Conducting Public Expenditure Tracking Survey (PETS) in Difficult Environments: Evidence from Afghanistan

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Abstract
Among the many challenges of conducting a Public Expenditure Tracking Surveys (PETS) in difficult environments, this study highlighted the challenges relating to data availability and security. For example, the extent to which the flow of funds is straightforward can make the difference between an effective and an ineffective PETS. Even a carefully-designed PETS questionnaire can yield minimally useful results if expenditure data from various sources cannot be triangulated either because it is not documented, or it is not documented uniformly. In addition, insecurity could pose a significant threat to the validity and reliability of sample data unless the presence of corruption is assumed to be unrelated to security in regions where budget units are located. In light of these challenges, this paper assesses the strengths and weaknesses of various mechanisms to tackling corruption and making PETS work.

Keywords: Public expenditure tracking survey, PETS, Afghanistan, corruption
Introduction

One needs not be presented with empirical evidence to agree that “improved service delivery is a key issue, possibly the key issue, to be addressed in the effort to reduce poverty and vulnerability” (De Graaf 2005, p.1). Although budget data sheds valuable light on the extent of service delivery, the mere measure of budget spending cannot be equated with optimal service delivery because of leakages in resource flows. Dehn, Reinikka, and Svensson, (2003) present at least four reasons that indicate a break in the chain between spending and service delivery. First, if all the funds have in fact been spent, they may not have been spent on the right goods or the right people. Second, even when public resources are spent on the right goods and the right people, not all the resources may reach the intended beneficiaries at the bottom of the chain. Third, even if all funds reach those at the bottom, the quality of services provided may be weak because of incentive problems such as absenteeism and low staff motivation. Lastly, even if all the above conditions are satisfied, which address supply-side issues, there may be demand-side problems where the intended beneficiaries, i.e. the households, may not take full advantage of the services provided. For these and a variety of other reasons, inputs alone are inappropriate indicators of outcomes and impact.

In order to detect and remedy these issues in resource flows, various tools have been proposed and tested on the ground, some of which include the following:

- Living Standard Measurement Study (LSMS): These are household surveys that have also included health facility modules on an ad hoc basis (Alderman and Lavy 1996).
- Demographic and Health Surveys (DHS): These are carried out in over 50 developing countries and have also included a service provider component.
- Family Life Surveys (FLS): These are often implemented by RAND have combined health provider surveys with those of households.
- Quantitative Service Delivery Survey (QSDS): These are variants of provider surveys, with an emphasis on systematic quantitative data on finances, inputs, outputs, pricing, quality, oversight, and other aspects of service provision. While PETS is used for measuring leakage, “the primary aim of a QSDS is to examine the efficiency of public spending and incentives and various dimensions of service delivery in provider organizations, especially on the frontline” (Dehn, Reinikka & Svensson 2003, p.10-4).
- Citizen Report Cards: Where citizens are asked to rate specific service providers, which produces relative ranking and which gives incentives for improvements. It is reportedly first used in Bangalore, India, with repeat survey in 1999 showing significant improvement in citizen satisfaction (Paul 1998).

- Community Score Cards: These are similar to Citizen Report Cards, but are more qualitative and participatory, often carried out through focus group discussions and not surveys with standardized questionnaires (Sundet 2004).

What is PETS?

Public Expenditure Tracking Surveys (PETS) are a variant of the above methods defined as “tools in a methodology used to track the flow of public resources (including human, financial, or in-kind) from the highest levels of government to frontline service providers” (Koziol & Tolmie 2010, p.3). PETS have been known to be an effective tool in identifying leakages and delays in the flow of financial and in-kind resources from the top of the chain, i.e. donor or government agencies down to frontline service providers.

The first PETS in the education sector was conducted in 1995 in Uganda (Abldo & Reinikka, 1998; Reinikka 2001), which found a leakage of 87%, i.e. that only 13% of student capitation grants were actually delivered to the intended end users. Since then, both the idea of discovering leakages through PETS has received significant attention by academics and policymakers alike.

Since the Ugandan case of capitation grants, various PETS have been implemented around the world, especially in health and education sectors, such as Ghana (Ye and Canagarajah 2002), Peru (Instituto Apoyo & the World Bank 2002), Tanzania (Price Waterhouse Coopers 1999), Zambia (Das et al. 2004), Mozambique, Honduras, PNG, and many more. In fact, Tanzania tried three consecutive PETS: first in 1999 for health and education; second in 2001 for RRSP priority sectors of health, education, water, agriculture and roads; and third in 2004, a more robust and ambitious PETS under the Primary Education Development Project or PEDP. But not even all of them together produced the kind of hype that the Ugandan case did (Sundet 2008). In fact, not even in the first health PETS, also in Uganda in 1995, created the same kind of buzz that the
Ugandan education case created, which I contribute to the simplicity of capitation grant and complexity of all other cases.

The Case of Afghanistan

The importance of the health sector in any economy cannot be overstated. The health sector in Afghanistan, under the auspices of the Ministry of Public Health (MoPH), is similarly one of the most important and vibrant sectors in the country. The sheer volume of the sector as measured through its annual budget is indicative of its significance. For example, the MoPH core budget, which is comprised of the central government budget allocation and external assistance, for the years 2012, 2013 and 2014 were nearly 11, 13 and 13.1 billion Afghanis respectively (equivalent to nearly USD 200-230 million). To put these figures into perspective, they make up approximately 8%, 4% and 3% of total government budget for all sectors across the country (NHA 2013 and author calculations).

