



## Evaluation methods for assessing Value for Money

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BetterEvaluation



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# Background

Value for Money (VfM) is a concern in procurement and implementation of programmes worldwide. Determining whether programmes or activities provide value for money is of interest to national governments as well as international donors and non-government organizations. In the international domain, the issue of VfM has become a policy imperative. The focus of this paper is on VfM in international development.

VfM is an issue of much debate and interest in international development today<sup>1</sup>. Cost and value have always been of concern to donors<sup>2</sup>, but the particular discussion of 'value for money' and how to assess it has occurred particularly over the last 10 years.

## Purpose

This paper provides evaluators and evaluation commissioners with information on the topic of Value for Money and presents a range of methods for assessing VfM. By the end of the paper, an evaluator will be able to:

- Consider a range of options for determining whether an activity is value for money
- Work with a specialist to design the best approach to determining VfM
- Ensure key points are included in the design that may be important: e.g. sustainability, gender, participatory process etc.

## Definitions of VfM

The meaning of value for money is a matter of debate. DFID includes the following elements in its assessments:

- Economy: less cost, while bearing in mind quality
- Efficiency: achieving outputs for inputs, while bearing in mind quality
- Effectiveness: achieving programme outcomes, while bearing in mind equity

## Some examples to illustrate the concepts of economy, efficiency and effectiveness

A donor is funding an education programme with three components: building schools, training teachers, and procuring educational materials. The goal of the programme is to increase the number of children that stay in school and to increase the quality of their schooling (determined through test score results). The programme is particularly focused on giving children in the most remote regions of the country an education. To assess VfM, the donor considers the economy, efficiency and effectiveness of a number of alternative programmes in different parts of the country.

**Economy** – Programme A costs \$100m to build 50 schools and Programme B costs \$75m to build 50 schools. Programme B is better VfM in terms of economy. As quality is a part of the assessment of economy, schools are only counted if they are built to a satisfactory certified standard. So Programme C that cost \$50m but built 50 schools that failed building inspection is not considered VfM.

**Efficiency** - Programme A costs \$5m to train 100 teachers. Programme B also costs \$5m to train 100 teachers. The test scores of students in Programme B schools are substantially higher than Programme A schools. So in this situation, Programme B is better VfM in terms of efficiency.

**Effectiveness** – Total costs for Programme A were \$120m and Programme B cost \$150m. There were 6000 graduates from Programme A schools, with 1000 of these finding paid employment. Programme B resulted in 5000 graduates, with 500 finding paid employment. Graduates from Programme B were in the hardest to reach regions of the country. Programme B is better VfM in terms of effectiveness even though the programme cost more and resulted in less graduates finding paid employment. This is because the programme achieved results amongst the most vulnerable population.

<sup>1</sup> For example, see and Emmi, A., Oxlem, E., Maja, K. Ilan, R. and Florian, S. (2011), *Value for Money: Current Approaches and Evolving Debates*, London School of Economics and the April edition of Norrag News focused on Value for Money at: <http://www.norrag.org/issues/latest> that includes a range of different perspectives on applying Value for Money to international education

<sup>2</sup> For example the focus on Results-Based Management and Aid Effectiveness.

The Independent Commission for Aid Impact adds a dimension of Equity<sup>3</sup> - the 4<sup>th</sup> E. This means ensuring that benefits are distributed fairly. Additionally, ICAI balances all of the four elements together to come to a judgement of value for money.

### Putting the 4Es together – an example from the Humanitarian sector

"I was one of the humanitarian advisors for DFID-Pakistan's 2010 humanitarian response programme. We were asked to pilot DFID's new VfM in early 2011, when we focused on early recovery programmes. At first it wasn't easy. Should we look at the unit costs of things? Each individual item? Agency overheads? We didn't want to put too much burden on partners or our team and slow down the process too much. It had to make sense. Here is an example of how we responded.

Emergency shelter: A low cost "kit" was £20, but included no more than a plastic sheet and some rope / poles. This was cheap but effectively useless; it had little value to the end users because they couldn't build a temporary shelter that offered dignity, much protection nor privacy. Another kit was £45 and offered two plastic sheets, loads of bamboo poles and rope. This enabled people to build a walk-in shelter with a closed back end. Family-friendly. Better. Lastly there was the classic tent, costing at least £120 and offering good security and privacy, but less space, with warmth in winter, but often too hot in summer. These were good for Northern Pakistan in winter, less so for the hotter South.

We thought the best VfM went to the £45 poles and plastic. We could reach more than twice as many vulnerable families as compared to tents... But what did the recipients think? This is critical: we spent weeks in flood-affected communities asking all these questions, bouncing these ideas off displaced people and recent returnees. You can't decide on their behalf! Let them design, and feed that into your decision on best VfM."

