Efficiency analysis: Why bother, ... and why is it so difficult

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**Why bother doing efficiency analysis?**

There are compelling reasons why professionals working in international aid cannot get around efficiency analysis. For example:

- Efficiency analysis helps choosing the “right” interventions. Efficiency analysis can help selecting interventions that are i) overall beneficial and ii) maximize overall net benefits to society.
- Efficiency analysis helps improving interventions. Efficiency analysis can inform operational and strategic improvement of interventions through minimizing costs and maximizing yields.
- Efficiency is a standard evaluation criterion. For example, OECD DAC lists efficiency as one of five recommended criteria for evaluating development assistance.
- Efficiency analysis is required by law. Budget codes in several countries require efficiency analysis for measures affecting national budgets.

**Why is it so difficult?**

At the same time, efficiency remains an elusive or ambiguous concept, and efficiency analysis is often considered somewhat of a challenge. Again, there are several reasons for that, for example:

- Efficiency blabber jabber. Efficiency-related terminology and concepts are confusing and ambiguous. For example, OECD DAC offers two conflicting definitions and UK’s “value for money” approach uses a narrow definition.
- Efficiency analysis without purpose. At times, efficiency analysis is required without a clear purpose, resulting in lack of direction for analysis and evaluation findings of limited usefulness.
- Efficiency analysis without proper skills and tools. Some types of efficiency analysis are rather demanding and requiring expert skills and experience.

**Our terminology and concepts**

In this workshop, we adopt a broad understanding of the term “efficiency”. We include, for example:

- Output-level efficiency (production efficiency): conversion of inputs into outputs;
- Impact/outcome-level efficiency (allocation efficiency): conversion of inputs into outcomes or impacts; or
- Net benefit, utility, and other economic efficiency measures.

We differentiate two principal types of efficiency analysis based on their purposes:

- Level 2 analysis compares the efficiency of entire aid interventions with alternatives or benchmarks with the purpose of maximizing total welfare (by selecting those
interventions that produce the largest net benefit to society with available resources).

- Level 1 analysis has the purpose of improving the efficiency of individual interventions. It does this by investigating the intervention at hand and/or by benchmarking partial efficiency indicators across several interventions. In contrast to level 2 analysis, level 1 analysis does not assess or compare outcome/impact-level efficiency of different interventions.
- In addition, a third type of efficiency analysis exists: descriptive (level 0) analysis describes or provides an opinion on efficiency without a clearly identified purpose.

Along these three types, we have collected the following list of tools and methods for assessing the efficiency of aid interventions:

<table>
<thead>
<tr>
<th>Type</th>
<th>Level 2 Analysis</th>
<th>Level 1 Analysis</th>
<th>Descriptive Analysis</th>
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</thead>
<tbody>
<tr>
<td>Description</td>
<td>Compare the efficiency of entire aid interventions with alternatives and benchmarks</td>
<td>Identify efficiency improvement potential in an aid intervention</td>
<td>Describe or provide an opinion on efficiency</td>
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<tr>
<td>Purpose</td>
<td>Select the most efficient interventions from many</td>
<td>Improve the efficiency of one intervention</td>
<td>(Unclear)</td>
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<td></td>
<td>Cost-Effectiveness Analysis</td>
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<td>Data Envelopment Analysis</td>
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<td></td>
<td>Cost-Utility Analysis</td>
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<td>Stochastic Frontier Analysis</td>
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<td></td>
<td>Social Return on Invest</td>
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<td></td>
<td>Multiple-Attribute Decision-Making (MADM)</td>
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Data Envelopment Analysis
Stochastic Frontier Analysis
The Partos Efficiency Lab

This case is one of a series of ten that was produced in the framework of the Partos Efficiency Lab. The Efficiency Lab was established mid-2017, in response to the finding from the MFS II evaluation that development organisations in the North and the South, as well as evaluators, struggle with the concept of efficiency, and with how to measure and analyse efficiency.

The aim of the efficiency lab is twofold:

• To develop a common understanding among Partos members about the concept of efficiency, the various methods for assessing efficiency, including their advantages and disadvantages.
• To identify and/or develop a recommended repertoire of appropriate policies, methods and tools for addressing the efficiency question in development interventions.

On 23 November 2017 Partos organised a conference on efficiency. Important insights shared by a panel of experts include that efficiency analysis is often of very poor quality in project setups and evaluations. This is because there is a lot of confusion about the concept of efficiency.

• First, definitions used by influential bodies such as OECD suggest that efficiency is about the relation between costs of inputs and outputs. According to these definitions even a project that has no, or even negative, outcomes or impact, can still be efficient. A definition that can lead to such conclusions is not helpful for innovation and the improvement of interventions. A useful definition must be based on the premise that effectiveness is a prerequisite for efficiency. In other words, without effectiveness there can be no efficiency.
• Second, the purpose of conducting an efficiency analysis should be made explicit, because the purpose has consequences for the choice of methods and tools used. Two important types of purposes need to be distinguished: 1. comparing the efficiency of an intervention with alternatives or benchmarks, and 2. improving the efficiency of individual interventions.

The experts also looked into ten typical cases of development interventions drawn from the practice of member organisations of Partos. For each of the cases they have provided recommended methods and tools for analysing efficiency. This paper presents one of these ten cases.

The participants of the Efficiency Lab are: Mark Kirkels (War Child), Margriet Poel (SNV), Jeroen Bolhuis (Plan Nederland), Marieke de Vries (CNV International), Arnold van Willigen (Woord en Daad), Erik Boonstoppel (Oxfam Novib), Simon Bailey (Aflatoun), Kees Kolsteeg (GPPAC), Julio C. García Martínez (ZOA), Agnès Marsan (Simavi), Anita van der Laan (Akvo), Jan de Vries (Pax).

Facilitators of the Efficiency Lab are: Anne-Marie Heemskerk (Partos) and Heinz Greijn (L4D)

The panel of experts is composed of:

• Pol de Greve, Development Economist at Context, international cooperation, with experience an assessing the efficiency of development projects
• Antonie de Kemp who worked as a researcher for the Netherlands Court of Audit, the Netherlands Institute for Social Research (SCP) and the Institute for Research on Public Expenditure (IOO). He joined the Ministry of Foreign Affairs in 1997, and since 2005 has been an evaluator at IOB.