

## **Empowerment, mobilisation and initiation of a community driven project: women and the Marula.**

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### **Abstract**

*Bulilimamangwe is one of the poorest and most marginalised areas of Zimbabwe. In 2001 a community driven project was started under the Kellogg funded Integrated Rural Development Programme, to utilise the indigenous Marula trees found in the area. From the onset project members were mostly women. This paper documents the early years of the project. Achievements are given, problems faced examined and possible solutions put forward. Challenges, opportunities and conflicts are discussed in the hope that these may be of interest in the study of future projects utilising natural resources in poor communities.*

**Keywords:** *Empowerment; women; natural resource; rural livelihoods; development; Marula*

### **Introduction**

Africa is full of so-called 'development projects' purporting to be catering for community needs. While empowerment is very much the word and concept of the moment often it is more of a lip service to the people than an actuality. The Kellogg funded Integrated Rural Development Project (I.R.D.P.) in Southern Africa, between 2000 and 2003, tried to take the ideas of empowerment and community mobilization into the field and to assist the local people in formulating their own directions for development of their communities.

According to the Narayan 2002, empowerment is 'the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control and hold accountable, institutions that affect their lives'. Andersen in Ostergaard 1992 discusses empowerment as a policy approach to women in development, which, 'focuses on increasing women's control over the choices in their lives'. Empowerment 'seeks to increase their self-reliance and self-confidence so they will become more active players in society' (Ibid).

The overall objective of the I.R.D.P. was to reduce poverty where poverty was seen from a broad multi-dimensional perspective, encompassing inadequate food, poor health, and lack of access to knowledge and skills. In order to attempt to combat poverty the I.R.D.P. had four core objectives

- Increasing civic participation

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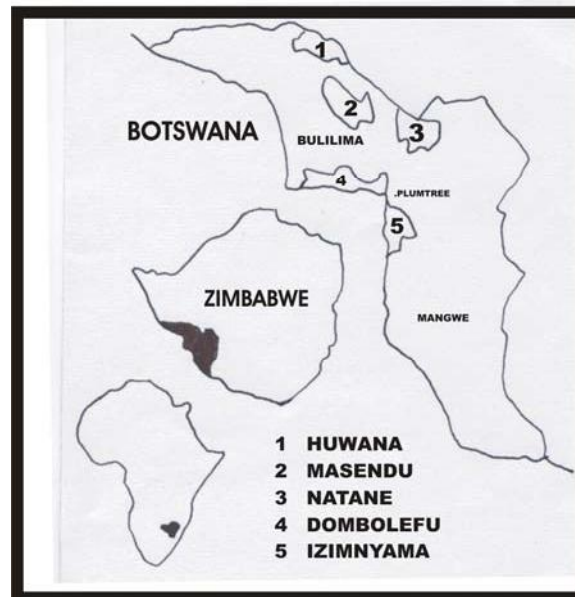
- Developing human capacity
- Increasing economic opportunities
- Enhancing health and well being.

All project activities were expected to achieve in some way all or most of these objectives. However the nature of such projects is long term and is not always clear sailing. The establishment and early years of the Marula Project in the Bulilimamangwe area of Zimbabwe illustrates some of the strengths that can be built on, and weaknesses that have to be overcome, in order to achieve a viable, self-sustaining project in many poor and marginalized rural areas. Some of these strategies may be applied elsewhere and obstacles and hurdles learnt from, to assist in the smooth establishment of community driven projects in similar environments.

### Background to the area

#### *Location of I.R.D.P. Wards involved in the Marula Project*

Bulilimamangwe Area is situated in the South-West of Zimbabwe along the border with Botswana. What was one District, is now in fact three Districts, those of Mangwe, Plumtree and Bulilima.



The population of the District is around 180 000 (C.S.O. 2002). It is a highly rural district with most of the population living in villages, often with dispersed or scattered homesteads. Outside Plumtree- the only urban settlement within the district- economic activities are mainly confined to agriculture and wildlife utilisation with very minor service provision. Agriculturally most of the District falls into Natural region IV of Zimbabwe, a region most suitable for semi-extensive farming as it experiences annual rain-

fall totals of between 450 and 650 mm and is subject to periodic seasonal droughts. Rainfall is too low and uncertain for any significant cash cropping and traditionally most of the population rely on livestock production and the growing of a few drought resistant crops. Many parts of Africa have similar marginal environments.