What is more interesting is that these figures represent only a small fraction of the total health expenditure (THE) in the country. In fact, according to Afghanistan’s National Health Accounts (NHA 2011-2012) report, total health expenditure in 2011–2012 was nearly 1.5 billion USD, nearly 8% of GDP, on par with the ratios in OECD countries. This level of expenditure makes the entire MoPH budget less than 27% of the total health expenditure in the country. This ratio was also true as far back as 2008, when the MoPH core budget was about 24% of total health expenditure (NHA 2009). The remaining 2/3rd of the total health expenditure is borne by the households themselves through out of pocket (OOP) expenditures.

It is the result of these expenditures and the hard work of the national and international community and health experts that has helped Afghanistan achieve significant improvements in health indicators. For example, maternal mortality rates dropped by almost 80% from 1,600/100,000 live births in 2002 to 327/100,000 live births in 2010. Infant mortality rates were less than halved from 165/1,000 live births in 2002 to 77/1,000 live births in 2010. Mortality rates among children under 5 years of age declined from 257/1,000 live births in 2002 to 191/1,000 live births in 2006 and to 97/1,000 live births in 2010 (Multi Cluster Indicator Survey, UNICEF Afghanistan 2002, Afghanistan Mortality Survey, MACRO 2010, Afghanistan
Household Survey, Johns Hopkins University 2006). These data, however, are not available at the sub-national level.

Despite the aforementioned achievements, significant challenges remain facing the health sector in Afghanistan. As far as the utilization of resources is concerned, one of the most basic questions is whether one can account for these vast levels of expenditure through the implemented activities and achieved outputs. Have the resources been used for their intended purposes or have they been diverted elsewhere? Have the resources been utilized in the most effective and efficient manner, an important topic prioritized by the Health Care Financing and Sustainability Strategy 2014-2018 document? What is the extent to which resources actually reach the target groups? If not all the resources reach the target groups, have resources been diverted elsewhere?\(^1\) If yes, what is the magnitude of those diversions? What is the impact of those diversions on service delivery in the domain of public health? What strategies can be devised to prevent leakages in the health sector?

The answer to these and other related questions can be explored through a Public Expenditure Tracking Survey (PETS), which is a mechanism for following the money trail and identifying and rectifying bottlenecks, inefficiencies, leakages, diversions and inequitable allocation of resources. In the context of public health, PETS tracks the flow of public funds and other resources from the central government (Ministry of Finance) all the way through to the frontline service providers. One of the key questions PETS is designed to answer is how long it takes resources to travel through this bureaucratic hierarchy from the center to the periphery. In doing so, the ultimate objective is to improve the quality of service delivery at the health facility level, improve efficiency and equity of public spending, and eliminate diversion and leakages. This important study also sheds light on the extent to which public spending in the area of public health is transparent, accountable and equitable.

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\(^1\) For example, several World Bank reports discuss “ghost” workers, especially in the context of health and education sectors in developing countries, where teachers and health practitioners only exist on paper and receive their salaries regularly, but never show up for work. Such extremely harmful leakage of public funds can be uncovered through a Public Expenditure Tracking Survey (PETS).

In the beginning of 2014, the MoPH commissioned the first round of PETS, but limited the survey to national hospitals in Kabul. To expand the coverage of PETS findings beyond Kabul, this survey was conducted in 2015 covering 8 out of the 34 provinces.

**METHODOLOGY**

In order to assess the extent to which health expenditure in Afghanistan is transparent and efficient, we employed a multi-faceted mixed-methods approach, consisting of desk review, consultation with MoPH and MoF senior executives, survey questionnaire designed in light of the desk review and high level consultations, in-depth interviews conducted with various stakeholders from every link in the chain, and field observation to complement the findings from the tools mentioned above. In the following section, we highlight our sampling design, followed by a discussion of the implementation of our methodology in three phases, namely set-up, fieldwork, and data analysis & reporting.

**Sampling Strategy**

For the purpose of this study, we carried out a two-stage sampling procedure, consisting of province selection and health facility selection. The sampling design ensured that the selection of both provinces and health facilities was carried out in a way that the sample was representative of the target population and minimized biases threatening internal and external validity of our findings. The recruitment of senior level staff and external experts for the purposes of in-depth interviews, however, were non-random and particularly on the basis of their relevance and expertise on the subject matter.

In stage one, we carried out a purposive selection of eight provinces based on two key criteria, namely donor type and region, which stratified the provinces into various groups. As the first selection criterion of provinces, we stratified the provinces based on key donors. From the universe of our sampling frame, we knew that European Commission/World Bank-funded System Enhancing for Health Actions in Transition (SEHAT) covers 18 provinces, USAID-funded Partnership Contract for Health (PCH) covers 13 provinces, and Strengthening Mechanism (SM) covers the remaining 3 provinces. In order to ensure representation, we
selected four provinces among SEHAT, 3 provinces among PCH and one province among SM. As the second selection criterion, we stratified the provinces into the seven regions, namely Northern, North-Eastern, Eastern, Southern, South-Western, Western and Central. The intersection of these two criteria gives us the following selected provinces.

It is important to note that originally, the proposed sample included Ghazni instead of Paktya and Kunduz instead of Takhar. At the beginning of field implementation, however, it was determined that these two provinces were too insecure given the spread of insurgency in northern Afghanistan and therefore replaced by provinces that were deemed relatively more secure. This and all other changes to plans were communicated and coordinated with the client representatives. During these replacements, we made sure the original rationale for sample selection was kept intact. In particular, both the selection of original sample provinces as well as the replacement followed a purposeful sampling strategy to ensure a representative sample from Afghanistan’s various regions and donors.

