

Multidisciplinarity in the PLA Context: Eight lessons from a research project on tourism and the environment

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Introduction

This paper presents some of the basic lessons learned from my experience in participating in a multidisciplinary research project on *Tourism and the Environment*. The issues emphasised are those relevant to PLA. The full results of the study are documented in Omondi *et al* (2000).

Multidisciplinary research largely draws on participatory research methods. Participatory research requires a holistic approach to issues, an essential requirement in multidisciplinary research. When people of different specialisations work together they need to use techniques that will enable each member to learn the predisposition of other members in the group. For example, a physical scientist needs to understand the perceptions of a social scientist. Training is therefore an indispensable pre-requisite, if a co-operative consensus is to be built among all stakeholders/ participants in a *win-win* atmosphere. Also, both multidisciplinary and participatory research approaches require resources, time and energy. Without proper conceptualisation of these issues a multidisciplinary research project will face severe shortcomings as it progresses.

Tourism and the Environment was a 2 year research project (1996-1998) funded by the International Development Research Centre (IDRC) of Canada, through the School of Environmental Studies of Moi University – Eldoret, Kenya. The overall goal was to assess the negative and positive economic, environmental, and social-cultural impacts of tourism in Kenya. One of the main areas of interest was the perception of stakeholders in the industry, particularly local (host) communities.

The project brought together professionals from five main disciplines:

- Biological sciences
- Economics
- Geography (planning and resource management)
- Environmental sciences
- Film Production

The team comprised four principal researchers, four graduate student researchers, one film producer (plus crew: cameramen, sound/lighting, editors etc), one media communications expert, two drivers and over seven field assistants. Each principal researcher had one student to work with.

I joined the project in May 1998 as a educational communications expert to provide technical advice for the documentary component of the project. The video documentary was a consummation of all four major components. My role was to translate the research findings into a mode suitable to present results of the study in a 30-minute educational video. I was therefore involved in collecting data through formal and informal interviews and observations, so as to get a clear picture of the project as a whole.

Multidisciplinarity and PLA

Multidisciplinarity, as described in the *Encyclopaedia of World Problems and Human Potential*,

is a variety of disciplines, presented within the same setting, but without making explicit possible relationships between them. From a systems point of view, the successive steps of co-operation and co-ordination between disciplines lead to the definition of the organisational principle for a single-level multi-goal, hierarchical system, without co-operation between the parts.

In a multidisciplinary team each member maintains their faculty identity without necessarily bringing together skills and knowledge from other fields since relationships between individual traditional disciplines are not well defined. Members tend to contribute from their own specialisation rather than benefit from the totality of the team as a whole, yet we know that the simple sum of parts is not equal to the whole. Each member has covert goals to achieve besides the overall overt goal of the project and thus dominance of certain “prestigious” fields is not uncommon in spite of the fact that they should be working together on a common problem.

The task of team building tends to concentrate around co-operation rather than the integration of concepts. This can lead to the results of the same study having different angles/ treatment when reported in the literature of each discipline involved.

PLA takes this a step further. Participants are encouraged to think in, and understand, each other's assumptions. It is a step towards interdisciplinarity, a complex concept that faces challenges from established discipline concepts, vocabulary and limited perspectives. Everyday issues

encompass several disciplines in a holistic manner that makes it difficult to pin-point one discipline we could claim to solve any single problem.

Local people for instance do not consciously employ any particular discipline in solving a community problem. They instead have well developed trust and respect for one another's knowledge and skills, appreciating their differences but realising the strength of understanding one another when working together. Perhaps the worst blow they suffer is from the specialisation of development workers/ researchers who have a tendency to inhibit rather than contribute to the richness of the solution sought.

Multidisciplinarity in the context of PLA tries to break boundaries between disciplines by opening avenues of "natural" dialogue by providing a common language for all team members. Whereas transdisciplinarity (fusion of disciplines) is far from being the norm in action research, we believe that multidisciplinarity in the context of PLA is a big stride forward. Policy makers must have the ability to digest information from various sources and distil a framework within which future action will be based (this is the norm rather than an exception). There is also the need for team members to learn from each other. Transferring methods, knowledge and skills between disciplines can be quite challenging for members within a purely multidisciplinary team. Such experiences can however provide deeper reflections on the limitations of commonly held methodologies. It does not imply that we abandon our own fields but requires us to use our knowledge while learning enough about other areas sufficient for us to function in a field different from our own. However, making this concept acceptable to 'professionals' of the trade is easier said than done.

Some of the challenges we faced as a team are discussed here. They are selected examples of the challenges that would be typical in a multidisciplinary research project in the context of PLA.

The Eight Lessons

Lesson 1: Defining who is a Stakeholder

Who is a local? We found that host communities resented us talking to people they considered to be outsiders, such as when we happened to interview a migrant resident whom the host community had accepted for the crucial role of providing services to them, but did not qualify to be their spokesperson. As an outsider it is very difficult to distinguish between stakeholders without the help/ expertise of the local people/ community. Even once you have identified these it then becomes difficult to know how to solicit views and involve the participation of each category without jeopardising your mission. In some communities the difference is so harsh that you cannot get members of two communities/ clans sitting at the same table.

