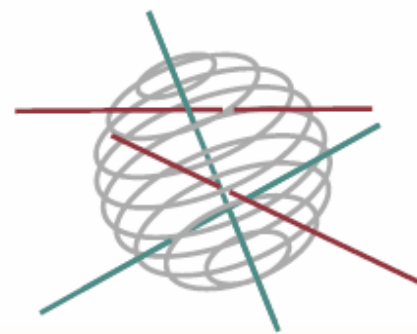


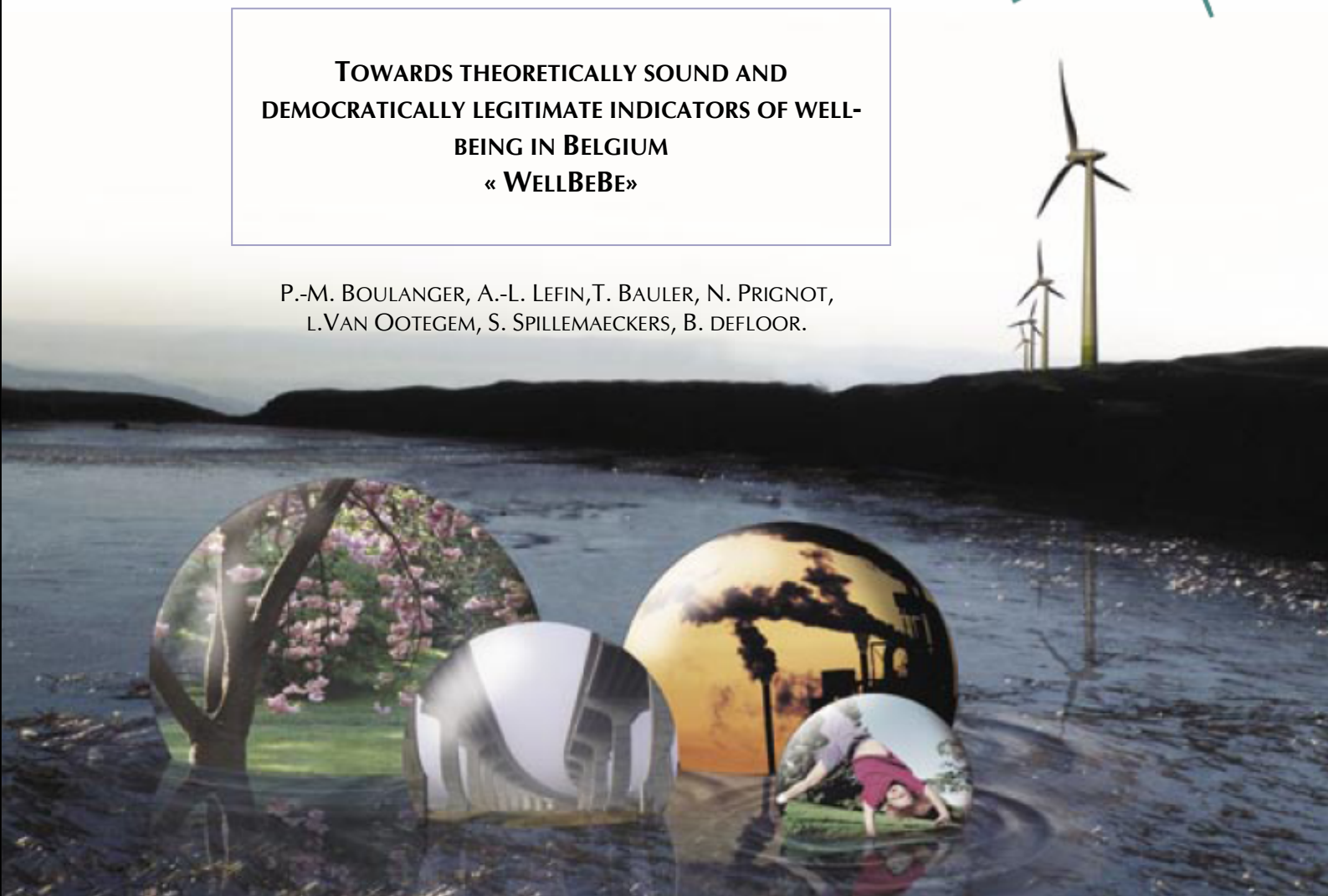
# SSD

SCIENCE FOR A SUSTAINABLE DEVELOPMENT



**TOWARDS THEORETICALLY SOUND AND  
DEMOCRATICALLY LEGITIMATE INDICATORS OF WELL-  
BEING IN BELGIUM  
« WELLBEBE »**

P.-M. BOULANGER, A.-L. LEFIN, T. BAULER, N. PRIGNOT,  
L.VAN OOTEGEM, S. SPILLEMAECKERS, B. DEFLOOR.