**Table 1. List of final eight provinces selected to represent donors and regions.**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Province</th>
<th>Donor</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kabul</td>
<td>PCH</td>
<td>Central</td>
</tr>
<tr>
<td>2</td>
<td>Heart</td>
<td>PCH</td>
<td>Western</td>
</tr>
<tr>
<td>3</td>
<td>Paktya</td>
<td>PCH</td>
<td>South</td>
</tr>
<tr>
<td>4</td>
<td>Nimroz</td>
<td>SEHAT</td>
<td>South-Western</td>
</tr>
<tr>
<td>5</td>
<td>Nangarhar</td>
<td>SEHAT</td>
<td>Eastern</td>
</tr>
<tr>
<td>6</td>
<td>Takhar</td>
<td>SEHAT</td>
<td>North-Eastern</td>
</tr>
<tr>
<td>7</td>
<td>Balkh</td>
<td>SEHAT</td>
<td>Northern</td>
</tr>
<tr>
<td>8</td>
<td>Panjsher</td>
<td>SM</td>
<td>Central</td>
</tr>
</tbody>
</table>
After the selection of provinces, the second stage focused on the selection of health facilities. We stratified the health facilities within each province by facility type, followed by a random selection of health facilities with few exceptions that had to be replaced by more secure health facilities. On average, we sampled the following number of health facilities per province: one Regional Hospital (RH) or Provincial Hospital (PH) or District Hospital (DH), four Comprehensive Health Centers (CHCs), and eight Basic Health Centers (BHCs). In addition to five Special Hospitals in Kabul, the total original sample size included 3 RHs, 3 PHs, 7 DHs, 27 CHCs, and 60 BHCs, reaching a total of 105 health facilities across eight provinces. For the five hospitals in Kabul, we selected a mixed sample by specialty type, including children’s hospital, Orthopedic hospital, mental health hospital, and maternity hospital.

After the launch of the fieldwork, however, this number was reduced to a total of 96 health facilities, comprising of 5 SHs, 3 RHs, 3 PHs, 7 DHs, 24 CHCs (as compared to 27 CHCs planned), and 54 BHCs (compared to 60 BHCs planned), across eight provinces (compared to a total planned number of 105 health facilities).

As is common in the context of a conflict zone like Afghanistan, sampled health facilities within the revised sample were also subject to change in light of security conditions on the ground. For example, after our field surveyors were deployed to the provinces, they were advised by the local authorities and respective NGOs of the heightened security risks in certain districts. As a result, a total of nine health facilities had to be dropped from our sample, which included the following:

<table>
<thead>
<tr>
<th>Province</th>
<th>District</th>
<th>HF Code</th>
<th>HF Name</th>
<th>Type of HFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balkh</td>
<td>Kholm</td>
<td>1762</td>
<td>Baghicha-Sarhang Clinic</td>
<td>CHC</td>
</tr>
<tr>
<td>Balkh</td>
<td>1754</td>
<td>Boke-Alam Kheil Clinic</td>
<td>BHC</td>
<td></td>
</tr>
</tbody>
</table>

2 This way, the chosen sample size of health facilities below the provincial level is approximately equal to 10% of total number of health facilities in the country.
3 For a more detailed description of planned and selected list of provinces and health facilities, please refer to Appendix II and III.
<table>
<thead>
<tr>
<th>Province</th>
<th>District</th>
<th>Population</th>
<th>Clinic Name</th>
<th>Facility Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balkh</td>
<td>Vazirabad</td>
<td>1753</td>
<td>Clinic</td>
<td>CHC</td>
</tr>
<tr>
<td>Paktya</td>
<td>Nahr-e-Shahi</td>
<td>1824</td>
<td>Shahrak Clinic</td>
<td>BHC</td>
</tr>
<tr>
<td>Paktya</td>
<td>SaidKaram</td>
<td>2083</td>
<td>Damghandi(Jehad-Qalah)</td>
<td>BHC</td>
</tr>
<tr>
<td>Paktya</td>
<td>SaidKaram</td>
<td>1734</td>
<td>Kohseen Clinic</td>
<td>BHC</td>
</tr>
<tr>
<td>Hirat</td>
<td>Karokh</td>
<td>2122</td>
<td>Jandah Khan Clinic</td>
<td>BHC</td>
</tr>
<tr>
<td>Hirat</td>
<td>Injeel</td>
<td>1977</td>
<td>Qala-e-Khowaja Clinic</td>
<td>BHC</td>
</tr>
<tr>
<td>Hirat</td>
<td>Guzarrah</td>
<td>649</td>
<td>Syah Washan Clinic</td>
<td>BHC</td>
</tr>
</tbody>
</table>

One of the key questions one has to ask while developing a sampling strategy, especially when the population is small, as is the case in this study, is whether the chosen sample is representative of the population. We believe the sampling strategy we have developed for this study and the resulting selected provinces and health facilities are in fact best representative of the population, because we have covered all sources of potential variation, such as variation by geography, donor, health facility type, urban-rural divide, and population density. For example, knowing that the flow of financial resources is different for health facilities at the provincial level and those below the provincial levels, including a mix of all various kinds of health facility types ensure an appropriate representation of health facilities with various kinds of funding mechanisms.

The qualitative component of this research was conducted, in most part, through in-depth interviews with a range of different stakeholders and experts. At the broadest level, the key interviewees were selected among senior level officials at the Ministry of Public Health (MoPH) and at the Ministry of Finance (MoF), followed by interviewees from among the staff handling budget formulation and procurement all along the chain including donors, MoPH, MoF, NGOs, and health facilities. In addition, interviews were conducted with the heads of all selected health facilities. The recruitment of senior level staff and experts took place on the basis of their relevance and expertise on the subject matter and in close consultation with the client.
Implementation Strategy

We grouped all the activities involved to carry out this study into three stages, namely Set-up, Fieldwork, and Analysis & Reporting.

