SUSTAINABILITY AS SOCIAL CHANGE:

VALUES AND POWER IN SUSTAINABILITY DISCOURSE

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Introduction

Sustainability[1] as it is commonly used has a particular political and historical context. Rather than simply a discourse of the environment movement or the competing tension between environment and development, sustainability is primarily a discourse of modernity. In simple terms, modernity can be seen as the social relations created by institutions and cultural values. The key institutions that can be associated with modernity are democracy, capitalism and science. Modern values include progress, consumption, human rights and individual freedom. As a discourse of modernity, sustainability reflects and creates ideological contradictions and has material consequences when it is defined and acted upon.[2] People's relationship with nature, the environment and the place in which they live is critical, however, this relationship is essentially social and dependent on power relations in local, regional, and global contexts.

In our work at the Institute for Sustainable Futures, we are frequently required to challenge the meaning behind the increasingly familiar lexicon of sustainability in both the private and public sector. This is not always easy or comfortable. Inevitably it is a

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[1] For the purposes of this paper when we talk about sustainability, we are talking about it as a discourse that incorporates definitions and concepts associated with sustainable development and its trajectories.

[2] See Albro (1997) and Arnason (2000) for different approaches to modernity

process where there are competing knowledges, diverse interests, personal ambitions and institutional power struggles. Nevertheless, within this process there are opportunities for meaningful dialogue about how communities, government and society might plan and act for the future.

The approach that one takes to working in this area has consequences in terms of the power certain groups have over other groups. It is our view that social action relating to sustainability may as easily perpetuate oppression and exclusion as create change that is liberating and inclusive. In this paper we outline a brief history of sustainability discourse, the contribution of social sciences to the theory and practice of sustainability and an analysis of some specific projects undertaken at the Institute. We demonstrate the limitations and potential of a particular approach to social research. Following Flyvbjerg (2001), we argue that when engaging in practical work and theoretical debates it is essential to clarify competing values, to actively address power relations and to ground research in specific contexts.

Sustainability

In the past decade, the interpretation of sustainability has occurred in various ways and in multiple contexts. The original or literal meaning of the term is equivalent to permanence and implies notion of durability, stability and eternalness. The term as commonly used today appears to have first been used in the early 1970s, and drew upon the environmental discourse of the 1960s typified by emerging green movements. This early discourse focused on the threat of ecological harm by using such metaphors as the "tragedy of the commons" (Hardin, 1968). It was argued that changes to social and economic structures were necessary to avert large-scale ecological disaster.

In 1987, the idea of sustainable development started to gain mainstream currency when the World Commission on Environment and Development released *Our Common Future* (the Brundtland Report). The report explicitly drew a connection between accepted models of development and the deterioration of the environment. It called for inequities to be addressed, in particular those between present and future generations and between

rich and poor countries. Subsequent multilateral conferences in the 1990s[3] started to address particular issues requiring international agreements and cooperation. This included the establishment of Agenda 21 as a framework for institutional change, and the development of supporting instruments so that considerations relating to sustainability could be incorporated into policy making and business. It is argued by Petrucci (2002), among others, that much of this incorporation has been appropriated within the rhetoric of continued economic development. He argues that the original issue of environmental limits was subsumed within a global drive towards further economic growth and consequently the current interpretations of sustainable development are deficient, as they are:

> …too plastic—or too loaded—to be of any authentic or practical use. Indeed, its current deployment on the global scene as a political catchphrase engendering a vague sense of goodwill toward the "Third World," and the environment generally has done little to engender any radical shift in top-down development strategy and oppressive global trading practice (Petrucci, 2002).

This fluidity has aroused impatience and scepticism in many quarters. For example, in the world of business, Paul Tebo (Du Pont's vice president for safety, health and environment) has been attributed with creating the term sustainable growth to make sustainable development acceptable to business:

> Growth was very important. I tried *sustainability* and the business leaders saw it as status quo. I tried *sustainable development* and they viewed it as environmental sustainability. I tried *sustainable business* [but] growth is what organizations want – either you're growing or you're not and not growing is not a very good sit (Spencer-Cooke, 2000, cited in Holliday C. et al, 2002 p15. original emphasis).

