INTERNATIONAL FARM MANAGEMENT CONGRESS 2003
FARMING AT THE EDGE

TOWARD BETTER OUTCOMES FOR NATURAL RESOURCE MANAGEMENT DECISIONS – THE POTENTIAL OF PUBLIC DELIBERATION

Sandra Hodge
University of Missouri
HodgeS@missouri.edu

Neil Southorn
The University of Sydney, Orange
neil.southorn@orange.usyd.edu.au

Abstract
The type of public participation or community consultation process used by communities to resolve natural resource management issues will have a major impact on the types of decisions which result. A familiar process is the "expert" model where expertise is delivered to the community rather than reflecting a true collaborative learning process with community members. An alternative is deliberation, a community-based process where community members engage in collaborative learning and find courses of action valuable to the community as a whole, and not those which represent just a few interests. This paper discusses two case studies - the development of Water Sharing Plans by River Management Committees in New South Wales, Australia, and concern over potential intensive livestock operations in Saline County, Missouri, USA - and compares how the different processes were used to resolve natural resource management issues.

Introduction
It is generally agreed that reform is needed to ensure the long term sustainability of agricultural and natural systems, and in rural areas particularly, the communities that depend on them. This reform is in progress, but its momentum can easily be compromised. Although there is no single, widely accepted definition of 'sustainability', it is generally agreed that it encompasses three spheres of influence that embrace biophysical, social and economic criteria (Productivity Commission 1999).

Community participation in natural resource decision-making is critical if policy planners want "ownership" by communities, as it is the actions of local communities that ultimately determine the success of the policy. This process is intended to represent all community positions and voices, but this is usually not the case.

One common scenario is where public debate tends to be dominated by postures of individuals in a scenario of "decide-announce-defend" (Forester 1999:63). These meetings are likely to be adversarial encounters where polarized positions voiced by a few individuals tend to dominate, discouraging the lesser-heard voices so that the public sees these meetings as futile. Even when public participation is encouraged, it is likely that the community does not lead the process, but rather, it is a top-down "expert-client" approach where knowledge is diffused to communities by experts. Powers & Pettersen (2001) note that this approach does not support communities in efforts of co-learning and co-creating to determine their own futures.

Deliberation—a different way to decide

In communities, citizens can't work together on community issues without making choices. This is always difficult as choices about what kind of community is desired forces people to deal with priorities that each of them may hold differently from others. When people have different but deeply-valued concerns, this "choice work" can only be handled effectively in a deliberative dialogue, where people come together to reason and talk *through* an issue, not just *about* it. They carefully weigh the costs and consequences of their various options for action, in the context of the views of others. Deliberation is therefore much different from an expert guiding the community through a decision process that is not created by the community.

In the context of natural resource management, Goldney & Bauer (1998) agree. They recognise the importance of community wisdom whilst emphasising the need to integrate nature conservation with agricultural production, and recommend "a move from a technocentric extension paradigm to embrace empowerment paradigms, where the community and agencies become co-learners in the development and implementation of relevant programs". This does not mean that technical or expert information is not necessary. It implies that unless the community is engaged as a co-learner and co-creator of the process, it does not build the community's capacity to think, talk and work together in *their* common interests, as opposed to what an expert thinks their interests are.

Deliberation is designed to produce a change in the way people habitually interact with each other over public issues. Daniels & Walker (2001) describe this as "collaborative learning" - where citizens and experts collaborate, producing learning for both. If public participatory processes are to lead to sustainable decisions around community issues, people have to be willing to come together and do the work it takes to identify which choices work for their community.

Further, when the public comes together a unique kind of knowledge is produced - different from what is usually thought to "educate" citizens, different from the "expert" information provided by professionals, experts, and officeholders, and different from when people work alone.

Two case studies are presented to briefly illustrate the expert and deliberative models.

Case Study: River Management Committees, NSW, Australia

In the quest for more sustainable use of natural resources, Australian policy makers are redesigning legislation to lessen the impact of exploitive activities such as industrial agriculture. In many cases, this places controls over the behaviour of farmers, either by restricting access to natural resources such as extraction of water for irrigation, or preventing farming practices previously considered acceptable; for instance, the clearing of native vegetation. The current reform process includes mechanisms for community consultation.

The operation of River Management Committees (RMCs) in New South Wales (NSW), Australia, is detailed as a case study of current practice in community participation. This brief synopsis demonstrates a community consultation process biased toward the "expert" or top-down approach.

In 1995, a cap was imposed on extraction of water from the Murray Darling Basin, authorised by the Council of Australian Governments (COAG). During 1998 and 1999, the NSW Government created numerous RMCs to implement its water reform agenda. The vision of this agenda refers to healthy watercourses, vibrant rural communities, and sustainable water extraction for agriculture, business and recreation. In addition, Government agencies conducted assessments of the stress status of rivers, based largely on desktop analysis of biophysical indicators (Department of Land & Water Conservation 1999).

The task of the Committees is to develop Water Sharing Plans, which determine the local operating rules for water extraction within the NSW Government policy framework. Committees were established largely on catchment or sub-catchment boundaries, but differentiating between regulated (i.e., river flow controlled by releases from storage) and unregulated parts of the water source. Committees were limited to generating recommendations relating to share allocation of available flow, and therefore unable to make recommendations on the land management practices that influence flow and water quality.