While unemployment figures are difficult to gauge in an area of this nature, the 1992 Census (C.S.O. 1993) puts unemployment at around 43% of the economically active. The Bulilimangwe Rural District Council (R.D.C. 1999) believes that real levels have since risen, due in part to the annual release of school leavers onto the job market. There are high levels of out-migration to urban centres in Zimbabwe and to neighbouring countries of South Africa and Botswana. Greatest numbers of emigrants come from the male, economically active age groups, resulting in a population skewed strongly in favour of females.

### ***The establishment of the Marula project***

It is against this background that the Integrated Rural Development Project (I.R.D.P.) was established in the area in 2001. The programme targeted eight of the thirty five wards in the District, choosing wards representative of the different land ownership patterns found in the area. After meetings with the community in the eight wards it was decided to set up an Implementation Committee, composed of two community facilitators per ward and two rotating traditional leaders. The committee met monthly and produced a quarterly implementation plan. A Monitoring and Evaluation Committee was also set up and were engaged in ongoing monitoring of programme activities and field visits to see how initiatives were operating on the ground. The structure of the committees allowed for full involvement of the community and for accountability to the community, an element often lacking in development projects.

The Marula project was started in 2002 by women in the I.R.D.P. wards. It was the result of consultation with the community who identified the Marula as an abundant natural resource found within most of the wards and with the potential to be harvested to supplement rural livelihoods and to assist in economic growth. In a marginal agricultural area such as Bulilimangwe, utilisation of indigenous biotic resources can supplement income from herding and be integrated into the production activities of the subsistence smallholder.

Traditionally the Marula has many uses. Most women are aware of a variety of uses for the tree and its products, ranging from utilisation of the fruits for direct consumption and alcohol, to the use of the kernels for oil or crushed and added to vegetables to provide extra nutritional value to a basic diet, to medicinal uses and even for use as a termite poison (group verbal reports, Marula workshop 2003). Similar uses are documented throughout Southern Africa (Marula Organisation, S.A. 2003). The project sought to build on the traditional significance of the Marula in order to make it a vehicle for economic empowerment. The majority of traditional uses of the tree involved use by women, so the project was ideal to provide a focus for the involvement and betterment of the lives of the most disadvantaged rural women and was founded on an existing knowledge base.

Economic benefits to the community can only be sustainable if women can control and direct the development of the project and be at the forefront of engineering its growth. In order that women were directly involved ten women went on a 'look and

learn' tour to a women's Marula project in the Tswapong hills of neighbouring Botswana. Here they were able to observe and interact with women who were engaged in a similar project to theirs and to share experiences. The 'look and learn' concept has been widely used and has been successful in engendering interaction by and between ordinary project members and in learning through a less theoretical approach, than that of traditional instruction.

Participants at a workshop held in early 2003 reflected the involvement of women in the project. Representatives from all wards and some stakeholders attended. Of the twenty five participants twenty two were female. Participants had further roles in the community including home-based careers, adult literacy tutors, pre-school teachers, church leaders, a nutrition garden chairperson as well as mothers and grandmothers with their critical roles of caring for families and traditionally educating future generations. Recognition of the multiple roles of participants is important in understanding the scope of projects of this kind and their ability to infiltrate all aspects of community life.

#### ***Project early development and progress***

For the first two years during which the project was operational, activities were confined to the extraction of Marula nuts, which were collected by I.R.D.P. vehicle from ward collection points monthly during the collection period (July to October) and taken to sell to a more established women's project in Botswana (Kgets'i ya Tsie). In Botswana the oil was extracted from the nut and sold on . The I.R.D.P. acted as a facilitator in setting up the project. It brought people together from different communities within the District and helped provide a forum for ideas that could be used to reduce poverty within the community. The I.R.D.P. provided the communities with a grant through the Kellogg Foundation. This grant took the form of a pseudo loan scheme. Money from the loan was used to buy Marula nuts from the women involved in cracking. After selling the nuts the money was returned back into the fund. Further profits were used within the communities for identified community projects. This fund helped in bridging the time and distance gap between the producers and the market. However it did effectively distance producers from market through shielding them from direct market concerns. However, the I.R.D.P. involvement enabled the community to access funds to initiate the project in a situation where loans would not be forthcoming from formal money lending institutions.

Total production in the first two years of the project was quite similar, however this similarity is deceptive as various restraints limited operations during 2003.

