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The Challenges and Benefits of Employing a Mobile Research Fellow to Facilitate Team Work on a Large, Interdisciplinary, Multi-sited Project

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Abstract

Over the last few years research funding has increasingly moved in favour of large, multi-partner, interdisciplinary and multi-site research projects. This paper explores the benefits and challenges of employing a full-time research fellow to work across multiple fieldsites, with all the local research teams, on an international, interdisciplinary project. The article shows how such a 'floating' research fellow can play a valuable role in facilitating communication between research teams and project leaders, as well as in building capacity and introducing disciplinary specific skills. It also highlights some key challenges including problems of language and translation, and the complex power relations within which such a researcher is inevitably embedded. This paper contributes to the development of strategies for collaborative projects to facilitate coordination between research teams. It is based on a five-site, cross-cultural project, involving nine partners with a mixture of natural and social science backgrounds, researching aquatic resource use, rural livelihoods, work and education in China, Vietnam and India.

Introduction

In recent years it has become increasingly common for research to be conducted in large, often interdisciplinary teams, to facilitate multi-site projects (Barry et al., 1999; Wasser and Bresler, 1996; Rogers-Dillon, 2005) including researchers from several institutions (von Tunzelmann et al., 2003). Such projects are likely to increase at a time of funding cuts as they can offer greater 'value for money'. Similarly, with increased emphasis on 'impact' (ESRC, 2013), large multi-sited comparative studies can have more significant policy implications than single site small-scale projects (Hunt et al., 2011).

Although team research is perhaps less efficient and more expensive than research conducted on an individual basis (Wasser and Bresler, 1996; Hall et al., 2005), these issues are outweighed by a number of benefits. A team which is heterogeneous in terms of discipline, expertise and methodological experience can offer new skills and insights allowing a higher level of conceptual thinking and more effective analytical capacity (Wasser and Bresler, 1996; Richards, 1999). Recently some academics have begun to reflect on the challenges of working within large-scale research initiatives (such as Barry et al. 1999; Hunt et al., 2011; Thomas et al., 2000). For example, Rogers-Dillon

(2005) discusses the group dynamics and unequal power relations present within a hierarchical research team exploring racial and class inequalities in childhoods in the USA, with a focus on the experiences of research assistants. Thus as Younglove-Webb et al. (1999: 427) point out: "although multidisciplinary research teams are well equipped to attack complex problems, actually succeeding in such endeavors is not easy."

While there is increasing acknowledgement of the challenges of managing heterogeneous research teams, there are a number of broad gaps in the literature. When research involves *multiple* research teams at separate institutions, there is a need to consider how lead researchers can ensure their team members are working in synchrony with partners towards common goals, particularly for comparative work when teams are based in different countries. This paper focuses on one measure which was taken by project leaders to address some of the dilemmas involved in multi-sited, multi-partner research: *the employment of a full-time research fellow* to work with all of the teams throughout the key segments of the project cycle. While the use of full-time research fellows is commonplace, the literature is yet to systematically explore the benefits and drawbacks of employing one, particularly in the context of collaborative international and cross-cultural research.

After introducing the project, testimonies by team members are used to show that a full-time research fellow can play a valuable role in enhancing communication between local teams and project leaders, as well as developing the skills of junior researchers and introducing disciplinary specific skills. The paper addresses some challenges including language, translation and complex power relations before outlining some recommendations for employing a research fellow for large-scale research initiatives.

Project background and methods

The international five year research project, HighARCS, on which this paper is based, investigated aquatic resource use in five upland watersheds in Vietnam, China and India (see http://www.wraptoolkit.org/) to better understand patterns of intergenerational change regarding education, work and migration for rural communities (see Punch and Sugden, 2013; Sugden and Punch, Forthcoming 2014). Sugden was the project research fellow but as this paper has two authors, the third person is used when referring to his personal experiences.

Phase 1 of the research was a situational analysis of the socio-economic and biophysical characteristics of each fieldsite. Phase 2 incorporated biodiversity mapping, and an institutional assessment as well as a livelihoods analysis, which is where the research fellow's primary responsibilities lay. This included a quantitative social survey with 90 households and 40 focus groups with men, women, girls and boys across the sites. The livelihoods, institutional and biodiversity research culminated in the production and implementation of a series of interdisciplinary action plans in phase 3 of the project.