Drawn from Magnus Wolfe Murray's response on the ALNAP Value for Money Forum accessed at <http://www.alnap.org/node/7868.aspx> 10th December 2012

The Social Return On Investment (SROI) Network International adds the concept of SROI to discussions of VfM. Social return values social, economic and environmental outcomes created by an activity or an organisation.

A number of other donor agencies have also engaged with the issue using a range of definitions:

- World Bank - uses cost-benefit analysis in developing and managing programmes and is mandated in its Articles of Agreement to use this type of analysis to determine the economic rate of return<sup>4</sup>
- ADB - uses financial analysis and an assessment of the financial policies and the capacity of the financial management systems of the borrower or executing agency in developing and managing programmes<sup>5</sup>
- USAID - uses results-based management in addressing Congressional questions on value for money<sup>6</sup>

<sup>3</sup> ICAI, (2011), ICAI's Approach to Effectiveness and Value for Money

<sup>4</sup> World Bank, 2010, 'Cost-Benefit Analysis in World Bank Projects', Fast Track Brief, Independent Evaluation Group (IEG), World Bank, Washington, DC

[http://lnweb90.worldbank.org/oed/oeddoelib.nsf/DocUNIDViewForJavaSearch/CF83C56C2C21A14E8525779200783AF2/\\$file/FB-FY2010%20CBA\\_desk-to-desk\\_06\\_29\\_10.pdf](http://lnweb90.worldbank.org/oed/oeddoelib.nsf/DocUNIDViewForJavaSearch/CF83C56C2C21A14E8525779200783AF2/$file/FB-FY2010%20CBA_desk-to-desk_06_29_10.pdf)

<sup>5</sup> ADB, 2003b, 'Financial Management Systems, Financial Analysis, and Financial Performance Indicators', Operations Manual, Section G2/BP, Asian Development Bank, Manila

<sup>6</sup> OECD-DAC, 2006, 'The United States: Peer Review', Development Assistance Committee, OECD, Paris, <http://www.oecd.org/dataoecd/61/57/37885999.pdf>

- AusAID - uses a series of planning and review processes to establish VfM: Comprehensive Aid Policy Framework; Country and Regional Strategies; Thematic Strategies; Design, Implementation and Performance Management systems at the activity level; and internal and external reviews<sup>7</sup>.

VfM is used in discussions of procurement as well as project implementation. It is often important to clarify the part of the project cycle VfM is applied to. The Bond<sup>8</sup> VfM framework<sup>9</sup> includes three components: managing for value for money, comparing value for money and demonstrating value for money. Managing for VfM involves getting the right processes. Comparing for VfM allows comparison across programmes. Evaluation of programme outcomes allows demonstration of VfM.

## Issues of debate

There are a number of issues in discussions of VfM that are a matter of debate. Some common affirmative and negative arguments are summarised in Table 1:

**Table 1: Affirmative and negative arguments in discussions of VfM**

### Affirmative<sup>10</sup> arguments for VfM

Cost studies can demonstrate that development spending provides a return on investment.

- ROI evidence strengthens public confidence in policy-making and justifies maintenance of development budgets.

Cost studies provide guidance for programme improvement

- Cost studies provide and validate models of optimal resource allocation.

Cost studies encourage implementation of low-cost, moderate-impact programmes over high effect-size initiatives that may not be feasible on a broad scale or lead to lower net benefit for a given budget.

### Negative arguments against VfM

Value for money is a concern for donors rather than beneficiaries.

- The issue of VfM is a step backwards – away from international development agreements from the Paris Accord onwards that aid is country led<sup>11</sup>

Value for money can lead to a focus on activities that are easy to measure and implement rather than more risky and important activities.

- Measuring quantitative outcomes of aid is easier than complex human, institutional and social change<sup>12</sup>.

The final listed advantage can also be seen as a disadvantage

<sup>7</sup> AusAID, (2012) Helping the World's Poor through Effective Aid: Australia's Comprehensive Aid Policy Framework to 2015-2016, AusAID

<sup>8</sup> The UK membership body for non-governmental organizations (NGOs) working in international development.

<sup>9</sup> Bond. Value for money: what it means for UK NGOs; Bond. 2011.

<sup>10</sup> Affirmative arguments drawn from Levin, H. M. and McEwan, P. J. (2001). Cost-effectiveness analysis: Methods and applications, Sage Publications, California

<sup>11</sup> See Carden, F., (2012) 'Whose Development Results Count?', in NORRAG NEWS, Value for Money in International Education: A New World of Results, Impacts and Outcomes, No.47, April 2012, pp. 59-60, available: <http://www.norrag.org>  
<sup>12</sup> See for example the distinction Cathy Shutt draws between simple service delivery projects and more complicated and complex project contexts that involve capacity building and/or relationships between multiple stakeholders Shutt, C. (2011) Reclaiming Value for Money, Push Forward accessed at <http://bigpushforward.net/archives/1477> 19th February 2013

## Evaluating Value for Money

Resource allocation analysis was first applied in the 1930s in the United States in public works legislation<sup>13</sup>. The wide spread application of economic analysis throughout the federal government occurred in the 1960s with the Planning, Programming and Budgeting System (PPBS). Governments pioneered these techniques to water resource developments (United States) and major transportation investments (England). The World Bank started to apply this analysis to project level activities and national programmes after World War II.

