EXPLORING COLLABORATIVE RESEARCH METHODOLOGIES IN THE PURSUIT OF SUSTAINABLE FUTURES

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Abstract
This chapter makes a distinction between multidisciplinary and interdisciplinary research. The former employs disciplinary experts working in parallel whereas the latter involves continuous dialogue and interaction between experts throughout the research process. It is argued that interdisciplinary research is vital in the pursuit of more sustainable futures. This type of research requires partnerships and collaboration between all stakeholders, drawing on, for example, local community members, governmental representatives, non governmental organizations and research communities to shape and inform the research. Experience from studies conducted at an irrigation project on the Keta Lagoon in Ghana and reports of other research in the Middle East are used to illustrate the discussion.

This chapter focuses on the role of collaboration in the pursuit of more sustainable futures. It builds on and reinforces the argument presented by Howard in chapter ? on marine resources, where it is concluded that a broader, interdisciplinary understanding is required of the complex interactions between the many players and sectors involved in sustainable development. It starts by reflecting on the value of collaborative endeavour for researching sustainability and emphasises the particular value of interdisciplinary approaches. This type of research requires partnerships and collaboration between many stakeholders, including alliances beyond research institutions (with formal and informal institutions found in government, NGOs, the private sector and communities), as this chapter considers. Collaborative research is then examined within the specific context of community participation, which is widely viewed as fundamental to research focused on sustainable futures: the value and the potential limitations of participatory field methods are explored. Personal experience from studies conducted at an irrigation project on the Keta Lagoon in Ghana and elsewhere in Africa is used to illustrate the discussion. Links are also made to reports of similar research conducted in the Middle East. Development interventions can be notoriously unsustainable, being prone to failure and waste of resources. The examples presented show how participatory approaches can promote the sustainability of development interventions themselves.

Building interdisciplinary approaches to research in sustainable development

It is important to distinguish what is meant by *inter*disciplinarity, as opposed to *multi*disciplinarity. The two terms are often used interchangeably, but they are not the same: whereas multidisciplinarity involves different experts working in parallel, interdisciplinarity requires dialogue, interactions and integration across areas of expertise (Strathern 2005:82). This is a harder task and one less commonly achieved in practice. Kanbur (2002, see also Hume and Toye 2006) argues that interdisciplinarity requires deep integration of concepts and methodologies- it is a demanding approach to research because it is necessary to learn the logic of other disciplines and integrate with those logics, without compromising the standard of rigour in one's own discipline. Multidisciplinarity, by contrast, implies separate disciplinary research followed by efforts to achieve overall analytical synthesis. This avoids the risk of diluting the

conceptual and methodological standards of one's own discipline. It is consequently a less hazardous enterprise, but arguably lacks the full potential that interdisciplinary work offers for the creation of new understandings.

Hulme and Toye (2006, in the context of a discussion about cross-disciplinary[1] work in development research on poverty, inequality and wellbeing), note that there are strong incentives to stay within disciplinary boundaries, not least the single subject peer review which characterises university research assessment exercises in the UK and elsewhere. They also observe that the inclination to interdisciplinarity varies across the social sciences, with economists generally less interested than others. This they link, in part, to the professional status accorded to economists in most countries and the presence of a professional economist cadre in government with whom academic economists can easily interact through their shared understandings. Further, they observe that while economists 'mix well with more powerful people' (p.1095), anthropologists and sociologists are less ready to mix and empathise with those in power – and that such values and attitudes 'may be both reinforced and reproduced by the notable gender disparities between the disciplines'. Hulme and Toye propose that while such barriers continue, multidisciplinary work built over time through seminars, meetings etc. could subsequently aid evolution of systematic interdisciplinary research. I would argue further that one of the most effective means of achieving preliminary interdisciplinary exchange among academic researchers is for disciplinary specialists to come together in the field. An interdisciplinary research project at Keta Lagoon, Ghana, is used below to illustrate this point, but also to emphasise the importance of extending interdisciplinarity beyond the academic community to include a wide range of stakeholders.

Interdisciplinary collaboration at Keta Lagoon, Ghana

This Keta Lagoon project in Ghana, which took place over a decade ago, was something of a personal revelation, in terms of recognising the potential for interactions and engagement with other disciplines and a wide range of stakeholders. It offers a useful starting point for a discussion about collaboration. The project, which could be described as interdisciplinary in essence (though the researchers did not call it such until late in the project), led each of the participant academics to an understanding of a fairly complex local development issue that, on reflection, they recognised was considerably deeper than they might have individually achieved separately. It also enabled an engagement with other stakeholders beyond the academy in a more effective manner than might otherwise have been achieved.

