Impact Monitoring –

Case Example: "Future Oriented Mobility in Alpine Space Regions"

by Kerstin Bernecker[1]

1. Context of impact monitoring application

In the last "BeraterInnen News" (2/2003, p.66), some background of impact monitoring was introduced, adequate methods and tools for impact monitoring were proposed. As shown in that article, impact monitoring requires some abstraction and may seem to be a relatively abstract approach. To facilitate the understanding of the approach an application is presented here. The essential elements of the approach are recalled in table 1.

2. Summary and justification of the case used

As case, a project has been chosen which is about to start in a specific European Region, the Alpine Space. It is dealing with a sector which is one of the most critical ones regarding sustainable development in the region, in the three or four specific intervention areas as well as in most other parts of the world: the transport/ mobility sector.

This project is of relevance for other parts of the world as it is an attempt to act on one of the crucial areas or sectors regarding the *unsustainable* development path of the so called "developed world (DW)" in an exemplary way. It is crucial because in this area the approach of the "DW" interests other parts of the world more than most other sectors, and they risk to copy the mistakes of the DW "one to one". That is why as goal of the project was chosen:

A model for future oriented mobility is available/ ready for implementation elsewhere *(see Logframe, Table 2).*

Table 1: Summary of impact Monitoring Approach

Why impact monitoring now?	Because emphasis had been too much on managing and monitoring of inputs (disbursement!); objectives, positive impacts were insufficiently specified, insufficiently managed and insufficiently achieved
Why impact monitoring at all?	The major objective of impact monitoring is to provide the necessary information enabling the decision makers including the management and the other relevant actors of a project, programme.. to improve achieving of objectives as well as positive side effects and to avoid or attenuate negative side effects of the project ...
What are the basics?	Management by objectives, management by delegation
	Objectives oriented planning, linking consistently and consequently the objectives of the undertaking (project or programme or sector, policy..) to higher level objectives – without accepting an "attribution gap"
Which are the most adequate tools?	extended logical frameworks, based on problem and objectives networks scenarios allowing to capture at least some of potential unexpected impacts (the most likely ones?)

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The essential cornerstones of the project **FOM alpin** (Future Oriented Mobility) are presented in the following diagrams, details are given in Chapters 3.2 to 3.4.

Diagram 1: The model and its objective

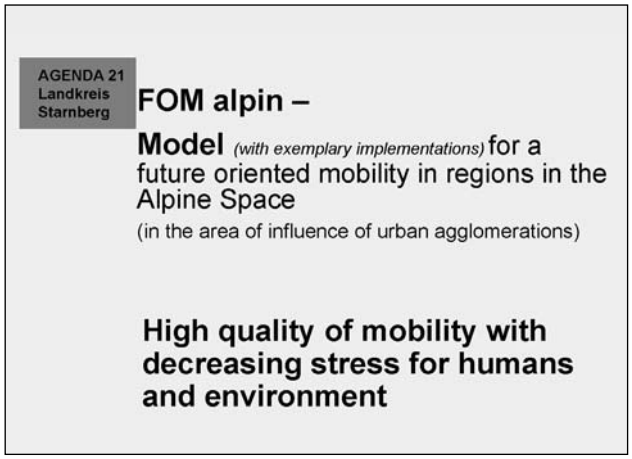


Diagram 2: The 4 sub-objectives

Diagram 3: Model with the 3 or 4 intervention areas
(Austria, Germany and Italy are EU members and benefit from EU funding contribution, Switzerland can participate with full own funding; the Swiss decision is pending, also because of other than funding reasons)

