
ANNEX VI - CLASSIFICATION FRAMEWORK

Cross-border effects:

These effects represent the distribution of welfare among municipalities, regions or nations (depending on the unit of measure used). Eijgenraam et al. (2000) recognise that the effects of major projects often cover large areas; thus, cross-border or cross-regional effects are possible. Therefore it is important to clearly show the distribution of costs and benefits among regions (or nations, if this is the case). Improved environmental quality is an example of a cross-border effect. In fact, this may not only be of benefit to the region analysed, but also to border regions or even border nations.

Direct and indirect effects:

Furthermore, a distinction between **direct and indirect effects** can also be made (see Eijgenraam et al, 2000). Effects can influence the policy outcome - either directly or indirectly. Rossi et al. (2004) also recognise this classification and distinguish between proximal and distal outcomes (see figure 1). By looking at the impact model as a causal chain of events, “...events following directly from the instigating program activities are the most direct outcomes”, while “...events further down the chain constitute the more distal”. Of course, indirect effects are caused by - and depend largely on - the success of direct effects (Runhaar, 2011; Rossi et al, 2004, p. 142). For example, the reduction of MSW’s quantities is a direct effect, while the increase in environmental quality is an indirect effect. Direct effects are easier to measure and attribute to the program implementation than indirect effects, which are often difficult to measure and can lead to dubious results.

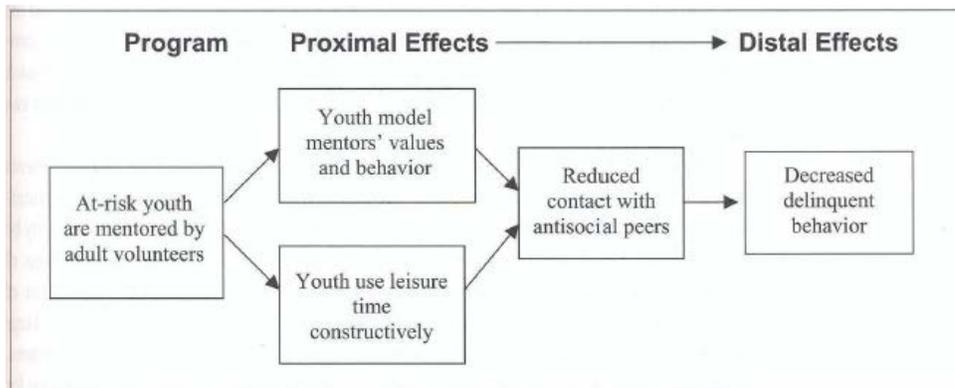


FIGURE 1: DIRECT AND INDIRECT EFFECTS (SOURCE: ROSSI ET AL, 2004)

Priced and non-priced effects:

Another categorisation of effects is those which are priced and non-priced. Priced effects are defined by Eijgenraam et al. (2000, p. 57) as “advantages or disadvantages of a project which are expressed as prices of goods and services via transactions and price setting in markets”. On the contrary, a non-priced effect cannot be measured so easily; it has no market price to rely on. This is, for example, the case of environmental externalities (e.g., CO₂ emissions) and other intangible and non-tradable goods, such as time, risk and equity.

It is widely recognised that it is difficult to express all costs and benefits in monetary terms. Which costs and benefits can be monetised - and how - is still widely debated in the literature. The monetisation of non-priced effects is therefore a weakness in the realisation of a CBA and must not be overlooked.

Efficiency and redistribution effects:

This is probably the most important criteria for a CBA. The distinction as follows: with efficiency effects, there is a *net increase (or decrease) in welfare* (or efficiency improvement). On the other hand, with redistribution effects, there is no net increase in welfare, but only a *distribution of welfare* within the society. For example after the introduction of PAYT

scheme, the MSW decreased. As a consequence there might be a redistribution among economic sectors operating in the WMS, in terms of losses for haulers and gains for companies that sell bags, tags, etc.

These welfare redistributions must be taken into account in a SCBA, but they are not always easy to quantify.