**Table 1.** Monthly and yearly total of nuts collected

<b>Month</b>	<b>2002 (kgs)</b>	<b>2003 (kgs)</b>
July	82	199
August	89	178
September	102	28
October	121	No collection
<b>Total</b>	<b>394</b>	<b>395</b>

Source: compiled from I.R.D.P. Bulilimamangwe reports and collection records 2002 and 2003

Differences in quantities gathered in particular months from year to year can be attributed to differences in rainfall patterns and in the ability to travel to purchase nuts. Fuel was scarce and difficult to procure in Zimbabwe in 2003, therefore the purchasing team was limited in its ability to visit sites. Only the five most productive wards were visited in 2003 because of transport restraints and it is likely that production might have been significantly higher if more groups could have been reached and more frequent visits made. Collections were only made from the least productive of the five wards in August and only the most productive ward was collected from in September.

Masendu can be seen to be by far the most productive ward. This reflects both the abundance of the resource and the poverty of the community, which provides a motivation towards any income generation available. Masendu is the poorest of the eight wards in terms of economic base and infrastructure.

**Table 2.** Marula production per ward 2003

Ward	kgs
Masendu	307
Huwana	40
Natane	13
Dombolefu	25
Izimnyama communal	6.5
<b>Total</b>	<b>391.5*</b>

Source: compiled from I.R.D.P. Bulilimamangwe records 2003

- Disparity from figure in Table 1. due to slight differences in records

Commitment to the project is reflected in both numbers of women involved and in their constant production over the three months of the season. Only indications could be arrived at for the 2003 season as inconsistent ability to collect nuts from villages may have lowered some women's returns and been a deterrent to production.

A total of 198 women were directly involved in Marula kernel production in 2003. While some of these women produced very low totals they were still actively involved in the project and had the potential to increase production and involvement as the project developed. Masendu ward had the core of most committed women and all 8% who produced kernels each month came from this ward.

Most women achieved fairly low production levels, the largest number producing between 1 and 1.9 kgs during the 2003 season. Mean production was 2.07 kgs. However a few women achieved much higher totals, one reaching a total of over 14 kgs for the season. Production totals may be misleading as some women work alone, while others work with other members of their family. However, low production levels are an ongoing concern and may be attributed to the laborious task of cracking nuts by hand to extract the kernels.

The project survived the first two years with a significant number of women involved. This was an achievement given the difficulties involved in extracting the kernels and in operating during abnormal conditions of fuel shortage and economic stress during the 2003 season. In terms of I.R.D.P. objectives, although the project has only

brought very low financial returns to the women producers, it has opened a door that can lead to further economic opportunity. It has allowed some of the women involved to interact with other women engaged in similar activities beyond Zimbabwe's borders, thus building Regional cooperation at grassroots levels. This has served to build upon the local women's knowledge base and to break away from a situation where academic 'experts' from outside the community decide upon the direction of the project. Sharing of information by women in similar environments in adjoining countries is important in building a knowledge base that is rooted in indigenous knowledge and hands-on experience, rather than in theory. Project members participated directly, in line with the I.R.D.P. objective of increasing civic participation. Marula groups developed capacities of organisation and shared existing skills of kernel extraction and Marula use. In the short term the project provided a small amount of financial return that could be used to enhance family or individual well-being. In the long term the project showed the potential to provide members with a more significant income and involvement.

#### **Problems, limitations and challenges for the future**

Most women involved in the project have only been able to produce very low totals of nut kernels. One of the main reasons for this lies in the labour involved in cracking the Marula nuts. This was the greatest concern of women attending the 2004 workshop. Most Marula projects elsewhere in Southern Africa have machines to help extract the kernels from the nut. Monetary returns from production were very low. The low returns could mostly be attributed to the primary production nature of the project to date and the cost of transporting the raw material across the border to sell to the Marula project in Botswana where they realise the greater profit when they extract the oil.

Thus while women have been directly involved in the project, limitations were faced due to reliance on a relatively outside agency to collect nuts and prices being controlled by buyers in Botswana. Women in the project therefore remained effectively marginalised in levels of income received and control over prices and nut collection.

Membership of the project has been mostly elderly women. This is partly because older women have more time to crack nuts. The women may also be assisted by children and youth (Ngwenya and Tshuma 2002). While these women have a wealth of experience and traditional skills, they lack the skills of business management needed for the project to expand.