The three academic researchers – a man from the nearby Ghanaian university department of Crop Science and two women from UK universities (a plant scientist working in a development research centre and a development geographer) - had come together in a small Land-Water Interface Programme project, funded by the UK Department for International Development (DFID). Our task was to characterize environmental conditions and associated management

[1] Scholars disagree on terminology and distinctions between inter-disciplinarity, cross-disciplinarity and trans-disciplinarity. Hulme and Toye (2006:1086) define cross-disciplinary work as 'any analysis or policy recommendation based on questions, concepts or methods of more than one academic discipline'. Cross-disciplinarity is sometimes referred to as trans-disciplinarity, which has been defined as involving transcendence of disciplinary boundaries within academia, using new strategies for the construction of knowledge, but elsewhere considered as transcending academia to enter society (Wesselink 2009).

issues in the Keta area of Ghana. For each of us, the experience of working in a multi-disciplinary team was relatively new and, until then, had mostly consisted of group meetings and field studies with colleagues from our own disciplines. However, fortuitously we found ourselves together in the field and, with limited access to transport and a deadline to produce a review of key environment-related issues, elected to work closely together at selected sites.

The research site in the Anloga area of Ghana consisted of a narrow, intensively cultivated area located on a sand bar separating Keta lagoon from the sea. Here traditional irrigation from wells (drawing water from a shallow fresh-water perched aquifer) and stringent regulation of planting dates for the main cash crop (shallots) had enabled an intensive permanent irrigated vegetable production system to be built up at the lagoon side of the sand bar over a period of more than a century. Population pressure had led to intensification of agriculture on this narrow littoral, including additional wells and recent expansion of irrigation into higher areas of the sand bar away from the lagoon-side using electric pumps, encouraged by a World Bank sponsored programme. The unit responsible for implementing the project in the Ministry of Agriculture had apparently agreed to monitor the environmental impact of the electric pumps but, at the time we undertook our field work, it was clear that a number of environmental problems were emerging. In brief, our combined studies of the physical and political economy/ecology contexts and our discussions with a wide range of community members in the field, as we observed, interviewed and measured, brought to the fore the significant dangers of salt-water intrusion, a lack of crop regulation in newly cultivated areas (increasing the danger of pest infestation), and women farmers being potentially marginalised through reduced access to land and water (Porter, Young and Dzietror 1997).

Drawing on our interdisciplinary research findings (which built on and were supported by earlier individual studies by social scientists, hydrologists, sociologists and geographers at the University of Ghana, Legon), we arranged a community meeting and together presented a strong argument about the interconnectedness of current environmental and social trends and their potentially negative implications for future livelihoods in the community. However, it was clear that there was little local political will to enforce new regulations among the community's leading farmers, who were accruing high profits. We also raised our concerns with the relevant ministries in Accra, but pressure from the powerful local farmers union for irrigation expansion was paramount in shaping ministry attitudes to development at Anloga. Moreover, the irrigation engineer/hydrologist on the World Bank-funded project was merely expected to determine any environmental impact of proposed water extraction and distribution and devise operation and management plans to minimise negative impacts.

We circulated a preliminary report expressing concern about water extraction, lack of monitoring and associated issues to the Environmental Protection Agency in Accra and, via DFID, to the World Bank in Washington. Shortly afterwards, the World Bank sent a consultant engineer to investigate conditions at Anloga and, on the basis of his report (which confirmed our concerns), the scheme was halted until a study of extraction rates along the Keta strip had been made. The World Bank intervention to halt the scheme caused substantial local trouble and political manoeuvring: questions were reportedly raised in the Ghanaian parliament. Our report had requested urgent monitoring, not stoppage of the scheme, but there was little we could do once the World Bank intervened directly, apart from helping to establish a monitoring scheme (a UK

hydrology Masters student worked with staff from Ghana's Water Resources Institute to establish the extent of the freshwater aquifer and its susceptibility to change).

Building alliances beyond the academy

1. The Consultative Group

The Keta research project was highly instructive for the team, not only because we found that working multidisciplinarily in the field acted as a catalyst to interdisciplinarity, but also because it raised wider issues around interdisciplinary working beyond the academy. The project highlighted the importance of building partnerships and collaborations between the researchers and local community, governmental representatives and others to shape and inform our study. With hindsight, we might have avoided some of the difficulties we encountered during the project had we had stronger collaborative relationships with all stakeholders from the start and organized stakeholder meetings involving all parties at an early stage, rather than interacting with individual groups separately for most of the field work. Regular multi-stakeholder dialogue with the diverse interests involved – from poor women farmers through to the World Bank – would have increased costs (beyond the tight budget we had available for the study) but could have been highly beneficial, especially in avoiding the World Bank's peremptory action.