In a pure multidisciplinary approach, the choice of informants is based on each discipline's methodology with

input from the team. However, we found that we had to adopt participatory methods to select people in the research area as key informants using informal unstructured interviews to discover the opinion leaders, experts of certain aspects, and so on. Informal interviews were held with the local people using the field assistants to interpret language as well as meaning of concepts/ geographical definitions etc. We identified field assistants who introduced us to the village leaders. This enabled us to gain faster acceptance among local leaders. Often it was the village elder that recommended a reliable person to serve as the field assistant. At one place in Namanga-Amboseli area we chose a young man to direct us to the Manyattas of the Maasai but a local shopkeeper raised his concern over the reliability of our would-be guide. We later discovered that the villagers in that area did not trust the young man due to his past record.

We found that host communities complained that foreigners had effectively taken what was theirs. The study showed that host communities rarely got employed in supervisory levels at the lodges, hotels, reserves, parks and museums. Locals got positions such as 'regalia' porters, dancers, or to do junior clerical and menial work. They also complained that they were not involved in policy formulation, and that the industry exploited their culture without fair compensation, leading to the neglect of their indigenous resource conservation practices – yet for ages they felt they had co-existed with their environment in a more sustainable manner than could currently be claimed.

As discussions proceeded more people were willing, and even volunteering, to talk to us. This was evident in all the study areas. But before this, when we had picked on non-representative informants, the rest of the local people tended to stay away.

Lesson 2: "Specialised Ears"

Multidisciplinary teamwork in the PLA context requires that team members understand one another's concepts and fields of work. At the beginning it was quite difficult for the team to understand each other due to their training/ professional background. Each professional had well treasured, justifiable ways of doing things. The physical scientists found the methodology of the social scientists to be odd and vice versa. During a workshop held in Mombasa to discuss the findings of the study, participants demanded methodologies they were familiar with, as though their own fields were under threat. In addition, the funding agency had imposed a reporting format which hindered the team's freedom to present the results innovatively.

"Specialised ears" can be overcome if participatory methods are used from the start of the team's formation. The 'talk about your field' approach relaxed the team and provided an opportunity to learn what each person thought of the task ahead. One-to-one discussions of methodological approaches and concept definitions were used throughout the project; for example, another team member accompanying the biologist to collect specimens,

and then to see and discuss the results together in a non-disciplinary way while relaxing over a snack etc. This gave us the opportunity to integrate the results into one body, and thus move a step towards interdisciplinarity. However, this was the toughest task to achieve.

Lesson 3: Leadership Issues

Traditional management styles make it difficult, if not impossible, for a junior worker to supervise his/her senior. In a multidisciplinary project the choice of a junior member as the leader of the group can have repercussions when it comes to decision-making at the executive level. However, we trained ourselves to try to overcome our differences and instead work as a family. The project leader was chosen not on seniority but based on a consensus developed within the team. We selected a person with a cross-cutting background, who possessed sufficient initiative to be creative and provide leadership. No leadership wrangles were experienced.

This did not mean that we did not experience problems when incorporating temporary members or during our fieldwork. Locals felt '*intimidated*' during the first stages until after the ice had been broken. With peers, there was the problem of '*specialised ears*' interfering whenever a colleague thought that s/he was smarter due to age, area of specialisation, better pay or affiliation. Other problems were experienced between management-administration and the team.

Leadership/ ownership issues can greatly discredit a project. It is best to set aside sufficient time and resources to build up a team prior to starting work. Games, interviews between experts and role-playing, plus democratically choosing a leader need to be taken into account at each stage. Trust and co-operation enhance the integrity of a team more than leadership based on seniority. Nevertheless the involvement of senior management is an element that requires close attention if long-term support for the project is expected.

Lesson 4: Changes in time and economy

During the project the Kenyan economy underwent a drastic decline that saw a depreciation in the local currency. Inflation caused our budget line to increase far beyond the project limits. Regarding time we found out that stakeholders held different attitudes and perceptions depending on the performance in the industry; slump versus boom, and low versus peak season. Pastoral communities moved across national borders in search of pasture and this also affected their perceptions due to spatial and temporal changes.

Time changes also meant changes in staff and administrators/ policies. Changes in university administration somehow impinged on the project. Three of the founding principal researchers had to leave for one reason or another. This derailed the project's timetable by over one year to the year 2000 instead of 1998.

This suggests that multi-disciplinary teams in the PLA context should not see themselves as static systems. They need to devise ways to deal with changes so that they become part of the learning process of the group. The PLA team needs to initiate new members into its way of thinking and doing things. This can be a slow and energy-consuming process. Involving key decision-makers and developing mechanisms to sense signs of stress and change, are key factors to consider in any team work. Personnel changes can be effectively dealt with by creating an atmosphere where the new team member can quickly feel comfortable and the old team members can see the benefits of a new member's potential contribution. This either requires a good facilitator, or solid participatory skills within the membership to resolve these problems.