The project leadership was a steering group consisting of senior scholars from four research institutions in Europe and one in the Philippines. The bulk of the fieldwork was carried out by four in-country teams in India, Vietnam and China, with the steering group making periodic visits initially for training and research design, and later to guide on-going work. Although in-country research teams had some autonomy to shape the research agenda in accordance with local needs, the steering group played an overall coordinating role, with individual members leading work packages related to their area of expertise, such as livelihoods, aquatic biology, or institutional analysis. Both the steering group and in-country teams were divided by disciplinary specialisation, with representation of social and natural scientists.

The decision to appoint a research fellow initially arose because Punch was the partner responsible for ensuring that gender and age were mainstreamed throughout the project rather than addressed in a more tokenistic manner. This was challenging as a disproportionate section of the overall team were from a natural science background. Most of the in-country researchers were not familiar with conducting qualitative research with women, children and young people, as their physical science work tended to use quantitative approaches usually only speaking with adult male heads of households. Furthermore, given that Punch had a UK-based lecturing post, she was aware that intermittent field visits would be insufficient to support the collection of qualitative data based on gendered and generational perspectives. Thus she spent the majority of her budget employing a full-time researcher for two years during phase 2. The intention was that the research fellow would be mostly in the field working with the in-country teams focusing on rural work, education and livelihoods. It later emerged that the research fellow had a major communication role between the steering group and in-country research teams and was a key facilitator who ensured that the research remained on a common course.

Given the demands that such a role would entail, it was important to be transparent about such challenges during the recruitment process, being clear about the long periods in the field and the requirement of moving between four countries (UK, China, Vietnam and India) as well as the 'uncertainties and hardships' (Rogers-Dillon, 2005: 445) of conducting fieldwork across five rural fieldsites. The real difficulties involved in such a post were illustrated when two of the short-listed candidates withdrew before the interview. It was necessary to appoint at post-doctoral level because of the autonomy required in the field, but with hindsight a greater part of the budget should have been allocated to cover the extensive fieldwork costs.

This paper is based on 17 semi-structured, individual interviews conducted by Punch with members of the steering group and in-country teams during an international team meeting in China half way through the project. The aim was to encourage critical reflection on issues that the team felt could have been improved throughout the research process to enable some of the challenges to be addressed during the life of the project [1]. At the end of the project, team members will be invited to reflect on

subsequent issues that arise and these will be addressed in a follow-up paper. It should also be noted that there is likely to be some bias as respondents may have been wary of criticising the research fellow to the colleague conducting the interview. In order to minimise this bias, anonymous feedback sheets were also collected in a sealed box during the meeting to enable more sensitive issues to be raised. Furthermore, interviewees were assured that Sugden would only see the anonymised coded themes emerging from the interviews rather than full transcripts, to which only Punch would have access.

To supplement the detailed testimonies from team members, the research fellow has used his own personal reflections, including notes from his field diary and emails to Punch during periods in Asia as well as a document of personal methodological reflections which was created for circulation amongst team members at the end of his first year of employment. Hence, whilst this paper draws together these different data sources, it is acknowledged that it is written largely from the perspective of one of the key social science partners of the project based at the University of Stirling.

Research fellow role as cross-team facilitator and communicator

A key role that a research fellow can fulfil is to act as an intermediary between project coordinators (the steering group) and the multiple teams conducting research on the ground. As mentioned, this had not been the original purpose of the post but this additional 'steering' role was suggested by the teams at a project meeting before the fellow's work began. While teams had some autonomy, it was still necessary to focus on the key project objectives, generate comparable data and produce the proposed deliverables. The steering group endeavoured to ensure teams followed a common direction but this was by no means straightforward considering the geographical distance between the institutions of the steering group (Denmark, UK and the Philippines) and those where the research teams were based (China, Vietnam and India). Furthermore, the distance between the teams within Asia impeded any horizontal transfer of ideas and sharing of experiences.

The entire team was only brought together for annual meetings, while in the meantime the primary mechanism of communication was through email and periodic visits to Asia. Sometimes steering group members would visit in-country teams alone or in small groups, spending a few days in the field and some days working on analysis and report writing. Members would offer support in accordance with their area of expertise and discuss research methodology. While these visits were effective, communication was more limited between visits. Email was useful to some degree, but not all in-country teams had the same access to the internet – a reality of the global digital divide (Martell, 2010) – while busy schedules on both sides meant responses were sometimes slow. The speed and quality of internet connections also meant that Skype was impractical other than amongst the largely European steering group.