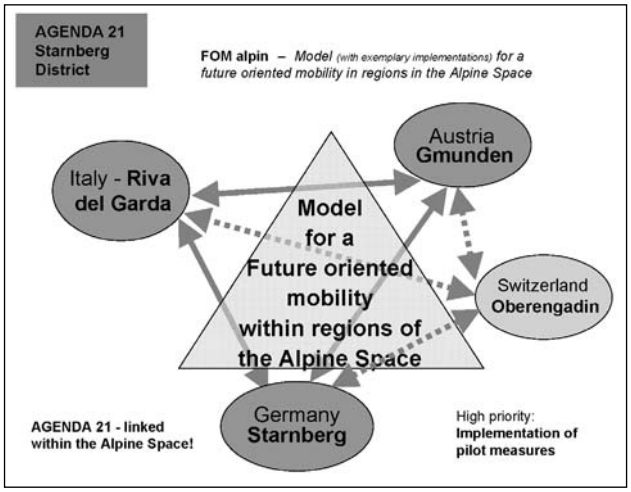
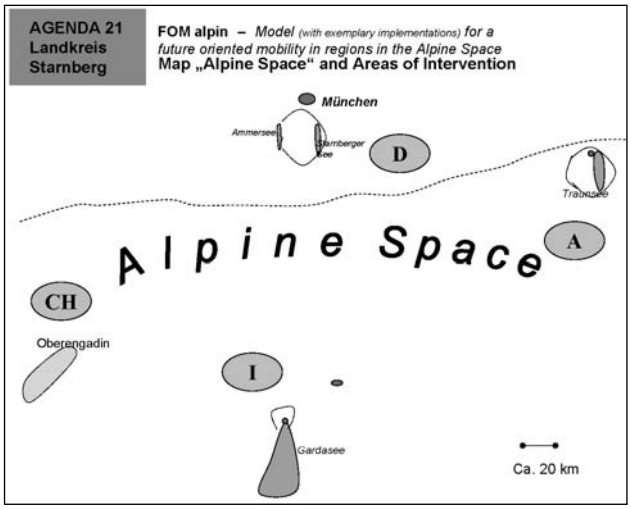


Diagram 4: Map – where are the regions about to work on future oriented mobility?



3. The tools and their application

3.1 Overview

Generally, the tools for impact monitoring are applied

- during project preparation – in order to optimise the likelihood of achieving the envisaged objectives and impacts,
- during project implementation – in order to verify whether the project approach leads really to the envisaged impacts and to allow to improve their achievement, if necessary,
- after project completion, if lessons should be drawn from the experience of the project.

They are used in a participatory approach, i.e. in group work and with a moderator/ facilitator. The major tools for impact monitoring are given in table 2.

Table 2: Overview of the essential impact monitoring tools

Type of tool	Specific tool / designation (remarks) / purpose	Phase of establishment and updating	Phase / frequency of application
Network analysis	Problem network (analysis) *Purpose: analysis and presentation of a given situation with its essential problems, cause-effect relationships and (negative) feedback cycles ("vicious cycles")*	• Project preparation; analysis of the given situation • Intermediate evaluations: updating of the situation • Project completion • Ex post evaluation(s)	In an iterative way during preparation, then updating annually or every 2 years, depending on project type ...
- " -	Objectives network (analysis) *Purpose as above, but deduced from the above (problematic) situation a future, "positive" situation with the problems solved and positive feedback cylces*	- " -	... an evaluation rhythm
Logframe	Project logframe Extended (Impact monitoring) logframe *Purpose: presentation of a systematic summary of the project, objectives, impacts .., deduced from the above analyses*	• Preparation/ design • Intermediate/ mid-term evaluations, related replanning	Preparation, as above
Plan of operation (POP)	The classical POP is rather a tool for implementation monitoring; however, it may be changed and adapted for the management of impact monitoring itself (responsibilities, frequencies ..) *Purpose: to facilitate impact monitoring in a systematic and transparent way*	After project start	To be defined within the POP itself
Scenarios	a) without project situation, with project ... b) Scenarios with other, specific framework conditions (e.g. ++ / -- economic development; changes in political priorities ...) *Purpose: to identify at least some of the otherwise unexpected impacts* *a: to allow more realistic estimates of the impact of the project* *b: to take into consideration other influences, unexpected impacts*	As above logframe	Preparation, mid-term

3.2 The networks [2]

The crucial element of project preparation is the problem analysis (network): it allows to develop a common view of the given situation within a group of people concerned with the project – decision makers, stakeholders, project planners.

Starting from one crucial problem of the (future) project environment or from a small network, a complex reality can be reduced to the essential, developing the causes and effects from the starting problem or mini-network. Although people argue often, this analysis puts too much emphasis on problems, it has turned out that it is much easier for participants from different interest groups to agree on problems and their causes than agreeing on objectives[3]. Therefore, this provides a good basis to develop an objectives network, - referring to the problems and their causes, turning them into objectives and means to achieve those.

