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## The effect of consensus building processes on regional collaboration

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### Abstract

*The involvement of all relevant stakeholders into the elaboration process of shared goals is generally considered as a key factor for a successful regional development. However, no empirical research has been conducted to confirm this claim yet. In the last years, increasing efforts have been made to evaluate participatory processes, but the focus of that research was on the quality of the processes. This paper presents a recent study which had the objective to measure the effect of consensus building processes, a particularly interactive form of participation, in a systematic and reliable way. To this end, a new evaluation method based on the methodology of intervention research of environmental psychology was developed and tested in a case study.*

**Keywords:** *participation, consensus building, evaluation, effect, case study, intervention research*

### Introduction

Rural development, in particular in peripheral areas, is challenged by the increasingly international character of the economy. In order to be able to compete with more favoured regions, such regions have to make optimal use not only of their material resources, but prevalently of their knowledge and social potential as the key factors for innovation (Thierstein, 1997). A successful regional development requires the involvement of all relevant stakeholders into the elaboration of shared visions which enables the region to include all the regional knowledge, to develop a sense of regional control and to create opportunities of social collaboration and innovations (Volker, 1997).

In the last decade, there has been an increasing interest in involving the public in decision making and community development, both in the developed and developing world (Edwards, 1998; Rowe and Frewer, 2000; Carnes et. al., 1998; Barnes, 1999). At the same time new participative planning techniques focussing on consensus building, have come up (Godschalk and Patterson, 1999).

Consensus building is a particularly interactive form of a participatory process in which the affected stakeholders are directly involved in the decision making (Dorcey et al., 1994). Whereas in conventional procedures decisions are determined by power negotiations between political parties, in consensus building procedures, decisions are negotiated between stakeholders mainly on the strength of arguments and based on mutual understanding. Thereby the points of view of the stakeholders are expected to con-

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verge, so that more optimized and better shared solutions can result (Jackson, 2002) which also offer an improved basis for cooperation (Dryzek, 1997).

Procedures of consensus building (and participatory procedures in general) are considerably more time consuming and expensive than conventional procedures. Therefore good evidence is needed to confirm that procedures based on consensus building really produce better and more lasting decisions. There is still a lack of empirical research which could confirm these assumptions.

In the last years the literature on participative processes has increased considerably. But most of this literature considers participation as an action and thus focuses on the quality of the process (Beierle and Konisky, 2000; Jackson, 2002). The few attempts to evaluate the outcome of participative processes were conducted by ex-post measurements (exception: Godschalk and Stiftel, 1980) and based on self reported assessments of success criteria, mostly completed by (not independent) experts. In one of the best known recent evaluation studies which assessed 25 participative processes on the basis of existing documents it was found that the processes considerably contributed to a better inclusion of the public's values in decisions and to a lesser extent to conflict reduction and trust building. Such evaluations of participatory processes are of limited validity as they are strongly influenced by the assessors' personal expectations and their relations to the organisers of the process. In order to get better evidence of the effect of consensus building processes as the possibly most promising form of participative processes we started a study aiming at answering the following questions: How can the effect of consensus building processes be measured in a reliable way? To which degree can consensus building processes contribute to the expected convergence of the involved stakeholders' attitudes and points of view? What are the measurable effects of consensus building processes on the regional collaboration?

## **Methodology**

### ***The evaluation approach and reflections about the research design***

According to our point of view, consensus building procedures can only be evaluated in a reliable way if these processes are considered as societal interventions – and not as has been done so far as “isolated” actions, ignoring the specific social context of each process. Therefore we adopted the principle that the evaluation of such procedures should focus on the societal changes caused by this intervention. So we planned to base our new evaluation approach on the achievements of two research traditions: interventions research of environmental psychology which developed methods to measure societal interventions, and participation research which has identified the relevant process and success criteria in this specific field.