ENERGY

TRANSPORT AND MOBILITY

AGRO-FOOD

HEALTH AND ENVIRONMENT

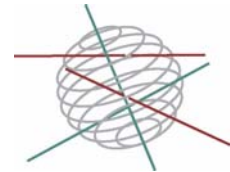
CLIMATE

BIODIVERSITY

ATMOSPHERE AND TERRESTRIAL AND MARINE ECOSYSTEMS

TRANSVERSAL ACTIONS

SCIENCE FOR A SUSTAINABLE DEVELOPMENT  
(SSD)



***Transversal Actions***



FINAL REPORT PHASE I  
SUMMARY

**TOWARDS THEORETICALLY SOUND AND DEMOCRATICALLY  
LEGITIMATE INDICATORS OF WELL-BEING IN BELGIUM**

**« WELLBEBE »**

SD/TA/09A

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*May 2009*





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P.-M. Boulanger, A.-L. Lefin, T. Bauler, N. Prignot, L. Van Ootegem, S. Spillemaeckers, B. Defloor. ***Towards theoretically sound and democratically legitimate indicators of well-being in Belgium.*** Final Report Phase 1 Summary. Brussels : Belgian Science Policy 2009 – 8 p. (Research Programme Science for a Sustainable Development)

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Sustainable development will not be achieved without some fundamental changes in our ways of life. Henceforth, it will be necessary to rely less on material commodities and more on immaterial goods to realize our conception of a good, valuable life while maintaining or even improving our overall well-being. However, in order to trigger a democratic and participative transition towards sustainable development, it is necessary, first to know what are the shared conceptions of a good, valuable life and second, what criteria citizens use to assess social arrangements in terms of quality of life. On the other hand, improved and theoretically sound indicators of well-being have become indispensable to guide public policies, as it is widely acknowledged that increasing production and consumption has ceased to induce more well-being and happiness. The demand of such indicators is emerging strongly, both at the international and national levels. In a context where sustainable development is on the policy agenda, population's well-being is seen as an important aspect to take into account when developing alternative models of society, complementary to more traditional socio-economic development objectives.

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## WORKFLOW

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The two requirements ('theoretical soundness' and 'democratic legitimization') translated in two lines of research. The first one was dedicated to a literature-based analysis, aiming at identifying and assessing the main conceptual frameworks for well-being and synthesizing the information brought by the factual sciences in that respect. The second one consisted in an empirical field-work, aiming at uncovering the divergences and convergences of people themselves in their definition of the 'good life' by using two techniques, namely focus groups and Q-methodology. The report concludes on a dynamic framework based on the capabilities approach that integrates all these findings. This framework will be the basis of the second part of the project, concerned with (amongst other things) the design of an index of well-being in Belgium.

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## WELLBEBE RESULTS

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### **ADDRESSING WELL-BEING: A THEORETICAL ANALYSIS**

By definition, an indicator is an observable variable used to account for a non-observable reality, generally corresponding to an abstract concept such as: democracy, justice, freedom, well-being, etc. The objective of an indicator is to give an empirical expression of the concept, to operationalize it in a way as to be able to describe a social situation or a trend, to evaluate public policies and to set quantitative objectives for it. Building a potentially successful indicator of well-being is first of all a question of agreeing on a definition of the concept, and, moreover, on a full conception of it, i.e. a definition of its main dimensions, the way it is structured, the principles that underlie it, etc.