Economic analysis helps in determining the fundamental question of the central agency: how to allocate scarce resources (federal funds) among a large number of competing claimants (federal programmes). To determine which programmes are worthwhile, the agency focuses on key questions: is this project worth it, what are the benefits and what are the costs, could the private sector do a better job, is it cost-effective compared with alternatives<sup>14</sup>?

The idea of judging the utility of social interventions has gained wide spread public acceptance. The procedures for analysing benefit and effectiveness remain in question however. This reason for the debate relates to the general unfamiliarity with analytical procedures used to make economic assessments and a reluctance to impose monetary values on the outcomes of social programmes<sup>15</sup>.

### Methods

There are six main methods that can be used to assess VfM:

- Cost Effectiveness Analysis (CE analysis)
- Cost Utility Analysis (CU analysis)
- Cost Benefit Analysis
- Social Return on Investment (SROI)
- Rank correlation of cost vs impact
- Basic Efficiency Resource Analysis (BER analysis)

These six methods can be categorised in terms of three groups. Each group examines the relationship between costs and benefits in a particular way. Table 2 below includes a description of each method and the similarities and differences in each set of methods.

<sup>13</sup> Nelson, R. H. (1987) "The Economics Profession and the Making of Public Policy." *Journal of Economic Literature* 35(1): 49:91.

<sup>14</sup> Nelson *ibid*.

<sup>15</sup> Rossi, P., Freeman, H. E., & Lipsey, M. W. (1999) *Evaluation: A Systematic Approach*, Sage Publications, London

**Table 2: Six methods for evaluating VfM categorized into three groups**

	<b>Method</b>	<b>Description</b>	<b>Similarities and differences</b>
Group 1	Cost Effectiveness Analysis	The evaluation of two or more alternatives, based on the relative costs and outcomes (effects), in reaching a particular goal. This method can be used when comparing programmes that aim to achieve the same goal.	Cost Effectiveness and Cost Utility analyses are useful for evaluating programmes that aim to reach the same goal in non-monetary terms. For education programmes, that might mean a goal of increased school enrolment, attendance, completion, or cognitive development. The main difference between the two methods is that CU takes beneficiary perspectives into account. Well-known applications of CU analysis is in the health sector, with the use of Quality Adjusted Life Years (QALYs). The QALY allows each potential programme to be measured according to the extent to which it extends life expectancy while also improving the quality of each year lived. Developing this indicator involves determining satisfaction derived from different health states.
	Cost Utility Analysis	The evaluation of two or more alternatives by comparing their costs to their utility or value (a measure of effectiveness developed from the preferences of individuals). This method can be used where monetising outcomes is not possible or appropriate. This method is most commonly used in health through quality adjusted life years (QALY). The QALY allows the comparison of medical interventions by the number of years that they extend life.	
Group 2	Cost Benefit Analysis	The evaluation of alternatives by identifying the costs and benefits of each alternative in money terms, and adjusting for time. This method can be used to identify if a course of action is worthwhile in an absolute sense—whether the costs outweigh the benefits—and allows for comparison among alternatives that do not share the same objective or the same sector.	Cost Benefit Analysis and Social Return on Investment evaluate whether a programme is beneficial in an absolute sense. They both monetise outcomes. Both methods allow for comparison of programmes with different objectives or from different sectors. The difference between them is that SROI measures social, environmental and economic costs and benefits.
	Social Return on Investment	Measures social, environmental and economic costs and benefits. Like Cost Benefit analysis, SROI can be used when comparing programmes with different goals or in different sectors.	
Group 3	Rank correlation of cost vs impact	Allows for the relative measurement of VfM across a portfolio of initiatives.	Rank correlation of cost vs impact and Basic Efficiency Resource Analysis both evaluate the relative costs and benefits of many programmes. The first method ranks and correlates costs and impact while the second examines relative value by plotting programmes on a four quadrant graph based on costs and impacts.
	Basic Efficiency Resource Analysis	Provides a framework for evaluating complex programmes by comparing impact to resources and offering a relative perspective on performance where units analysed are judged in comparison to other peer units.	

Tables 3 and 4 can assist in making a decision about which method to use.