Lesson 5: Time clashes

It was not always easy to bring the team together particularly with senior members who had multiple duties. It had been agreed that at least the principal researchers would go out together in the field as a team using one vehicle. However, our schedules conflicted severely, due to normal obligations coming first, and because we worked in different departments and institutions. Opportunity costs seemed to interfere with the schedules of the project.

Participatory methods helped to determine the times when it was prudent to do certain activities, taking into account the workloads of both the team and the respondents in the field. A team needs to agree on a process which allows all members to feel they have an equal part in the project even if they cannot always be physically present. Communication channels must be devised and agreed upon in advance so that information is available to all members. Attention must be paid to the stresses that are inherent in the irregularity of the team functioning as it is hard to predict events due to these uncertainties within the team.

Lesson 6: Need for regular meetings/ briefing

We realised that whenever we met regularly to review our work and map out strategies for the next day we enjoyed every bit of our work, especially when we were all together in the field. But when we went back to our stations it became difficult to meet or to make certain deadlines. At times delays resulted in increased costs. For example, we received some suggestions for further changes to the documentary, after video editing work had been completed in a hired audio-visual studio. Going back to the studio required a new contract and additional payment.

This problem had been successfully addressed earlier when the team met together twice for a preview of the documentary and provided an opportunity for spontaneous responses. Throughout the preview I took notes of comments made, even where there was a simple sigh or dead silence, like during one scene where a couple of lions were mating. It turned out that this scene had not been well received at both previews and it proved one of the most difficult to talk about.

A team needs ways of dealing with changes if they occur. To make important decisions quickly, it requires a team leader with good facilitation skills to guide the group to a decision or through a decision-making process, while being sensitive to, and able to resolve, signs of stress.

Lesson 7: Delegation issues

Bureaucratic red tape often caused delays. Even after the difficulties of assembling the team to work in the field, more time was wasted dealing with technical matters. It seemed that when controlled by a centralisation of power, the system became too slow for effective and efficient teamwork. For instance, to avoid delays, we decided to have a retreat to write the final report. However, administrative problems prevented us from meeting in time.

Using participatory methods to enhance the project reviewing process can determine areas of weakness that require adjustment to ensure deadlines are met, and areas of strength to be reinforced, so that experiences can be applied elsewhere. Involving senior management from the project conceptualisation to implementation could include a series of brainstorming sessions where management becomes part and parcel of the process, and therefore more likely to be sympathetic to granting requests later. Participatory methods help ensure that all stakeholders are aware that they have a responsibility, towards supporting the whole project. When a person feels part of a process it is more likely that s/he will give support. We successfully involved all stakeholders during the project launch, inviting each to give their views at a brainstorming roundtable in Kakamega. For the second round, at the Mombasa workshop, preliminary results were presented for participants to critique. Both meetings were very fruitful, although a continuous appraisal system that involved in-house stakeholders from the funding organisation and the executing institution would have been even more beneficial.

Lesson 8: Personal gain vs group objectives

Due to the multidisciplinary participatory nature of the study it was agreed that the team shared their observations and findings openly. This helped to build the team and overcome obstacles in the field and in reporting. Conflicts of interest were however noticed whenever we involved a commercial partner, or contractor, who would then take advantage of the openness in the group for personal gain. Those commercial partners who knew the budget line always tried to spend the maximum the budget would allow. Since the team used an *open-book* management style of doing things (discussing with all parties and giving all necessary information including the estimated budgets) these partners used such information to tailor their costs so as to gain maximum profit from their assignments, often by over-quotation. This would not happen if the contractor did not have known budget allocations.

Participatory methods help members see their position in the whole process. Costs and benefits can be seen in a

vivid way that can then be used to enter into a contract. Our weakness was in incorporating new members into our system of working. Rather than behave like technocrats when seeking for collaborators, it would have been better to be open from the beginning. We had used technical methods to hire commercial partners due to the institutional regulations involved in funding and executing the project. So when they joined the team they came expecting to make a profit. Telling them how much was available sounded to them like a strategy for profiteering rather than as a way to trust each other. I believe participatory multidisciplinary approaches would put aside such personal interests and create an atmosphere of trust.

Conclusion

There is a need to clearly define and identify the host community for your work, and any other stakeholders well in advance of the project. It is true that host communities have long felt left out of setting development policies and agendas. Involving them is however not sufficient until the local expertise is fairly developed. This means that participatory methods should incorporate training aimed at developing the participants' different roles and/or levels.

Delegating responsibility is an essential attribute to the success of multidisciplinary projects and participatory research. This largely depends on how much you are willing to invest in human resource development such as developing local expertise and delegating responsibilities.

To succeed in a participatory session, the choice of time is crucial to ensure that opportunity costs are minimised. Participatory approaches can be used to determine this. Personal gain must not override group objectives; ways to clarify and to resolve conflicts of this nature need to be arranged. The team should be alert and ready to diffuse such detrimental conflicts. Professionals should be trained to learn to think in holistic terms rather than using traditional faculties they were trained to think in. This helps to overcome problems of seniority/ inferiority within a team.

References:

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