Stage One: Set-up

This very critical stage formed the foundation of the entire study. During this phase, our team held a number of meetings and consultations with senior level officials from MoPH to ensure a shared understanding of the purpose and objectives of the study, to decide on the overall direction the study will take and to agree on the particulars, including the sampling plan, instrument design, study timeline and other issues of interest.

Before the instruments could be developed, however, it was important for us to review all relevant documents pertaining to budgeting and procurement processes at the MoPH. Only after a careful review of these documents and a clear understanding of study objectives were we able to fully develop data collection instruments and interview guides. It is important to note that the data collection instruments were customized to respondent and the health facility type. For example, the questionnaires used in a health facility manager was significantly different from one used in a pharmacy, where applicable. Similarly, an interview guide for a senior level official at MoF was significantly different from one used to interview a health services provider at the front line. The data from all sources, however, were used to triangulate the findings and where significant differences emerged, further probes were conducted to identify the reasons for variations across different sources. One of the key advantages of mixed methods, as carried out in this study, is that the qualitative data can help fill the gaps identified through the quantitative component of the study.

In-depth interviews with staff from the MoF, MoPH, some donors and implementers were used to contextualize the study and explore answers to big questions like the overall budgeting and procurement processes, or the impact of delays and/or leakages on the quantity and quality of service delivery. In addition, to the extent possible, the findings were verified with data from various sources and interviews with service providers at each level of health facility. Interviews with provincial health directors, hospital management, and procurement teams further enriched the study by providing more detailed and bottom-up information on the processes involved and
the impact they have on each level along the chain. For instance, questions raised at the level of health facility management discussed issues relating to how they receive resources, how much, how long it takes for resources to reach them from the time they place a request, frequency of resource disbursement per year, and the extent of autonomy in financial and procurement decision making.

In addition to tracking the flow of money, the data collection tools were designed in a way to also allow for tracking other resources, including supplies and equipment, which are more important for health facilities below the provincial level, such as DHs, BHCs, and CHCs. Since the list of all staff, drugs, supplies and equipment that each health facility receives is varied and comprehensive, we had to resort to developing a list of most common and most important drugs, supplies and equipment and track them for every health facility type. For example, from the list of essential drugs, we focused on the following fifteen items, knowing that not all may be present in all health facility types.

Table 3. List of essential drugs sampled for assessing stockout

<p>| | | | | | | | | | | | |</p>
<table>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Chloroquine</td>
<td>Cotrimoxazole</td>
<td>Mebendazole</td>
<td>Folic Acid</td>
<td>Condoms</td>
<td>Contraceptive</td>
<td>Rifampicin</td>
<td>INH</td>
<td>Amoxicillin</td>
<td>Paracetamol</td>
<td>Lidocaine</td>
<td>Diazepam</td>
</tr>
</tbody>
</table>

Since the overall design of the survey followed a bottom-up strategy of triangulating data from various sources, questionnaires were designed to get at this by starting from the service delivery points (i.e. health facilities), go up to provincial and central level NGOs, MoPH, MoF and the donor agencies. For each of the HFs, we planned and conducted one interview with the head of the HF, one interview at the pharmacy (where applicable) and two interviews with random HF staff. Then, for each of the provinces, we planned and carried out one interview at the provincial level NGO and one at the central level, reaching a total of 18 in-depth interviews. For Panjshir province, which is managed through the “contracted-in” modality of funding, the interviews
were conducted with PPHO instead of an NGO. Going up the ladder, we conducted six interviews at the MoPH, one interview at the MoF and three interviews with donor agencies. To summarize, we developed and fielded the following eight modules of questionnaires:

Table 4. Questionnaire Design

<table>
<thead>
<tr>
<th>Questionnaire module</th>
<th>Target respondent</th>
<th>Planned number of interviews</th>
<th>Actual number of interviews</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>HF Management</td>
<td>105</td>
<td>96</td>
<td>None</td>
</tr>
<tr>
<td>1b</td>
<td>Pharmacy Unit</td>
<td>105</td>
<td>96</td>
<td>Also included observation of HF condition</td>
</tr>
<tr>
<td>2</td>
<td>Random HF Staff</td>
<td>210</td>
<td>192</td>
<td>Two staff per HF</td>
</tr>
<tr>
<td>3</td>
<td>NGO Management</td>
<td>18</td>
<td>18</td>
<td>For Panjshir, PPHO and Mostofiat were interviewed.</td>
</tr>
<tr>
<td>4</td>
<td>MoPH Procurement</td>
<td>1</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>MoPH Budget Office &amp; GCMU</td>
<td>2</td>
<td>2</td>
<td>Separate tools were used for these two respondents.</td>
</tr>
<tr>
<td>6</td>
<td>MoF</td>
<td>1</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>7</td>
<td>MoPH Key Staff</td>
<td>9</td>
<td>9</td>
<td>None</td>
</tr>
<tr>
<td>8</td>
<td>Donor agencies</td>
<td>3</td>
<td>3</td>
<td>None</td>
</tr>
</tbody>
</table>

Stage Two: Fieldwork
The fieldwork included site visits and interviews with all the key stakeholders according to the agreed upon sampling plan. These interviews, site visits, and review of facility data enabled us to say something meaningful on the following topics:

- Characteristics of the facility: size, opening hours, and access to infrastructure.
- Human resources: levels of absenteeism and ratios of personnel to beds.
- Outputs: numbers of inpatient and outpatients treated.
- Financing: funds received and spent by health facilities.