**Table 3: Key questions and suggested methods for evaluators**

Key question	Suggested method
The evaluator wants to compare alternative programmes that aim to reach the same goal	Cost Effectiveness Analysis
The evaluator wants to compare alternative programmes that aim to reach different goals	Cost Benefit
The evaluator wants to compare alternative programmes that occur in different sectors	Cost Benefit
The evaluator wants to understand whether benefits outweigh costs	Cost Benefit
The evaluator needs/wants to consider individual preferences	Cost Utility
The evaluator needs/wants to consider social costs	SROI
The evaluator wants to compare the impact and performance of each unit relative to other units	BER and Rank Correlation

The advantages, disadvantages and required expertise for each method are summarised in Table 4<sup>16</sup>.

<sup>16</sup> The summary of advantages, disadvantages and required expertise for CE, CB and CU analysis is drawn from Levin, H. M. and McEwan, P. J. (2001). Cost-effectiveness analysis: Methods and applications, Sage Publications, California

**Table 4: Advantages, disadvantages, and required expertise for VfM methods**

Method	Advantages	Disadvantages	Required Expertise
Cost Effectiveness Analysis	<ul style="list-style-type: none"> <li>This method is well suited to the comparison of alternatives that are being considered for reaching the same goal.</li> </ul>	<ul style="list-style-type: none"> <li>This method cannot compare alternatives with different goals</li> <li>It cannot make an overall determination of whether a programme is worthwhile in an absolute sense—this method will not help determine whether total benefits exceed total costs, only whether an alternative is a relatively more cost-effective solution.</li> </ul>	CE analysis can often be done by taking the normal evaluation design and integrating a cost component.
Cost Utility Analysis	<ul style="list-style-type: none"> <li>Makes careful attempts to consider individual preferences</li> <li>A large number of potential outcomes can be included in the evaluation</li> <li>Can contribute to consensus building and participatory decision-making as stakeholders are called upon to assess their preferences for diverse outcomes.</li> </ul>	Results are often difficult to reproduce among different evaluators because of the numerous and sometimes conflicting methodologies that are used to estimate importance weights.	CU analysis has its own expertise requirements, closer to those of CE analysis than CB analysis in their content.
Cost Benefit Analysis	<p>This method can help determine:</p> <ul style="list-style-type: none"> <li>A comparison between alternatives with different objectives</li> <li>That any particular alternative has benefits that exceed its costs</li> <li>Which of a set of alternatives within a given sector has a higher ratio of benefits to costs.</li> </ul>	Benefits and costs must be assessed in money terms. For this reason, this method is best used when the majority of benefits can be converted to monetary values or when those that cannot be converted are unimportant or are similar among the alternatives considered.	This method requires an understanding of the workings of economic markets to determine prices and shadow prices.

Social Return on Investment	<ul style="list-style-type: none"> <li>• Can contribute to participatory decision-making as stakeholders are called upon to identify and value programme outcomes</li> <li>• The Social Return on Investment Network provides an assurance process that ensures the analysis has been completed to a consistent standard.</li> </ul>	<p>Cost data can be disputed as different evaluators use numerous and sometimes conflicting methodologies to derive value.</p>	<p>SROI evaluators can choose to be members of the SROI network. In addition, you can become an accredited practitioner of SROI through the network.</p>
Rank correlation of cost vs impact	<ul style="list-style-type: none"> <li>• This method can help determine a comparison between alternatives with different objectives</li> <li>• Can be useful for multi-unit programmes. It shows the impact and performance of each unit relative to other units.</li> <li>• Can contribute to participatory decision-making as stakeholders are called upon to identify and value programme outcomes.</li> </ul>		<p>This method can often be done by taking the normal evaluation design and integrating a cost component</p>
Basic Efficiency Resource Analysis	<ul style="list-style-type: none"> <li>• This method can help determine a comparison between alternatives with different objectives</li> <li>• Can be useful for multi-unit programmes. It shows the impact and performance of each unit relative to other units.</li> <li>• BER can be used to aid discussions into the performance of units, their challenges, opportunities, and operating environment.</li> </ul>	<p>BER simplifies complex information and should not be relied on alone. It should be used in conjunction with other data, and never as the only analytical approach.</p>	<p>BER analysis can often be done by taking the normal evaluation design and integrating a cost component</p>

## Issues common to all VfM methods

There are a number of questions an evaluator should ask regardless of which method they choose for assessing VfM:

Theoretical questions

- How will value be measured? Will it include economy, efficiency, and effectiveness? Will it include equity?
- Who will decide value? Will this be a participatory analysis?

Practical questions:

- Is the evaluation assessing the value of one project or comparing a number of projects?
- Will the evaluation measure in monetary terms or will it use a proxy measure of value?
- How will the evaluation process make sure costs and benefits are agreed and transparent?
- Will these methods be used in ways that promote/enable participation and accountability to communities and partners?

# How to implement VfM methods

## Cost effectiveness

This can be implemented in six stages<sup>17</sup>:

*1. Choose an appropriate measure of effectiveness:* An evaluator will need to determine a valid and reliable measure to judge the effectiveness of their programme. A reliable measure is one that will produce the same results when applied to the same individuals on a number of occasions. A valid measure closely corresponds to the concept it is intended to reflect.