**Table 3.** Project members unable to write name by ward, 2003

<b>Ward</b>	<b>% unable to sign</b>
Masendu	35.4
Huwana	53.3
Natane	41.6
Dombolefu	23.5
<b>Overall</b>	<b>37.6</b>

Source: derived from I.R.D.P. Bulilimangwe Marula collection records 2003  
Of the top ten producers 42.1% cannot sign their name

Many active members of the project are illiterate. Literacy levels in Bulilimangwe as a whole are low, with an illiteracy rate of around 25% (Bulilimangwe Rural District Council 1999). The Zimbabwe Government Census of 1992 records a literacy rate of 72.06% of females over the age of fifteen. There is a steep decline in literacy as one reaches the older generations and the 1992 census shows 76% of the population of over sixty-five as illiterate. Records of Marula kernel buying where women are asked to sign their names on receipt of payment show the following picture:

The problems faced in 2003, the second year of the project, served to highlight the problems of dependence of marketing through another project outside the area. Women involved in the project were vulnerable to factors operating beyond their area and problems, such as that of transport, were accentuated by difficulties prevailing nationally. In addition the collecting and marketing were effectively driven, in all senses, from the I.R.D.P. district office rather than from within the project itself.

### **Opportunities and possible solutions to some problems**

To eliminate or lessen vulnerability and to more greatly empower women to drive their own project there is a need to

- **Raise production and add value locally**

Most similar projects in Southern Africa have machines to help extract the kernel from the nut, but to import the technology from neighbouring countries is expensive. The local Intermediate Technology Development Group (I.T.D.G.) have been working to develop a decortication machine to assist with the removal of the oil bearing kernels from the nut. The use of such a machine will enable women to raise production levels and improve returns. To add value locally an oil pressing machine was also designed to use within the rural environment. Such simple technology could be operated by all but the most elderly. The use of this basic machinery would allow oil to be extracted within the area for sale or marketing within other products like soaps. Already there are other projects in Zimbabwe that are producing soaps utilising natural plant and tree oils and these have the potential to be marketed locally and outside the country. Initially such machines may be set up in a central point within Masendu, the most productive ward.

- **To build upon the knowledge base existing within the community**

This may be harnessed in order to expand the project into marketing other products derived from the Marula. The most obvious product to market is jam made from the marula fruit : this has already been produced by other projects within Zimbabwe (Safire) and other countries within the Region. More imaginative products may stem from more traditional uses and their production could go some way towards ensuring that women retain control not only of the resource, but also of their indigenous knowledge. There could also be expansion into other wild tree products such as the *Jatropha*, which produces seeds in the months preceding the Marula. Similar equipment is needed for oil extraction and it may be possible to combine the production of the two species. *Jatropha* oil has been used for making soap in some areas of Zimbabwe and for oil for leather making.

- **Train and raise skills of members of the project**

Despite lack of formal literacy women have developed alternate skills. There is a

high ability to recall and store information mentally. Interaction between members through face-to-face contact is of prime importance. These skills may be perceived as strengths filling the place of more formal written literacy. Youth from the area may be employed by the project to assist in marketing and record keeping. This will keep the project in the hands of those indigenous to the area.

- Establish direct markets rather than use 'middle' agents  
This challenge will follow the introduction of basic oil pressing machines. Marketing through 'fair trade' links may enable maximum profit to be retained.
- Sourcing funding from within the community  
Funding for some initiatives could come from members of the community who are at present outside the country. There is already evidence that these absent community members are funding initiatives in their home wards and have set up development associations where they decide on projects to initiate (Dube 2003). This would serve to keep control and direction of the project within the hands of those rooted in the area.
- Reduce the role of the I.R.D.P. district office and devolve power/decision making to the project itself  
In 2004 management of the Livestock, Marula and Health projects were placed under the newly established Tjinyunyi Babili Community Trust. The Trust was established to operate as a community development agency linked to partners and organisations such as Kellogg. Through the Trust structure the project aimed to gradually move away from its dependence on Donors and operate in a more autonomous fashion. It is still too early to see how effectively this has been able to take place.