### **WHAT KIND OF INDICATOR?**

Developing an autonomous index of well-being implies to face a first decisive alternative: shall we adopt an objective, a subjective or a mixed conception of well-being? In short, the subjective component refers to states of minds and the objective one to states of the world, admittedly two very large categories. But other problems and decisions have to be taken when building an indicator: what about its normative content? How to make it useful? What basic (objective or subjective or both) elements are we to include in our index? As indicated, the set of the 'states of the world' is almost infinite and this is probably true also for 'states of minds'. How are we to decide?

The crucial problem is perhaps not the objective vs. subjective problem but the extension of the evaluation scale: full-range vs. truncated. According to several philosophers of justice, even if there existed an intersubjectively acceptable way of measuring and comparing individual well-being conceived as the level of satisfaction of the individual's full range of preferences, it would certainly not be the right scale to use in distributive justice matters; the right scale that we should use would be composed only of the urgent or important preferences. How to determine what is important or urgent? Two approaches to the urgency problem can be identified: a naturalist and a conventionalist one. For the naturalist approach, there would be an objective truth about the relative urgency and importance of the different interests. For the conventionalist approach, the ranking of interests would result from a consensus on what would appear the best available standard of justification mutually acceptable for people whose preferences diverge.

***Our position is that we need both, that is, an overlapping democratic consensus informed by well established objectives facts on well-being, stemming from empirical research.***

### **SOCIAL DISCOURSES ON AND OBJECTIVE DETERMINANTS OF WELL-BEING**

In order to investigate what constitutes and on what depends well-being, two strands of research were developed: on one hand, empirical methods such as focus groups and Q methodology were used to highlight social discourses on well-being and its dimensions, while, on the other hand, scientific literature was consulted, which enlightened the relations between subjective well-being and objective, personal and social covariates,

#### **Social discourses on well-being**

Eight focus groups were organized around eight main dimensions: work, physical environment, physical and mental health, social environment, leisure-culture, education-information, income-wealth, and political environment. The aim of the focus groups sessions was to discuss well-being in order to explore the SWB of (a sample of) the Belgian population, to gather sentences for the composition of a "Q-sample" (see infra) and to explore the possibility of ranking the eight dimensions. The first part of the session was dedicated to well-being in general and a ranking of the eight dimensions, the second one to an in-depth discussion around one specific dimension only.

Amongst the results, we can underline that the eight dimensions appeared quite spontaneously in the participants' discourses. The majority agreed on their importance and underlined the difficulty of the ranking exercise. The latter was often done in function of the present situation of the persons. If there were unfulfilled needs, or problems with one of the dimensions, this dimension came out as more important. Finally, on average, 'health' came in the first place, followed by 'wealth' and 'social environment'. 'Work' came right behind. Those four first items were considered as highly correlated by the participants. Next came 'physical environment' and 'leisure'. 'Education' followed, and, finally 'political life' was overall seen as the less important. Adaptation, comparison and personality were the three factors that appeared to have the most influence on the way people formulated their aspirations in life and their goal setting in function of the realization of well-being. Based on these aspirations, a list of relevant capabilities can be elaborated, in the sense of what people are able to do and to be.

Amongst the minutes of the focus groups' discussions, a bunch of 62 statements about well-being were selected, which were then ranked by 169 participants during a Q methodology exercise. The results enabled us to distinguish three different conceptions of well-being among the sample of the Belgian population, each one characterized by the relative importance they attached to the 'having', 'doing' and 'being' dimensions of existence and their privileged sector of interactions. To summarize, we would say that the first conception is an active conception of well-being (privileging doing and interacting). The second conception of well-being gives less importance to working and acting and more to feeling, relaxing, etc. Finally, the third one summarizes a conception of well-being giving more importance to comfort and material conditions brought by working and social security and

enabling to enjoy family relations. Of course, these distinctions should not be pushed too far. In fact, the difference between these conceptions of life is more a question of nuance, of privileging one or the other dimension at the expense of others.