These two examples offer quite different and inherently contradictory critiques of sustainability. Perspectives such as these are part of a much more complex set of political

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[3] Most notably, the 1992 United Nations Conference on Environment and Development (also known at the Earth Summit or the Rio Conference), and the 1997 Rio+5 conference.

and theoretical debates. They exemplify, however, the interpretations that have arisen from two particular interest groups—social justice advocates and the business community. These groups are incredibly diverse and, of course, not always mutually exclusive. Work in the area of sustainability often requires deliberate and careful choices about positioning oneself in relation to the arguments offered by these two groups and about managing the associated conflicts. Dialogue, stakeholder involvement, consultation and collaboration are all common processes associated with sustainability work. These processes will ideally consider underlying values and assumptions of the parties involved and openly address conflicts. The processes of dialogue or engagement will often involve difficult decisions for participants as they may offer both promise and risk in both ethical and political terms. This is even more acute when working directly with communities in projects involving social research.

Social sustainability

The triple bottom line (TBL) has come to represent an agreed set of categories to assist conversations and action relating to sustainability. Many social scientists would argue that the attempt to segment the "social" from economic and environmental considerations is fundamentally questionable. For example, longstanding theoretical debates about the usefulness and validity of the nature/culture dialectic would suggest these categories are much less straight forward than TBL advocates would often imply. In some quarters, the idea that economics should be reified as a separate sphere outside the social sphere is a particularly unattractive consequence arising from this way of segmenting the world.

It is important, however, to consider the extent to which the demarcation of the 'social' in this way has been useful in supporting action. Researchers, policy makers, activists and other social change agents have used, and will continue to use, the triple bottom line to pursue ethical and political goals. The social dimension provides a context in which social scientists are considered to have particular expertise and to be able to make relevant contributions to public policy and decision-making. This social science knowledge is usually underpinned by the explicit recognition of ethics and principles concerned with the advancement of what "should" be, rather than what "is". The specific contribution

that this perspective brings to sustainability is an emphasis on the core values of justice and dialogue.

Our notion of justice embodies three key concepts—fairness, equitable distribution and human dignity (Sachs, 2003). Fairness is a question of substantive outcome, of whether the allocation of benefits and harm could be considered fair, legitimate and just. The relational aspect of justice is captured by equitable distribution, which takes into account the distribution of resources and rights among individuals or groups. Finally, human dignity acknowledges that there are minimum levels of rights necessary for human existence, such as the right to subsistence.

In the field of human rights, there is also an increasing recognition from communities and governments of the 'right to participate'. This may be justified in association with theories such as participatory democracy, public deliberation and discourse ethics. A rights perspective, however, is not always compatible with the rationale for public participation from the perspective of decision makers. Public participation in decision-making is valued for various reasons. The rationale for initiating public participation from the point of view of decision makers is mostly to increase political legitimacy of decisions and to enhance the quality of outcomes through combining knowledge and perspectives. Unfortunately, the practice of public participation often leaves much to be desired as consultation is often poorly carried out and tokenistic. The differing expectations of the parties, the public believing they have a right, and the bureaucrats and proponents often concerned only with procedural compliance, can lead to disillusion and increased distrust between the project proponents, government and public.

There are many opportunities for inclusive and influential public dialogue to be extended within the scope of existing and future projects. Yet inevitably, decision-making concerning development is characterised by complexity, often because of the uncertainty of the science and related risk. The multiplicity of actors adds additional social and political challenges. Inevitably, these actors have disparate and competing interests, often with much to gain and lose from decisions. Of greater relevance, they are in varying relationships of power, not only to each other, but also to the decision makers. The social

sciences have much to offer in contexts such as these, as its study of politics and power relationships is well developed.

Social science, however, is a broad church and encompasses many disciplines, diverse traditions and worldviews. Each tradition comes with a particular approach and underpinning each is a set of values the researcher implicitly or explicitly adopts. These values may vary in the extent to which they are democratic, managerial, inclusive, individualised, collective and so on. Sometimes issues of fairness, equity and human dignity are considered and sometimes they are not. The values underpinning some approaches, when unquestioned, may be counter to social justice. Certain social science practitioners tend to employ the discourse of the social quite narrowly. In these approaches, social issues may be limited to the consideration of local employment, or the measurement of attitudes or liveability. Researchers using such approaches may consider issues of justice as being outside their brief, not relevant or too political.

