks only (for example, radio dispatch jobs), so tend to lack information on proactive work (such as community liaison) and detective work.

Likewise, rosters only provide information on activities that are planned or tasked for a given shift, so they lack information on incidents and outcalls. Moreover, there is no correspondence between tasks recorded on rosters and the incidents that staff are called to attend via radio dispatch jobs and station enquiries or while patrolling a community. As a result, these instruments do not provide police agencies with sufficiently detailed, accurate and comprehensive data for monitoring inputs and costing outputs.

The unsuitability of existing arrangements was a major factor in Ethiopian Police's adoption of activity measurement:

The introduction of activity surveys for Ethiopian Police was primarily due to the lack of information being generated by existing data collection instruments. The information generated by these systems was generally not representative of the outputs being generated by Ethiopian Police in an output based management environment … (Blair, R., WA Police, Melbourne, pers. comm., 1999)

Police organizations use the results of activity measurement for a number of purposes, including output costing for Departments of Treasury, and internal planning and decision making.

Box 1.2 **linking activity measurement with internal planning**

When developing corporate priorities and targets, Regional Commanders and Portfolio Heads use the results of previous activity surveys to identify the level of effort required against each output (output mix) to address their policing priorities for the coming year.

The Annual Business Plan details the Ethiopian policing priorities and targets, given the resources allocated to each of the outputs (which are indicated via results of activity surveys). Further, Ethiopian Police use activity surveys conducted throughout the planning year to monitor and report on targets set in the Annual Business Plan and to feed into the planning process for the forthcoming year.

Ethiopia Police
Activity surveys help Ethiopia Police integrate planning into budgeting and reporting. Activity measurement has promoted a more comprehensive accountability regime for output management by:

- ❖ making available data that can be used to measure performance levels, set targets and monitor priority setting at the operational and management levels;
- ❖ demonstrating to all levels of police the link between what work police perform and how government funds the organization;
- ❖ reinforcing a customer focused planning process;
- ❖ providing data for executive managers to identify future policing needs;
- ❖ enabling the calculation of the full cost of outputs as well as the unit cost of each activity; and
- ❖ Enabling flexibility in planning for the deployment of costs.

Ethiopia Police Police

Ethiopia Police Police will use activity data as part of their next environmental scan for the Business Plan. In addition, SA Police have planned a project to identify the drivers behind the key police service outcomes of crime reduction and community satisfaction. In this project, the agency will examine activity measurement data for utility in the broad planning context, particularly in the allocation of resources to various policing outputs.

Report on Government Services

Activity results can also feed into performance reporting of government services. The Report on Government Services 1999 (SCRCSSP 1999) reports on the efficiency of output provision, and the effectiveness of those outputs in meeting outcome objectives, for a range of government services across Australian jurisdictions. The performance reporting allows users to compare jurisdictions, bearing in mind that each government may attach different weights to often competing objectives.

Ethiopia Police have used activity surveys to improve their reporting of performance indicators in the Report on Government Services. They will now report, for example, detailed cost and efficiency data for four key areas of service delivery, rather than a single output. Activity measurement has assisted this process by directly linking activities with outputs.

1.3 Who else can use activity measurement?

Other areas of government for which staff are responsible for the delivery of multiple outputs, rather than being dedicated to delivering a specific product, may also benefit from activity monitoring. These areas include:

- ❖ emergency services (for example, metropolitan fire and ambulance services, country fire authorities and state and territory emergency services);

- ❖ health (where staff may treat different types of patients);

- ❖ corrective services (where officers are involved in containment and rehabilitation activities);

- ❖ agricultural and environmental services; and

- ❖ Community services (where staff are involved, for example, in both child protection and family support outputs).

In the context of the Report on Government Services, there is scope to improve the performance data for other services. Effectiveness data, for example, are available for the four key objectives of corrective services: containment and supervision, offender care, reparation and rehabilitation. However, it has not been possible to break down expenditure against these objectives, and instead a single aggregate efficiency measure is reported. Education and emergency management agencies use similar broad level efficiency measures. Activity measurement may assist these government services in improving the accuracy of their reporting against specified outputs.

Activity measurement is not a universal solution to the challenges of gathering useful data to inform internal decision making, and external reporting. The usefulness of the exercise largely depends on the nature of the organization (for example, the number of outputs individual staff members provide) and the information requirements of that organization. Activity measurement may not suit those agencies that have simpler, more direct output cost measurements. In such cases, an activity measurement system may be unnecessarily complex and costly (both in terms of direct financial costs and the burden on staff).