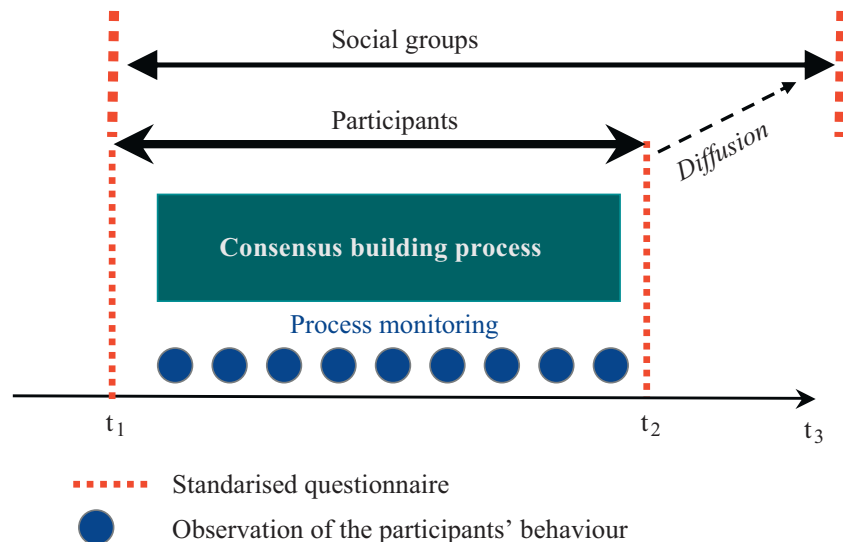
In environmental psychology, field-experimental intervention research has been developed and applied, and various forms of interventions, aiming at changing of attitudes and behaviors in environmental matters, have been tested (e.g. Mosler & Tobias 2000; Dwyer et al. 1993). In order to produce reliable evidence whether an intervention was effective, an experimental "A-B-A"-design (measurement-intervention-measurement) with a treatment and a control group is applied in general, often accompanied by a social monitoring of the process. As a consensus-building process can also be considered

as a kind of intervention, it could be evaluated with a similar kind of experimental design.

In participation research, various frameworks for evaluating consensus-building processes have been developed (Halvorsen, 2001, Beierle & Konisky, 2000; Rowe & Frewer, 2000; Godschalk & Stiftel, 1980). These frameworks are a valuable basis especially for evaluating the quality of the process itself, but they are only designed for ex-post evaluations without measuring the situation before the experiment. There are, however, two major differences concerning the design of the experiment to be taken into account. (a) This kind of intervention has primarily an effect on the social and only indirectly on the physical environment, i.e., the effect cannot be determined, at least not in short term, with objectively measurable environmental data, but only with quasi-objectively measurable reconciliation of formerly conflicting positions of the social groups concerned. (b) The consensus-building intervention does not directly address all the individuals belonging to the affected social groups, but only their representatives, which are attending the consensus-building process. Therefore, the effects can only be measured among these representatives (treatment group). A measurement of the effect in the wider public will only be possible when the consensus-building process will have diffused to larger parts of it. However, as such diffusion is a slow process, this cannot be performed within the duration of the same project.

#### *Method of evaluating the consensus-building process*

The intention to evaluate consensus building processes in the sense of an intervention experiment and facing the methodical difficulties for its application in the field of participation led us to the following evaluation design: (see Fig. 1).



**Figure 1.** Ideal evaluation design for consensus building processes

Shortly before the start of the consensus-building process and shortly after the end of the process (both in situ), the participants are handed out a questionnaire. They are asked to rate four kinds of items presented on a 5 point scale: a) their attitudes towards the negotiated topic (e.g. regional development, projects), b) the attitudes towards general development principles c) the subjective perception of the actual situation in terms of consensus and conflicts in the region as well as the trust in the decision makers on the local and cantonal level d) the assessment of the personal agreement with the attitudes of other groups (farmers, tourism, local and regional authorities, nature organisations)

A questionnaire with an extract of the most important items is also sent to a random sample of the regional population, which allows to assess the regional representativity of the participant's attitudes at the initial state of the process.

During the whole consensus-building process the behaviour of the participants is observed and recorded in a journal (social monitoring).

Immediately after the process the participants are handed out a second quasi identical questionnaire. Additionally to the first questionnaire it includes items measuring the process and effect criteria recommended by the literature on participation research. By comparing the data taken from the before and post-measurement, the effect of the consensus building process on the participants can be quantified.