The work of the Institute for Sustainable Futures

At the Institute, we are seeking to include critical social science within all of our projects. This requires us to account for power relationships within our research projects and to explicitly adopt justice as a normative value. The implications for our approach are various. For example, we need to recognise the multiplicity of values and interests in a given context and actively seek "participation" by those who may otherwise be excluded. We need to acknowledge and appreciate the particularities of local contexts and related social change processes. Moreover, rather than simply articulate the diversity of competing values and interests we also need to make transparent the power relations at play. The following section draws on projects conducted by the Institute. Three case studies are selected to illustrate the potential for this kind of approach to sustainability research:

1. Community perspectives on weirs in the Upper Nepean River

2. The Integrated Monitoring Progam: the SECH group

3. Family support needs of rural General Practitioners (GPs).

These case studies all contain elements where contradictory values and power relations between different actors impact upon the research process. The context within which these relations occurred had consequences for both the methodology and the management of conflicting interests between the researched, the researchers, those providing funding for the research and those the research sought to influence.

Local perspectives on weirs in the Upper Nepean River[4]

A State Government decision was made to introduce releases of water (known as environmental flows) from storage reservoirs, of sufficient quality and quantity to help restore the "natural" or pre-industrial state of the river in the Hawkesbury–Nepean River. A River Management Forum was established and an Expert Panel appointed to provide Government with advice. Weirs along the river, in particular those that had been poorly maintained and were no longer functioning, were regarded by various decision-makers as barriers to environmental flows. Therefore, removal of weirs was considered a straightforward option to facilitate environmental flows in the river. As part of the decision making process, a study on local perspectives was commissioned.

The purpose of the study was to identify the values held by river users and community members, including irrigator groups along the river, in relation to identified weirs on the Upper Nepean River. This involved identifying the nature of the social and economic relationship between relevant river stakeholders and the weirs and the concerns they might have with any change to the weirs. The researchers also sought to find out what information requirements there were in relation to any change, and the ways in which the various groups would want to participate in related decision-making processes. The researchers rather than those who had commissioned the study initiated these last aims.

The researchers were conscious of the fact that decision-making was likely to have significant impacts at the local level. The approach taken was deliberately flexible, participatory and sensitive to the local context. For instance, the range of possible issues

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[4] See Cheney, H. et al (2003) for a more detailed account of this project.

to be researched was decided in consultation with stakeholders prior to the formal research process. Indigenous groups were consulted, both about *how* they would like to respond and to identify their key issues for the study. By involving the relevant communities in planning the scope of the project, the researchers sought to foster local control over the research agenda.

Disparities in power between the researched, researchers and decision makers were consciously managed throughout the process. Variable access to information reflected, in part, the power relations between researchers and researched. The researchers had access to various documents that had not been available to local people. This was further complicated by the preliminary nature of the study. That is, the community study took place prior to an environmental impact assessment, and so technical information about weir removal or modification was limited. At times it was impossible to adequately respond to people's requests for information about the changes that might be expected.

This differential access to information was managed by incorporating two-way processes to share information with research participants. A key feature of the process was a feedback loop designed to respond quickly, where possible, to information needs and concerns that were raised during the project. Following initial consultations, a mailing list for a newsletter was created to keep all participants updated on the progress and preliminary findings of the study. Given that community information about weir management was limited, it was essential to provide sufficient information to enable understanding of proposed changes. Multiple communication avenues were used. An information sheet, prepared using advice and input from the Expert Panel and government agencies, was provided to participants in the study. A series of frequently asked questions raised by participants during the research were recorded and sent on to representatives of the Hawkesbury–Nepean River Management Forum. Responses were obtained and distributed. Informal contact and meetings with participating groups and individuals provided opportunities for ongoing dialogue about issues relating to the weirs and the research process itself.

The research processes used to collect and analyse information were also influenced by consultations with local government, water user groups and other local stakeholders, including Indigenous groups. Multiple methods were designed to capture the diverse views of as many interested parties in the community as possible. These methods included questionnaires, structured on-site interviews, informal communications (email and telephone) and group meetings. A media analysis of reported community perspectives and other secondary sources was also done. The combination of methods enabled the approach to be sensitive to the diversity of views and the relationships between those views. It allowed an understanding of the interests, conflicts and relationships threading through this particular sustainability issue, and for these to be represented appropriately and fairly.