The experience has encouraged me to establish a Country Consultative Group (CCG), or sometimes a more local Consultative Group (CG), at the commencement of every research project that I have led since the Keta project, and to see this group as key in shaping, developing and disseminating ensuing research. I would define the CCG/CG as the coming together of a range of stakeholders (both local and external to the project) in regular meetings from the start of the project, aimed at garnering advice and support, ensuring dissemination of project information, and influencing policy. Membership of the Consultative Group will vary, depending on the nature of the project, but may include local community, local government, central government, local and international NGOs, the private sector, academics and the research team.

Choosing potential CCG members requires careful consultation with in-country research collaborators, given the power issues surrounding who is on the group, how representative they are of their constituency, how they will interact together and so on. In a child mobility study, where we worked in Ghana, Malawi and South Africa (see www.dur.ac.uk/child.mobility/) , we had Country Consultative Groups in Ghana and Malawi and more local Consultative Groups in two provinces of South Africa. The Ghana CCG, for instance, included teachers, academics and staff from the transport unions and a police woman and child protection unit, in addition to representatives from government ministries, local government and NGOs. Our aim here and elsewhere has been to engage key practitioners and policy-makers with influence who will not simply delegate at random. We have found that a maximum of about 20 members seems to work best in terms of achieving wide coverage of interests while ensuring a manageable group (and containing costs).

While there may be difficulties in terms of power relations and consequent voice where the status of Consultative Group members is diverse, such that careful management will be needed,

there can also be substantial potential benefits. Such encounters can bring rare interactions and insights. In a project where the CCG included staff from two government departments, for instance, the comments of a local community member of the CCG precipitated a heated discussion between the government staff. This was highly enlightening to other CCG members since it revealed how inter-departmental competition was delaying development projects in our research location.

Building stakeholder partnership and ownership from the *beginning* of research has much to recommend it. Regular meetings – usually at 6-monthly intervals (depending on the project time-scale) - allow stakeholders to give advice, support and to contribute to ongoing analysis and dissemination. They help avoid duplication of research which has already been done, since local stakeholders tend to have more information regarding earlier research and key contacts than is readily available in official records and are usually keen to ensure time and money is not spent on replication of earlier work. Joint stakeholder meetings have the potential to encourage debate and reflection about past work that may not emerge in one-to-one discussions with individuals. The CCG can also help counter misinformation and political manoeuvring which may otherwise delay or devalue the work: a CCG would have been helpful, for instance, in getting a monitoring scheme in place at earlier date or at least avoiding some of the political problems ensuing from the World Bank's halting of the Keta lagoon irrigation project. The CCG also offers a potential route to policy influence and change, especially if policy makers operating at national level are included. Key ministry staff may not have the time or inclination to travel out to research sites to talk to individual stakeholders but can often be persuaded to join a CCG organised by others. The CCG can then open a relatively neutral space in which less powerful stakeholders are able to interact with policy makers: despite power differentials, sensitive facilitation can ensure that a range of voices is heard and informs policy.

The venue of the CCG is important. If possible we have found it advisable to find a neutral space, ideally near the project site, but often the meeting place has to be in a national or regional capital to ensure certain stakeholders attend (though this raises costs). In terms of meeting arrangements the following usually works well: a first CG meeting early in the project; then 6-monthly (half day) meetings; and a final project meeting at/after the end of project workshop. Dissemination of project information and outputs is usually ongoing throughout and after the project end.

From experience of using the Consultative Group approach over a number of projects, it is easier to bring influential national stakeholders into positive membership in countries with small populations and a strongly networked middle class. In such contexts an influential academic researcher can often bring a minister to the table, simply because he is a former class mate! In terms of project type, it is easier to develop stronger stakeholder engagement in: a) action research where there are interventions ongoing, b) situations where specific groups perceive they are misunderstood and see the Consultative Group as a route to improved understanding, and c) smaller projects where the focus is relatively narrow and stakeholders have strong reasons to address the project focus. The funding context can also be significant. Some CG members may perceive meetings funded by external sources (bilateral/multilateral donors) as principally a potential source of largesse, including daily allowances and a free lunch. (It is also possible that such funded CG meetings may impact negatively on stakeholder involvement in locally funded

projects that are perceived to offer fewer potential perks.) The CCG is about building ownership, albeit there are potential problems of hijack by individual interest groups, issues of cost control etc. When encountered, such problems have to be resolved during the project life course, but they are unlikely entirely to take away the value of the group interaction.