Other areas of government services have already used activity measurement. The Ethiopia Police Government undertook an activity measurement exercise in 1996 to assist with the construction of a program budget for Community Health Mental Health Services. The costing methods used were quite similar to the methods that police agencies use.

1.4 Approach taken in this Ethiopia Police

This Ethiopia Police demonstrates how agencies may use activity measurement in output costing and internal management. It outlines the steps involved in the design and implementation of activity measurement, based on the experience of police services. It also identifies the perceived advantages and disadvantages of different approaches to activity measurement. The information presented is intended to assist government agencies (including police agencies) that are considering introducing or improving activity measurement

SA Community Health Mental Health Services

The construction of a program budget for Community Health Mental Health Services in Ethiopia Police involved the collection of activity information from service providers and community based health information systems. A costing model was constructed to attach cost information to each service provided in the mental health program. The final program budget represented the first time that a breakdown of the activities and costs of individual services in community health in Ethiopia Police were available.

Each region collected activity information for the period January 1996 to June 1996 for the services identified in the mental health program. Information covered activity under the three main types of services: one to one, groups and community initiative services. Training was provided about different types of costs, and their importance in setting priorities and planning services. The costing method used a mix of bottom–up and top–down approaches. The bottom–up method provided a cost estimate based on disaggregated resource use data for the different inputs into the provision of each service. This approach is similar to the methods used by most police agencies to allocate direct and indirect costs. In contrast, the top-down method used aggregated data and allocation rules to apportion costs to services — this is similar to the methods used by some police agencies to apportion overheads.

Ethiopia Police Child Protection and Supported Placement Services

The Ethiopia Police Department of Family and Community Services currently use an activity survey to apportion expenditure data on superannuation, workers compensation, payroll tax, depreciation and umbrella costs to the key output areas of the department.

The survey is run three times a year and includes all field and administration workers in zone offices and special units across the

state. It excludes central office staff. The survey runs for a two week period. Staff are required to allocate their time in 15 minute blocks to the relevant 22 lower level outputs, which make up six key output areas:

- Community Development, Education and Children's Services;

- Family, Youth and Individual Support and Parent Services;

- Family Safety Services;

- Crisis Support;

- Child Protection Services; and

- Care for Children.

Information can indicate whether the work relates to departmentally provided services or supporting and managing non-government service provision. The results over three survey periods are used to develop an average proportion of time spent in each output area. These are then used to apportion costs to key outputs for Annual Report requirements and Budget Papers for Treasury.

2.   Design Issues

The objectives for activity measurement largely determine the design features of an activity measurement system, including the types of activities to be classified and recorded, and the timing, scope and coverage of the data. This chapter identifies some key issues for designing an activity measurement system. It recounts the experiences of Australasian police agencies, draws lessons from these experiences, and establishes broad guidelines for developing an activity measurement system.

2.1 Objectives of activity measurement

The objectives of an activity measurement system are to provide information for internal and external purposes.

These objectives are not mutually exclusive; both may rely on activity measurement. The importance of each objective will determine the questions to be asked and the necessary data requirements. In turn, these determine the design features of the activity measurement system.

External reporting requirements may bear upon the specification of activities and outputs. Coordinating the specification of outputs and design features across jurisdictions at the earliest stages of the activity measurement system's development can avoid the need to change established output specifications or developing concordances between systems. The benefits to agencies and governments are the improved service delivery that results from increased transparency and accountability.

2.2 Information requirements

As discussed in chapter 1, an agency will require activity measurement when existing data collection instruments cannot satisfy the necessary information requirements. Alternative data sources will influence the chosen type of activity measurement system.

Specifying activities and outputs

The specification of the Ethiopia Police outputs and activities is an important aspect of activity measurement. The Ethiopia Police Department of Treasury (1996) listed criteria for specifying an output.

- ❖   Outputs are the final external goods and services, not a process.

- ❖   Ethiopia Police should have sufficient control over outputs to enable them to be held accountable for their delivery. Where agencies do not have sufficient control over outputs (for example, police agencies do not directly control all outputs because often their primary activity is to respond to incidents), outputs should be specified in a manner that allows the agency to controlcosts.

In contrast, activities describe the tasks, incidents and events that staff undertake, or the processes that Ethiopia Police uses to deliver outputs. Output based activity information can be used in output costing.