There were a number of implications of this limited contact. Firstly, during initial workshops, in-country teams played a key role in setting the 'ground rules' and methods. However, the limited communication with the steering group impeded incountry teams from full participation in the continued reworking of common goals and objectives, and made it more difficult for teams to offer critical feedback. There was therefore a risk of replicating neo-colonial relations whereby the European based funders set the agenda for majority world based beneficiaries (Tuhiwai Smith, 2012).

Secondly, on a more practical level, because teams could not always gain support and guidance from the steering group on a continuous basis, there was an amplified risk that research strategies and outputs would begin to diverge. Given that communication was not in synchrony with the day by day research process, in-country teams would often be obliged to delay or postpone work, or to find their own solutions to problems, sometimes going against project protocol. There were difficulties in keeping track with project progress:

Even if people tell you there's progress, you don't necessarily get the evidence of it at the time and then you have your annual-ish meeting and that's when you really find out what the progress has or hasn't been. So there's quite a big delay in actually finding out what's happening. (Interview 6, Aug 2011)

The challenges of communication were heightened as all of the steering group members and many of the in-country team members were part-time, with numerous other commitments. Balancing multiple commitments is aggravated in large research teams where responsibility to produce results is diluted within a large group of researchers (Wasser and Bresler, 1996). There was sentiment amongst some team members that there should be a member of the steering group that is full-time and can offer continuous guidance to in-country teams. In reality this would be difficult to accomplish for senior researchers due to the cost, and because of lecturing responsibilities and involvement in other projects.

Nevertheless, employing a full-time junior research fellow at a postdoctoral level who could devote 100% of his time to the project was one way to address this problem. He was able to play a key role in maintaining a common direction in the research by facilitating continuous communication between the in-country partners and steering group, and updating both with each others' progress via email. The research fellow had time to spend extended periods working collaboratively with the in-country teams. Three team members also noted in interviews that he was able to reply more promptly to emails between teams, whether they were requesting support and guidance, or updates on progress (he was copied into all communications).

The research fellow had time to keep track of the project progress and offer continuous input while others grappled with competing commitments:

The other pro is that he's got time. That means he's available at all times. And that's one of the reasons why he has been able to be the one who always responds, and he's been able to call the shots many times and he's sort of... been able to push others. Because he's constantly thinking about this. ... I mean basically he's full-time. And for most of the rest of us, that has been the problem, this is not, even though it's a major thing, it's not the only major thing. And every time you do the other things you forget a little bit about HighARCS and your ideas, and some of the information and who has written what. (Interview 9, Aug 2011)

The utility of the research fellow in playing this cross-team facilitation role was illustrated in the development of research tools. The multi-site project required standardised methods in order to make effective cross-site comparisons. For example, with regards to the livelihoods part of the project for which the research fellow was employed, a questionnaire and focus group schedules were developed during the third round of project workshops. These tools were piloted in the field by the research fellow and members of the Vietnam team shortly after he joined the project. They were subsequently circulated to the other partners in China and India, and to the steering group, for comments. The feedback was addressed quickly by the research fellow, and a final schedule was produced within a few weeks, allowing other teams to get started with the research.

During visits to the Chinese and Indian partner institutions in the following months, the research fellow and in-country team members were able to conduct fieldwork together using these same tools, by which time the research fellow was aware of some of the 'problematic questions' and the best way to address them. While teams used these tools, the research fellow was able to act as a crucial 'go-between', raising problems and concerns in-country team members had and communicating these with the steering group, while also sharing the experiences of the other in-country teams:

He's helped a lot in the communication side, so providing a link between what's happening in the sites and a more permanent, you know, conduit, channelling communication to the field sites at particular times. So he has certainly followed up well on the livelihoods aspects, but in communication for what's happening in the other things as well... alerting people to potential problems with work packages or disciplines. (Interview 6, Aug 2011)

Another reason that the research fellow was able to help keep the project on a common track was that he was the only member of the project team who spent long periods of time in all five of the fieldsites, working with all the in-country teams and with the steering group. During the analysis of the work, education and livelihoods data, he was able to identify a greater number of relevant differences and similarities between sites than would be the case during the shorter visits by the steering group. When interesting issues arose in one of the sites which were not covered in survey or focus group

schedules, these could be explored through further questions at other sites later in the year, enhancing the comparative quality of the project:

I think it's good because like the work package leader, they don't have time to travel to understand more about the system, but he has spent time at different sites and sees the performance, so he have the big view, and the deep view also about different things, about local study. So when we are talking about this, he can know it all and he can help the local team to explain more. (Interview 5, Aug 2011)

His extended presence at all the sites also facilitated the standardisation of data. Given the difficulties of communicating regularly with other team members, data was at times generated in different formats, such as different units of measurement or different emphasis on certain questions. Through continuous cross-checking of data as it was collected, and extended discussion of the results, he was able to identify such differences, and help teams adapt data (e.g. standardising units) or fill in 'gaps', so more effective cross-site comparisons could be made. In the process of playing this facilitating role, he could also gain a good understanding of the needs of different teams, and where they required more input:

...he has managed to get comparison because he has the personal experience. So something I cannot answer you, like compare the three teams, how they organise, what they are experts in and what expertise they have and what difficulties there are. So he can compare much better. (Interview 6, Aug 2011)

Although the research fellow did play an important role in facilitating the multiple teams in following a common direction, this was not always straightforward. Rather than short regular visits to each team, the research fellow stayed for two extended 2-3 month periods at each institute in the first and second year of his employment. An inevitable consequence was that he was with each team at different stages of the research process. For example, he was present in Vietnam during the core livelihood phase in the Spring 2010, while on arrival in China the team had already completed the bulk of that data collection. This meant he was not able to play his facilitating role in China during core phases of their fieldwork.

Some team members felt that the research fellow was not a substitute for greater steering group input, and support from the leaders of each discipline specific work package was sought. One team member attested:

...our team thinks that we need more voice from work package leader, more frequency contact like monitoring, and comment for us in time... not too late! (Interview 10, Aug 2011)

A further impediment to the research fellow facilitating coordination between the teams and the maintenance of direction was that he was not always able to consult the steering group when required to relay the in-country team's enquiries or request

assistance for a problem they were encountering. This made the research fellow himself appreciate some of the difficulties that teams faced as he recalled during his interview with Punch:

There were big problems with communication. When I had a kind of crisis moment in the field, particularly when I was separated from the steering group who are, lets face it, the kind of ultimate authority in the project... [laugh] it was always difficult in a crisis situation to get somebody to reply and it would often take like a week to get a reply from someone in the steering group to find out what is the best way around it. It is frustrating. Often by the time you hear back you have moved on and found your own solution. (Interview 17, Aug 2011)

Rogers-Dillon (2005: 443) also points out that while junior researchers technically feel they should rely on the project leaders' judgement to address issues encountered, this is difficult if problems emerge 'spontaneously' in the field.

Finally, there were challenges with language, making it more difficult for the research fellow to get an effective grasp as to what kind of data was being produced. Although competent in one of the local languages, he was dependent on a translator for the remainder of the fieldwork, an inevitable consequence of cross-country comparative research. This increased the burden for the in-country teams, as difficulties translating could cause frustration on their side:

Sometimes we would go to the villages and maybe the research fellow would want to know something and he will tell me and I will use the local language to the people, and they will answer me and tell me these things, and I can't translate it into English. This is very difficult for me. It takes me so much time to think how to tell this meaning to the research fellow ... the big problem is language. (Interview 15, Aug 2011)

Translation was easier when the research fellow was on his own in the field with a research assistant, allowing a more exploratory approach. However, when accompanying a larger group of researchers, they often felt under pressure by their in-country project leaders to collect as much data as possible on the prescribed topics, and translation inevitably slowed down the interview process. These tensions were noted:

I feel the village entry has been far too fast... It is very difficult to translate. Whenever the translator is translating, the interviewer immediately goes on to the next question. This makes it very hard to probe on interesting issues afterwards as the conversation has already moved on. It makes the interview very messy. I try to find a natural break, and then apologise to ask if they can let me know more about the issue which was discussed earlier. (Field diary, May 2010)

Employing someone who acts as a full-time translator for the research fellow might have helped, allowing him to conduct separate and more exploratory interviews, although there would have been budget constraints. An alternative solution for two field trips was that a post-graduate student accompanied him to facilitate data collection and translation. This opened up opportunities for cross-learning on both sides, as 'communicative competence' is also linked to 'intercultural competence' where researchers "need to be 'aware' of other people's 'cultures' as well as their own" (Byram et al., 2013: 251).