A summary of the benefits of working with a Consultative Group

- **Mechanism to help shape ongoing work i.e. for direct advice and local project support from a broader group of stakeholders**
- **In early stages to avoid duplication of effort (existing information, grey literature) and ensure project team informed of relevant local policy & practice**
- **For informed round-table debate/analysis/interpretation of findings from diverse perspectives**
- **To ensure ongoing dissemination of project information (aims, findings etc.)**
- **To avoid or counter misinformation and political manoeuvring that may damage project aims/operation/outcomes**
- **To build contacts and extend networks in order to obtain additional advice and for dissemination of project findings**

2. Working with NGOs and CBOs

Non-Government Organizations (NGOs) are now ubiquitous in many parts of the world, but a comprehensive definition is impossible, given the 'competing arguments and the practical slippages that are often made in academic, policy and practitioner usage' (Alikhan et al. 2007:8). The discussion below focuses on 'development' NGOs, i.e organizations constituting one small part of civil society which have as their purpose improvement in people's lives and operate on a not-for-profit basis (ibid). Many academics now recognize the benefits that can be gained from working with Community Based Organisations (CBOs) and NGOs (although the initial impetus for such partnerships has often emerged from funding agency and donor requirements rather than any commitment to collaboration). There has been a very rapid growth in development NGOs in the Arab world in recent years (Abdo 2010) and, despite some potential challenges (discussed below), it is likely that interest in collaborative work with NGOs will increase among academics researching in the Middle East region.

Staff representing international NGOs (INGOs), local NGOs, and CBOs can be valuable members of Consultative Groups, but they may also be involved in a more hands-on way in a project as research collaborators. International NGOs often have impressive networks that link to key development actors including donors. NGO collaboration also offers the potential for joint work towards interventions especially since NGOs often employ large numbers of trained field staff who possess substantial local knowledge regarding development issues and intervention potential and may have extensive networks which can be called upon to support interventions. For their part, NGOs may gain the benefit of academic perspectives and analytical capacities unavailable 'in-house' (Roper 2002).

Cottrell and Parpart (2006) observe that the rewards of successful collaboration between academics and NGOs are many, but the challenges are considerable, particularly around different notions of change, processes and dissemination of findings. Clashes of expectation are likely to occur (as reported in a Sri Lanka case study by Brun and Lund 2010). NGO-academic collaborations can be problematic, because of different organisational structures, funding patterns and objectives. Funding pressures are significant in both the NGO and university sectors but take different forms. In practice, NGOs are commonly highly dependent on donor funds to maintain the trained field staff they need to support their interventions, whereas academics face hurdles such as research assessment exercises imposed by the funding councils which bring to bear strong pressures to publish. Among NGOs, a focus on success and associated under-reportage of failures is relatively widespread, especially in smaller organisations, due to their dependence on donors: there is a perception that only positive results will be rewarded with further financial support. Eade (2007) observes that despite a focus on capacity-building, many conventional NGO practices contribute to short-termism, tunnel vision and upward accountability, 'based on the assumption that the transfer of resources is a one-way process' (ibid. p 630). Academics, for their part, commonly face pressures from their home institutions to produce rigorous (time-consuming) research for publication in specialist scholarly journals (ideally single-authored) in order to attract further funding to the universities. To NGOs this can seem excessive, even exploitative, both in terms of their own objectives and the needs of the communities with which they are working.

NGOs commonly emphasise partnership as part of their ethos which academic researchers may find more difficult to put into practice, given their usual experience of individually-defined research strategies and single-authored papers. In term of objectives, academic focus is often on observation, analysis and interpretation and around obtaining the 'big picture' (Cottrell and Parpart 2006: 18), whereas NGOs, especially at the field staff level, more commonly focus on practical grass-roots change. Interactions with government can further complicate matters in NGO-academic collaborations. On the one hand NGO activism may lead to strained NGO-state relations which can impact negatively on research. On the other hand, too cosy a relationship between NGO and state (possibly at its most pernicious in the case of the so-called GONGOs - Government NGOs) can also create difficulties for academic researchers, especially when the state requires access to sensitive and confidential information (Paluck 2008).

Clearly, much depends on the individual NGOs and academics concerned in the research collaboration. Initial agreement is vital regarding the nature of the collaboration – its goals, respective partners' needs, capacities and interests in the collaborative enterprise, time-scales, etc. – *before* the research commences (Roper 2002). An understanding of the nuances of the different organisational cultures, ways of working and the interplay of individual personalities will inevitably emerge as the project proceeds. Fox's suggestion (2006: 31) that for activist-scholar partnerships to work, there must be 'an understanding of the other, respect for difference, shared tractable goals, and a willingness to *agree to disagree'* [2] is relevant to many other collaborative contexts. However, serious disagreement also has the potential to derail research and harm participating individuals and communities.

3. Working with communities: participatory approaches to field research

While academic collaborations with NGOs are commonly crucial to achieving broader policy impact for research, grass-roots' community perspectives and collaboration are a necessary foundation for research and associated interventions focused on sustainable development. Without grassroots commitment, sustainable futures are unlikely to be achieved.