A longer period after the consensus building process, i.e. when the effect is supposed to have diffused to the wider regional population, a second questionnaire is also sent to the random sample of the population. The differences between the pre-measurement and this post-measurement indicate the effect of the consensus building process on the wider regional population.

To analyse the survey data, univariate and multivariate statistical methods are applied. The recorded observations of the behaviour of the participants are qualitatively analysed.

### **Study area and the consensus building process**

The evaluation design was applied and tested by evaluating a consensus building process in a mountain valley in Switzerland. This consensus building process was organized as part of a larger research project of a Swiss National Research Program in which we investigated the expectations of different collectives of the population (local residents, local tourists and the Swiss population) regarding the Alpine landscape development. The consensus building processes served on the one hand to introduce the results obtained from qualitative and quantitative investigations of the regional decision making process regarding landscape and tourism development, and on the other hand to find out, to what extent consensus building processes can contribute to the convergence of conflicting expectations.

The consensus building process evaluated in this study was conducted in the Albula valley. This mountain valley is characterized by traditional land-use, a landscape oriented (soft) tourism and accordingly a low potential of conflicts regarding landscape development. In this valley we invited in the name of the regional authorities representatives of all the regional groups, decision makers on the municipal and cantonal level as well as landscape experts to participate in a two-day workshop. During this workshop

the 42 participants worked in changing groups according to the technique ‘future search conference’ (Weisbord, and Janoff, 1995), guided by an external moderator. Thus they developed shared goals for relevant aspects of the regional development.

### ***Evaluation***

The consensus building process was evaluated according to the evaluation design presented above. The post-measurement, however, has not been carried out in this first case study as it appeared to be of too little political importance to have a measurable effect on the regional population. So we will refer in this paper only to the evaluation data gained from the participants (N=42). The questionnaires were filled out by all the participants at the very beginning and the very end of the consensus building process (in situ), and we did not observe any reluctance to fill out the quasi-identical questionnaire twice. As the participants were asked to fill in a personal code we were able to compare the pre-data and the post-data on an individual level. The fact that not all the observed differences between the pre-/post-data showed a shift into the same direction is an indicator that the measured differences were not artificially influenced by the measurement design.

In the questionnaire, the following categories of items were measured: The participants’ assessment of landscape scenarios on various scales (open landscape, settlement, Alpine houses), the participants’ agreement with planned projects, the participants’ agreement with developmental principles, the participants’ assessment of the consensus situation within their region, the participants’ agreement with attitudes of other groups (all categories in the pre-measurement and post-measurement), the participants’ assessment of the process quality and the success of the process (only in the post-measurement). The data were entered in a database and statistically analyzed with SPSS.

### **Results**

#### ***Observations concerning the consensus building process in the Albula valley***

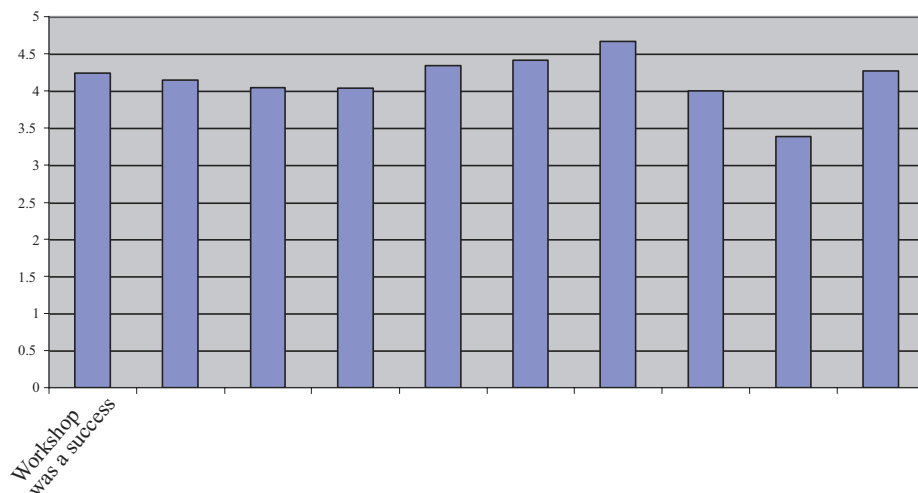
Although the regional and local authorities were directly involved in the initiative and the preparation of the consensus building process, the small number of registrations after the first deadline made obvious, that the residents were not very motivated to participate in the workshop. There had been too many other workshops in the last months because of the planned creation of a regional landscape park. By directly contacting members of not yet represented groups, the number of participants could be raised at least to a minimum level.