### **Possible conflicts**

Conflicts inevitably emerge when trying to establish a project of this nature. Some conflicts have already been identified by the women themselves (discussion with women and reports from groups, 2003 Plumtree Marula workshop). The Marula is traditionally a communal resource and while women may harvest from trees immediately adjacent to their homesteads, some trees are harvested or used by the whole community, and even those in a member's field are not seen as a private resource. Traditional tree tenure can be complex and seemingly contradictory, with verbal information given by women not always tallying. This situation is mirrored elsewhere in Southern Africa and has at times been confused by colonial ideas of ownership that have been superimposed on the traditional (Krieke, 2003)

The season for harvesting Marula nuts falls in the Zimbabwean dry season when traditionally livestock are allowed to roam. Fodder at this time is scarce and animals tend to congregate around Marula trees and feast on the fruit. This puts them in direct competition with the women who wish to harvest the nuts.

Further conflict has been experienced between women engaged in the project and men who wish to cut down the non fruit bearing trees to use for timber. In a strongly male dominated society women have trouble in getting the men to listen.

Solutions may lie in increased involvement of the whole community in the project. Awareness of the value of the Marula will increase when it is seen to generate signifi-



cant monetary gains. Support of the traditional leadership structure is essential and their involvement in the I.R.D.P. structure and in the newly established Trust has helped.

### Conclusion

The initial years of this Marula project illustrate some of the strengths and weaknesses of starting off a project of this nature. Genuine empowerment of those involved is a complex matter involving the understanding of dynamics within the community as well as the logistics of the physical launching of the project. The early years of this project have served to allow women involved to discover their own strengths and weaknesses and to see their own way forward. This is necessary to avoid the project being a short term wonder and to allow it to build itself. The transfer of the project from the more donor driven I.R.D.P. to a newly established community trust has meant greater control by the project members themselves. The project has made the transition fairly smoothly. However, it's future may ultimately depend on the ability of younger, more educated individuals from within the group to spearhead effective marketing and linkages. Links to other similar projects within the Southern African region might assist in the sourcing of viable marketing and trade opportunities.

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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.

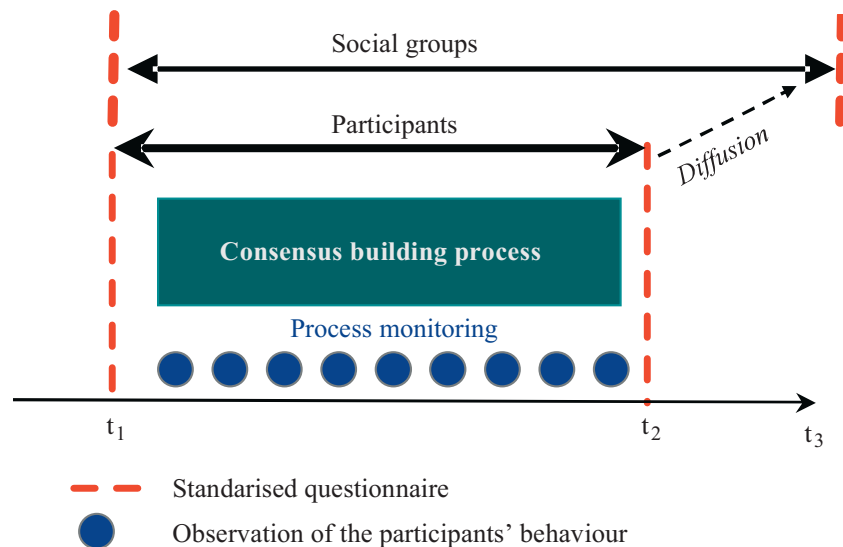
In environmental psychology, field-experimental intervention research has been developed and applied, and various forms of interventions, aiming at changing of attitudes and behaviors in environmental matters, have been tested (e.g. Mosler & Tobias 2000; Dwyer et al. 1993). In order to produce reliable 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***