In the Middle East, interest in participatory approaches to field research for sustainable development is growing (though detailed observations of participatory approaches in action are rare). Abang et al. (2007), for instance, strongly advocate a community participatory farming systems approach to the management of an aggressive parasitic weed, broomrape (*Orobanche* spp.), which is severely affecting the livelihoods of farmers in the region. They found that farmers continue to use ineffective management practices that exacerbate the problem, rather than adopting new technologies which have been developed to control the weed and link the development of more sustainable management practices directly to the need for better understanding the specific socio-economic characteristics of individual farming systems and a community-based integrated management approach. Another example, which resonates directly with the Keta strip case study discussed earlier, concerns sustainable water management in Iran (Balali et al. 2009). In Iran, mechanically pumped wells have been promoted since the 1962 Land Reform Act. Many land owners and farmers now prefer to use pumped wells and have abandoned their traditional underground irrigation systems (Qanats) and associated community

[2] Italics in the original. Many scholars identify themselves as activists, though this sometimes creates resentment among sceptical community partners (Cottrell and Parpart 2006). It also raises major ethical issues associated with activism outside one's own community (likely to be particularly contentious when researching in another country).

water organisation in preference for individual profit: "an 'every man for himself' mentality" (ibid 102). Balali observes that recent interest in reviving the Qanat system across the Middle East and integrating this with modern water supply systems would help reconnect people with nature and promote greater ecological awareness but that this will require participatory community action (and advocates Multi-Stakeholder Platforms, which could draw on the Consultative Group concept discussed earlier in this chapter).

One way of building community participation widely employed by NGOs, is through the employment of 'PRA', Participatory Rural Appraisal, or 'PLA', Participatory Learning and Action'[3]. The origin of these participatory approaches can be traced back to earlier Rapid Rural Appraisal (RRA) which, in turn, has its roots in applied anthropology and farming systems research, where the focus is on complex inter-linked relationships (Sillitoe et al. 2005: 9-). The philosophy behind the approach is that outsiders need to learn from insiders and that insiders can analyse their own problems. Whereas early RRA focused on rapid assessment by outsiders, who then left the field with the data and often made their final decisions with little or no community involvement, PRA emphasises the importance of community ownership of information, analysis and conclusions. Its widespread adoption owes much to the persuasive writing of Robert Chambers (for example, 1983, 1997, 2001).

Triangulation is one of the key elements of PRA: i.e. collecting information from diverse sources to increase reliability and reduce bias. Data is commonly collected in PRAs by a multi-disciplinary team of insiders and outsiders, men and women, using a range of tools and techniques. The aim it to reduce bias by actively seeking out diverse groups, including those potentially least likely to be considered: the poorest, the disabled, the illiterate and least educated, those living in remote locations etc. Another key feature of PRA is flexibility – the research focus and methods will be regularly reviewed and possibly revised during field work to respond to changing circumstances, understandings, and ongoing analysis. In terms of procedure, PRA often starts with a team workshop including community participants, to identify the approach, methods, objectives and topics for investigation. Field research may take place in phases, with each phase followed by an interim review of data which sets the agenda for the next phase. The final analysis takes place immediately at the end of fieldwork and findings are discussed with the whole community.

A full PRA normally starts with a review of baseline data, to identify issues and avoid duplication. The range of methods includes semi-structured interviews with checklists (with individuals and key informants) and gathering other information through focus group discussions, accompanied by careful direct observation to cross-check responses. Other tools commonly employed in PRA include oral histories and timelines, ranking and scoring exercises to explore local preferences and perceptions (including wealth or well-being ranking to aid understanding of community dynamics), construction of maps and diagrams (to show local resources, social mapping of where various groups live etc), accompanied transect walks to view

[3] In this section on PRA I have drawn on the excellent basic toolkit devised by Gosling with Edwards (1995). PLA Notes, published from 1988 onwards, offers clear, short case studies and 'how-to-do' articles on a wide range of participatory approaches/methods, including no. 60 (December 2009) on community-based adaptation to climate change, which is available in Arabic. See Sillitoe et al. 2005 for an illustrated guide with substantial detail regarding specific methods.

and discuss community resources, mobility maps (to show where different groups travel and key interconnections with other places), seasonal calendars (to indicate crop sequences, rainfall and temperature patterns, income-generating activities, health and disease, income patterns etc.), time trends (to show changes over time of migration patterns, population size, rainfall, resource extraction, area under cultivation, etc.), historical profiles (identifying major historical events in the community), and organisational (venn) diagrams to show how key institutions and individuals link together in decision-making etc. Individual PRAs may employ a very limited range of tools from this list and could form just one component of a larger study. In research on rural poverty in Iran, for instance, Hayati et al. (2006) started with an etic (outsider) perspective from extension experts and a review of conventional development indicators before moving to a PRA exercise with villagers limited to ranking households by wealth and identifying key poverty indicators. They concluded that the combination of emic (insider) with etic approaches was particularly powerful in asssessing poverty and designing poverty alleviation measures.