The diversity of values found in the study was not surprising. As mentioned earlier, some stakeholders (decision-makers and others), originally assumed the removal of weirs would be straightforward. They had assumed that the resulting environmental benefit had primacy. The study revealed, however, that the economic, social and heritage value of weirs had been under-estimated. Commercial water users strongly identified weirs with their livelihoods. Irrigators, in particular, pointed out that the "original purpose" for constructing the weirs, as a mechanism to compensate irrigators for lower river levels due to upstream dams, is just as valid today as it was previously. In contrast to views held by some scientific experts, some stakeholders spoke about the weirs as a natural feature of the river environment. The weirs, and the river, were valued for their aesthetic qualities and there was much concern expressed about how the river would change if the weirs were removed.

The research findings addressed power relations between the public and the decision makers by identifying their differential information needs, expectations and assumptions concerning participation. Participants across all non-government stakeholder groups consistently expressed a desire to be better informed in the future. In particular, they were concerned about likely social and ecological impacts of weir removal and/or modification and requested specific information about technical details relating to repair and

modification of weirs. Many indicated their willingness to participate in ongoing dialogue and involvement in the management of the weirs. Many expressed a desire to take part in further community consultations and debates through community meetings, and to have issues debated in the local newspapers. Mechanisms of direct involvement suggested by participants included surveys, submissions, a public vote, public viewing of the weirs in question and the formation of a bush care group.

All participants strongly expressed concerns that decision-making processes ought to be inclusive, and that they should accord local experiential knowledge equal currency alongside empirical scientific evidence. In some instances, there was deep mistrust of the decision-making process, with some participants asking what "really was going on", and suspecting an "ultimate agenda of [weir] removal".

It has been decided by the government that, at least for now, it is too difficult to negotiate between the competing interests. It is likely that in some cases the local communities and stakeholders may not have opposed weir removal. For example, some of the weirs are very dilapidated and it would have been possible to achieve a high degree of support for these to be removed. Relative to a unilateral decision concerning all weirs, the resources and time required for specific negotiations around particular weirs may on balance have appeared too onerous, and limited environmental benefits.

There was an uncomfortable disjuncture in the conversations between the researchers, the researched, the departments funding the research and the various layers of decision-making involved. These sites of power could not be made explicit in the project for a number of reasons. The research team carrying out the community study did not know exactly what was going on behind the scenes and the various agendas were not transparent. It is thought that the commissioning of the research brief arose because of a dispersed set of interests that were represented on the River Management Forum and in the Expert Panel. Some of these interests were being negotiated concurrently on other water resource issues in NSW and in a much broader social context around river management and water reform. The researchers adopted an approach to the study that centred on the representation of the local peoples' perspectives rather than on assessing

what should or should not happen in relation to the weirs. This was frustrating for some of the decision makers who were focused on achieving a particular outcome.

The ultimate decision concerning weir removal did not rest with the local community. Nevertheless, the research approach taken and its findings (with the associated media and political debate) significantly influenced the decision-making process. This influence was incremental, so that during the process it would have been hard to identify particular turning points. It would be fair to say, however, that the community research process did allow local views to be expressed and heard. The public language employed by the decision-makers shifted during the course of the project. For example, the assumption of "weir removal" became one of "weir management", and "weir modification". This decision was seen as a compromise by some of the parties. For example, for some environment groups and recreational users participating in the study weir modification was not the most desirable or "sustainable" outcome. Nevertheless on balance this was considered a politically acceptable alternative that would achieve environmental benefits, albeit probably not equivalent to potential benefits from weir removal.

The use of an approach that explicitly accounted for diverse values and unequal power relations clearly influenced the outcome of this research. At the beginning of the project, researchers were asked to consult the community on their views about weir removal. Conscious decisions were made by the researchers not to present the proposal as a *fait accompli* so as to encourage active participation and allow other possibilities to be considered. This more open approach then contributed to an alternative course of action being undertaken. It is frustrating that the limited timeframe of the project and the parameters of the decision making process have not supported ongoing dialogue with the local community on this issue. Hopefully, the next stage of the process will build on local knowledge already established and will extend the process to other contexts where environmental flows and weirs are being considered.

The Integrated Monitoring Program: The Social, Economic, Cultural and Heritage (SECH) group[5]

As part of the consideration to introduce environmental flows in the Hawkesbury-Nepean River, decision makers also needed to evaluate the likely outcomes of the proposed flow regime. The expert panel proposed an integrated monitoring program to assist in achieving this outcome. The panel needed to demonstrate that the proposed integrated monitoring program was feasible—both conceptually and financially—before the decision to fund the actual program could be made. For many involved in the program design, particularly those trained in traditional scientific paradigms (engineers, ecologists and other scientists), this requirement meant that the value of the monitoring program lay in its capacity to prove or justify the benefits of environmental flows. There was less interest in any negative consequences that may arise from policies and programs proposed to provide and protect environmental flows. There were two sources of conflict. Firstly, the group was unfamiliar with participatory research (Reason and Bradbury 2001) and participatory decision-making (Konisky and Beierle 2001; Carson and Gelber 2001). Secondly, most of the group wanted to achieve a particular project outcome.