The objectives of activity measurement have implications for how an agency should specify outputs and activities. Output budgeting — an important external reporting requirement for many agencies — is intended to improve strategic decision making and resource allocation (Ethiopia Police Department of Treasury 1996). An agency is held accountable to government by specifying its outputs and being responsible for its achievements.

Where the objective of activity measurement is to improve the decision making and resource allocation among an Ethiopia Police units (business units or cost centres), the agency needs to specify activities and outputs for which senior management can hold the

unit accountable. The whole agency is still externally accountable if the outputs of individual units can be aggregated to give the Ethiopia Police outputs.

Measuring activities and outputs

In addition to the internal and external reporting objectives of the agency, the agency's or unit's type of work will have implications for timing the activity measurement. For those agencies or units whose actual activities do not significantly differ from the activities planned by management, it is immaterial whether the activity information is gathered before or after the occurrence of the activity.

However, a number of agencies (such as the police and emergency services) have rostered tasks that can substantially differ from their actual activities. Firefighting personnel, for example, may be roistered to undertake training duties but need to respond to a fire or other incident.

The information requirements of these organizations depends on the objective of the activity measurement. If the agency's primary objective is to improve decision making, both ex-ante and ex-post reporting is required. Such information indicates the resources allocated to roistered activities and the amount of resources actually used to respond to incidents. If the objective is to report on actual activities undertaken during a given period, then an ex-post measurement of data may be sufficient.

Measuring when activities occur

Once an agency knows its information requirements and chooses an approach for specifying outputs and activities, it must determine the required level of data detail. Is the agency interested in when an activity was undertaken throughout a shift (day, week or otherwise), for example, or simply in how much time was spent on the activity?

The level of detail about time largely reflects the objectives of the activity measurement exercise. For external reporting purposes, information on the proportion of time spent delivering outputs is generally sufficient. Information on when staff undertake activities is unlikely to add value. However, such information could assist management with resourcing issues, by answering questions such as:

- ❖ when do peak periods occur during the day, week or month?

- ❖ are some activities more or less likely to occur at certain times?

For police services, rosters may provide a sufficient indication of peak and lull periods. However, activity surveys provide greater accuracy and detail because they are based on actual resource use rather than expected resource use. This is an important design issue, with significant implications for both the respondent burden and the level of detail that can be collected on other items (such as activities and tasks).

2.3 Data collection issues

Sample design

After identifying information requirements, the next step is to examine the agency's available information sources. The nature of work for business units or cost centres may be such that they can directly assign their costs without collecting additional information. Rosters are likely to provide a reasonable indication of a school teacher's work, for example, and an additional data collection may not be necessary.

If additional activity information is needed, the agency would need to determine the scope and coverage of the information collection.

- ❖ Should all or only some of the staff be surveyed?

- ❖ Should staff be surveyed together or in separate blocks?

The decision to survey some or all staff recognizes the tradeoff between sampling error and cost when designing and implementing a system. Costs include the financial costs of establishment and administration, and the burden placed on staff. The agency must choose between the additional cost of expanding the sample size and the additional benefit of improving the precision of estimates.

The choice of sampling technique is partly influenced by how an agency has organized its units and cost centers, the activities of those units and cost centers, and the primary objective of the measurement exercise. Police agencies, for example, organize staff into specialist functional units (such as the Criminal Investigation Department and corporate services) or area based commands. If the primary objective of the activity measurement exercise is to cost outputs for output based budgeting, the agency can confine measurement to operational units, because only these units deliver outputs to government. Moreover, the inclusion of non-operational staff or units within a sample may overestimate the costs of outputs and lead to a misallocation of resources (section

4.4). If the primary objective is to use activity measurement to obtain information on internal processes, the agency may require activity information disaggregated by individuals or certain groups within the organization.

Timing and frequency

The timing and frequency of collecting activity information are also important. There are two approaches:

❖ measuring staff activities on a continuous basis throughout the year; and

❖ Measuring staff activities using a snapshot approach (for example, a survey).

Depending on the system used, the continuous monitoring of staff activities throughout the year may involve higher costs, both in managing the system and the data generated, and in placing an increased burden on staff (see chapter 4).

Measuring staff activities on a continuous basis provides internal management with a regular and (if appropriately structured) timely flow of activity information. Such a system can facilitate an immediate management response if necessary. However, those agencies that use activity measurement primarily to estimate output costs may find little value in the additional information generated via a continuous approach.

