LEARNING BY DOING – STAKEHOLDER PARTICIPATION IN LAND USE MANAGEMENT: THE RESEARCH AND DEVELOPMENT PROJECT GRANO

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Abstract

The main principles of transdisciplinary research projects which try to implement sustainable development are problem - orientation and stakeholder participation. The R&D project GRANO "Approaches for Sustainable Agriculture in North Eastern Germany" comprises of an interdisciplinary team of scientists. During the last four years the project has developed problem solving concepts and the implementation of solutions in cooperation with local agents. The article reviews the planning and management process including different examples of conditions and challenges for the participation of stakeholders. Methodological approaches such as qualitative monitoring and evaluation are described.

Keywords: stakeholder participation, action research, transdisciplinarity, participatory monitoring & evaluation

Introduction

By describing the constraints of stakeholder participation in the GRANO-project this paper will answer the following questions. Used methods from monitoring, management and evaluation are described. Different causes and recommendations are discussed.

- What efforts are necessary to analyze stakeholder networks and motivate them to participate voluntarily especially under transformation conditions?
- How should objectives and tasks be planned in relation to available resources of the project team and involved local agents?
- How can in transdiciplinary research a consensus on activities, outcomes and benefits be reached?
- What does an action-research project contribute to sustainable development when it depends on changing political conditions?

GRANO approach

The application-oriented research approach and the bottom-up implementation approach in GRANO necessitates both interdisciplinary cooperation within research as well as a close linkage between science and practice.

The success of problem-oriented concepts and development strategies depends on the active involvement of relevant regional stakeholders, especially their knowledge and experience (Smith et al. 1997, Pretty 1995). This can only be achieved if stakeholders' participation starts at the very beginning with the definition of problems and objectives and ends with the final evaluation. The project is based on the hypothesis that approaches to change land use towards sustainability are not successful if they do not include the interests of as well as the constraints facing land users and decision-makers. One important element motivating different stakeholders to actively participate in the research project is its application-oriented

approach. The concepts and solutions to be developed must be relevant not only in theory but result in concrete development activities in the model regions
Instruments used in developing countries like Rapid Rural Appraisal, Participatory Rural Appraisal, and Participatory Learning and Action, as well as instruments used for participation in urban or rural planning (round table, hearings, workshops, mediation) activated stakeholders and decision-makers working together with the researchers (Siebert et al. 1999). The objective-oriented project planning method (ZOPP; GTZ 1996) was used for managing the research team and the participation of stakeholders.
As a result of a step-by-step project planning the action-research process was divided into different phases:
(1) Situation analysis
(2) Definition of problems and objectives
(3) Development of concepts
(4) Implementation
(5) Evaluation
These phases are separated only for analytical purposes, they are not to be understood as chronologically isolated periods. Single activities may be carried out simultaneously as long as the basic logic of the problem solving cycle is maintained. The project developed and implemented model initiatives for three selected counties in the federal state of Brandenburg/Germany in the context of the existing social-economic framework.
In autumn 2001, the implementation was coming to an end. The implementation process was successful if stakeholders are willing and able to continue the started activities and adopt concepts for a long-term use. An internal evaluation and assessement of impacts is actually on the run (Müller et al. 2000, Narayan 1998).
In addition, a participatory evaluation in regional workshops is planned in February 2002. Finally a scientific symposium with decision-makers in research and agricultural policy in June will be held to discuss and analyze universal conclusions and consequences for landscape research and interdisciplinarity research programs.

Definition phase

The research program „Ecological concepts for land use systems“ was created by the Federal Ministry of Science and Education. Assuming that the ecological knowledge base has not been sufficiently exploited in view of introducing sustainable agriculture in Germany, the ecological research priority program aims at developing means to implement this knowledge in agricultural practices and rural policies at various sites.
The project started with a so-called “definition phase”: the Ministry gave a small budget, so a core group of researchers could define research objectives and questions. Other tasks of the core included the creation of flow-charts for the planning and decision-making process as well as the overall organization of the project. The definition phase was also used to combine differing views, assumptions, and working methods from several separate scientific disciplines. In addition, mutual definitions,as well as a project philosophy and identity had to be established. The results were reviewed by scientists and the project started in 1998. This two-phase-invitation of the research program was the first one in the German ecological research policy and was intended to guarantee an intensive interdisciplinary project planning from the beginning (Wilms-Herget/ Balser 2000).
Stakeholders were involved from the beginning: as a first step decision-makers from the state government and regional agents were asked for representative regions where the case-studies should start. For analyzing the results a special indicator set was created. Two districts came into consideration: Uckermark/ Barnim in the north and Elbe-Elster in the south of Brandenburg, a total area more than 5000 km^2.