### Don't use a budget to develop project costs

A budget will give an evaluator information on what expenditure is planned. But it won't provide information on what was actually spent. And a budget may not provide a yearly breakdown of costs. An evaluator might use the project budget as a starting point, but should also seek information elsewhere to determine accurate and annualised costs for all project ingredients.

Even though an evaluator only chooses one measure of effectiveness (CE allows for the comparison between a range of alternatives in achieving a single outcome), in reality, the programme they are evaluating will have multiple outcomes. An evaluator will need to measure the important intended and unintended outcomes of each alternative.

*2. Gather cost data:* One method of valuing programme inputs is the Ingredients Method. This involves identifying all of the ingredients of a programme and their cost. An evaluator must make sure to include the cost of any resources that are contributed or donated. Common categories of costs are:

- personnel
- facilities
- equipment and materials
- other programme inputs
- required client inputs

An evaluator should collect as much detail as possible on each ingredient. This will help them to develop accurate costs. For example, they can list personnel by roles, qualifications and their time commitment on the programme. They can list facilities by their dimensions and characteristics and if they are used for other purposes (and if so, how much time they are used for the project). They can list the equipment and materials that are used specifically for the programme and shared with other activities. Under 'Other programme inputs' they can identify those ingredients that do not fit easily into the other categories. And finally, they can list the costs that the client has to bear to be involved in the programme.

An evaluator should pay most attention to getting accurate prices for those items that make up the bulk of the project. Errors in costs of these items will create the largest distortions.

<sup>17</sup> The description of method implementation draws from Levin, H. M. and McEwan, P. J. (2001). *Cost-effectiveness analysis: Methods and applications*, Sage Publications, California

**3. Examine causality:** The evaluation should be designed to determine whether it is the particular intervention that causes a change in the measure of effectiveness.

**4. Discount effects if the intervention lasts longer than a year:** An evaluator should apply a discount rate to each alternative. This discounting favours programmes that achieve results more quickly.

**5. Analyse the distribution of effects:** An evaluator should consider if and how the programme affects particular groups differently. If it does, they can calculate estimates of effectiveness for each sub-group.

**6. Combine costs and effectiveness:** An evaluator should develop cost effectiveness ratios for each alternative: either a given level of effectiveness for the least cost, or the highest effectiveness for a given cost.

### **Issues with cost effectiveness analysis:**

If the programme produces some outcomes that can be converted to a monetary value, these can be subtracted from programme costs. In this case, the analysis becomes a hybrid of CE and CB.

An evaluator can conduct a sensitivity analysis to deal with any uncertainty in the evaluation design or assumptions. The sensitivity analysis identifies the parameters with the most uncertainty and identifies a range over which that parameter might vary. Then an evaluator may re-estimate the cost-effectiveness ratios over the entire range of the given parameter (a one-way sensitivity analysis) or over two or more parameters (a multi-way analysis).

## Cost Utility analysis <sup>18</sup>

This allows for comparison of programmes along a number of measures of effectiveness (or attributes). CU allows for the quantification of utility as derived from a number of individual attributes and the creation of an overall measure of utility based on these individual attributes. CU uses the following five stages:

**1. Determine the utility of each single attribute:** There are a number of methods to assess single-attribute utility:

<i>Proportional scoring</i>	This method presents each attribute according to a common utility scale. This can be presented in a graphical manner. The x axis presents the lowest-scoring alternative to the highest. The y-axis presents the utility scale. Increasing amounts of an attribute are associated with increasing amounts of utility. The lowest amount of an attribute is assigned a utility of 0 and the highest a utility of 100. Other attributes can be plotted accordingly.
<i>Direct method</i>	Stakeholders rank their preferences for a range of attributes. The lowest ranked attribute is given a score of 0. The highest ranked attribute is given a score of 100. Individual stakeholders are then asked to score the remaining attributes, giving each attribute a score of between 0-100.
<i>Variable probability method</i>	Stakeholders assess their preferences for varying amounts of a range of probabilities. Individuals choose the probability that makes them indifferent between the highest scoring attribute and the lowest scoring attribute.

**2. Assess importance weights:** The next stage is determining the relative weight or 'importance' of each attribute to overall utility. The direct method and the variable probability method can be used to estimate importance weights.

<i>Direct method</i>	Ask individuals to allocate a total of 100 points among attributes according to their relative importance.
<i>Variable probability method</i>	Ask individuals to choose between two options when there is a 100% chance of A occurring and a 0% chance of B occurring. Change the probabilities until there is no difference between whether they choose option A or B.

**3. Discount utility if utility gains occur over a period of many years.** An evaluator should apply a discount rate to each alternative. This discounting favours programs that achieve results more quickly.

**4. Combine costs and utility:** Divide the cost of each alternative by its utility. The ratio is the cost of obtaining a single unit of utility. The smallest ratios are the alternatives that provide a given amount of utility at the lowest cost.