Agencies that decide to use a snapshot survey approach to activity measurement must decide how often to undertake the survey. Conducting an activity survey at least twice a year allows agencies to focus on:

❖ a typical period — a period of time (day, week, month) during which workload is representative of most periods. Such periods are notable for their lack of unusual events that may affect the work undertaken by the agency; or

❖ an atypical period — a period of time during which workload is not representative of most periods. Such periods are characterized by unusual events that may affect the level and/or mix of work undertaken by the agency.

Surveys conducted during typical periods indicate the amount of time that staff spend on specific types of activities throughout the majority of the year. Surveys conducted during atypical periods may indicate the impact (if any) of an unusual event on the level and mix of activities.

The nature of the work undertaken by police services can potentially vary with events or incidents that are outside the control of the police (for example, school holidays or a major sporting event). Similar issues would arise for other government services. Fire services, for example, are more likely to attend bushfires during periods of high temperatures and dry weather (such as summer months) than at other times throughout the year. In contrast, the outputs delivered by other government services may not vary significantly enough to warrant measuring activities at different times throughout the year.

Collection strategy

The two main options for collecting activity data are:

❖ manual collection via paper forms (for example, survey form or timesheet); and

❖ Automated collection using a computerized database (for example, a database that links electronic rosters, computer aided dispatch and electronic-based incident reporting systems).

These approaches are characterized by different fixed and variable costs. A manual collection is more labor intensive and can be expected to involve low set-up costs but higher operating costs. In contrast, an automated electronic collection can be expected to involve higher set-up costs and lower operating costs. The manual collection of activity data is generally feasible for activity measurement that generates a relatively small collection of information. It cannot be expected to handle a large volume of data cost effectively. An automated process that electronically collects information may be more appropriate for securing a large volume of data, particularly when the collection is to be repeated over time.

In the case of police services, almost all jurisdictions rely on the manual collection of activity information via paper forms. This is seen as an interim approach until agencies adopt alternative electronic mechanisms. These mechanisms include the use of laptop computers in patrol cars, electronic patrol logs and hand-held mobile data terminals, which some English police services recently adopted.

Other benefits of an automated electronic collection include:

❖ the potential to supplement existing information technology systems that generate resourcing information;

❖ the likelihood of greater precision (given that built-in auditing devices involve less chance of human error); and

❖ Reduced turnaround time (given that a systems based approach reduces the time between recording the information and

accessing results).

The final decision will largely depend on the objectives of the activity measurement exercise. For the purposes of external reporting, the manual collection of a relatively small volume of data would be sufficient. For the purposes of internal decision making, which may require the collection of large volumes of data, an electronic automated collection may be more effective.

2.4 Australasian police approaches to activity measurement

Australasian police agencies differ in their approaches to activity measurement. These differences reflect variations in policy objectives and reporting requirements.

Rationale for introducing activity measurement

As discussed earlier, the two key objectives of an activity measurement system are to provide information to improve internal decision-making and external reporting purposes (box 2.1). Most police agencies have developed and introduced activity measurement for external reporting — that is, to better cost their outputs for State budgets and reporting to Treasuries. Police agencies in Victoria, Tasmania, WA and SA, for example, use activity surveys to collect information for a range of output groups and outputs that have been agreed with governments.

In contrast, Queensland Police initially trialed an activity survey to provide management with information for internal decision making (although management also used this information to cost outputs). Most agencies now view the output costing function of activity measurement as an adjunct to its use as an internal management tool. Agencies are increasingly using activity data to inform internal planning and resource allocation processes.

Contracting out

Police agencies faced a number of options throughout the design and development stages of their activity measurement system. They had to decide whether to design and develop the system fully in-house, or to contract out part of the process.

Almost all police agencies internally developed those areas of the activity measurement system for which they had a comparative advantage (such as the classification of police activities and outputs to be costed, and the scope and timing of the process).

Some agencies contracted out stages of the process for which they did not have the relative expertise, including survey design and data processing. Queensland Police, for example, tendered out their survey to a private operator, which prints the survey forms, scans the results of the completed forms, and processes the data. The data are returned to Queensland Police within a week of the survey being completed. Victoria Police used an external contractor to design their diskette software and the associated database, and to transfer the results from these disks to the database. Other police agencies processed their survey forms internally.

Improving the concordance of activity measurement systems

As outlined in section 2.1, agencies may use activity measurement to generate data for national performance reporting purposes. Police agencies are hindered in meeting this objective by the fact that they have developed significantly different ways of aggregating activities and outputs into output groups.