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4 For a complete list of all in-depth interviews, please refer to IV.
Throughout the fieldwork, and all stages of implementation, special attention was paid to discrepancies between data from different sources. In fact, one of the most important tasks our team focused on is data triangulation, because it is apparent from previous work in this area that there is often data mis-match at various levels. We were alert to the idea that certain bodies and individuals may have the incentives to mis-represent the data, both under- and over-reporting. The collection of data from various sources, including administrative data and qualitative component of our proposed methodology helped us alleviate some of these concerns.

All ethical guidelines and codes of conduct were strictly adhered to throughout the fieldwork. As an example, a written consent form was provided to all the study participants prior to the interviews, where the participants were given ample information on what their participation meant and that their participation was completely voluntary. In particular, the interviewers were instructed to read the consent form to the participant and only after the participants made up their minds about participating in the study, were they guided through the rest of the interview. A verbal consent was obtained and the interviewers signed the form as a witness to the verbal consent.

Stage Three: Data Analysis and Reporting
Once all the data from fieldwork were entered, cleaned and processed, the data analysis stage began, with an aim to provide answers to the specific study objectives and questions raised in the ToR and verified through the initial consultations. We looked for common themes that emerged from all components of our study, including desk review, early consultations, field visits, and interviews. In particular, we analyzed the data with an aim to achieve the following:

- Evaluate the processes and procedures involved in health system budgeting, planning, allocation, disbursement, and execution
- Determine the flow of funds from the central administration (ministry of finance and other sources) through the MoPH to the implementer organizations and health facilities and diagnose problems associated with the flow of funds at the different levels of the system.
- Determine the utilization of resources that reach facilities and the services provided with such resources
- Assess the reasons behind delays in the execution of budget at each step
- Determine leakages or diversion of funds along different stages
- Determine if the allocated funds are not spent on the intended service delivery units
- Assess the impact of delays and leakages on service delivery

**KEY FINDINGS & DISCUSSION**

Although the primary purpose of conducting PETS is commonly to report on diversions, leakages and delays in resource flows from the government to frontline service delivery points, this study has attempted to report on a large number of indicators, including the overall budgeting processes, absenteeism, stockout of both drugs as well as supplies and equipment, existing monitoring and evaluation mechanisms and overall health facility building conditions.

Before delving into a detailed discussion of our key findings and recommendations, it is instructive to highlight a few key challenges and limitations in conducting this survey. To begin with, tracking resource flows in a complex environment such as the one at the health sector of Afghanistan is fraught with challenges. For this reason, the first step in our study was to map out all kinds of flows (from all sources, including donors, MoF, MoPH, NGOs, province, district and finally health facility level) before developing questionnaires to assess the scope for leakage and delays. Although the concept of leakage may be straightforward at first look, defined as the amount allocated to a particular facility for a particular period of time minus the amount actually received by that facility, in reality, allocation rules might be more complicated (such as soft vs. hard and clear rules) and thus leakage can be less straightforward.

Secondly, from a sampling point of view, although each stage of sample selection has been in line with accepted sampling and statistical methodologies, caution must be exercised with the external validity of our findings, i.e. while extrapolating from these findings to the rest of the country. One of the main reasons for advising caution on external validity is because insecurity in the country may have significantly impacted our findings. In particular, in line with the assumption that resource diversion, leakages and delays are likely to be more pronounced in
more insecure areas, our findings may have significantly underestimated the extent of the problem, because we had to exclude insecure areas (both across and within provinces) in order to minimize potential risks to our enumerators.

Thirdly, the subject of this study is extremely sensitive, with its findings having strong ramifications, especially at the political level. It is expected that the sensitivity of the topic could have direct impact on respondent views, despite the fact that confidentiality of opinions was promised while taking consent from each interviewee. In addition, organizational loyalty may have incentivized certain individuals to shift blame on other links within the chain along which the resources flow. For example, many of the interviewees shifted blame on long approval procedures at the level of cabinet for delays in fund disbursement. While this may be in fact true, it does not take away from the point that delays happen at every other link along the chain.

In anticipation to such potential biases, we had planned to triangulate data, especially on budget delays and leakages, by various sources such as the MoF, MoPH, NGOs in Kabul and NGOs in provinces. However, the main impediment to this strategy was the fact that several organizations either did not have accurate data at the level of health facility, or their figures did not match those of other sources. There were even deviations between the figures presented by the same NGO in Kabul and in the province as in the case of Hirat and Takhar provinces. Interpreting such questionable and non-reconcilable figures could be due to a variety of reasons including poor record keeping, uncoordinated updating of data or even willful manipulation, although the latter is unlikely to be the case, especially when provincial NGO shows to have over-spent than records kept by Kabul NGOs.

Fourthly, acquiring budget data was not easy despite the fact that we intentionally chose the year 1393 as our relevant range for this tracking survey, which should have allowed all the concerned bodies to have completed all the paperwork for that year. For example, when we asked our interviewees about budget data for specific health facilities for the year 1393, MoF and MoPH budget office provided incomplete budget data. In particular, the MoF could not provide us budget data at the health facility level because they said they transfer resources for the entire sector at once to the MoPH. When we approached MoPH budget office for the breakdown of
budget data by health facility, they gave us figures for the sum of all health facilities (and not the specific health facilities under our investigation). Finally, when we approached MoPH’s Grant & Contracting Management Unit (GCMU) for the aforementioned data, they were only able to give us precise budget data for 85 of 106 health facilities, leaving the remaining 21 health facilities blank.