**5. Account for uncertainty:** Conduct a sensitivity analysis (described under Cost Effectiveness).

<sup>18</sup> The description of method implementation draws from Levin, H. M. and McEwan, P. J. (2001). Cost-effectiveness analysis: Methods and applications, Sage Publications, California

## Cost Benefit analysis

This uses the following stages<sup>19</sup>:

**1. Determine the value of outcomes:** To determine the monetary value of outcomes, an evaluator determines the maximum amount each individual affected by the programme would be willing to pay to receive the desirable outcomes. You can use contingent valuation approach or the observed behaviour approach.

<i>Contingent valuation</i>	<i>Open ended method</i>	Individuals are asked to state their maximum willingness to pay.
To survey individuals on their willingness to pay, an evaluator can use:	<i>Close-ended iterative bidding</i>	Individuals are asked if they would pay an amount for a particular good. If they answer yes, the amount is increased and the question repeated. The process is continued until the answer is no.
	<i>Payment cards</i>	A series of cards of different amounts are presented to individuals and they are asked to select the maximum value they would be willing to pay.
<i>Observed behaviour</i>		An evaluator can infer the price of a good by observing what people pay for like or related goods. For example, an evaluator can infer the value of good schools by the additional amount people will pay to buy homes in a given school district.

**2. Determine costs:** When using Cost-Benefit analysis, certain costs are intangible. To conduct a full analysis, an evaluator must assign values to all of the cost variables. For example, on a crime prevention programme, there may be a reduced sense of security due to building a jail in a district. This must be priced and factored in as a cost. An evaluator can use the same methods to determine the costs that were described to value outcomes: contingent valuation and observed behaviour.

**3. Combine costs and benefits:** You can use one of the following three methods:

<i>Benefit-cost ratio</i>	The product of the benefits divided by the costs. The answer to the equation is the number of monetary units of benefit for each unit of cost. If the ratio is greater than one, the benefits outweigh costs and the project is desirable.
<i>Net benefits</i>	Derived by subtracting the costs from the benefits. If the answer to the equation is positive, the project is a desirable one.
<i>Internal Rate of Return</i>	The discount rate that causes the net benefits to equal zero. If the IRR is larger than the prevailing discount rate of the project, the project is desirable.

Note: Levin and McEwan advise computing all three measures of project desirability as each has its strengths and limitations. The benefit-cost ratio provides an indicator of whether benefits outweigh costs, but no information on the scale of the project. Net benefits provides an indicator of project scale.

### Determine cost-benefit ratios for all stakeholders

Develop a matrix with stakeholders on one axis and costs on the other. This will allow you to develop a detailed breakdown of the costs and benefits to each stakeholder group.

<sup>19</sup> The description of method implementation draws from Levin, H. M. and McEwan, P. J. (2001). Cost-effectiveness analysis: Methods and applications, Sage Publications, California

## Social return on investment

This uses the following four stages:

**1. Establish scope and identify key stakeholders:** Before an evaluator starts their SROI analysis, they must clarify what they are going to measure and how, and why they are embarking on a measurement process.

In establishing the scope, an evaluator must consider the following issues:

Purpose	What is the purpose of this SROI analysis?
Audience	Who is this analysis for?
Background	What does the organisation do, what does it hope to achieve by its activities and the scale of the issue it is seeking to address?
Resources	What resources are required and what are available?
Who will carry out the work	Internal or external and what mix of skills?
Range of activities on which evaluator will focus	The evaluator must clearly describe what they intend to measure.
Period of time over which intervention will be/has been delivered	
Whether analysis is a forecast or an evaluation	

**2. Map outcomes:** Through engaging with their stakeholders, an evaluator will develop an impact map, or theory of change, which shows the relationship between inputs, outputs and outcomes.

**3. Evidence outcomes and give them a value:** This stage involves finding data to show whether outcomes have happened and then valuing them.

**4. Establish impact:** Having collected evidence on outcomes and monetised them, those aspects of change that would have happened anyway or are a result of other factors are eliminated from consideration.

1. Calculating the SROI. This stage involves adding up all the benefits, subtracting any negatives and comparing the result to the investment. This is also where the sensitivity of the results can be tested.
2. Reporting, using and embedding. This last step involves sharing findings with stakeholders and responding to them, embedding good outcomes processes and verification of the report.

## Rank correlation of cost vs impact

To use this method<sup>20</sup>:

**1. Identify all the costs involved in the activity:** Clarify and document which costs were included and which were excluded: e.g. partner's own costs, other donor contributions, etc. Rank the activities by the cost of the inputs.

**2. Generate ratings of effectiveness for each entity:** The same set of activities are ranked by their perceived effectiveness or impact. If a participatory ranking process is used, an evaluator will provide information on the stakeholders who were involved.