### EMPIRICAL RESULTS IN SCIENTIFIC LITERATURE

The results of the focus groups were also seen as illustrative of the conclusions of econometrical researches that explore the relations between subjective well-being and objective, personal or social covariates. Here are some of the results:

There is evidence of diminishing marginal returns to *income*, i.e. the relationship with SWB gets weaker as income rises. *Age* has a U-shaped relationship with SWB, with SWB lowest around 32-50. Concerning *gender*, women tend to score lower on mental health measures than men, but there is a wide degree of within-gender variance. The relationship between SWB and *education* is indeterminate (but it is strongly related to income). *Unemployment* is highly detrimental to SWB, although the effect is moderated by living close to others who are unemployed. The evidence suggests that more *activity*, be it formal (e.g. paid work), informal (e.g. some forms of volunteering), social (e.g. church attendance) or physical (e.g. taking walks) is generally associated with higher SWB. There is a strong positive relationship between SWB and both *physical and psychological health*. The perceptions of one's *circumstances* matter to SWB, the degree of *trust* in others seems to be positively correlated with SWB but the evidence is very limited. *Belief in god* is positively associated with well-being. Seeing one's *family and friends* and having an intimate relationship are associated with higher SWB and the breakdown of that relationship is strongly detrimental to well-being. Finally, there is a very weak evidence of a relationship between well-being and the *economic, social, political and natural environment* we live in (inflation, unemployment rates, income inequality, crime etc.), largely because it is very difficult to control for the range of other variables that will affect these relationships.

Those results were also enriched by two other important considerations concerning the dynamic of SWB. The first one is that, whatever the factor considered, its impact is generally asymmetric. This means that an increase in the provision of a factor acting positively on well-being will bring less additional well-being than an equivalent decrease will harm it. The second one is that freedom and control (in conjunction with one another) happen to be the most explicative and significant variables of SWB followed by marriage, religion and trusts in institutions.

Besides SWB, objective health and life expectancy constitute a second yardstick by which to assess the overall costs and benefits of our social arrangements. Health and longevity have also been thoroughly studied through three lenses, all more or less connected to the notion of social stress: social status, balances between demand and control and balance between effort and reward. Longitudinal epidemiological studies have highlighted a “**social** gradient of health”. These studies demonstrate that health is related to the social position (rank) as such and not to the characteristics of the individuals who end up in the different social strata. Having discarded all possible other explanations they conclude that the only remaining factors that can account for the social gradient in health are psychosociological ones, namely: social status, social affiliation and stress in early life. What is important in social status for health is certainly material conditions and lifestyles, but maybe more important, at least beyond a certain threshold of material well-being, are autonomy, control over one's own life and self-esteem.

After having shown that an important part of work-related stress and its subsequent physical illness are the outcome of a high level of psychological demand combined with a low level of decision latitude, many studies conclude to the importance of a perceived balance between demand-control” in

social cooperation. The imbalance between effort and reward has also been showed to influence work stress and coronary heart diseases. It builds on the notion of social reciprocity which is a fundamental principle in social relations. Clearly, high demands-low control and high costs-low gains working conditions are more frequent in the lower grades of the organizational and social hierarchies than in the higher ones, i.e a corollary of social status. It is then difficult resisting the temptation to make a connection between the 'demand-control' model and the importance of 'freedom with control' for SWB (see supra).

One can generalize the demand-control and effort-reward imbalance from working context to other social and institutional contexts such as family life. Furthermore, stress can also result from tensions between incompatible demands between different social roles. Five possible sources of stress, linked to the accomplishment of social roles, can be identified: role overload, interpersonal conflicts within role sets, inter-role conflicts, role captivity and role structuring. Besides role strain, another major source of chronic stress comes from the environmental conditions of living: noise, crowding and insecurity in neighborhood are well identified stressors. Role strains and environmental stressors are particularly important in a well-being indicators perspective insofar as they cannot be effectively coped with by individuals alone. They constitute social organization problems which can be addressed only at a collective level.

#### **A FRAMEWORK FOR ASSESSING WELL-BEING**

There exist several theories of well-being, all of them enlightening various aspects of the concept. We chosed to use the capability approach (CA) developed by A. Sen that considers well-being as real freedom to live the life one values. This approach accounts for both the homogeneity of human nature and the irreducible diversity and heterogeneity of talents, tastes, preferences of individuals. In this framework, what an individual is really doing or being is called his or her achieved functionings. All possible functionings an individual can achieve are called his or her capabilities, representing the positive real freedom of an individual. Human functionings require commodities and services which have several characteristics that are necessary to achieve a specific functioning. However, these characteristics of commodities tell us nothing about what a person is able to do with these characteristics. If we want to assess individual well-being, it is essential to take these personal attributes into account. Alongside the act of using a commodity to do or be something (i.e. the functioning), there is the valuation of this activity, of this doing or being..However, valuing a life only through on basis of achieved functionings is still insufficient because the dimensions of freedom, choice, opportunities and responsibility would be missing.