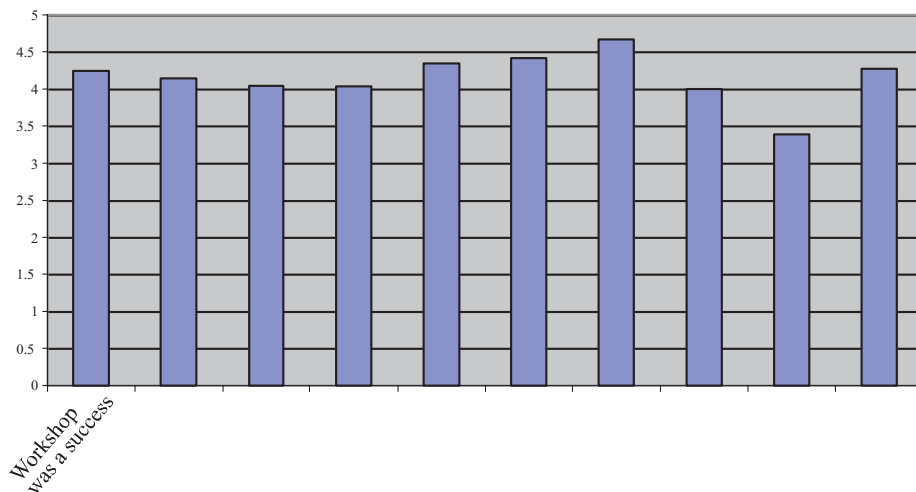
Although the regional and local authorities were directly involved in the initiative and the preparation of the consensus building process, the small number of registrations after the first deadline made obvious, that the residents were not very motivated to participate in the workshop. There had been 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.

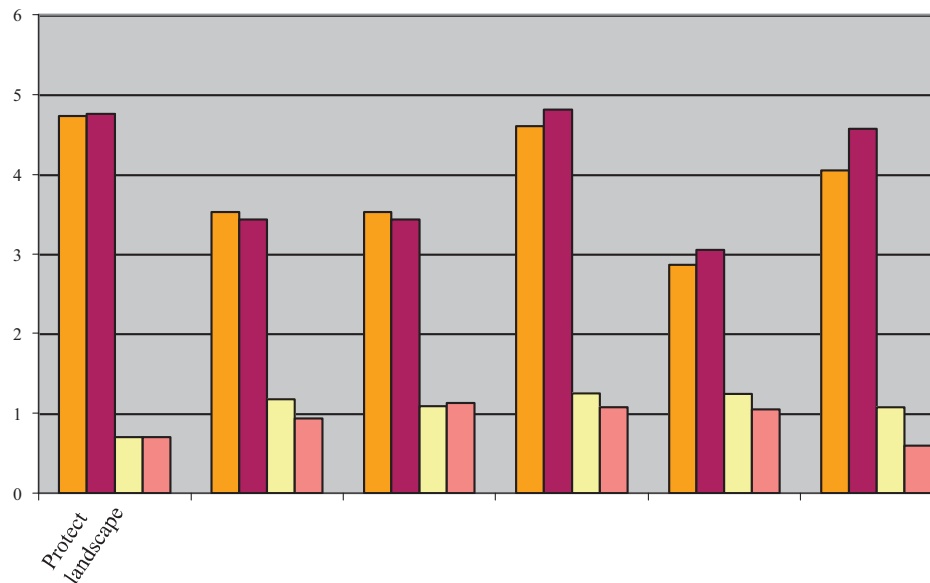
#### *Findings concerning the effect of the consensus building process*

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'



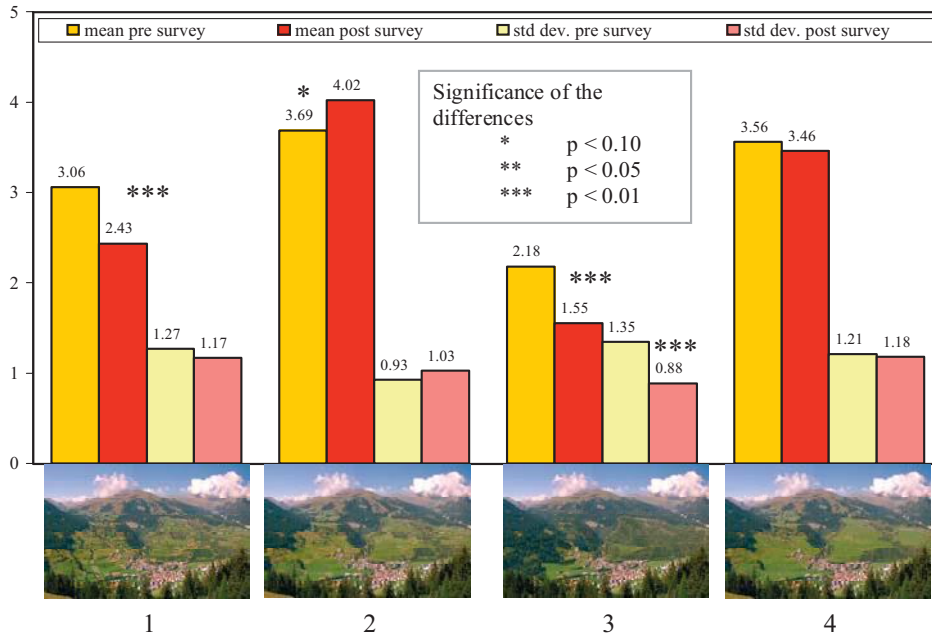
**Figure 3.** Participants' attitudes towards developmental principles before and after the process

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.