An evaluator must work with stakeholders to gain an understanding of their ranking. This may be best elicited through pair comparisons of adjacent sets of ranked activities.

Questions may include:

- What impacts are more valued than others?
- Was there more evidence for that kind of impact?
- If a given impact is on the same scale, was there better evidence of that impact?

**3. Calculate the rank correlation between the two sets of rankings:** The results will range between these two extremities:

A high positive correlation (e.g. +0.90)	Here the highest impact is associated with the highest cost ranking, and the lowest impact is associated with the lowest cost ranking. Results are proportionate to investments.
A high negative correlation (e.g. -0.90)	Here the highest impact is associated with lowest cost ranking, but the lowest impact is associated with the highest cost ranking. Here, the more an evaluator increases their investment the less they gain.

In between will be correlations closer to zero, where there is no evident relationship between cost and impact ranking.

**4. Find opportunities for improvement by doing case studies of "outliers":** These are found when the two rankings are plotted against each other in a graph. Specifically:

<i>Positive cases</i>	Rank position on cost is conspicuously lower than their rank position on impact.
<i>Negative cases</i>	Rank position on impact is conspicuously lower than their rank position on cost.

Note: An evaluation should report the number of activities that have been ranked. The more activities, the more precise the rank correlation will be.

<sup>20</sup> This method was developed by Rick Davies. The following description is drawn from his website, MandE News: <http://mande.co.uk/2011/lists/value-for-money-a-beginners-list/>

## Basic Efficiency Resource (BER):

This method<sup>21</sup> compares two variables within a matrix: input and output. The final result is a quadrant as illustrated in Figure 1:

**Figure 1: BER analysis conceptual model**

Input	High	Below average efficiency	Average efficiency
	Low	Average efficiency	Above average efficiency
		Low	High
		Output	

**1. Identify the units of analysis:** The units will vary according to the needs of the analysis. Units may include business units, programme components, or organisational teams. An evaluation can identify the units through documentation or through interviews with stakeholders. A stakeholder map can be developed listing the stakeholders involved with each unit. This will assist in the analysis stage. The units of analysis and stakeholder map can be validated with the sponsoring organisation

**2. Define inputs and outputs and data sources:** Definitions for inputs and outputs can be developed in consultation with stakeholders. They can clarify what type of data is available to demonstrate inputs and outputs.

**3. Collect data:** An evaluation can involve developing and administering tools that measure inputs and outputs or perceptions of efficiency of each unit, based on inputs and outputs. The method developers recommend using a 6-point Likert-type scale as this can be converted easily into a continuous graph and the four-quadrant or nine-quadrant BER analysis.

**4. Visualise data:** The data are analysed and presented using either a four quadrant or nine quadrant matrix.

**5. Interpret the data:** The information provided in the matrix, along with other qualitative data, insights and knowledge, is used to develop conclusions on the efficiency of each unit. An evaluation must ensure any interpretations are based on an understanding of the units of analysis and the informants who participated in the evaluation.

<sup>21</sup> For further details on the method, see Cugelman, B. and Otero, E. (2010) *Basic Efficiency Resource: A framework for measuring the relative performance of multi-unit programmes*. Leitmoiv and AlterSpark.

# Appendix: SROI Case Study, World Vision Australia

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## Context/ background

Talensi Farmer-Managed Natural Regeneration (FMNR) project is taking place in the upper East Region, in the semi-arid far North East corner of Ghana, close to the border of Burkina Faso. The project identified nine of the district's 69 communities to participate as pilot communities, and these nine communities comprise approximately 3000 households.

The project's goal is to improve households' incomes and food production in a vulnerable farming district. The project's approach is to promote the adoption of sound natural resource management practices in order to restore presence of indigenous natural resources as well as increase the health of agricultural soils and increase and diversify the resilience of farm crops.

Practices include:

- Adoption of FMNR on forest reserves and farmland (FMNR is a technique to rapidly re-establish tree cover by pruning wild regrowth from live tree stumps into mature trees).
- Use of crop residues as fertiliser and fodder
- Market information training for farmers
- Development of local laws to support good environmental management
- Establish and train community fire-fighting volunteers
- Discovery and adoption of supplementary income and resource generation
- Promote and train for the adoption of fuel-efficient wood stoves

The project responds to pressures on the community such as degrading and eroding soil; declining yields over time; and diminishing stocks of tree cover, flora and fauna that constitute important parts of traditional livelihoods and coping mechanisms.

The project was jointly financed by private donations and AusAID's ANCP mechanism. Activities commenced in 2009, but most initiatives took place in 2010 until late 2012.

An end-of-phase evaluation is currently taking place, effectively after 2.5 years of implementation. Data collection occurred through July 2012. The analysis has commenced in late September and is expected to be completed around December 2012. The conclusions and recommendations of this evaluation will inform a redesign to guide a new phase, starting in 2013.

