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Action Research for Collaborative Management of Protected Areas

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Introduction

Collaborative management is increasingly advocated as a desirable approach to the management of protected areas and/or buffer zones. The promotion of this collaborative management is based on both a pragmatic argument (that effective management of protected areas requires cooperation between various stakeholders) and on an argument for the equitable treatment of stakeholders, particularly people dependent on the resources included in protected areas.

However, while there is a growing trend towards collaborative management in protected area policy in the Asian region, there are relatively few success stories so far and there is a need to learn how to implement collaborative management and to understand what it means in practice.

A further barrier to effective implementation is that the interests of various stakeholders in protected areas are often in direct conflict. As a result, efforts to implement collaborative management frequently involve situations where there is a lack of mutual trust between interested parties.

In order to implement collaborative management on a large scale there is a preliminary need for examples which illustrate the processes which lead to success. But even generating a few examples of success will not provide a simple recipe which can be duplicated, because individual cases are complex and involve case specific issues and factors.

Thus, in Protected Area management:

- we have to work in a complex multi-stakeholder environment which often involves endemic conflict and lack of mutual trust;
- PA management often takes place in the context of limited resources and limited knowledge (often complicated by completely false assumptions); and
- each case has many specific factors which need to be dealt with (differing types of resources, differing policy framework, differing combinations of stakeholders, differing capacities – skills, knowledge, power - amongst various actors).

We need an approach to management and implementation which is able to adapt to specific situations. Essentially we have to learn our way through the implementation process. It would also be nice to be able to learn from the successes of others, but is this possible when each case is highly specific?

We wish to suggest that action research is a methodology which can meet these needs. Our aim in this paper is to introduce the idea of action research and to show how it could be relevant to collaborative management of protected areas.³

Action Research

³ We do not propose to review the literature in great detail. The books edited by Foote Whyte (1991) and Kemmis and McTaggart (1998b) provide overviews of the field of action research as well as useful collections of readings.

The idea of action research used in this paper applies to a broad approach which was originally developed by the psychologist Kurt Lewin (Lewin 1946) in the context of experimental community projects in the USA, involving diverse contexts such as equal employment opportunity and integrated housing. Action research has the following characteristics:

- It combines action and research.
- It involves a group of people united around an issue or concern (such as managing a protected area).
- This group consciously and systematically moves through a series of repeated cycles of action, observation, reflection and planning. (These repeated cycles have been presented as the “Action Research Spiral” by Kemmis and McTaggart, 1988a. See Fig, 1.)

The key idea behind action research is the idea that a group of people with a shared issue or concern collaboratively, systematically and deliberately plan, implement and evaluate actions.

Action research

...combines action and investigation. The investigation informs action and the researchers learn from critical reflection on action. (Sriskandarajah and Fisher 1992:11)

Action research is a process of *learning* in order to act more effectively in a particular situation. In this sense it is first and foremost a methodology for implementation and action.

But action research is also a type of *research*, in the sense that it contributes to “public” knowledge. Experience in a specific situation generates insights and understanding which can *inform* actions in similar situations. The word *inform* is important here. The intention is not to provide recipes for implementation, but rather to provide insights which others may find useful in other contexts. This aspect of generalising from learning in a specific situation is the research element.

Action research

- is a process of learning in order to act more effectively;
- can also generate insights relevant to similar situations.

It is important to recognise that action research is an overall methodology, not a particular research technique. Within the broad framework of reflective planning and action, other forms of research can be used as necessary. For example, at various points in a series of action research cycles, it may be appropriate to carry out wildlife inventories, botanical studies, social surveys or anthropological studies of indigenous knowledge. Action research can be used as a way of managing the steps in an applied research process.

Methodology vs Methods

- Action research is an overall methodological framework.
- In specific cycles various “methods” and tools can be used, including tools associated with technical scientific research and social science.

Action research has been applied in a variety of contexts including organisational change (businesses, educational institutions, government agencies) (Walton and Gaffney 1991), curriculum development (Kemmis and McTaggart 1988a, 1988b), community development (Lewin 1946), development and modification of appropriate technologies (Maclure and Bassey 1991) and natural resource management (Gilmour et al. 1987). While the basic characteristics mentioned above are consistently involved, differing contexts and objectives have led to considerable diversity in the actual practice of action research.⁴ The important point about this diversity is that it demonstrates the adaptive potential and flexibility of action research.