Translation also became an issue during the analysis of qualitative data. Hunt et al. (2011) indicate that managing vast amounts of written data is a significant challenge for large-scale multi-sited qualitative studies. Richards (1999) further warns of a 'distancing' of project leaders from the actual data during team research when it is collected by teams of field workers. In the context of this project, there was the added burden that many of the interview transcripts and field notes were in local languages. While in India it was common for data to be collected in English, in the other two countries data were collected almost entirely in Mandarin and Vietnamese. The incountry teams analysed the local data and subsequently wrote the project reports in English. This may have led to some issues being over-emphasised or possibly overlooked as different teams conducted the analysis in each country.

It also meant that it was difficult for the research fellow to get a full understanding of where gaps were in the generated data. This posed a considerable challenge as a key role of the research fellow was to keep the steering group and other teams in touch with the kind of data being produced. Translation of all the team's field notes and transcripts was simply impractical:

Perhaps the team could have done more translation for me, but I guess it is just too difficult given the language barrier and the vast amount of time this would have taken. Also, how do you decide what to translate and what not to translate? (Email to Punch, 10 June 2010)

Nevertheless, through direct working with all the teams, the research fellow was at least able to generate a selection of primary data on key issues, particularly relating to gender and generation. He carried out a series of the standardised focus groups and interviews himself in each site, so as to have a sample of raw data on age, gender, work and education – a field of expertise which was lacking across all project teams. This data source was valuable as it could be quickly shared with other teams and the steering group to facilitate comparison between sites and identify areas where more information was needed before data was developed for reports or publications. It could be also used to cross check the validity of the data being collected which would otherwise only be available to the steering group once it had already been written up as a finished output.

Facilitating the sharing of interdisciplinary skills

The research fellow was also useful in facilitating the diffusion of methodological skills and academic knowledge within the multiple teams. This occurred firstly through offering support in developing the skills of junior researchers, a positive output which will far outlive the project. Most in-country teams employed a number of Bachelors and Masters level students for data collection and analysis. Given that the leaders of incountry teams were frequently, like the steering group, only part-time on the project, these research assistants were often the primary field researchers, and therefore would work directly with the research fellow during field visits. Working in close contact with emerging scholars of a similar age was valuable for the research fellow himself in developing cross-cultural friendships, and learning about local culture and society, something particularly valuable during long isolated stays in the field [2]. However, given the diverse level of social science skills, the research fellow who was trained in a very different institutional context was also able to familiarise some of the less experienced research assistants with a new range of qualitative methods:

For us, he's sort of like the guider, like for this activity we're supposed to do and any difficulty, he can help. For us working in the field site it is no problem, but we have difficulty in data analyses and also writing up and building the report, and actually we could have more of his help in the analysis. (Interview 5, Aug 2011)

The second process through which the research fellow had a knowledge and skills diffusion role was in offering discipline specific expertise, particularly in relation to mainstreaming gender and age. The disciplinary specialisations of each in-country team was variable, with some over-represented by natural scientists. Even within social science, there were variations linked to the prevailing academic culture. While in India for example, there was a more established culture of qualitative research, in Vietnam social research has been traditionally more focussed on quantitative, positivist methods (Bonnin, 2010). In this cross-cultural context, the utility of a research fellow to attempt to 'level out' disciplinary differences and promote a common set of research tools became apparent.

Those from a natural science or quantitative social science background appreciated the research fellow's support in data collection, analysis and report writing for the livelihoods' work package. Furthermore, few team members were familiar with the age dimensions of livelihood research, which is a relatively new field (Ansell, 2005; Wells, 2009) and requires familiarity with particular qualitative methods (Punch, 2002; Tisdall et al., 2009). The research fellow also sought to use his qualitative training to encourage greater reflexivity (Punch, 2012; Rose, 1997) than those from natural science or quantitative social science backgrounds were accustomed to. He played an important role in initiating team meetings to discuss the strengths and weaknesses of their methodology, and to reflect on how personal and disciplinary differences were affecting the research process. For example, the debrief sessions in the field revealed the importance of keeping fieldnotes and incorporating some participant observation which resulted in several of the researchers accompanying households on fishing trips.