## VfM approach

The evaluation attempts to satisfy two core information demands:

1. Generate recommendations to inform the redesign
2. Interpret the value or contribution of this pilot project to human development.

To generate recommendations, World Vision conventionally draws on methods such as qualitative data collection in the form of focus group discussion, key informant interviews and site visits, plus quantitative data in the form of household surveys, plus review of project documentation and secondary data where available. This evaluation employed this mixed method approach.

To interpret the value, the evaluator has incorporated 'Social Return on Investment' (SROI) methodology into these data collection methods.

The decision to do so related to the hypothesis that many of the benefits generated by this project will be environmental and social in nature, and therefore, be difficult to account for in an analysis of contribution to

human well-being. SROI prompts evaluators to not only record the diverse project results but to guide project stakeholders to identify benefits and assign values of them to their lives in the form of proxy financial values.

A number of aspects of SROI appealed to the evaluator.

1. SROI seeks to identify and record all effects of a project deemed by participants to be significant, rather than focussing on targets predetermined at design phase or benefits that are easy to quantify;
2. Consistent with World Vision's ideals, the methodology guides the stakeholders to interpret and quantify what is important to them, instead of using externally assigned value.
3. NGOs are under increasing pressure to articulate evidence of impact, as donors are no longer satisfied (perhaps even cynical) with detailed narratives. Whether we NGOs are comfortable with it or not, contemporary Australian organisations speak and hear the language of economics. SROI 'packages' the aggregate contribution of development projects in terms that such organisations understand.
4. SROI provides a valuable tool to guide reflection and recommendations. Translating all outcomes into proxy financial values enables comparison of the relative contribution of different outputs within individual projects. Under conventional evaluation, we can record several contributions of a project, but ranking them tends to be subjective. By contrast, while SROI is not free of subjectivity throughout its calculation process, it is able to bring more objectivity to conclusions of which outcomes had the greatest impact across the participant community and why (such as whether an output made a small contribution to many people or a major contribution to a few).

## Tensions and reflections

### *Time intensive:*

In the course of data collection, the evaluator found that stakeholder discussions extremely time-consuming to find proxy financial values for non-economic benefits. The concept is very abstract, and therefore difficult to communicate. Focus group discussions each had durations of two hours. This entire time period could easily have been devoted to naming positive and negative outcomes and trying to generate proxy financial values for each. In this evaluation, SROI was included as a complementary approach, nested within the broader mixed methods. As a result, the more abstract the outcome, the less likely the discussion was to produce a proxy financial value. For example, values for physical benefits were easy to generate, such as more animal fodder, more tree timber and more wild fruit. At the other end of the spectrum, the evaluator did not return with agreed values for important, but less tangible outcomes such as greater levels of community collaboration and a more shaded and comfortable micro-climate for beneficiaries.

The ramification of this gap is that the evaluator will need to explore equivalent values from development literature, compromising the philosophy of allowing community members to define value.

The evaluation plan was to create a single hybridised evaluation process and analysis. However, the rigour of SROI methodology will effectively require a doubling of analysis time to combine with a more conventional evaluation write-up.

### *Over-simplified messaging:*

The evaluator has reservations about SROI dumbing-down development outcomes into easily misused, tabloid sound bites. Whilst SROI's rhetoric refers to the value of the lessons acquired through its process, the reality is, nonetheless, that its conclusion is the creation of a single cost/benefit ratio number. As mentioned above, if an organisation, whether donor, media or others critiquing the development sector, is no longer satisfied with NGO narratives, the descriptive analysis and interpretation behind the ratio is likely to be discarded, and all the attention placed on the hollow number.

### *Potential to stifle innovation in development approaches*

NGO managerial and finance decision-makers may, themselves, to fall into the same error of discarding background. Pilot development projects introducing a new innovation into a community tend to have lesser outcomes. New ideas compete with orthodoxy and routine. Logically, they are resisted by many, and embraced by a small number of early adopter/pioneers. Subsequent projects are likely to make more rapid gains as early

adopters provide localised evidence of benefit and the technology is normalised. SROI analyses for innovative projects are likely to record lower social return ratios in early phases than well-established 'old' approaches. If decision-makers within an NGO feel the need to demonstrate efficiency, utilisation of SROI to inform the most efficient avenues for attacking poverty may very well stifle the pursuit of innovation.

### *Conclusion*

SROI appears to hold value for NGOs in identifying and quantifying the benefits (and detriments) of an intervention that may otherwise be overlooked or under-stated. Its greatest strengths are the objectivity of comparison that it brings when looking at diverse outcomes within a project. Its economic language may provide a useful and reassuring medium of communication to donors and critics. SROI data collection and analysis is very time consuming, so is best done as a discrete evaluation approach, rather than a component within a mixed method approach. Its generation of a simplistic cost/benefit ratio is likely to be misused by decision-makers inside and outside NGOs, perhaps to the detriment of richer descriptive interpretation.