The idea was to develop the concepts in the first region and then transfer them in the second. So the correlation between regional conditions and different results should be evaluated.

General set up

The North Eastern of Germany is predominately occupied with the task to solve economical problems and agriculture is still a dominating sector. Natural soil fertility is low compared to other parts of Germany as result of soil texture and amount of precipitation. Due to the limited yield potential more than 70 percent of the agricultural land has been assessed of inferior quality according to the EU standard. Forty percent of the agricultural land is designated as nature or landscape protection areas. Based on the historical development of agricultural co-operatives in the former GDR, the farm structure is characterized by agricultural enterprises with an average size of ca. 1000 ha. Most of the agricultural land is on lease. The population density (86 inhabitants/ km²) is far below the German average. Due to the transition process in the New German States, the unemployment rate, especially in rural areas, is high (18 %). Only eight percent of the work force is employed within the agricultural sector. The lack of alternative sources of income results in considerable rural emigration.
The state of the environment improved by the break-down of industrial production and the introduction of advanced technology. On one hand side this reduced the consumption of resources and on the other side it diminished the awareness of complex ecological problems. When discussing the issue of sustainable development with stakeholders, especially farmers mentioned economic topics e.g. high leasing rates, land abandonment and the uncertainty of political programs as their urgent problems (Siebert et al. 1999).

Situation analysis

The objective of the first actual project phase was to specify project contents together with an expanded circle of stakeholders, especially at the local level. After the initial talks and workshops, additional key-actors, such as farmers, environmentalists, local government agencies were identified. In most concepts of action research it is recommended to relate project activities to prior or other ongoing projects. This is in particular important for the success and impact on regional development (Blum et al. 2000). But in East Germany many development projects had no lasting effects when they were terminated. This produced increasing skepticism for top-down projects and governmental financed programs. Some stakeholders also expressed their complaint about the great number of inquiries from various projects.
In the first model-region former research activities of ZALF improved the access to local agents. Due to the size of the first model-region the analysis of conditions and organizations in the region was time consuming. „Compared to traditionally managed research projects we have achieved field implementation only after a long period of conceptualization and preparatory activities“ (Toussaint et al. 2000). Nevertheless this effort was done to built confidence as an essential factor for cooperation. The philosophy and the objectives of the GRANO project had to be disseminated on local, regional and state level. The advantage of the chosen approach is a whitespread knowledge on the overall objectives of the project and the establishment of individual relationships to relevant stakeholders.
Semi-structured interviews helped to consider preferences, behavioral reaction patterns, constraints of the stakeholders, as well as the potential of the region. An investigation about regional policy plans analyzed collected data and established land-use strategies.
Focal points were the so called "planning workshops" in each model region. The results of the situation analysis were summarized in a short paper to serve as a data-basis for the workshops. Land-use conflicts and other constraints concerning sustainable development have

been described from farmers, associations, NGOs and regional authorities. Scientists and local agents were involved in creating a vision for the region and defining objectives of rural development. Finally certain topics were selected for the use for future activities. A great number of these subjects based on a consensus of researchers and stakeholders interests. Nevertheless in some cases the researchers interests were dominating the decision. After the planning workshop the project team was divided into four interdisciplinary teams:

(a) Regional agro-environmental policies
(b) Agro-environmental extension service
(c) Regional marketing strategies and sustainable tourism
(d) Regional site management

Development of concepts

The planning workshops resulted in some project ideas and opportunities for action. Nevertheless it was a long way to reach sustainable solutions. After the long and intensive analysis phase participating stakeholders had extended expectations on results from project activities. Simultaneously an external evaluation demanded for an early implementation as well. This caused external pressure on the project team to move forward and leads to the use of well-known concepts instead of developing new concepts. These concepts and methods were then fitted to local conditions and tested on a case study basis and demonstration projects. Small groups of researchers and stakeholders had to reduce the complex system of sustainable development by work-sharing and using iterative feedback loops. Interdisciplinary work and the involvement of local agents demanded a high degree of organizational flexibility. As a consequence, the project can only take place when the project progress is made visible and clearly presented for all participants.