For impact monitoring, the networks are initially established in a relatively large group – in order to have a large common agreement about the basics of the project. Then, the networks are deepened according to the specific questions and requirements, i.e. tracing (first) impacts. This is usually done in small groups and at different stages of project implementation. It may be linked with the scenario development. The later work on the networks – after the initial establishment – needs of course coordination and communication of the new findings. This coordination may be done by making use of an impact monitoring POP (see Table 2). The changes in the networks have then to be summarized and to be reconsidered by the relevant people involved in the project. Changes may have to be taken into account for updatings of the logframe.

An example of a basic problem network of the FOM project is given in figure 1. The lines link different problems in a cause-effect linkage, the double arrow shows a reinforcing (negative) feedback:

3.3 The logframe and the indicators

The project logframe – extended version (with the additional columns "expected/ unexpected impacts, +/-) is shown in Table 3. It is deduced from the networks (objectives network which corresponds to problem network). The logframe is so far only rudimentarily filled

- in order not to confuse the readers with too much detail,
- as many of the envisaged indicators are not easily available and require hence some more work/ time.

For impact monitoring, especially the following levels are most important:

- project purpose (direct objective of the project)
- project goal (to which the project contributes – among others) and
- project outputs

The lower (activity) levels are rather important for implementation monitoring. However, quite frequently, these levels have also to be veryfied, in order to better understand/ trace impacts, possibly along their impact chane (in the network).

3.4 Scenarios

Basic and very important are two scenarios from the very beginning:

- scenario 1 for the "without project" situation
- scenario 2 for the "with project" situation.

They are well know from the economic project analysis: to be able to estimate economically relevant project cost and benefits, economists consider these two scenarios as a basis for the economic cost-benefit analysis. Their emphasis, however, is not on impacts in general but on costs and benefits. Usually, the benefits are at least partially, directly or indirectly, related to positive impacts. For impact monitoring yet a wider spectrum of aspects has to be considered, - in general and when applying scenario techniques.

[2] A summary of this approach and its possibility combining with other participatory methods is given, e.g., in BERNECKER, K. and M. RIBI "Combining ZOPP and PRA: ZOPP-PRA Twinship", Lindau CH, 1997.

[3] In addition to the networks, there are usually two more steps of analysis prepared, i.e. a "Participants´/ stakeholders´ analysis" (all relevant persons concerned with the project) and "potential analysis", both very adequate to help reducing the criticised "problem vision".

For developing different scenarios, different techniques may be applied, such as simple brain storming, mind mapping etc.. The essential findings should be briefly summarized in a small paper, illustrated possibly with the "visualized" results (mind map). In the FOM project, some of the major findings were so far, briefly:

- without project:
  - suffering of people would continue, even exacerbate,
  - the wish for and planning of new roads, especially by-passes around the villages, and, increasingly, tunnels, would increase further,
  - seen the (structural) economic situation, decreasing public budgets, the risk of pieces of road constructions without any substantial effect on traffic is increasing, as politicians see a need to calm down people,
  - no improvement of the traffic situation can be expected, the best to be expected without project would be a stabilisation, but rather worsening. Destruction of nature, social space and landscape would continue.
- with project:
  - in a concerted action better public transport, better conditions for walking and cycling, good publicity (also emphasising the co-operating and linked partner regions), a synergy effect with positive feedback cycles may be reached,
  - the situation may be significantly improved and get on a sustainable development path.

4. How impact monitoring is being carried out in the "FOM" – now and in future

Within the FOM, impact monitoring (IM) is done / envisaged to be further done in the least formal way possible. For the start, the lead partner group (AGENDA 21 district of Starnberg/ BN – Association for Environment and Nature) - being responsible for the overall project management - developed the IM approach and facilitated the establishment of the basic set of tools (networks, extended logframe, scenarios, draft POP). Each project partner will assign one person responsible for the IM of that partner´s project component.