For researchers developing the social, economic, cultural and heritage (SECH) component of the monitoring program, this added an extra layer of difficulty. Experience elsewhere on social monitoring, social impact assessment and river management suggested that public participation in decision-making and monitoring is crucial. Ideally, this participation occurs early, during the initial scoping of potential issues to be monitored. Ongoing and meaningful participation should encourage stakeholders to contribute to how and where monitoring should occur, how information should be interpreted, and how it should influence decision-making. Focusing on issues specific to both the context and the values of stakeholders can assist in the prevention of conflict and address unequal power relations.

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[5] See Hawkesbury–Nepean Expert Panel (2004) for a more detailed account of this project.

The expert panel's terms of reference required the use adaptive management, which is primarily concerned with the relationship between people and the environment, as an appropriate approach to natural resource management (Jiggins and Roling 2000). It seeks to base decisions on local knowledge as well as scientific research. The participation of local communities is thus central to the operation of the monitoring program, aiming to increase stewardship of the river and share responsibility between government and the wider community. The program is based on a pragmatic approach that integrates both technical and participatory methods, and uses diverse forms of knowledge to capture ongoing dialogue about river uses and values. Easier said than done!

The framework proposed by the SECH group sought to enable the people most affected to interpret change at the local level and to influence decision-making. This takes into account the range of social conflicts that inevitably arise in the management of a catchment such as the Hawkesbury–Nepean. Policy actions, rather than environmental flows *per se*, formed the basis of a framework for monitoring the SECH consequences associated with a changed river management regime. This recognises that policy actions are potentially conflictual and need to be engaged with and managed with affected communities as part of an adaptive management process. Because of limited time and resources there was consultation with only selected planning and natural resource agencies and other stakeholders represented on the River Management Forum. In contrast, the SECH program recommended processes for local communities and stakeholder participation at all stages.

At the outset, the Forum's social objectives were quite different from their environmental objectives. The environmental objectives were specifically defined, relying primarily on technical and scientific criteria. On the other hand, social objectives were broad and participatory, using the language of inclusiveness, equity and negotiation. The integrated monitoring program required that the different paradigms of social and natural sciences be reconciled. This integration was particularly challenging on at least two levels. Firstly, there is the challenge of integrating the different paradigms within the SECH (social, economic, cultural, heritage) monitoring component itself, and secondly, the challenge of integrating the biophysical sciences' and social science paradigms.

With the first challenge, the approach taken was to balance 'technical' methods with elements of participatory research. Integration with biophysical monitoring, however, was more problematic, and reflected a struggle between very different epistemological and ideological perspectives. The different values and power relations within the monitoring group caused conflict at times. Some Expert Panel and Forum members expressed resistance to the social sciences, particularly to the participatory approach. The inability to resolve these conflicts was exacerbated by shared objectives and conflict resolution skills. Ultimately, the interdisciplinary and integrated intent of the program was frustrated and integration in this sense has not been as successful as was first anticipated.

On a more positive note, some benefits resulted from the project. The SECH issues have been included in the monitoring program and some funding will probably be allocated to continue the work. Moreover, scoping of issues was broader to include more than the usual basic demographics and economic interests. The SECH component included a range of river related activities like recreational fishing and community values such as a sense of place. Hopefully, those implementing the program will be supported to pursue the recommendations concerning community involvement in monitoring and river management more generally.

Family support needs of rural medical General Practitioners (GPs)[6]

Rural sustainability is a multi-faceted issue, one aspect of which is the difficulty of attracting a range of professionals to rural areas. The sustainability of local communities can be assisted by ensuring the presence of a diverse range of skills and professions in local towns and rural regions. Demographic changes in Australian health services personnel are one important factor affects the recruitment and retention of professionals in rural areas. The 'new' generation of rural GPs, for example, is more likely to be female, from a wider range of ethnic backgrounds, with stronger interest in lifestyle and family/work balance, and have spouses with professional careers. (Cheney, Willets &

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[6] See Cheney, H. et al (2004) for a more detailed account of this project.