Action research provides just the learning based approach to dealing with complex situations that are called for in collaborative management. It is an excellent way of implementing “projects” in situations where people don’t really know where to start or what to do next. We will now turn to an example of the application of action research to protected area management in Uganda.

Case Study: National Parks, Uganda

The case study relates to a complex project working on collaborative management of two national parks in Uganda.

The project goal is conservation of the biological diversity and ecological processes in the parks through promotion of sustainable natural resource management.

At the beginning of the process described it was known (or assumed) (a) that the livelihood of local people was partially dependent on use of the protected area and (b)

⁴ In fact, some methodologies, not explicitly linked to action research and called something else, share these characteristics and can be placed within the broad field of action research. An important example is the farmer-back-to-farmer model of agricultural research (Rhoades 1984).

that some of the current usage was incompatible with conservation objectives within the protected area.

Preliminary situation and assessment

It was observed that the harvesting of wild fish from the protected area by artisanal fisherfolk was depleting fish stock and this was considered by the Uganda Wildlife Authority (UWA) to be unsustainable and incompatible with park objectives. Several activities contributed to an assessment of the situation:

- There was a collaborative analysis of the situation which involved rural communities, the Uganda Wildlife Authority, project staff and district authorities.
- Rural assessments were undertaken by rural communities, the UWA and project staff.
- Technical investigations were undertaken by UWA and project staff, without community involvement.

Cycle 1

Plan: Investigate the development of fish farming.

Action: Research undertaken with selected farmers. Pilot ponds were constructed and fish farming piloted.

Observation (Conclusion): Fish farming is technically, economically and socially feasible.

Cycle 2

Action: Fish farming was promoted by the project and fish farms were established.

Observation (Assessment): Further investigation revealed that harvesting of wild fish had not greatly diminished. Research also showed that most fish farms had been set up by contract farmers, not by artisanal fisherfolk.

Cycle 3

Action: Fish farming was promoted among artisanal fishers and incentives were provided to encourage fish farming.

Observation (Assessment): Wild fishing declined, fish farming was adopted by artisanal fishers. The income of rural communities increased through the sale of smoked fish to local markets, but fuelwood was being harvested from the protected area to feed the fish smoking houses. The UWA considered fuelwood harvesting levels to be incompatible with park objectives.

Cycle 4

Action: Investigation into alternative fuel sources was initiated.

The process is continuing.

Discussion

The overall outcomes of the activities described are of two types. The main one is the gradual modification and improvement of project implementation (improved practice). A second, if modest, outcome was an increased understanding of the linkages between development activities and conservation outcomes. Collaborative management projects often assume that increased rural income and alternative sources of income will take pressure off PAs. This case study reminds us that the connections are not always simple and that the linkages need to be much more explicit. In this sense, there is a “research” outcome: some generalisable insights contribute to our understanding of PA management in general.

The activities described above equate very closely to the steps of the action research cycle, but there was not, at the time, an explicit attempt to follow the action research cycle. Nor was there a single group of people involved in all the “action research” cycles. We have used this example, not because it is a perfect example of conscious application of an action research process, but because it does illustrate how action research could be applied at the implementation level. Unfortunately, just as there are few examples of successful application of collaborative management of protected areas, there are few examples of the application of action research. There are few examples because action research has not really been systematically attempted in collaborative management.⁵

Clearly, however, this case study shows the potential of action research in such situations. In addition to the general demonstration of the value of critical reflection on actions to develop better actions, there seems to be evidence that a more broadly collaborative approach from the beginning might have avoided some of the “mistakes” made.

The sort of “management” approach described above, with continual monitoring of the results of actions and continued development of new activities in the light of critical reflection on outcomes, might seem to be a fairly routine way to manage a project (“everyone does it”). So, why is action research different from good flexible, adaptive management? Further, some of the project outcomes do not seem particularly surprising in retrospect. Should they not have been foreseen by good managers?