In the framework of the bi-annual meetings of all project partners, specific sessions take place for impact monitoring. At the beginning, it is foreseen to have a session of the IM group just before the general meeting starts and another one when the general part is over. The first session is foreseen to agree on the focus of IM during the general workshop meetings. The second one is reserved to discuss, clarify, carry out IM, IM issues. Both sessions would be well prepared beforehand (eMail etc.). During both sessions, some of the tools presented above would be used, according to the specific requirements. It is attempted to avoid by all means the classical, often very bureaucratic approach of monitoring and evaluation (M+E) which usually implies also a lot of paperwork. However, the application of IM in FOM should develop, always aiming at improving the achievement of the positive impacts.

5. Perspectives: will the project be a better one due to impact monitoring?

There are quite good chances that, impact monitoring consequently applied, the project may be more successful than "classical" ones. The FOM team aims at having "an early detection system" allowing to identify deviations from the objectives/ intended impacts with a minimum of bureaucracy.

If the expected success will be achieved, the BN readers would have another chance to read about it – may be in a year´s time.

Table 3: The „Extended“ Logical Framework for Impact Monitoring (and Evaluation) of FOM

Narrative Summary/ Objectives	Objectively Verifiable Indicators	(Means of verification) OVIs for Assumptions	Important Assumptions	Impacts/ Effects			
„Hyper Goal“ [1] The existing models are linked and an overall strategy is developed and implemented				***expected***		***unexpected***	
„Super Goal“ The model is applied in other regions (increasingly)				+ (desired	- (non-desired)	**+**	**–**
Project Goal A model for future oriented mobility is available/ready for implementation elsewhere	to=2002: STA - QI/Qn: No vision or even model for future mobility is thought of GM, RI; t1=2004 STA - QI/Qn: the „model“ is being discussed in the districts..;			t?: other regions start considering/ discussing the model in view of „super goal“		t1=2003 STA: Other groups start thinking about the need for another (future oriented) mobility (CSU, suffering citizens..)	
possible intermediaite steps							
Project objective (purpose) A high quality of mobility is achieved with decreasing stress for humans and environment	to=2004; STA: QI (subjective): people are satisfied with their general ql of own mobility (high) – mainly ivm, but suffer from the effects of the mobility of others; objectively: move x km/ year; GM; RI t1=2005; STA: QI (subjective): people recognize differences in quality of mobility + have changed their point of view and consciousness regarding ql of mobility to=2006; STA: QI (subjective): people have slightly changed their mobility according to the new consciousness regarding ql of mobility;	Sample survey 2004, 2005. 2006					
Project Outputs							
O1: Improved/ facilitated availibility of/access to other means of transport and mobility („environmental league“)	to=2002: STA - QI/Qn: Implementation of the public transport concept is not envisaged; t1 =2004: STA - QI/Qn: Implementation of concept +complementary/ Improving measures starts..		Road projects in pipeline are not implemented The governments´ financial situation does not improve significantly (on national, state, district... levels)				

[1] „Hyper goal“ and „super goal“ do not belong to the „classical“ logframe. They are used to show the position of the project in a larger context.
According to the „logframe philosophy“, normally they cannot be reached by the project alone, but additional efforts are necessary to get there (the project ++..). Usually, these additional efforts can be found in the „important assumptions“ column.

O2: Traffic related stress significantly (see OVIs) reduced	to=2002: STA: People (sample) suffer from traffic (cannot sleep...); t1 =2004: STA -...						
O3: Mobility with regard to the regional economy is optimised							
O4: Nature and landscape are conserved / rehabilitated/ safeguarded	to=2002: STA: Further destruction of nature for roads.. is decided by district council, community councils; t1 =2004:.. t?: first rehabilitation measures are being started						
Project activities (outputs of the components)							
Activities contributing to O1							
1.1 Optimised and exemplary implementation of local public transport plans in the regions							
1.2 Active mobility management							
1.3 Integrated cycling concept							
1.4 Improvement of accessibility of relevant locations in walking distances							
1.5 Improvement of the information regarding the „environmental league“							
1.6 Working on the Transport association in order to improve attractivity of public transport							
Activities contributing to O2							
....							
Activities contributing to O3							
....							

Explanations: STA – district of Starnberg; GM – district of Gmunden; RI – Community of Riva; the indicators were initially (for testing...) developed

Figure 1. FOM – Problem Network