Wilson, 2004) This research project focused specifically on personal and family support factors that affect the retention of rural female GPs and rural registrars (doctors undertaking their vocational training as general practitioners). It was conducted in collaboration with the Rural Faculty of the Royal Australian College of General Practitioners (RACGP) between June 2002 and April 2003.

Experience had shown that simply recruiting individual GPs by increasing financial incentives is a necessary but inadequate response. An effective approach to recruitment necessitates a broader view of GPs and their families. This includes the needs of spouses, children and extended family members. In this project it was also seen to include an even broader social network, in particular the local community and the rural medical profession. It was found during the project that the needs of each GP and their family were considerably diverse and dependant upon a range of factors. These included age of children, spousal relations, proximity of family and friends, social and professional interests and attitudes toward rural life. The researchers needed to appropriately address people's specific needs as well as other needs shared by the local community or the community of GPs and their families. It became possible during the project to focus on supporting and building rural communities, rather than just offering an exclusive service to individual GPs.

The approach taken can be broadly described as combining collaborative evaluation, action research and community development. Wadsworth (1997) argues that collaborative evaluation is valuable because it involves parties who might be expected to change their practice as opposed to a non-participatory and non-democratic evaluation process, which cannot ensure an appropriate outcome for those who will be affected. To instigate successful change, the affected parties need to experience evidence of the value and significance of change, both directly and personally. To do this, the project initiated and supported actions that provided the actual experience of change for participants within the timeframe of the project.

The specific strategies developed needed to be community-owned, meaning that both the definition of the problem and its solutions come from the group most affected by the

issue. In the first instance this was the rural GPs and their families, however the need for ownership also extended to the community more broadly. The specific process of community development used here can be summarised as a series of cycles and is described in detail elsewhere (Wilson, 2002). Key aspects include: developing a relationship with those most affected by the issue, agreeing on goals, and exchanging skills and information that enable all stakeholders to participate in bringing about the desired result. The action group expands outwards, particularly toward politicians and bureaucrats, to influence policy and decision-making.

The project activities comprised a sequence of steps to identify needs, develop potential strategies, support their implementation and evaluate their impacts. The project team firstly worked closely with GPs and their spouses to identify needs that they identified, in contrast to ones that might have been assumed or predetermined. Communication, including telephone, fax, letters, e-mail and meeting face-to-face, was flexible and open to new and changing possibilities throughout. The researchers encouraged GPs and spouses to identify the issues most likely to affect their retention in a rural area and were open to issues that might be considered the responsibility of other sectors of government, such as education and childcare.

Through dialogue, the researchers and participants explored a range of potential areas of activity in the design of an appropriate strategy. In some cases, the needs of participants changed during the project, which led to existing strategies being modified or new strategies being developed. The researchers worked collaboratively with GPs, their families, other community members and service providers to implement the strategies. The strategies were then evaluated from the participants' point of view through in-depth interviews. Individual case studies were analysed to develop general findings and recommendations were formulated to effect change in Commonwealth policy development and the rural medical profession.

The main strategies trialed during the project had both individual and community orientations. While all strategies could be seen to have individual and collective benefits, the emphasis within each was a matter of degree. When the notion of community is

referred to here, there are two main communities of interest: the immediate geographic community and the rural GP profession. The case studies demonstrate the potential to satisfy the individual needs of GPs and their families and in a number of cases, with consequent benefits for a larger community.

GP spousal unhappiness related to rural employment opportunities has previously been identified as a key issue for recruitment and retention of rural GPs (Tolhurst and Lippert, 2002). Rural GP spouses often struggle to develop a meaningful role for themselves, and provision of assistance and funding for further education in a new professional field has been a typical response. In this study there were several GP spouses with specific employment needs. In these cases, the strategies focused on building professional skills and creating employment opportunities. While this is primarily an individual response it can also indirectly improve service provision within the local community or provide a precedent that others with this need may adopt when learning from the project is shared.

It is also widely reported that both GPs and their spouses may be susceptible to feelings of isolation when residing in a rural community (Nichols, 1997; Tolhurst et al., 2000; Tolhurst and Lippert, 2002). A number of the case studies here involved strategies designed to help alleviate social isolation, enabling GPs and GP spouses to contribute to community groups and support beneficial community activities. The aim with these strategies was to address both individual and broader community requirements.