Awareness of internal differences through continued reflexivity allowed research teams to better refine the methodology, deal with potential criticism, and provide a richer analysis of data (see also Barry et al., 1999).

There were, however, a number of challenges to using a research fellow to fill in skills and knowledge gaps as there was a limit to how successful a single scholar could be in mainstreaming qualitative social science methods. A challenge of interdisciplinary research is that disciplinary differences do not only occur at the level of the topic under analysis. There are fundamental differences in worldview, and how data is conceptualised (Wasser and Bresler, 1996). Reich and Reich (2006) warn against 'tokenism', whereby members of one discipline are inserted into a research team dominated by members of a different discipline. This can be ineffective unless there is a commitment to open disciplinary boundaries, something which was beyond the capacity of the research fellow to influence. Nevertheless, while he agreed that it was more challenging to promote qualitative social science methods in some teams than others, he did find most natural scientists on the project supportive and open to new ideas. Furthermore, given that he was a co-writer for most of the team's reports, he was able to insert testimonies on livelihoods, gender and age based upon his own qualitative research in the field when the need arose.

Perhaps a more serious challenge was the research fellow's limited experience in natural science, an issue raised by four team respondents during interviews. This was not anticipated as a problem initially, as the team specifically sought a social scientist to mainstream gender and age – and it would have been very difficult to find an interdisciplinary specialist. There was frequently a tension between his role as a livelihoods specialist and 'all-round' facilitator. Sometimes he felt there was an expectation for him to help in-country members with parts of the project where he did not have expertise, such as the biodiversity field. He was able to offer some limited support to the natural scientists, particularly with tasks such as standardising reports but was not able to offer more specialist support:

He has allowed a common standard to be at least provided for the teams to use, and guidance. I think the only drawback from our perspective, is that he has limited species conservation knowledge and background and it would have been better for us if he had more of that expertise. (Interview 2, Aug 2011)

By only having a full-time research fellow representing qualitative social science, several team members noted that natural scientists on the project did not receive the same level of support for their areas of analysis such as biodiversity mapping. He spent considerable time enhancing the livelihoods' reports for each fieldsite, so in comparison, the biodiversity and policy reports were slightly less detailed. Another respondent suggested that the livelihoods' reports could have been more integrated with other parts of the project if the research fellow had had a natural science background. Aside from the risk of the project gaining a social science bias, the research

fellow himself felt that when he did attempt to support natural science teams, this detracted from his responsibilities to the qualitative livelihoods analysis. This was an interesting and unexpected tension which arose throughout the course of his employment.

Research fellow as 'neutral facilitator' or instrument of unequal power relations?

One significant challenge which should be borne in mind when employing a research fellow for a multi-team project is the complex power relations which will be inevitably present when working both for the steering group and in-country teams. The unequal power relations within research teams emerge from the differing capacity for individual team members to control how decisions are made, the outcome of decisions, and the allocation of resources (Reich and Reich, 2006). They can be grounded in one's rank within the University, affiliation to a 'dominant' discipline (Reich and Reich, 2006), or even one's race or class (Rogers-Dillon, 2005). Although the in-country teams had some degree of autonomy, there were still hierarchical power relations within the project. The steering group was directly accountable to the Europe based funders, and was obliged to encourage the teams to conform to a set of prescribed methodologies as set out in the original proposal. From the beginning this risked replicating neo-colonial majority world-minority world relationships (Tuhiwai Smith, 2012).

The research fellow held a very ambiguous position in the project hierarchy. He was accountable *both* to the leaders of in-country teams with whom he was working at the time, as well as to the steering group in Europe and the Philippines, and thus had to balance the concerns of both parties. While officially he had no 'authority' over the incountry teams, 'suggestions' were occasionally interpreted as orders, particularly as he was frequently associated with the steering group by default. For in-country teams therefore, there was occasionally a perception that the presence of an external researcher would undermine their local autonomy in the research process, particularly at the beginning of the project when his position in the project hierarchy was still unclear. For example, given the research fellow's different disciplinary background, his suggestions to improve the qualitative component of the fieldwork were often perceived by in-country teams as a newcomer imposing his authority and not respecting their own tried and tested methods.