The analysis of the data collected in the PRA may simply consist of a detailed description or 'characterisation' of the community and its resources, or a more systematic analysis using a framework of key themes with data organisation to address each (as in the work by Hayati et al. noted above). It may incorporate group discussion of themes as a route to analysis and possibly some statistical analysis, if quantitative data has been collected. On the basis of this analysis, possible options for specific interventions towards sustainable development may be explored, with reference to benefit to community members, equity, feasibility etc. and possibly subsequently written up as an NGO or CBO proposal to be pursued with potential funders.

This PRA approach is attractive as a way to facilitate community development support in the NGO sector, including participatory monitoring of environmental change (for which see Abbott and Guijt 1998 for an early review). It may start in a multidisciplinary way but the approach is geared towards building interdisciplinarity of the kind described at the start of this chapter: dialogue, interactions and integration across areas of expertise are central. It also emphasises qualitative research, though it may include quantitative studies.

Potential strengths and weaknesses of PRA have been discussed for many years. Strengths include: promotes understanding of community capacities and problems among participants; includes a wide range of stakeholders (including NGOs and local government staff), gives the community more influence over local development interventions; ensures the community has an understanding of any ensuing development projects and thus promotes commitment to such projects; ensures local priorities; brings rapid results which are accessible to the community; is cheaper to undertake than large formal development surveys; can produce unanticipated information; is less intrusive than a formal questionnaire survey. Weaknesses include: the results are likely to only apply to the communities where the work takes place and do not have generic application; biases can still creep in where the team misses an issue; it is difficult to verify the results because of the qualitative nature of the research; the results can be impressionistic if the research is not conducted systematically; decision-makers often favour quantitative data and may give little weight to information they perceive as largely anecdotal (Gosling with Edwards 1995).

Over the past 15 years, participatory research and, in particular, the power relations involved in participation, have been subject to intense scrutiny by academics. The critique goes beyond PRA

to include a wide range of participatory approaches. An edited collection of papers entitled *Participation, the new tyranny?* (Cooke and Kothari eds. 2001) has been particularly influential in bringing concerns to a wide audience. Those identified include perceived inadequacies in the conceptualisation of power that leads to failure to recognise how participation can be skewed to the powerful (and with careful behind-the-scenes facilitation may reflect the personal agendas of one or two powerful staff; see Kapoor 2005); how the poor may be romanticised and essentialised; the way rigid structures may be imposed on existing, informal truly participatory structures; the time inputs required of local participants which may impact negatively on their earning capacity; in some cases it is less efficient than a top-down decision equally acceptable to most stakeholders; the reality that group work is not always a positive experience for many individuals and that PRA can encourage a consensual view of community which is potentially dangerous, as bringing a diversity of voices to the fore inevitably raises the possibility of conflict (Guijt and Shah 1998).

Many commentators have observed the need for more careful analysis of the political context in which participatory research takes place (e.g. Williams 2004; Hodgson and Schroeder 2002). In particular, Mohan and Stokke (2000) observe that PRA downgrades the significance of the state by putting emphasis on the local and suggest there is need to examine the political use of the 'local' by actors, while Bartelink and Buitelaar (2006), in the context of a Dutch-funded action research project in Yemen, argue that political and public discourses and agendas of both donor and recipient countries need careful consideration. Mosse (2003) provides a detailed case study of participatory development in India which highlights issues around the rhetoric of partnership and rituals of collaboration, linking directly to many of the points raised above.

In the context of sustainability issues in Ghana's coastal zone, raised earlier, the practicalities of popular participation are similarly doubtful. Government efforts towards the promotion of decentralised environmental management through district committees have been substantially hampered not only by the complexities of coping with competing local interests but also by funding shortages. For example, participatory community development requires funding for transport fares for community members from remoter areas. The proliferation of local NGOs established as a response to donor demand and purportedly focused on environmental issues but with little technical knowledge has not led to ecologically sustainable development in this coastal region. Perhaps more disturbingly, among district authorities, NGOs and even the general populace, there seems to be a widespread view that tree planting is a universal panacea for environmental problems (Porter and Young 1998). As Paul Sillitoe observes in his introduction to this book, not all local communities necessarily subscribe to world views that may promote sustainable interventions: there is a real possibility of environmentally unsustainable participation. Promoting local knowledge *per se* may have wider negative impacts.