Much of the research literature in this field is concerned with the needs of spouses (such as those stated above) rather than the whole family, particularly children. There has been some discussion of children's education from an academic perspective (McDonald et al, 2002; Wallis, 2002). A unique element of our case studies was the inclusion of extra-curricular activities designed to meet the recreational and creative needs of children. These strategies also have the potential to improve the range of activities available to the wider community of children and adults. For example, a music theatre workshop was offered during the school holidays. While it was the particular interests of one GP that prompted the workshop, it attracted 50 children from the region and is planned to be an ongoing event in that community. Other case studies involved improvements to services

and infrastructure for the local community such as childcare and recreational facilities, and in particular, swimming pools.

A number of strategies were designed to address policy and more systemic problems. These can also be seen as concerned with the interests of a broader community of interest, namely rural GPs and their families. Strategies with this focus included the preparation and circulation of a number of discussion papers and the evaluation of a professional support group for female GPs. The discussion papers were concerned with flexible practice working arrangements, the changing face of GPs in rural Australia, and the potential for medical agencies to employ spouses who could work from home. These strategies had direct benefits for participants at the time of the study. The research process also allowed for the evaluation of the strategies to be documented and distributed to a wider audience that extended their potential benefits to rural GPs as a group.

Overall, the strategies were seen to have a positive impact on the individual participants when they were evaluated at the end of the project period. Participants spoke of a range of benefits including improved confidence and personal effectiveness, the satisfaction of being heard and understanding some problems as shared rather than individual. People also reported that strategies were beneficial in assisting them to explore options for support or change and for increasing networks and resources locally. The success of the strategies relied on various factors relating to the circumstances of the individual participants as well as that of the local community context. Conflict in communities is inevitable, and in this project it arose in a number of interesting ways. In one case, the conflict generated from the project made the researchers more aware of the power dynamics relating to the role of GPs within small communities. It appeared that the perception of GPs as an elite group gave rise to resentment in at least one instance. The activities associated with the strategies created tensions between the GP, other members of the community and the researchers. Some participants, and others not directly involved in the research, expressed another area of concern in that the evaluation may lead to public policy preferences for certain needs and strategies above others. The

concern was that this might not reflect their own interests or what they saw as the most important issues.

For the most part, by working directly with a core group of GPs and families, we were able to identify shared issues and to engage other local and professional community stakeholders in addressing them. Our research found that rural GPs and their families are often reluctant to receive special treatment. They were usually interested in exploring strategies that led to improvements for the local community as a whole and the professional community of rural GPs. Fostering this link between self-interest and broader community interests lay at the heart of our ability to facilitate positive change in rural communities, while attending to the specific needs of our collaborating group of rural GPs and their families.

This suggests that that policy responses to the support needs of rural medical families (and similar professional groups) may be designed to enrich the community as a whole rather than privileging a minority, arguably already privileged, group.

The social science, particularly community development, experience of the researchers working on the project was essential for prompting discussion and assisting participants to articulate their needs. Researchers were able to draw upon their knowledge of community and government to provide specific advice and access to resources. It is unlikely that researchers without this background would be able to replicate this approach. A policy response would need to be accompanied by skilled workers, appropriate resources to carry out activities, links with other professions and sectors, sensitivity to rural Australia and knowledge of the community and services sector to be successful.

The ongoing conversations between researchers and participants about their particular situation enabled a range of concerns to be heard, acknowledged and addressed. Together, they were able to pinpoint specific problems, and stimulate the generation of ideas for change rather than accepting the status quo if this was unsatisfactory. This dialogical process is a powerful one and likely to achieve a level of innovation than would usually be evident in non-participant-driven research projects.

Conclusion

We have argued, through these examples, that the theoretical traditions concerned with justice and dialogue have been particularly valuable in extending the social change potential of sustainability discourse. Social research in the field of sustainability requires these kinds of approaches to ensure quality of outcomes and ethical process. Choices about theory, methods and research practice are always political, and no less so in the field of sustainability. An unquestioning use of social science approaches that do not seek to make these power relations explicit is likely to perpetuate existing systems of power. If research was undertaken in the situations we have described above, without addressing some of these competing values and power dynamics, the likely outcomes would be to reinforce the exclusion and disadvantage of less powerful groups. Commitment to the values and viewpoints of competing interests can help to redress unequal power relations and ensure that decisions and findings will be appropriate to local contexts. Moreover, genuine public dialogue is essential for the negotiation of social change agendas that are desirable, or at least acceptable, to the various participants involved.

