



Sustainable Management In Action
4th - 6th September 03

Agenda 21 - From action to promotion of best practice

Introduction

A national enquiry made in spring 2003 in collaboration with the Swiss federal office for spatial development showed that nowadays more than 25% of the Swiss population lives in a commune that leads a Local Agenda 21 or a similar process. This percentage is still increasing yet.

Action-based and participative sustainability processes however cannot be the only tools to achieve sustainability in a local community. These processes are more likely laboratories where sustainability can be tested and applied, and powerful tools for sensitizing and citizen empowerment. Hence a crucial point is to achieve transfer of this knowledge and new sensibilities into the institutional framework, such as policies, project management and everyday decisions.

To allow and optimize this process, local sustainability action plans have to be of highest quality and well communicated. This currently appears not to be the case, as people only know about financial funding of those projects, but cannot document most of the benefits. This is a highly dangerous situation, as it makes them very vulnerable to subjective, arbitrary and fashion-linked decisions.

A cost and benefit analysis tool based on a multiple resources model.

Sustainable development deals per definition with the long-term impacts of one's actions. At the same time, Local Agenda 21's middle and long-term benefits often appear too hazy and distant to decision-makers. As the direct costs are on the contrary mostly well documented and evident, fair marketing of Local Agenda 21 is in great need of an instrument that puts both costs and benefits on the same level. It should help the decision-maker to track (direct and indirect) benefits and costs of Local Agenda 21 actions, could they be substantial or institutional. This project focuses on the single actions carried out and not, as it is usually the case, on the whole process.

To allow a cost and benefits analysis, we use a model that relies upon a desegregation of the World Bank «Four Capital Model» (human, social, manufactured and environmental capitals, split into categories such as money, time, health, knowledge, soil, water, social networks, ...). We consider them as resources that can be consumed, built up or transferred in another type of resource.

The evaluation matrix we developed is presented in figure 1:

Local Objective		Local performance indicator	Costs			Benefits		Balance	Global Objective (national)	Global Indicator (national)
Substantial	Institutional		Resources:(4)	Direct	Indirect	Direct	Indirect			
(1)	(2)	(3)	Money	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			Time							
			Energy							
			Wellbeing							
			...							
LOCAL SD			Costs & benefits analysis					GLOBAL SD		
- Integrated sustainable development : « Think globally, act locally » -										

Figure 1: Evaluation matrix

This evaluation matrix is the heart of our evaluation tool and needs some explanations:

(1) Substantial objective :

This element describes the practical part of the action and is capital at two points of view. First it helps the action planner to define exactly what he wants to be achieved, and it will delimit the direct costs and benefits. This means that it not only has to be a substantial objective, but that it needs to be clearly constrained in terms of space, time and targets.

Example: 10% less CO2 produced by traffic and industry in a given commune until 5 years.

(2) Institutional objective:

This aspect represent the changes at the institutional level and could be absent or predominant, depending on the action. It is however important to be specified in terms of objectives, as it can be critical for the success of the action.

Example: Create a coordinator function between the local environment and economic departments until the next three months.

(3) Effective performance measure (indicator):

It is important to have a possibility to measure if or in what proportion the objectives have been achieved. This also allows better interpreting the costs and benefits analysis. An open selection of indicators will be proposed through a database.

Example: 7% less production of CO2 by traffic and industry after two years.

(4) Any resource that is consumed, transformed or enhanced

These are the one that will be included in the costs and benefits analysis. As resources we consider: human capital (knowledge, skills...), social capital (relationships, confidence...),

natural capital (natural resources, land, ecosystems efficiency...), and economic capital (money, produced capital...).

An idea that should be underpinned is the fact that these resources mostly are not expenses but investments, as they are transformed in other mid- to long-term capitals.

(5) Resources invested for the action:

They are probably the easiest to measure, and people are generally most aware of those, especially on the monetary resources invested.

(6) Indirect costs of the action:

These costs are often not taken into account in standard project evaluations. By doing this we ensure an objective and fair costs and benefits evaluation. They are the one that are not specifically invested for the actions, but still are consumption of some resource. They usually occur either outwards of the spatial and temporal framework of the objectives, or do not concern the action targets.

Example: Car-drivers that have to buy more expensive filters or engines, impacts in the developing countries...

(7) Direct benefits of the action:

This should correspond to the objectives, if they have been correctly formulated.

Example: Better environmental situation, social structures, housing conditions...

(8) Indirect benefits:

Benefits that are not included in the objectives of the action, but which may be even more important.

Example: Better social cohesion due to the process itself, sensitisation, energy savings...

(9) Costs & Benefits balance per resource:

The costs and benefits analysis is separately calculated for each capital. Possibilities of transformation procedures between different capitals have to be developed further during our study.

(10) National or international objective:

Maybe a strategic plan, a law or a treaty (for instance Kyoto). This accounts for the global coherence of sustainable development.

(11) Usual official indicator:

Concerns the global objective. It should allow a better reflection on the global consequences of one's local actions, and if it is usable at the local level it may allow benchmarking.

General comments

The tool is being developed in the form of an MS-ACCESS module, containing for each resource an open list of possible indicators. We also intend to incorporate examples, tips and explanations for every resource.

The first three columns are integrated to enhance the quality of the process management. With clear objectives the actions have more chances to be successful. Benefits definition facilitates also the direct benefits tracking.

These three columns have to be put in relation with the two last one, which account for the fact that community-level sustainability should not be unsustainable on the global level. For example the typical Swiss tax-rate competition between communes or life cycle concerns. This way of handling also allows a learning process, which should tend to bring closer the local and the global objectives. It corresponds to the slogan: "Think globally, act locally".

For every action adequate indicators should be selected out of the developed database, which will be used as a reservoir of locally usable indicators.

The central part of the matrix is the cost & benefit analysis itself. It should allow defining the balance of the action in terms of different resources (money, time, energy, wellbeing, natural resources and others to be defined...). Through developing the benefits in terms of different resources, the evaluator should be able to better track the whole consequences of the action, including the benefits which are very often not only financial.

We do not intend to aggregate the different resources together.

Practice orientation

As one of our main objectives is to develop a user-friendly and straightforward tool, we base our research on a strong cooperation with the future users: communes. Hence we are currently setting up experience exchange networks with partner communes.

The database of indicators we compile is oriented on the local level, and will be tested in terms of data availability.

What about private companies

The tool we develop is strongly oriented toward communes. Hence the philosophy and methodology that lies behind could well be transferred to private companies.

Indeed those companies have become more and more aware in the last years that they cannot be properly and efficiently managed only in terms of financial resources. Human resources management is currently a key element of a company, information is more and more being tackled as an other key component of sustainability in companies, and environmental issues must also be dealt with. They are however mostly considered as independent and separate issues, and transfers between these resources are still very poorly known.

Integrated company and project management tools could probably help to decipher the complex interactions the different resources of a company have, and the "multiple-resource cost and benefits analysis" approach may be a good way to tackle it.

Conclusion

The tool we are currently developing intends to give project managers means to pass from sustainable actions toward sustainable best practice.

Hence state of the art project management, with clear objective definitions in terms of benefits and experience building through project self-assessment should allow higher quality

in sustainability processes, and is the conditions for documenting and communicating successfully one's project benefits and achievements. This should be one more step towards sustainable communities and perennial processes.

A joint research project between :

- *SANU, partner for environmental training and sustainability, Biel, Switzerland*
- *IDHEAP, Swiss Graduate School of Public Administration, Chavannes-près-Renens, Switzerland.*

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