During the workshop, the participants showed a high commitment and participated actively in the discussions. We observed, however, that during the discussions in the small working groups the participants tended to establish a consensus concerning the specific landscape aspect’s development by formulating very general objectives (such as sustainability or maintaining the potential) and by avoiding specific (potentially conflicting) expectations. Celebrating group harmony seemed more important to them than finding a better mutual understanding. During the plenary discussions, however, the participants openly criticized the statements and solutions of other groups.

The participants generally needed much time to get into specific landscape topics and it was obvious that they were not used to discussing landscape development. The time was often too short to come to more detailed conclusions. The presentations of the groups' posters, however, showed that there was a lot of tacit knowledge and agreement among the locals concerning the local lifeworld which did not need to be discussed, but which was mentioned by the speaker. Possibly the discussions were much more meaningful for the locals than interpreted by the observing researchers.

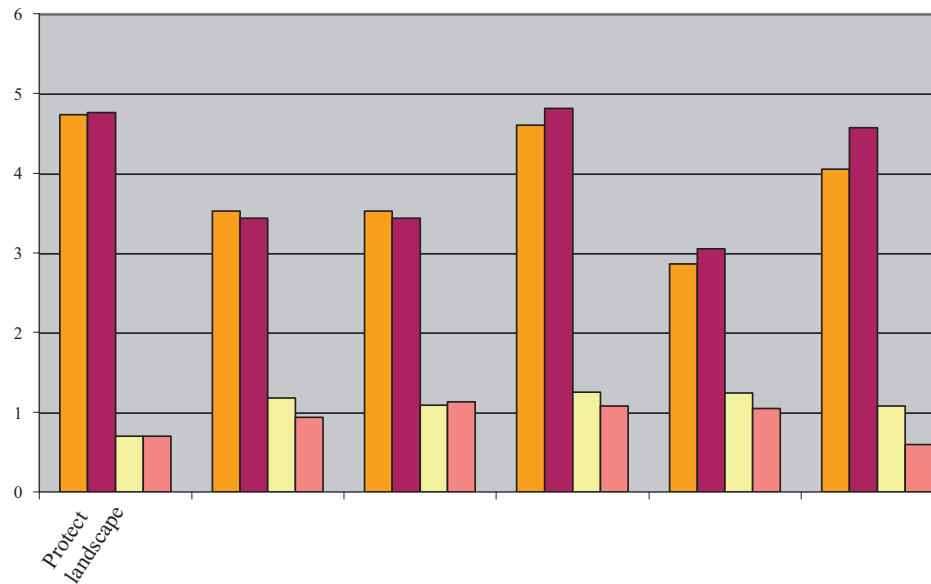
#### *Findings concerning the effect of the consensus building process*

According to the assessment of the participants after the workshop (post measurement), there was a consensus among the participants that the consensus building process was successful in terms of most of the asked aspects ( $>4$  of 5 points): in general, in terms of agreement of the developed landscape objectives, clarity of the objectives, convergence of the participants' positions, understanding the positions of the others, acceptance of the objectives and confidence of being able to solve the local problems (see Fig. 2). Interestingly, the only aspect that the residents assessed as less successful was addressing local conflicts. They seemed to be conscious that this aspect had been avoided during the workshop. According to the post measurement, which is "traditionally" used to measure the success of participatory processes, the process seems to have produced quite a positive effect.