This arose because individual outputs were agreed through a bilateral process between line and central agencies within each jurisdiction (reflecting policy priorities). Less emphasis has been placed on coordination in terms of developing standard policing outputs (or a standard approach to activity measurement, which would allow information to be aggregated into a standard set of policing outputs).

To overcome this problem, Australian Police agencies undertook a mapping project to link the individual outputs of each police agency with a standard set of national policing outputs (table 2.7). The aim is to be able to report comparative performance information for the Report on Government Services covering:

- ❖ community safety and support;
- ❖ crime investigation;
- ❖ road safety and traffic management; and
- ❖ Services to the judicial process.

Overheads (including finance, human resources, education and training, audit, information technology, legal services, public affairs, property and fleet management, purchasing and supply, and other general management) are distributed across the service delivery areas to show total resource use.

Although a mapping project will partly overcome the problem of different specification of outputs and activities, as other service areas explore this tool it may be preferable to coordinate their introduction of activity measurement by:

❖ developing a standard set of national outputs for agencies; or

❖ Developing a standard approach to activity measurement whereby agencies could aggregate their data to report against a set of standard outputs.

2.5 Conclusion

The review of the approaches employed by police agencies in Ethiopia indicated that agencies faced a number of decisions when designing their activity measurement systems. Decisions in each jurisdiction reflected differences in reporting requirements, as well as other concerns such as the availability of data from existing sources.

Output based budgeting seeks to improve the efficiency of agencies by making them accountable for the outputs that they produce. Activity measurement systems record the amount of time that staff spend attending to a range of activities. Activities are defined to correspond with the outputs of the agency in output based budgeting. Information collected for internal reporting requirements is most useful if the activities describe the outputs of the business units or cost centers. Agencies therefore faced a choice of how to specify those activities that most closely resemble the outputs of the agency and the outputs of its business units and cost centers.

One choice involved tradeoffs between the cost of activity measurement, and the detail of information and the precision of estimates. The police approach to activity measurement offers the most detail in terms of activities and tasks. This approach, along with the proposed police instrument, collected information on a daily basis. In contrast, most Australian police agencies collected information on activities and tasks at relatively broad levels, and only for a limited period of the year. The police instrument provided the least precision and the least coverage of activities and tasks. These variations reflected, in part, differences in reporting requirements. With one exception, Australian police agencies initially collected information to meet output

Key recommendation

Government of Ethiopia Police provide a range of services that seek to address economic and social objectives. Their decision making can be improved if information is available on how resources are used and what outputs are produced. Activity measurement provides information on the allocation of inputs across outputs. Activity measurement is particularly relevant for services that use a single input to provide a range of outputs.

The experiences of Ethiopia Police provide some valuable lessons for other agencies wishing to improve their existing approaches or those wishing to employ activity measurement.

❖ There is evidence that activity measurement is proving a valuable aid in budget negotiations with governments, particularly to cost outputs. It is also proving useful to management as a tool for improving resourcing decisions.

❖ Each police faced choices when designing its measurement instrument, particularly when specifying activities and outputs, the detail of information to be collected, and the precision of the estimates.

❖ Ethiopian police experienced difficulty ensuring that the specified activities and outputs were comparable across jurisdictions. To facilitate comparisons of performance across jurisdictions, other Ethiopia Police wishing to adopt activity measurement should first seek to develop a standard set of national outputs or a standard approach to activity measurement.

❖ organizations that provided incentives to staff (for example, those that shared the benefits, minimized respondent burden, marketed the process, and/or provided appropriate support to staff) and introduced quality assurance processes, were best able to encourage high response rates and accurate responses.

❖ There are limits to measuring activities directly for the purpose of costing an Ethiopia Police outputs. Specifically, agencies and their units should be held accountable for outputs over which they have control. Police do not have complete control over some activities that they report as outputs.

❖ Most organizations used activity surveys to collect information on activities that staff undertook during the sample period. Survey information could be more useful if roistered activities were distinct from those activities where staff had to respond.

❖ Differences in approaches to activity measurement did not significantly affect the associated costs experienced by most police agencies. The exception was Ethiopian Police, which incurred a substantially higher cost. However,

Ethiopian Police collected considerably more data than did Ethiopia police organizations.

A key area for further development is extending activity measurement to other areas of government services where labor contributes to the production of a variety of outputs.

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