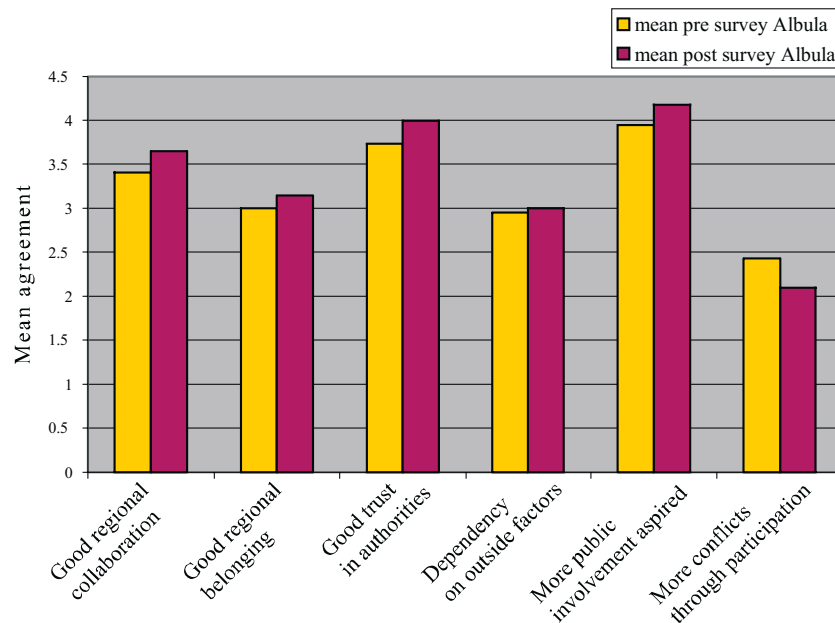
A little bit less clear is the effect of the process on the participants' assessment of the landscape scenarios. Here also, changes of the scenarios' mean assessment could be measured (partly significant). The expected decrease of the standard deviation, however, took only place in the reafforestation 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.



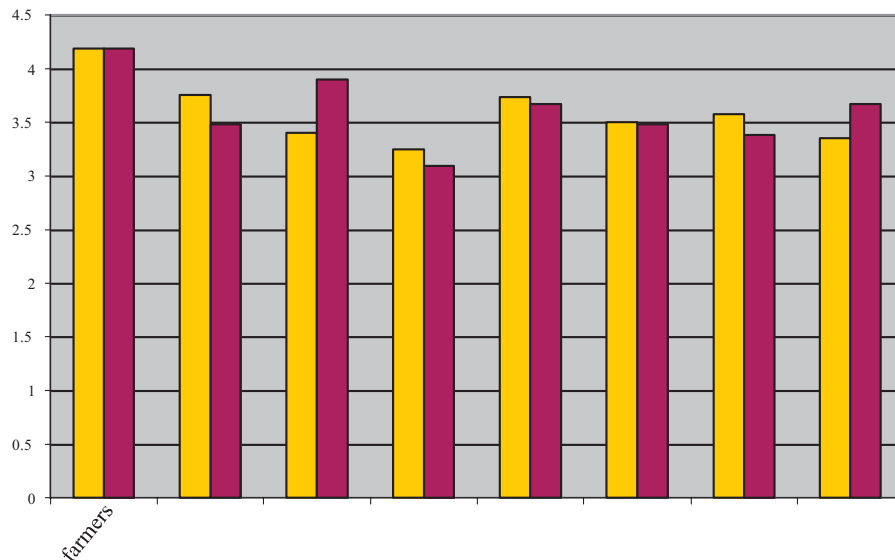


**Figure 4.** The participants' assessment of landscape scenarios before and after the process (1. ecologically enriched scenario, 2. scenaro of status quo, 3. land abandonment and aforestation scenario, 4. scenario of intensified use)



**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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