**Figure 2.** Participants' ex-post assessment of the workshop's effect in the Albula valley

The data gained from the comparison of the two measurement (pre and post) concerning the participants' attitude towards developmental principles seem to confirm that the consensus building processes really had a societal effect, i.e. an objective effect on the attitudes of the participants (see Fig. 3). Differences of the mean assessment between the pre-measurement and the post-measurements could be found in most of the items, and – which is more relevant – a systematic decrease of the standard deviation could be measured in 4 of 6 items. That means that a convergence of the participants'



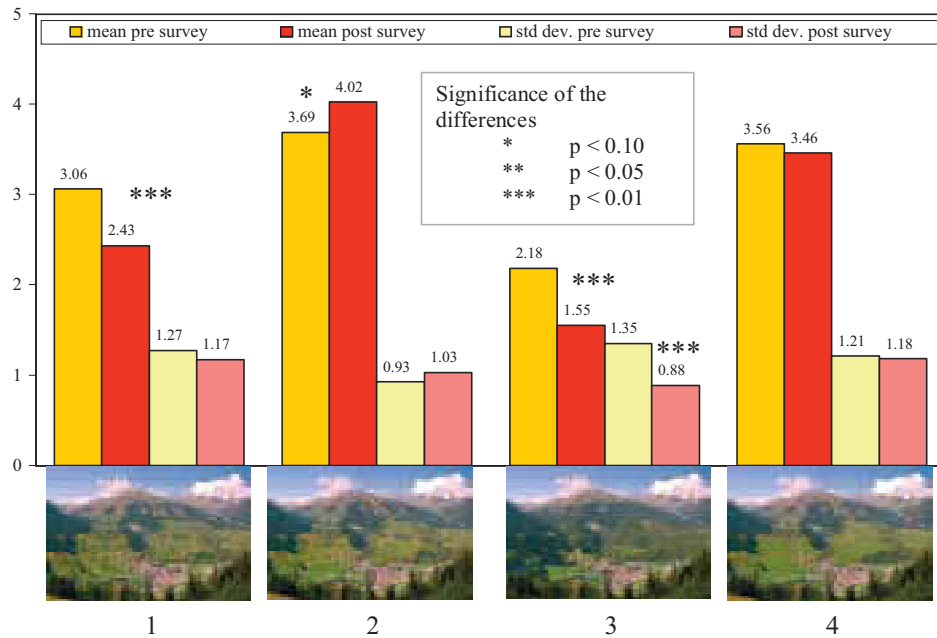
**Figure 3.** Participants' attitudes towards developmental principles before and after the process

attitudes in terms of developmental principles seems to have taken place. Besides that, it is striking that the principle "regional collaboration" already being very highly assessed before the process was additionally enhanced by the process.

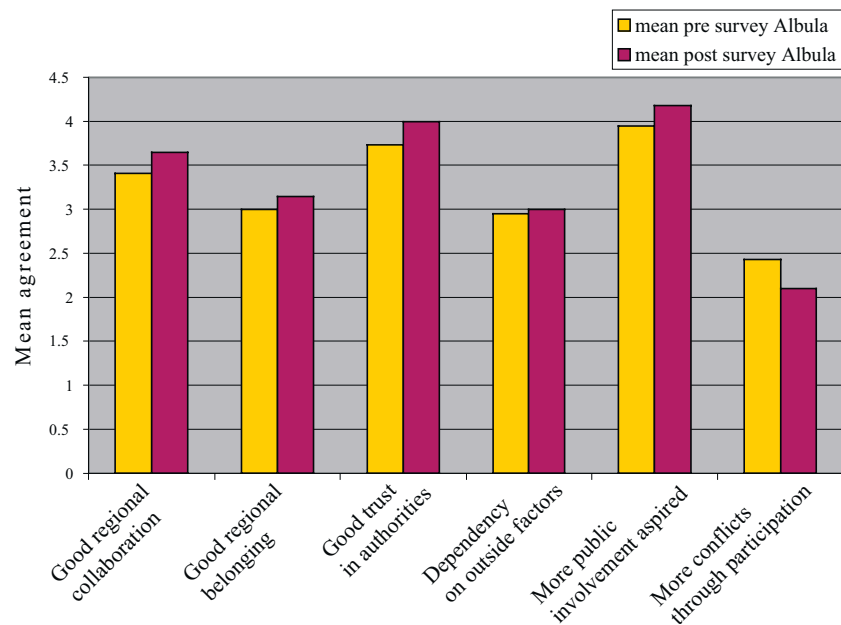
A little bit less clear is the effect of the process on the participants' assessment of the landscape scenarios. Here also, changes of the scenarios' mean assessment could be measured (partly significant). The expected decrease of the standard deviation, however, took only place in the reforestation scenario (see Fig. 4). But it is important to see that this was also the only scenario of really visible and relevant change compared to the situation today. So the nearly unchanged standard deviation among the other scenarios might be due to methodical problems (hardly visible differences of the scenarios).