The answer to the first question is that action research is *not* very different from good, flexible adaptive management. However, it is not really true that “everybody does it” routinely. The crucial point is that a planned, conscious process of critical reflection

⁵ We are aware that this is a dangerous generalisation. We know that some pilot action research activities are being tried by NGOs and small projects. The point is precisely that these small scale activities tend to be focused on implementation only. Their value as examples providing insights for others are missed because they are not generally published.

enables quick response and makes the process more regular and systematic. At the level of project implementation, action research is precisely that: a way of making critical reflective management a routine part of implementation. Action research brings discipline to the process. The idea of action research is deceptively simple.

The answer to the second question is that some of the unintended consequences could have been foreseen. Nevertheless, developments are often obvious in hindsight and such examples of obvious, if unintended, consequences, are very common in complex development projects. However obvious the mistakes are, people keep making them. We would argue that the conventional blueprint approach to project design and implementation (a detailed plan for all inputs and outputs throughout project life) tend to lead to people missing the obvious when it comes to actual project implementation. In addition to the obvious unintended consequences, in complex situations there can be unintended consequences which are much less predictable. Action research is one way to deal with these.

There is one other point that this case study illustrates nicely. We mentioned earlier that action research is an overall methodology, which provides a broad framework within which other forms of research can be utilised as necessary. In the case study, at specific stages in the various cycles, specific methods were applied to research particular questions. For example, RRA activities were undertaken to gain information on fish harvesting practices and levels. At the same time biophysical (sustainability) issues were undertaken as the focus of technical investigations.

The Applicability of Action Research to Collaborative Management

What we have been attempting to show is that conscious and deliberate use of action research can be useful in project implementation because it provides a framework within which critical planning and monitoring and evaluation can become a continuing basis for project implementation.

The Uganda case involved some collaboration between stakeholders, but there was no sense in which project activities as a whole were planned and monitored by a collaborative group involving or representing all key stakeholders. There are major advantages for project implementation if all major stakeholders or actors are involved in a group approach to action research. In a report on an action research project undertaken to improve the performance in an agricultural extension project aimed at improving food supply and market access in rural Papua New Guinea, Sriskandarajah and Fisher (1992: 12) noted:

Involvement by a number of actors in the process of organisational change gives these actors a sense of “ownership” of the emerging organisational practices. This occurs when people are involved in identifying goals, constraints and opportunities, as well as in planning and negotiating for the future.

Another advantage of a team approach is that membership of different stakeholders in a planning team ensures that a variety of perspectives is canvassed before action commences, thus increasing the likelihood that obvious unintended consequences will be avoided, false assumptions will be identified and that various stakeholders will

have a sense of ownership of and commitment to planned actions.⁶ Membership of a collaborative action research group can help to build mutual understanding and trust. (For this to occur there must be a genuine commitment to meaningful collaboration. Token involvement of less powerful stakeholders will not be enough.)

“We Don’t Need Any More Research”

People involved in protected area and natural resource management, especially government officials sometimes respond to suggestions that action research may be relevant by pointing out that there is no need for further research because “we already know how to implement protected area/collaborative management”. One response to this is to stress that action research is first and foremost an approach to project implementation, not a means of gathering information for its own sake.

At another level, however, it is not true that everything that needs to be known about implementing collaborative management is known. Firstly, we know that each situation is very complex and site specific. We need an approach which will help practitioners to learn their way through the complexity. Secondly, the fact that there are so few successful examples suggests that more needs to be known and/or that what is known needs to be better reported.

Perhaps part of the suspicion relates to the usual emphasis of research on data gathering. Most of the research on protected area management tends to be concerned with gathering information (about trees, animals, numbers of people, local economy etc). Relatively little is about increasing understanding of implementation processes. Yet, we would argue, the need is more for increased understanding than for information. Action research focuses more on increasing understanding than on collecting facts (although these can be collected under the rubric of action research when necessary).⁷

Conclusion

Our aim in this paper has been to show that action research has a lot to offer in terms of efforts to implement collaborative management of protected areas. The context for collaborative management is complex and action research provides a way to learn in order to implement better, through a conscious process of reflecting on and monitoring the effects of actions in order to plan improved actions. In cases where there is uncertainty about what to do next, or even what to do first, action research provides a way to commence implementation and to avoid being paralysed by the fact that everything is not known in advance. It is about “learning to do it by doing it” (Friere 1982). In situations where outcomes of activities will always be somewhat unpredictable, it enables mistakes to be detected and improved actions to be taken.