Implementation

During this phase, the project initiatives are implemented in the counties Uckermark and Barnim. Optimizing production, steering regional networks, reorganizing local planning processes and developing new strategies for agro-environmental policies are among the intentions of the project. The transferability of achieved experiences may also be demonstrated within the project itself, project phases in the Elbe-Elster region are staggered to follow the Uckermark region.. The researchers analyzed how individual projects in the areas will be completed, if they compromise one another and where synergies are possible. These interacting factors and network structures should be systematically completed to decisively influence the success of sustainable development in a region.

Due to the large size of the model region it became unrealistic to test the concepts all over the model-regions. Most of the sub-projects were carried out on district level. The reasons for choosing a certain part of the region were for practical matters, like the availability of resources or data, geographical distances or interested stakeholders. In the end, the several activities of the project were spread all over the Uckermark. Hence the goal to connect ongoing activities of single projects at a later time to reach enhancing effects could not be reached. In the Elbe-Elster district the activities were concentrated in a smaller area from the beginning. An established regional cultural identity, an existing small network and the stated problem-pressure increased the cooperation between scientists and local agents and produced better results. Some stakeholders were involved in various project activities spending plenty of time. This experience showed that reaching enhancing effects requires spatial concentrated activities with high engagement of key-actors.

Monitoring and Evaluation

Several instruments were used for monitoring the team-work of the researchers and the cooperation with regional stakeholders.
The main principles were:

- Working plans and time schedules for every team member
- Periodical team sessions and plenary workshops
- Supervising and analysing workshops
- Documentation of every team session or workshop
- Individual consulting by experts for project-management and participation
- Interviews/polls to get feedback from relevant stakeholders

In particular in the beginning intensive discussions on objectives and methods were needed so the whole GRANO team met for workshops every two month to discuss project progress and planned activities. The results were used for adjusting the project plan. While the implementation phase the plenary workshops were held only four times a year. All meetings and workshops were documented and the results were placed on the intranet.
Team members developed a concept for project-controlling and team coordination. Consequently every project-team draw up short and long term work schedules and defined milestones. The consultant for project management visited team-sessions and workshops with participants. His duty was to establish a general feedback structure and provide information for the project management. Enabeling the team-leaders to choose on suitable adjustment measures for conflict management was another task.
The yearly report for the funding agency provided a schedule for all project participants to evaluate themselves and keep up with future work packages. This was especially supporting for integrating single activities into the overall conceptual framework.

Criteria to evaluate participation processes

For the monitoring and evaluation of the stakeholder participation in the implementation phase a "participatory monitoring" was developed and introduced. Qualitative and quantitative methods are used to examine the process of participation and a special indicator set was generated. Interviews were conducted, reports were evaluated and workshops were observed. On the one hand project members themselves asked for feedback of their partners, on the other hand neutral consultants observed the co-operation activities and analyzed stakeholders acceptance. The outcomes were discussed broadly afterwards the results were described in the project report (Müller et. al. 2000) and helped to adjust project activities.
GRANO developed qualitative criteria for monitoring and evaluation the stakeholder participation (Baranek/ Ganzert/ Nagel 2000):
Criteria: "Representation of interests": The composition of working-groups should allow the representation of all relevant interest groups.
Criteria: "Commitment": All partners are willing to invest resources free of charge for the implementation or testing of concepts.
Criteria: "Consensus": Agreements should be reached by consensus and the process of decision-making is open to everyone.
Criteria "Implementation": The process of participation includes planning, implementation and evaluation of certain self-determined activities.

The criteria are used in the evaluation of definition-, analysis- and conception-phase. For the monitoring of the still ongoing participation process the indicators were continually differentiated. Additionally a quantitative evaluation raster was compiled. Meanwhile all panels in GRANO are observed and documented in order to enable an analysis. Workshops were followed by evaluations by users or these will become partial some weeks after by

telephone calls. Besides from questioning for intermediate results in the context of participatory monitoring qualitative semi-structured interviews will be used in already final or stopped subprojects.