When we look at the pre-post comparison of the data concerning the participants' assessment of the regional consensus and their attitude towards participation (see Fig. 5), we see that the participants perceived all the consensus qualities of the region, as expected, more positively after the workshop than before. There is, however, one not unimportant exception: the participants' assessment of the region's dependency on outside factors showed an increase. This means that the consensus building process helped the participants on the one hand to improve their trust in the region and their regional potential. On the other hand, the discussions on the region's development enhanced the participants' consciousness that their region strongly depended on decisions made outside of the region. Both of the (last) items indicating the participants' attitude towards participation show a clear increase. The participants seem to have learnt from the process that a better inclusion of the regional population into the decision making could be favorable for the regional development.



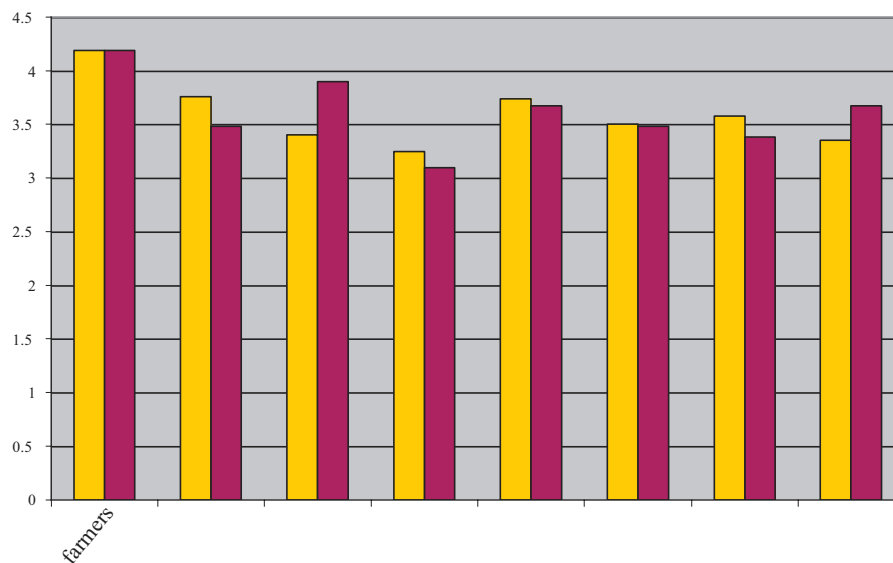


**Figure 4.** The participants' assessment of landscape scenarios before and after the process (1. ecologically enriched scenario, 2. scenario of status quo, 3. land abandonment and aforestation scenario, 4. scenario of intensified use)



**Figure 5.** Participants assessment of the consensus situation in the Albula valley before and after the process

Finally the pre-post comparison of the data concerning the participants' assessed agreement with the attitudes of other groups (see Fig. 6) shows a more detailed picture about the convergence of the participants' points of view. The agreement of the participants with the attitude of the majority experienced a clear increase. This indicates that, altogether, the participants gained trust that their attitudes corresponded with that of the regional population – which might strengthen their trust that they can determine the region's development. Interestingly, the participants' assessed agreement with the attitudes of the main regional groups, the farmers and the tourism industry, also increased, although they often pursue conflicting interests. The perceived differences between these two groups seem to have diminished by the process. Similarly the participants perceived the differences between their attitudes and those of the local and regional authorities as smaller than before the process. The contrary is true for the participants' assessed agreement with two extreme and regionally not very strongly represented positions, the building industry and forestry on the one hand and landscape protection on the other hand. The increased agreement with the most important regional groups is a strong evidence that the process had a strengthening effect on the regional collaboration. The increased distance to the attitudes of the most extreme antagonists confirm the willingness for consensual solutions.