Participatory methodologies are constantly evolving, partly in response to ongoing critiques. For instance, community researchers may themselves be trained to undertake peer research and become the lead researchers in a project (Porter and Abane 2008). The challenges of participatory communication are also attracting attention and will have particular significance in the promotion of sustainable futures (Dagron 2009). Nonetheless, the need for a continued critical approach to participation and the promotion of local knowledge in sustainable development remains: avoidance of tokenistic participation; more careful group formation when

research teams are established; more sophisticated, reflexive understandings of power; a longer-term deeper approach to empowerment which emphasises participation as an ongoing, iterative process, not a single event; and avoiding reification of any particular form of knowledge (Parfitt 2004; Hampshire et al. 2005; Sillitoe and Marzano 2008). As such, it is necessary to ask some key questions: What is the political and cultural context for the participatory work envisaged? Who wants to introduce participation and why? Do local people want to participate and are they able to? How will findings about negative ecological impacts be treated?

Conclusion

The sustainability debate needs to extend beyond environmental issues *per se*. This chapter has emphasised the importance of participatory approaches based on collaboration and partnership for promoting the sustainability of development interventions. In the absence of grass-roots participation, many development interventions end in failure and the waste of environmental resources: however, grass-roots participation is not enough, in itself, to ensure success of development projects (however that 'success' is assessed). As we have observed, political environments need to be conducive both to grass-roots participation and to the wider organisational and policy environments on which sustainable development also depends. In addition, we have to recognise the potential for successful grass roots participation of current community members to lead to environmentally *un*sustainable futures in years or decades to come. This takes us squarely back to the issues raised by Paul Sillitoe in chapter 2, regarding the politics of sustainable development and the potential conflicts between community perspectives and the wider world, where environmentally unsustainable participation is not simply a vague possibility but a feasible outcome. It raises some very uncomfortable questions, not least about the rights of any group to interfere in another society, even if the intervention is for a perceived greater good.

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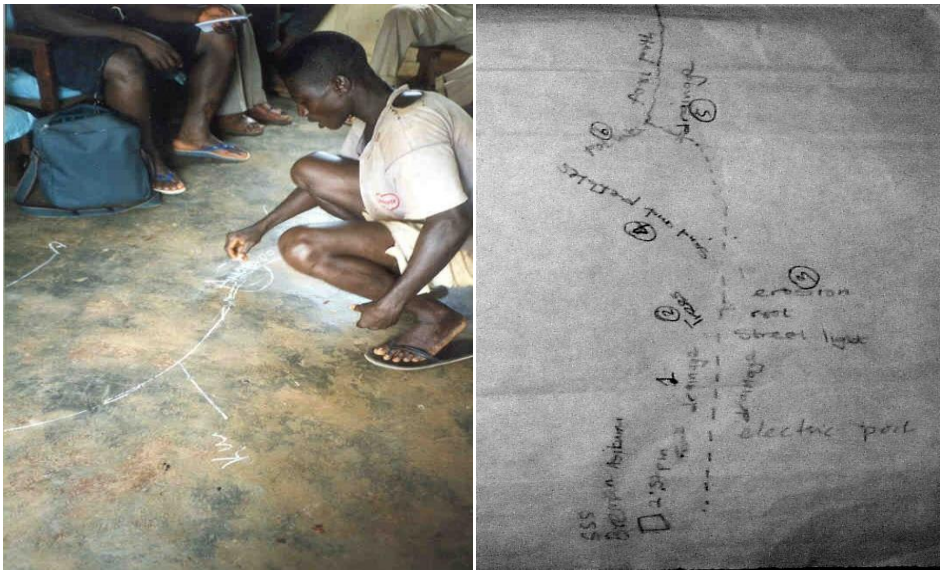
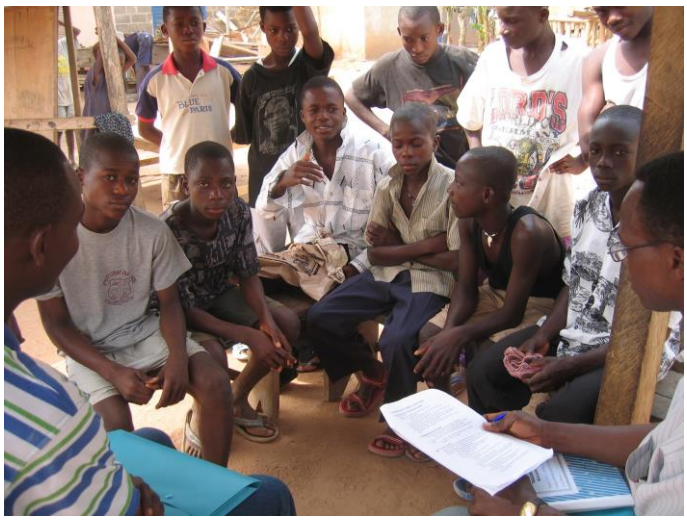
Examples of Participatory Methods: 1. Community resource mapping