Enabling conditions for participation

According to joint project planning additional activities are necessary to push sustainability or environmental topics on the stakeholders agenda (c.p. Koschatzky/Zenker 1999). In contrast to development projects research projects cannot offer financial means or incentives to participants. Stakeholders can be involved without financial incentives temporarily, but only expected benefits motivate potential participants to take part in a network. Entrepreneurs, local agents and NGOs have definite expectations when spending time, money or know-how for a co-operation. Considered as an investment they carry out a cost-benefit estimation. Expectations can be of material type (increases in sales) or idealistic type (knowledge increase, learning effects, image improvement). Besides that under transformation conditions in East Germany self-initiative and voluntary commitment were partial not as high as expected. High problem pressure felt by stakeholders as well as sufficiently common targets can secure long-term co-operation (c.p. Pretty 1995). Therefore GRANO subprojects were selected by the aspect of problem solving or knowledge requirement. The project had to select on methods and tools to encourage stakeholders (round-table, working teams, face-to-face contacts). Creating win-win solutions is another enabling condition for initiating an increase in social capital and foster problem solving. Therefore a concrete and visible project progress is essential. In the long run it needs motivating intermediate results (e.g. milestones) and increasing expectations for the use of results (Siebert et al. 2000). That may be one reason why GRANO partners often demanded testing of concepts as soon as possible to asses and evaluate the impacts.

Support of state government

Various decision makers of state government declared being interested in new institutional and methodological concepts for agro-environmental policy and rural development. Hence the project started under the assumption getting support from decision-makers on the regional level as well as on the state level. Project activities like “auctions of ecological services” and the “environmental co-operative” were aligned for implementing innovative approaches. Their objective were proposals for optimizing the existing agricultural policy system. Due to the announced reorganisation of the agriculture extension services the actual extension network was analyzed and recommendations to increase efficiency and user benefits were elaborated.
In the sub-project „Agro-environmental-Forum“ (AUF), farmers and environmentalists together developed a regional agro-environmental scheme on a “round table”. The suggested measures should be implemented on various farms to asses the impacts in case studies. Therefore subsidies from the running cultural landscape program were expected.
In both cases the political conditions getting worth, since the federal state government reduced the budgets completely. Although the state government was not interested on testing the innovations suggested in the GRANO proposals self-organized stakeholder teams in both project-areas submitted suggestions based on GRANO activities to the LEADERplus program. Action-research projects as well as networks on rural development are not secured or legitimized by public institutions and therefore possess no commitment in relation to the political system. They are founded on confidential relations between the partners and have "only" their endogenous potential e.g. their own social and financial capital. Therefore

activities should not be depend on insecure policy conditions in order to avoid disappointments (Rudolph 2001, Hellmer et al. 1999).
More independence from general conditions will be reached by the research project when it has a budget for testing concepts and innovative measures. Especially increasing higher opportunity costs under transition require (small) financial grants for cooperating stakeholders.

Conclusions

There is no guarantee for success when participation of stakeholders is reached in the process of defining objectives. After four years of action research we learned that the willingness to participate depends on the expected outcomes and benefits. Long-term motivation of stakeholders needs visible outcomes during the project. This is especially true when participants voluntarily take part.
Another particular aspect is the realistic estimation of the time budget participants are willing to spend on voluntary activities. During the elaboration of the GRANO-approach the duration of network analysis and the establishing of trust between researchers and local agents was underestimated. Contacts with existing projects or initiatives are helpful, but these projects also compete on the capacities of stakeholders. The wide range of topics and the size of the model-regions should been reduced from the beginning, hence implementation would start quicker and enhancing effects can be reached.
The view of stakeholders on participation is different. They do not want to be involved in every single step and consider a division of labor as a time saving result. Scientists and experts should develop concepts adapted to regional conditions. Then local agents will proof the applicability and give a feedback to the scientist for optimizing concepts or instruments. That is why stakeholders often asked for best-practice examples and experiences reports from other projects. Transdisciplinary research projects should aim on integrating social, economic and ecological objectives but the success depends on the size of the planning area, the available time budget and the support by decision-makers.

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