⁶ Lewin (1952) explores the crucial role of group decisions in changing behaviour. He points out that “...the question of group decision lies at the intersection of many basic problems of group life and individual psychology. It concerns the relation of motivation to action and the effect of a group setting on the individuals readiness to change or to keep certain standards.”

⁷ As research, action research should not be dismissed as a mere fringe activity. It is increasingly accepted as a useful way to research many questions. Many universities now recognise action research as a valid basis for graduate research at Masters or PhD level..

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References

- Foote Whyte, William (ed) 1991
Participatory Action Research. London etc: Sage Publications.
- Friere, Paulo 1982
“Creating alternative research methods: Learning to do it by doing it.” In B. Hall, A. Gillette and R. Tandon (eds) *Creating Knowledge: A Monopoly?* pp29-37. New Delhi: Society for Participatory Research in Asia.
[Reprinted in Kemmis and McTaggart 1988b.]
- Gilmour, D.A., G.C. King and R.J. Fisher 1987
“Action research into socio-economic aspects of forest management.” In *Role of Forest Research in Solving Socio-economic Problems in the Himalayan Region*. Proceedings of IUFRO Symposium held at the Pakistan Forest Institute, Peshawar, Pakistan, October 17-27, 1987. Pp 41-48.
- Kemmis, Stephen and Robin McTaggart (eds) 1988a
The Action Research Planner. Deakin University, Australia: Deakin University press (3rd edition).
----- 1988b
The Action Research Reader. Deakin University, Australia: Deakin University press (3rd edition).
- Lewin, Kurt 1946
“Action research and minority problems.” *Journal of Social Issues*, Vol 2(4):34-46.
----- 1952
“Group decision and social change.” In G.C. Swanson, T.M. Newcomb and E.L. Hartley (eds) *Readings in Social Psychology*, pp 459-73. New York: Henry Holt.
[Both reprinted in Kemmis and McTaggart 1988b.]
- Maclure, Richard and Michael Bassey 1991
“Participatory action research in Togo: An inquiry into maize storage systems.” In William Foote Whyte (ed) *Participatory Action Research*, pp 190-209. London etc: Sage Publications.
- Rhoades, Robert E. 1984
Breaking New Ground: Agricultural Anthropology. Lima, Peru: International Potato Center.
- Sriskandarajah, N. and R.J. Fisher 1992
A Participatory Approach to Improving Rural Livelihoods of People in the Goilala District of Papua New Guinea. Unpublished report on a research project funded by the Australian International Development Assistance Bureau. Richmond, Australia:

Faculty of Agriculture and Rural Development, University of Western Sydney,
Hawkesbury.

Walton, Richard E. and Michael E. Gaffney 1991

“Research, action, and participation: The Merchant Shipping case.” In William Foote Whyte (ed) *Participatory Action Research*, pp 99-126. London etc: Sage Publications.

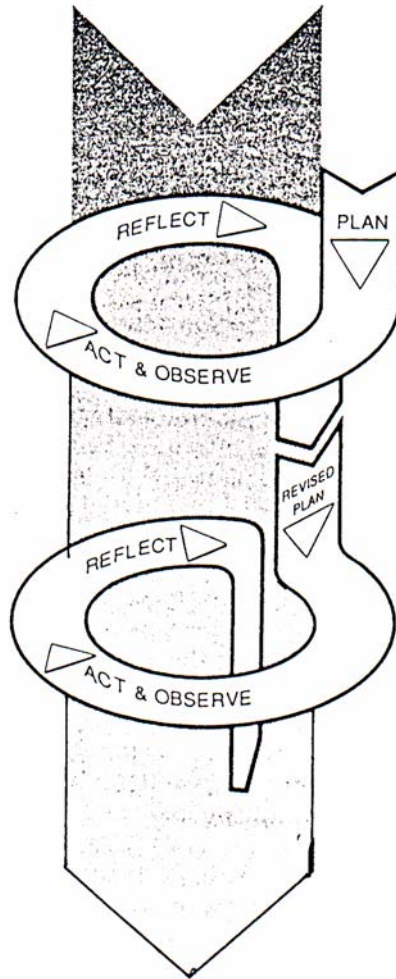


Figure 1: The action research spiral
[From Kemmis and McTaggart, 1988a]