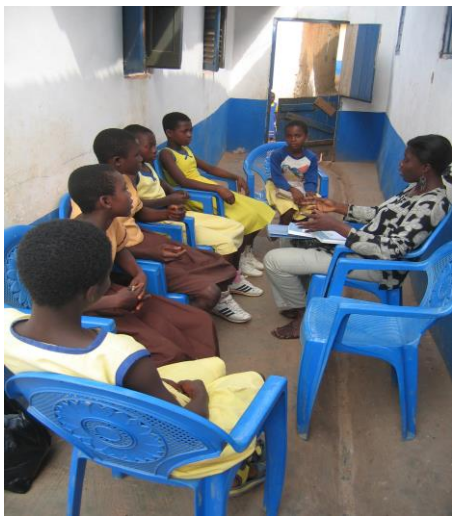


- This work is best conducted with small homogeneous groups: maximum c. 4-5 per group
- Encourage mapping in a medium which suits participants: this might be chalk on a concrete floor, as in the example above, or simply drawing in sand or on an earth floor with a sharp stick.
- Ask about key resources within and outside the community: map locations and note down associated information
- Ask about resource issues: quantity, quality, distance, access, constraints, perceived sustainability
- Ask about the features drawn: problems, opportunities
- Note discussions, disagreements; photograph resulting map
- Aim to capture diverse perspectives through an iterative mapping process with diverse groups (e.g. group of older women, group of farmers, group of landowners, group of landless)
- The map could also be linked in to a Community Integrated GIS

For examples and applications see Sillitoe, Dixon and Barr 2005 *Indigenous Knowledge Inquiries* pp. 124-130.

Examples of Participatory Methods: 2. Focus groups

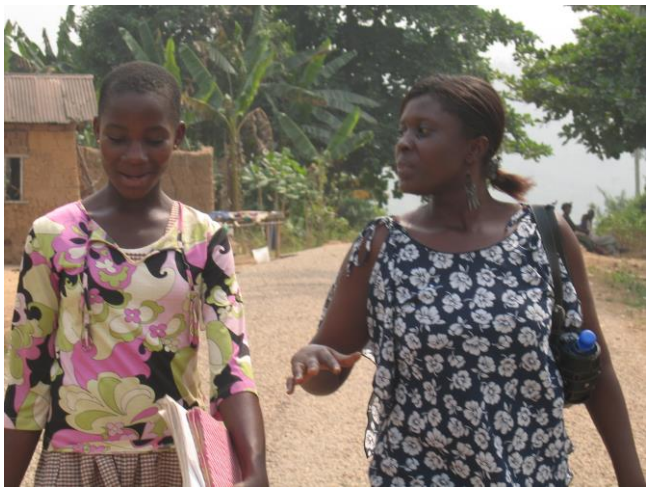




- This method involves explicit use of group interaction to produce data and insights (we can observe the ways in which group members agree/disagree, etc.)
- There is an interplay at work between two levels of analysis: the individual and the group
- Topics are supplied by the researcher. There is often high involvement by a moderator who guides the discussion
- The moderator helps guide the focus group, keeping discussion focused around key topics – s/he does not operate as an interviewer
- Focus group work usually start with groups involving participants with homogeneous backgrounds (especially social class) but may subsequently move to mixed groups
- A common successful format is to involve between 6 and10 participants, for a period of 1 to 2 hours
- Participants need to observe ground rules which will enable an effective meeting e.g. members should be able to make their contributions without interruption
- Sensitive issues are usually better handled in individual interviews rather than focus group discussions
- Focus groups can be a useful complement to individual in-depth interviews; they are sometimes used as a preliminary to in-depth interviews to identify issues for further exploration
- Focus group discussions are not a quick and cheap alternative to in-depth interviews and other methods – there can be substantial costs associated with moderator payment, participant payment, taping and subsequent transcription (c. 5-8 hours transcription per 1 hour of tape).

There are many guides available but Morgan's 1997 *Focus groups as qualitative research* is particularly helpful for beginners.

Examples of Participatory Methods:
3. Accompanied walks/transect walks/mobile ethnographies



- Walking together with the selected respondent works well when interviewing less powerful individuals (e.g. children) who are often shy in stationary interviews
- Walking allows discussion away from neighbours, parents or other bystanders who tend to hover in stationary interviews
- There is no need for eye contact, which may embarrass less powerful respondents
- Silences are natural when walking, whereas silences in a stationary interview can be uncomfortable for interviewer and interviewee.
- Walking encourages informal conversation and unsolicited observation
- Walking can be a valuable mnemonic device i.e. a reminder in the location of key issues associated with that place
- Walking to key locations is particularly useful for researching physical access to resources such as water, firewood etc.

For a detailed example see Porter, Hampshire, Abane et al., 2010 Where dogs, ghosts and lions roam: learning from mobile ethnographies on the journey from school. *Children's Geographies 8,2: 91-105*