The points raised in this paper highlight the need for ongoing deliberation within research projects that have sustainability and public policy impacts. This is between researchers, with research participants and with those who will be affected by the research. It is clear that a critical social science perspective can contribute significantly to this area. Through dialogue and sometimes conflict, we are often able to create new and shared knowledge on how to address specific problems and issues. Although the dialogic process often leads to compromise and less than satisfactory outcomes for some, it is more likely to result in desirable and enduring social change.

References

Albro, M. 1997. *The Global Age: state and society beyond modernity,* Stanford University Press: Stanford, California.

Arnason, J. 2000. Multiple Modernities, *Dedalus: Journal of the American Academy of Arts and Sciences*. Winter 129(1).

Carson, L. and Gelber K. 2001. Ideas for Community Consultation: a report prepared for the NSW Department of Urban Affairs and Planning. February.

Cheney, H. Willets, J. and Wilson, E. (in process) It's more than the money: social values and sustaining a rural general practitioner workforce. *Rural Society*.

Cheney, H., Cordwell, P., Miller, J., Nheu, N., O'Neill, G. & Vecellio, L. 2003. *Local perspectives on weirs in the Upper Nepean*, Final Report for the Hawkesbury–Nepean Independent Expert Panel. ISF.

Cheney, H., Willets, J. & Wilson, E. 2003, 'Not just for me': researching rural needs through dialogue. *New Community Quarterly*. (1)4: 13–15.

Flyvbjerg, B. 2002. *Making Social Science Matter: Why social inquiry fails and how it can succeed again.* Cambridge University Press: Cambridge.

Holliday, C.O., Schmidheiny, S. & Watts, P. 2002. *Walking the Talk: the business case for sustainable development.* Greenleaf Publishing Limited: Sheffield.

Hawkesbury–Nepean Expert Panel. 2004. *Integrated Monitoring Program for the Hawkesbury-Nepean, Shoalhaven and Woronora and Rivers,* Report for the Hawkesbury–Nepean River Management Forum. Department of Infrastructure, Planning and Natural Resources: Sydney.

Jiggins, J. and Roling, N. 2000. Adaptive management: potential and limitations for ecological governance, *International Journal of Agricultural Resources, Governance and Ecology.* (1)1: 28–42.

Konisky D. and Beirele T. 2000. Innovations in public participation and environment decision making: examples from the Great Lakes Region. *Society and Natural Resources*. 14: 815–826.

McDonald, J. Bibby, L. and Carrol, S. 2002. Recruiting and Retaining General Practitioners in Rural Areas: improving outcomes through evidence-based research and community capacity building. *Evidence-based review: final report.* Centre for Health Research and Practice, University of Ballarat: Victoria.

Nichols, A. 1997. The Spouses of Rural Doctors: a significant influence on professional life in the bush. 4th National Rural Health Conference. 9th February, Perth. http://www.ruralhealth.org.au/

Petrucci, M. 2002. Sustainability: long view or long word? *Social Justice,* (29)1–2: 103–116.

Reason, P. and Bradbury, H. 2001. *Handbook of Action Research: participatory inquiry and practice.* Sage: London.

Sachs, W. 2003. *Environment and Human Rights (Wuppertal Paper No. 137),* Wuppertal Institute for Climate, Environment and Energy, Wuppertal. Available http://www.wupperinst.org/globalisierung/pdf_global/human_rights.pdf.

Spencer-Cooke, A. 2000. Hero of zero, *Tomorrow* magazine (10)6: 10–16.

Tolhurst, H. Talbot, J and L. Baker. 2000. Women in Rural General Practice: conflict and compromise. [Editorial] *Medical Journal of Australia*, (173)3: Aug 3. 119–120.

Tolhurst, H. and Lippert, N. 2002. *The National Female Rural General Practitioners Research Project.* Final Report. Ausinfo: Canberra.

Wadsworth, Y. 1997. *Everyday Evaluation on the Run.* Allen & Unwin: St Leonards.

Wilson, E. 2002. Strategies to support families of female rural General Practitioners: a community development approach. Unpublished paper. 5th WONCA World Conference on Rural Heath: Melbourne.

World Commission on Environment Development. 1987. *Our Common Future.* Oxford University Press: Oxford.