**Figure 6.** Participants' assessment of their agreement with the attitudes of other social groups in the Albula valley before and after the process

### Discussion and conclusions

In this paper we wanted to find out how the effect of consensus building processes can be measured in a reliable way and whether evidence could be found that such processes really have a positive effect on local collaboration. We introduced a new evaluation design based on the methodology of intervention research and tested it by evaluat-

ing a small consensus building process. In spite of the rather small number of participants, the method proved to be sensitive enough to measure effects, although not in a purely statistical sense. Systematic differences of the mean values and the standard deviations calculated by comparing the pre-measurement and the post-measurement provide strong evidence that the evaluation method identified real effects of the consensus building process. Larger experiments are needed to confirm these results in a really statistical sense.

The results of our evaluation experiment showed that our new evaluation method is able to provide more reliable and more differentiated information about the effect of consensus building processes than evaluations based only on ex-post measurement of success criteria. The participants' assessment of the success criteria revealed to be much more optimistic than the really measured effects could confirm. And more importantly, our evaluation design allowed us to specify more exactly in which sense the process was really successful and in which sense it failed. Whereas the perceived differences between the main groups could be diminished, the distance to more extreme groups such as the landscape protection groups increased. Whereas the perception of the regional consensus came to be seen in a better light, the resignation in view of the region's dependency on outside factors was rather strengthened by the process. The main improvement of our new evaluation design is the shift from a measurement of abstract success assessments to a measurement of attitudinal changes towards factual attributes. Such measurement are much less subject to sympathies and antipathies towards the organizing institutions and persons and thus much more reliable. To confirm this methodological improvement, comparative studies are needed. In turn, we did not encounter any methodical problem. E.g. the participants' acceptance to complete an almost identical questionnaire twice within a short time appeared to be astonishingly high. So the only disadvantage of the applied methodology, compared to the ex-post evaluations done so far, revealed to be the additional time needed for the extended data collection and analysis.

The results of our evaluation experiment could procure a rather clear answer to our second question. It provided good evidence that the consensus building process in Alvaneu really did contribute to improve regional collaboration, i.e. to create more favorable conditions for it. The increased agreement about the developmental principles in the region measured by the evaluation (systematic decrease of standard deviation) indicates that the participants could improve their trust that they have shared aims and thus will be more motivated to collaborate. The participants' improved assessment of the consensus situation (increase of mean values) show that the participants could enhance their perceived potential for regional collaboration, which is an important precondition for real collaboration. And the participants increased agreement with the attitudes of other groups again provides strong evidence that the conditions for collaboration has improved during the consensus building process. An additional (more long-term related) contribution of the process in terms of improved regional collaboration is the participants' improved attitude towards public participation in general. This seems to indicate, that a learning process regarding the value of participatory processes has taken place, which might help initiating further participatory processes in future. The learning effect of participatory processes and the role of previous experience on local participa-

tory processes has been considered only marginally in this study; these aspects deserve more emphasis in future evaluation studies.

In our evaluation experiment we could only measure the effect of the consensus building process on the participants. To gain more reliable insights on the effect of consensus building processes, the evaluation should include the effect on the whole regional population, as suggested in our evaluation design, and should also be extended in the temporal dimension. An inclusion of the regional population would allow us to see whether the observed effect on the participants really diffuses to the regional population – and thus really becomes societally relevant. This, however, requires as mentioned above at first that the measured processes are really of societal importance. A temporal extension of the post-measurement is not only needed to measure this diffusion process, but also to confirm that the measured changes of attitudes are really stable. If we want to be able to prove the added value of consensus building processes compared to conventional procedures, long-term monitoring projects are needed, in which the development of regions with conventional and consensus-oriented decision making can be compared: but the framework for such comparisons is now available.

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