We understand capabilities as real life chances, the set of reachable havings (acquirings), beings (becomings), and doings (achievements), which depend on:

- The personal assets of the individual in which we can distinguish (though they are interconnected) human capital (health, skills, talents, character, education); economical capital (wealth, income, entitlements) and social capital (social relations and networks).
- The social opportunities available, which are the number and diversity of accessible social roles and the number and diversity of accessible goods and services.

However, opportunities don't suffice. In order to take benefit from them, it is necessary to be confident that a minimal level of fundamental functionings (or basic needs) will be guaranteed. So the third element of the societal context for well-being is the existence of effective:

- Insurance schemes: insurances systems against the risk of loss of capabilities and their consequences for functionings. They consist in a system of 'safety nets' guaranteeing minimal elementary functionings or basic needs satisfaction.

Therefore, in order to foster well-being, social arrangements should:

- Increase the life chances of the population in an equitable way by increasing the personal capabilities of the population and by increasing the opportunities in terms of social status, roles and positions.
- Ensure a fair balance between efforts and rewards and between demand and control in the accomplishment of economic and social roles.
- Establish effective safety nets guaranteeing minimum level of inescapable functionings for everyone.

### **TOWARDS INDICATORS OF WELL-BEING**

The indicators that should be used according to this framework are:

- Indicators of achieved functionings and especially referring to people under the minimum level of essential functionings (effectiveness of safety nets and insurances systems).
- Indicators of life chances (probabilities of achieved functionings) taking into account inherited capabilities. For instance, difference between the a priori probability of occupying a given socio-economic position and the conditional probability knowing parents' position and maybe other characteristics.
- Indicator of diversity and openness of economic and social status, roles and positions.
- Indicators of exposition to stress.
- Indicators of perceived life chances: perceived freedom to occupy such or such position, achieve such or such functioning.

In order to operationalize this framework, we need to identify important functionings-capabilities and finding indicators for each of them. We propose a grid for helping us to do so. It is based, for one part, on the distinction between 'havings', 'beings' and 'doings' and, for the other one, on the distinction between end-states and state changes or transitions, themselves being either positive or negative. This is in accordance with the results of the Q-methodology.

CHANGE -	STATE	CHANGE +
LOOSING	HAVING	ACQUIRING
BECOMING (negative) (RECEDING, DECLINING...)	BEING	BECOMING (positive) (DEVELOPING, GROWING...)
UNDERGOING	DOING	CREATING

The 'state' column refers to achieved functionings which, when considered as capabilities, can also be subsumed under the categories of capitals: human capital, economic capital and social capital. The left and right columns refer to 'changes' in the functionings and capabilities.

As the table highlights, changes can be positive or negative. In general, acquiring is more satisfying than just having, becoming more than being; creating, more than just doing. On the contrary, having will be preferred to losing, being to receding, doing to undergoing. The positive dynamic component of well-being can be related to the agency goals that Sen considers to be, alongside with well-being, the other dimension of quality-of-life.

In the same way that the Q-methodology survey gives some evidence that people differ in their evaluation of the respective worth of 'Havings', 'Beings' and 'Doings', it is very likely that they differ also with respect to the relative importance they give to the (positive) process or the end-state (outcome) dimensions of quality-of-life. Nevertheless, because of the universality of aversion for loss, the left column of the table (negative process) will almost certainly be considered by everyone as detrimental to well-being. As indicated above, there is a fundamental asymmetry in the way positive and negative changes are valued. It draws our attention to processes of deprivation, de-valorisation such as being fired, falling ill, etc.

The second phase of the project will be devoted to the operationalization of the framework summarized in this grid. More precisely, it will explore the relationships between four blocks of variables: Personal assets, Achieved functionings, Aspirations-valuation and Life chances. The fundamental objective is to contextualize the existing, available indicators of achieved functionings as



supplied by official statistical offices or other administrative sources by relating them to the interplay of the three other categories.