# Summary

## Tension between 'visionaries' and 'number crunchers'

Many politicians, representatives or scientists feel that social costbenefit analyses (SCBAs) do not sufficiently take human creativity and the capacity for risk-taking into account. These critics emphasise the importance of vision. In their view, SCBAs bypass the complexity of decision-making processes. Moreover, SCBAs leave out key factors such as experience and image. On the other hand, advocates of cost-benefit analyses think that these 'visionaries' all too often present ideals as facts. According to them, visionaries concentrate too much on realising certain projects rather than on the problems these projects should solve.

From this point of view, it may seem that 'visionaries' and 'number crunchers' are at odds with each other. However, we believe this to be a superficial opposition. Both vision and SCBAs play their own part in the decision-making process regarding investments in infrastructure. As long as these two roles are in balance, vision and SCBAs are complementary, not contradictory. Figure 1 illustrates this.



Figure 1 Relationship between vision, SCBA and decision-making

## 'The pyramids would not have been built...'

Visionaries claim that in practice decision-making processes regarding government investments are not actually rational and systematic and that they are not solely based on lists of costs and benefits expressed in monetary terms. For decision making, emotion is thought to be just as influential as knowledge. Visionaries also indicate that large projects such as the Afsluitdijk (Closure Dike) would never have been built if a SCBA had been the ultimate deciding factor. Another objection to SCBAs is that such aspects as the value of nature cannot easily be expressed in numbers and are, consequently, excluded from the calculation.

#### 'All too often, visions are just fantasies'

According to advocates of cost-benefit analyses, visions often lead too quickly to projects lacking sufficient grounding in a problem analysis and without having explored alternative solutions. There is also often no explanation of why an infrastructure project is the best solution for the opportunities and potential of a certain area. This objection is particularly prevalent for the potential employment effects associated with infrastructure projects. In practice, such effects are frequently overestimated.

## Towards an improved decision-making process

We consider both vision and SCBAs to be necessary ingredients for improved decision-making processes. Visions of future developments in the Netherlands can generate ideas for possible projects. SCBAs then help to assess the projects in terms of the costs and effects for society. Of course, politicians have the final say. In different phases in the policy and decision-making process, SCBAs can contribute to the efficiency and effectiveness of the various project variations. This can be done by including SCBA knowledge at a much earlier stage in order to distinguish possibly successful ideas from mere fantasies. Also, more flexibility is needed in dealing with projects, for example, through a phased or modular structure. This also helps in dealing with risk management.

In addition, we present two proposals for improving the decisionmaking process. The first proposal concerns the role of civil servants involved in policy-making, people who often serve as a bridge between the realm of knowledge production and the political arena. We think that civil servants should be more involved in the research process. Secondly, we assert the importance of evaluating projects after completion. The acquired empirical knowledge can then be used in order to fine-tune the estimates associated with ex ante research like SCBAs.