Finally, we wanted to analyze budget data broken down by three categories, namely salaries, services and assets, but were unable to get this level of detail. MoF and GCMU shared a large database with budget figures reflected against code names that were not easy to interpret. Despite the challenges deciphering those codes, our team managed to glean key figures that will be presented later in this report. We also wanted to get the data on installments from various sources with exact dates and amounts, which would have helped pinpoint the exact magnitude of delays in fund transfers. However, we were unable to get this kind of data from the MoF and MoPH. The hard-to-decipher database shared with us through the MoPH helped us arrive at only partial details about installments and fund transfers.

Despite these challenges, we gathered valuable data on the extent of expenditure in our selected provinces and health facilities, from a variety of different sources and arrived at the following key findings.

**Budgeting Processes**

Broadly speaking, there are two steps at budget formulation at the MoF. The first involves budget prediction for the coming three to five years, which happens in close consultation with representatives from each ministry and budget unit across the country. The second is budget estimation, which takes place on an annual basis. Although the annual budget preparation is quite complex and varies from ministry to ministry, we have tried to simplify the main decision steps within the process for the MoPH and present a simplified and illustrated diagram in Figure 1, which is also described in some details below.

The budget preparation process at MoPH may be described as comprising of four distinct yet overlapping steps, namely 1) budget formulation at the level of MoPH and HFs, 2) budget
approval at the level of MoF and the Afghan government, 3) budget implementation at the level of health facilities, and finally 4) monitoring of budget spending, which is predominantly the responsibility of the MoPH, although donors also play a role in this juncture.

The process of annual budget preparation begins when the MoF sends appropriate forms to ministries and budget units, including the MoPH. Once the MoPH receives the budgeting forms, the MoPH shares these forms with PPHOs, concerned NGOs and national hospitals. After filling the budget forms, the NGOs and the hospitals send them back to MoPH, where all the forms are compiled and sent to MoF. The MoF may ask all ministries and budget units to defend their budgets in a haring at the MoF. The MoF uses the submission from all ministries and budget units to develop their own national budget in consultation with donor agencies. These basic steps may, at times, require multiple iterations and back-and-forth between the affiliated parties until a final draft of the national budget is prepared to be sent for approval to the Afghan parliament. The Afghan Parliament considers, debates and approves the budget subject to amendments and the national budget is considered final and approved after it is signed by the President of the country.

Following the budget preparation and approval process, the MoF confirms budget allocations to individual ministries and budgetary units and the implementation stage begins. MoPH in turn informs PPHOs, NGOs and the national hospitals of the approved budget. The NGOs and hospitals then start implementation of the activities planned in the budget. Disbursement of the budget is done at the beginning of each quarter through direct bank transfers from government coffers to NGOs and national hospitals, but before each transfer is made, the MoPH has to give the go-ahead on the basis of an expense statement the NGOs and hospitals submit every month to the MoPH. Finally, the MoPH plays a monitoring role in the whole process of budget allotment and budget utilization across the country.

The NGOs may have an account in Kabul and one in their respective provinces. The money from Afghanistan’s Central Bank (Da Afghanistan Bank) goes to the NGO’s Kabul account. From Kabul, the NGO will transfer money to their provincial bank accounts, which then gets released by their “project managers” to cover the expenses relating to the HFs. In some cases where there
is no bank in the field, they may carry cash physically from the nearest location to the HF. According to the interviews we conducted, this step of the process is under complete discretion of each NGO and the MoPH does not have any control or say over how this transfer is made.

**Figure 1 Budget Cycle for NGOs/Specialty Hospitals under MoPH**

- **Budget Planning**
  - MoF sends Budget Forms to MoPH. MoPH sends them to NGOs/SHs.
  - Once filled, NGOs/SHs send the forms back to MoPH, MoPH consolidates & sends them to MoF for approval.
  - After final budget approval (in order: MoF, Cabinet, Parliament & President), MoPH informs NGOs/SHs to start execution.
  - NGOs/SHs send monthly expense reports to MoPH, based on which MoF releases installments on quarterly basis directly to NGOs/SHs*.
  - MoPH performs monitoring role in the budget execution process.

- **Monitoring**

- **Budget Approval**

- **Budget Execution**

*Note:
1. Different NGOs have different mechanisms of transferring funds from the bank account of the NGO in Kabul to their Provincial Offices.
2. In the case of SM provinces (Panjshir Parwan & Kapisa), PPHOs perform the functions of the NGOs.

**Participatory budgeting, entitlement awareness, & predictable timetable**

In addition to documenting the budget process, we explored three complementary and important sub-topics, namely the extent to which the budgeting process is participatory, the extent to which staffs at the point of service delivery are aware of details in what is budgeted for them and whether there exists a fixed timeline for every step of the budgeting process, thus providing a sense of predictability for health facilities. Knowing in particular whether the planning stage of budgeting is participatory or mostly done in isolation by the finance consultant in NGOs sheds light on the extent to which the process is transparent.

According interviews conducted at the 96 HFs, about two-thirds of the respondents said they were not involved in the budget preparation process. Among the remaining one-third who said they were involved, they were asked how many people participated in the budget preparation process, to which they noted a wide range of groups from 1 to 15 individuals. This survey indicated that much of the budget development process is centralized with little real participation from those ultimately affected by budgeting decisions.

When asked about the extent to which they were aware of budget details, almost all higher ranking and senior staff at HFs said they were only aware of their own salary in the budget and not any other details, while the NGOs in Kabul assert that all health facility staffs are aware of budget details. Among the rest of the staff at health facilities, however, nearly half of respondents did not know how much was budgeted for their salary, their most basic entitlement.