These tensions were understandable, especially given that the research fellow was from a minority world university, and thus his efforts to give teams direction risked supporting the very neo-colonial academic relationships that the project leaders had tried to challenge. Furthermore, as the research fellow was younger than most of the incountry leaders, there was a risk that his perceived 'authority' would upset entrenched academic hierarchies based upon age, status and experience within the institution. Secondly, the research fellow joined the project a year after it had begun (for phase 2), and was therefore a relative 'outsider':

I came in late in the project so I wasn't there from the beginning. ... I was a latecomer who just appears from nowhere... people may raise questions as to why this person is out throwing his weight around as he has just turned up. So, I sort of parachuted in. (Interview 17, Aug 2011)

His position within the project might not have been questioned by some of the partners if he had been at the first steering group meeting. It was a constant challenge for the research fellow to maintain a balance between being a 'neutral' facilitator and acting as a representative for the steering group. One example of this tension relates to the use of standardised tools which were not always appropriate for all fieldsites, such as longitudinal logbooks for fishers to record weekly catches of different species. While this method proved effective in one site where fishers were generally literate and accustomed to collecting such data for the local government, it was very difficult to pursue this tool in the other four sites, particularly where literacy was lower. In-country teams were therefore unhappy with the continued need to use this method. The research fellow found himself in a difficult position as he could see the problems, but felt a responsibility to the steering group to ensure teams at least attempted to distribute logbooks. In addition, he was aware that the collection of longitudinal livelihood and biodiversity data was linked to one key project deliverable, bio-economic modelling, and failure to complete this may have affected the delivery of the next instalment of funding. This parallels a challenge for many research projects using large, often hierarchical teams: managing a tension between 'project protocol' and the personal judgement of researchers on the ground according to local contexts (Rogers-Dillon, 2005: 440). In this project, the research fellow was caught between an obligation to encourage standardisation of methods in line with his cross-team facilitator role, and being sympathetic to the local judgement of the in-country teams. By putting too much emphasis on the former role, the research fellow unintentionally supported initial perceptions that he was there to 'police' local researchers on behalf of the project leaders, although there were efforts by the steering group to reassure the teams this was not the case.

To some extent these tensions reflect Michael Lipsky's notion of the 'street level bureaucrat' (1980) where discretionary power and risk are simultaneously pushed down to the 'street level' research fellow but without the legitimate authority which the steering group enjoys. This gives rise to interesting issues about the nature of governance/leadership in large-scale projects and where responsibility actually lies. As with the street level bureaucrat, the role of the research fellow is 'intrinsically conflictual' (Lipsky, 1980: 25) as he can be torn between the different demands and expectations of the steering group and those faced in the field. The research fellow has to make adjustments and balance competing agendas whilst trying to resolve dilemmas as they arise, ultimately having a potentially considerable impact on the project outcomes.

Despite the risk of the research fellow reinforcing (real or perceived) unequal power relations through his association with the project leadership, he was still lower in the project hierarchy compared to the steering group. Sometimes teams were more comfortable consulting him when they were unhappy with the steering group agenda rather than directly speaking to project leaders. Thus the ambiguity of the research fellow's position was actually productive in some contexts, as he could play a mediating role. With reference to the logbooks example, the research fellow was able to inform the steering group of the problems, allowing them to develop an appropriate set of alternative methods to approach the bio-economic modelling deliverable.

Lessons learnt

There are a number of lessons which could increase the usefulness of a research fellow's input in future interdisciplinary, cross-site projects. Firstly, it may have been more effective if the research fellow's site visits were shorter but more regular, enabling potential problems to be identified earlier, while also giving each team an equal level of support for key phases of the research. It was more difficult for him to play a cross-site facilitator role when visiting teams for single extended spells. The primary challenge, however, was the budget and a key recommendation is that, at the application stage, project leaders ensure sufficient funds for extensive travel and fieldwork expenses. It is important to note, however, that additional travel between countries and sites would be most effective if it is coordinated with visits by steering group members. This would enable a research fellow to directly follow up on the recommendations of the project leaders as well as allowing a more efficient use of resources.

A second lesson was the need for clear terms of reference for the research fellow before working with each in-country team. O'Conner et al. (2003) suggest that researchers' roles and responsibilities should be explicit from the start of a project when momentum is highest. This was done at the beginning of the research fellow's employment verbally through consultations between the steering group and in-country teams. However, it was only during the second year of his employment that a written terms of reference was developed, outlining his expertise, his contribution and mutual expectations of his role. This helped to minimise requests for his support for fields he was not qualified to help.

To a lesser extent, the written terms of reference made it easier for the research fellow to mediate some of the complex power relations he was embroiled in. If his more neutral facilitator role had been clearer from the outset, the risk of him being perceived to be enforcing only the steering group's agenda may have been reduced. These sentiments declined in the second year of his employment, perhaps due to the formalisation of his role. This may also have been due to building up more personal relations over time as well as an acceptance that he was not there to assert his own agenda.

On a related note, employing the research fellow right from the beginning rather than one year into the project may also have reduced the likelihood that his role was misinterpreted. This would have given him a greater ownership of the project on a level field with the in-country teams and steering group, so he was not perceived to 'parachute' in and undermine existing structures of authority. Nevertheless, this latter option may not be practical given the considerable expense of employing a full-time researcher, particularly when the workload is likely to be low at the start; dominated by administrative activities and lengthy access negotiations. Furthermore, unless a potential research fellow was involved as a co-applicant before funding is secured, the time taken to recruit one would mean that he or she would inevitably have to start several months into the project cycle.

A third lesson was that given the interdisciplinary character of the project, it would have been highly beneficial if a research fellow representing the natural science side of the project was also employed. This would have meant that steering support was less biased towards the social sciences, and would have allowed the research fellow to spend more time on his core qualitative social science responsibilities. The considerable expense of employing a research fellow would have to be balanced against the particular needs of the project team in terms of existing sets of skills and the interdisciplinary needs of the project.

Conclusion

It has been shown that for large-scale, multi-team, international and interdisciplinary projects a full-time travelling research fellow can be a highly valuable tool to help maintain a common trajectory by playing an intermediary role, facilitating communication, enhancing the standardisation of methods, and contributing to capacity building. By spending time at all sites, a research fellow is well qualified to identify common research design problems as well as areas where more data is required. In addition, for interdisciplinary projects, a full-time research fellow can be employed to focus on particular strands of research, filling 'gaps' in the disciplinary specialisation of the research teams. This is crucial to enhance cross-site comparison, as it allows one researcher to get much closer to the data generated at each fieldsite.

It must be emphasised, however, that a full-time floating research fellow is not a catch all solution to meeting the complex demands of interdisciplinary, multi-partner projects. Being a facilitator is not always straightforward when teams can only be visited periodically, and inter-team communication remains a challenge. This is amplified when working in diverse institutional and cultural contexts across several countries. Furthermore, projects employing a research fellow will need to consider how they will overcome the barriers of language, and deal with teams having very different academic needs in terms of disciplinary specialisation. Finally, attention must be paid to the influence a research fellow has on already complex power relations, particularly as projects confront the realities of an 'academic division of labour', with minority world

based funders and management on the one hand, and a body of majority world ground level researchers on the other. He or she can play a mitigating role, but can also reinforce perceived inequalities, particularly if their role is misconstrued. Hiring a research fellow will only be successful if an appropriate candidate can be found with the required skills and competencies to handle such a demanding role. As well as relevant academic abilities, a range of personal attributes and skills are necessary including resilience, willingness to travel, intercultural sensitivity/competence, independence, patience, adaptability and flexibility. The skills of trust-building, intercultural communication and the facilitation of mutual learning should not be underestimated in order to assure better project outcomes. It is worth bearing in mind that not all qualitative researchers automatically possess these attributes for undertaking such a challenging role and the recruitment process should incorporate some difficult scenarios to assess these competencies.

At a time when large-scale comparative and international studies are becoming more common, it is more important than ever to ensure that projects retain a common direction, disciplinary differences are levelled out and communication between teams remains effective. For this a full-time research fellow can be invaluable, so long as they are inserted into projects with sensitivity, and project leaders are aware of the potential benefits and drawbacks as well as the cost implications and complex power relations this entails.

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Endnotes

- [1] Each interview transcript was kept anonymous, and pseudonyms were used when interviewees referred to other team members (these are also used in the quotes in this paper). European names were used to both avoid 'cultural stereotypes', and so as to not give evidence as to the nationality and team of the respondent. After conducting a thematic qualitative analysis of the transcribed interview data, a summary of the key issues which had emerged was distributed to all members of the project.
- [2] See Bonnin (2010) with reference to fieldwork in Northern Vietnam for more on the value of and dynamics of developing friendships with research assistants.