Apart from the MoF and MoPH, all other interviewees were unaware of a fixed timetable for each link at the budgeting processes throughout the year. In other words, they could not easily predict each year when exactly the budget would be developed, approved and implemented. Even among those who said there was a fixed timeline, when we asked the respondents to share a
copy of the timetable, none was presented to us, indicating that such a document does not exist. We tested this hypothesis by asking interviewees about the exact dates that the MoPH informed them about budget approval, and for example, each of the five SHs in Kabul gave a different date for when the MoPH informed them about the budget approval for 1393.

**Leakages & diversions: perceptions**

We attempted to arrive at a deeper understanding of the extent, cause and impact of potential leakages from a variety of perspectives, including actual budgetary data and perceptions of leakages among various key stakeholders, reported in more details below. Among health facility staff, smaller number of respondents believed there are leakages than they think there are delays in the system. In fact, when asked if they think there are leakages in the system, about 30% of respondents responded positively, 42% responded negatively, and an astounding 27% either refused to answer the question or said they didn’t know.

Among the 29 respondents who responded affirmatively, they think leakages have existed in the system for several years, and all across the chain from MoF all the way down to the HFs across the country. According to them, the most common causes of leakages are lack of monitoring and oversight and too much trust on the system, especially on the NGOs. When asked about the potential impact of leakages on service delivery, except for four respondents who think there is no negative impact, the rest said leakages have serious consequences for the quality of health service delivery across the country as they affect the level of motivation of staff, the stock of medicine, the availability of equipment and the overall health facility condition.

**Leakages & diversions: empirical evidence**

While the above represented perceptions about the magnitude, reasons for and impact of leakages and diversions, we also tried to elucidate empirically the answer to these questions from different sources. Before going into the details, however, it may be helpful to put these figures into perspective by looking at some macro-level data on national statistics. In particular, table 5 shows government health expenditure relative to total government expenditure for the year 1393. We also compare these figures with the year 2013 as reported in the National Health Accounts report. According to these figures, while the total government spending has increased from 354 billion Afghanis to 436 billion Afghanis, the total core budget for health has remained almost the
same as the previous year, resulting in a 0.7% fall when considered as a percentage of total government budget. What is more interesting to notice, however, is that the MoPH absorption capacity seems to have increased dramatically. In particular, while in the year 2013, a mere 23% of total allocated budget was actually spent, this figure for the year 1393 has risen to 92% or almost 12 billion Afghani. It is also important to note that EC’s contribution to the health budget for the year 1393 was € 25,534,092, while USAID contributed a total of US$ 46,480,142.

Table 5. Government health budget as compared to total government budget in 1393 and 1391

<table>
<thead>
<tr>
<th></th>
<th>Total Government Budget</th>
<th>Total Health Budget Allocated</th>
<th>Health as % of Government Budget</th>
<th>Total Health Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>285,481</td>
<td>2,525</td>
<td>0.9%</td>
<td>2,525</td>
</tr>
<tr>
<td>Development</td>
<td>150,547</td>
<td>10,568</td>
<td>7.0%</td>
<td>9,473</td>
</tr>
<tr>
<td>Total</td>
<td>436,028</td>
<td>13,093</td>
<td>3.0%</td>
<td>11,998</td>
</tr>
<tr>
<td>2012 NHA</td>
<td>354,077</td>
<td>13,221</td>
<td>3.7%</td>
<td>3,115</td>
</tr>
</tbody>
</table>

Source: Interview with MoF

In order to assess leakages, we attempted to triangulate data from at least three sources, namely NGOs at the provincial level, NGOs in Kabul and MoPH. Table 6 shows the total funds allocated to the selected sample of provinces in the year 1393. We attempted to analyze data by health facility, but did not find any systematic patterns reflecting significant differences across different health facility types. We, therefore, present our findings by province and comment on differences across health facility types within each province when warranted.

**Absenteeism**

Staff absenteeism did not seem to be a major issue in the health facilities surveyed. In fact, even in the case of those health facilities that reported delays in receiving staff salary for months, reportedly staff members continued to come to work. Our survey revealed a maximum rate of absenteeism of 20%, the reasons for which varied from sick leave to attending a meeting or training offsite. The highest rate of absenteeism was among OPDs and midwives, which were
reported in eight of 39 health facilities and 19 of 90 health facilities respectively. The survey recorded absenteeism among nurses in 11 of 63 health facilities (17%) and among pharmacists in seven of 50 health facilities (14%).

**Medicine Stockout**

In order to estimate stockout of medicine, we first picked a carefully chosen sample of medicine and compared the quantity of medicine available on the shelf with those on drug registry. The table below summarizes our key findings on the number of health facilities that had less medicine on the shelf than what should have been available according to the registry. The denominator column refers to the number of health facilities that reported having these medicines in stock. According to this table, medicine stockout was reported for all medicine except for INH and Ketamine. The highest levels of stockout was seen in Ciprofloxacin for which five out of the 30 surveyed health facilities that were supposed to have this medicine on stock had less than what the registry indicated.

**The Efficacy of PETS in Tackling Corruption**

One key question to ask is whether conducting PETS alone is both the necessary and sufficient condition for uncovering and eliminating leakages in the use of public resources. The list of silver bullets to solve the endemic leakage issue has been wide and expanding, including the following: close monitoring and supervision of resource flows; public information campaigns to allow more people to watch the resource flows; informing the end users of their entitlements to give them greater voice in demanding their entitlements; and the political will of key policymakers and government officials.

Comparing various tools, Sundet (2004) concludes that policy change is really more a function of how much public discussion the survey generates and how widely the report is shared than anything else. In fact, he repeats the same finding three years later by arguing that the Tanzania experience shows that PETS is not a silver bullet and vested interests can easily derail the process (Sundet 2007). Reinkikka, Ritva & Svensson (2006) study three different data collection approaches and their impact on measuring and explaining corruption, and they too conclude that it is not much supervision, but the recipients’ ability to voice their claims for funds that explains
the magnitude of corruption and its curb. Even in the Ugandan case, before PETS was even conducted, the political will of key government officials, Sundet (2008) argues, was much more important in reducing leakage than any other factor.

In fact, in the case of Uganda, much credit has been attributed to a public information campaign, a government policy that required grant moneys to be announced in local newspapers. Using distance to newspaper outlet as an instrument variable, Reinikka & Svensson (2004) showed that proximity to newspaper outlet reduced capture significantly, from a mean leakage of 87% (and median leakage of 100%) in 1991-95 to 18% in 2001. It was concluded that it was not so much supervision mechanism, but the periphery’s ability to voice their claims for funds that helped reduce the leakage (Reinikka and Svensson, 2006). When viewed from this perspective, leakages become a classic rent seeking problem of moral hazard, where information asymmetry between the officials at the top and recipients at the bottom pave the way for the diversion of funds along the way without the knowledge of the intended beneficiaries. This could also be understood as a principal-agent problem where the agents took advantage of the principal’s inability to track financial flows.

Rejecting any notions of mono-causal explanations, such as those claiming that information campaigns holds the key, Hubbard (2007) argues that in addition to the information campaign, the following three factors also contributed to the success of PETS in the case of Uganda. First, the financial system in early 1990s was quite poor. The number of schools had doubled in the preceding decade; schools were practically run by PTAs, with parents paying for more than half of school budgets; the capitation grant was so small that even if paid in full, it only accounted for approximately 12% of total government funding to primary schools; there was poor data collection at the district level; and schools had an incentive to underreport enrolment to keep the additional money contributed by parents (otherwise, they had to remit those back to the district level). Second, systemic reform in education and public finance were underway around the same time, thus creating the right environment for corruption in the system. Block grants were changed to conditional grants, paid to separate district bank accounts; in 1997, universal primary education was implemented, which abolished the previously compulsory parental contribution; the capitation grant was almost doubled in response to the abolishment of parental contribution;
and donors increased funding for education, which were conditional on more transparency and accountability, in response to which, the government commissioned numerous studies and reforms. And thirdly, Hubbard questions the methodological appropriateness of information campaign studies. In particular, he first argues that the “proximity to newspapers” which the World Bank studies used as an instrument variable may not be technically correct given its potential correlation with the outcome variable other than through the exogenous explanatory variable. In other words, there could be less leakage for reasons other than those claimed by WB. In addition, even if the instrument variable was technically correct, these models only explain 8.7% improvement in leakages, not the entire 80% drop.

Echoing similar concerns as Hubbard (2007), a DFID briefing paper on PETS suggests that the key to the effectiveness of PETS lies elsewhere, i.e. in the commitment of governments to do the following: a) disseminate the results widely, b) engage all levels of government in changing the way in which sector policies are developed and resources are managed, and c) remain committed to transparency over the allocation and use of resources.” In fact, as many argue, at the end of the day, PETS is merely a survey and what it can do depends on the public debate generated afterwards. In addition, people often tend to focus disproportionately more on the magnitude of leakage, instead of the reasons behind the existence of leakages, which will lead us to finding solutions on what to do about them. For example, in Tanzanian case, the main problems were a) overly complex system of financial transfer and b) lack of knowledge of recipients of their entitlements.

In short, different lines of argument have been presented as the key to eliminating potential leakages in resource flows. This study will assess the relevance of each of these potential solutions to the context of Afghanistan and summarize key actions relevant authorities can take to reduce and eliminate leakages, delays and other inefficiencies in the system.

CONCLUDING REMAKRS

Some of the key questions that this survey attempted to explore included the following.
- What is the extent to which resources actually reach the target groups? If not all the resources reach the target groups, have resources been diverted elsewhere? If yes, what is the magnitude of those diversions?
- Have the resources been used for their intended purposes or have they been diverted elsewhere?
- What is the impact of those diversions on service delivery in the domain of public health?
- What strategies can be devised to prevent leakages in the health sector?
- What is the extent of delays as funds travel from top to the point of service delivery? What is the impact of these delays and what can be done to minimize them?
- Are there issues relating to staff absenteeism, drug stock out or stock out of supplies and equipment?
- What is the overall condition of health facilities?
- Finally, to determine the extent to which public spending in the area of public health is transparent, accountable and equitable.

While this study could not arrive at specific answers to each of the above questions because of the complexity of funding mechanism and data availability in the country, it sheds valuable light on some of the key issues relating to leakages, delays, stock out and health facility conditions.

In particular, it found that delays in fund flows are common, especially thought to be due to lengthy approval processes at the level of MoF and the Afghan government. Perceptions of leakages are reportedly higher than empirical evidence on the existence of leakages, and medicine stockout was also found to be a common issue among the majority of health facilities for almost all the sampled drugs in this survey.

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5 For example, several World Bank reports discuss “ghost” workers, especially in the context of health and education sectors in developing countries, where teachers and health practitioners only exist on paper and receive their salaries regularly, but never show up for work. Such extremely harmful leakage of public funds can be uncovered through a Public Expenditure Tracking Survey (PETS).

In short, different lines of argument have been presented as the key to eliminating potential leakages in resource flows. This study concludes that for the context of Afghanistan, a combination of all of the above solutions are needed in order to reduce and eliminate leakages, delays and other inefficiencies in the system.
REFERENCES