RMCs were constructed by approximately equal representation by Government agencies and the community, with a community representative appointed as chairperson. Community members were selected to represent vested interest

groups (the water users, including irrigators and stock and domestic users), environmentalists, local Government, and indigenous Australians. Individual committee members were appointed by Government, using a process that included nomination. In general, the Government agencies represented natural resource management policies, and not community or economic development agencies, in part because the initial brief given to Committees was to protect environmental values as first priority.

To a large degree (but not universally) the RMCs reached consensus on their recommendations, although some local communities have shown discontent and distrust over their application. In some cases, they have been widely rejected by various parties. In particular, some irrigator groups remain opposed to reduced water allocation, particularly in the absence of compensation.

There are a number of weaknesses in this strategy:

1. *Stakeholder groups were selected by Government*. Although the process is open, and representation appears to be balanced, there was no opportunity for community input into the composition of the Committees.

2. *Stakeholders were often nominated because of their opposition to Government policy*. In many cases, individuals sought nomination because of a perceived opportunity to oppose Government policy.

3. *Some stakeholders represented vested interests*. Although this is impossible to avoid, it may create difficulty in defining a shared vision.

4. *Government was represented by natural resource management agencies*. Although these agencies claimed expertise in socio-economic matters, the priority was clearly in regard to resource management. Following representation by RMCs and communities, Government agreed to include independent socio-economic assessment of Committee recommendations, but this was not permitted as an integral part of the process. Consequently, some disadvantaged members of local communities felt rejected by the process.

5. *The process created adversarial debate*. This is not unexpected, given the composition of RMCs, and the legal status of their recommendations, but does not necessarily optimise Committee outcomes.

6. *The formal Committee procedure was cumbersome and time consuming*. The Committee process required significant resources for support, administration, and travel. More than eight years has passed between imposition of the cap, and promulgation of the first Water Sharing Plans, resulting in substantial business uncertainty.

7. *Government was represented by many agencies, not necessarily united*. Rivalry and friction between agencies occasionally surfaced.

8. *Policy development occurred in parallel with Committee deliberations*. At times, policy modifications or new policy initiatives resulted in re-working Committee recommendations, creating frustration and a sense of destabilisation.

9. *The agenda, boundary, limitations, priorities and procedures were determined by Government*. Officially, the Committees acted only to advise the relevant Government Minister, who can reject or alter specific recommendations under a range of circumstances. Consequently, some communities questioned the true level of community participation.

10. *Scientific data was lacking*. In some cases, river management decisions were made with very limited scientific data, particularly in regard to stream ecology. Flow data was often generated from limited gauging information.

11. *Commitment to implementation remains vague, and resources for monitoring are limited*. Committee recommendations were made before implementation and monitoring strategies and resources were identified.

12. *Socio-economic assessment not integrated with Committee deliberations*. Because environmental values were established as first priority, socio-economic assessment was initially relegated to a superficial analysis. This appears to contradict the philosophy of sustainable development that underpins natural resource management (Productivity Commission 1999), and has alienated some communities. Follow-up assessments have been undertaken in some catchments, but these have not all been conducted by independent analysts, and have not been continuously integrated with Committee deliberations.

13. *Lack of compensation created barriers to adoption*. Discussion of compensation was limited to changes after implementation of Plans. The refusal by Government to consider compensation in the general sense, despite earlier Government approval of water extraction licences, will create hardship and disadvantage for some businesses, and created significant barriers to community adoption of recommendations and participation in the process. Barr & Cary (2000) note that in large part, successful adoption is related to economic advantage; i.e. the commercial benefits of sustainable resource use will enhance adoption, and there will be resistance to change resulting in, or perceived to result in, reduced economic benefit.

14. *The Committee process is not consistent with the participation and decision making processes of Indigenous Australians*. Although Aboriginal representation was expected and encouraged, the structure, charter and operation of Committees did not facilitate this (Schnierer et al. 2001). Some Committees proceeded without Aboriginal representation.

A survey of RMC members on the committee process was undertaken by Government during 2001, but results have not been made available.

The process described above, although not entirely, bears similarities to the 'expert - client' model described by Powers & Pettersen (2001), where certain parties provide expert knowledge in the belief that their clients will accept it and benefit by it. The dependency built into such a model provides a degree of comfort to the stakeholders, and helps support the continuance of institutional status. Although popular in past decades, such a model is increasingly unable to cope with social complexity, particularly in the absence of full information, and has partly contributed to current difficulties facing natural resource management.

Government did not truly engage or empower the community in the decision making process. It is likely that significant sections of the community will reject Government decisions on water sharing, and lead to continued community disharmony on natural resource management issues. In cases where Committees were successful in reaching consensus and influencing positive community reaction, it is likely to be in spite of the process; for example, where Committees chose to conduct public meetings that engaged the community and addressed social as well as biophysical issues. Critical success factors included elements of a deliberative approach to community participation.

Case Study: Saline County Study Commission, Missouri, USA

Initially, the natural resource management issue in Saline County was related to potential impact on groundwater. The concern of the County was the potential for large-scale confinement animal feeding operations (CAFO) (swine) to enter the County, as they had in other areas of the State of Missouri, and contribute to groundwater and air pollution (for more details, refer to Powers & Pettersen 2001).

The Saline County Commissioners could not prohibit CAFOs because they were regulated through the U. S. Environmental Protection Agency (EPA) and Missouri Department of Natural Resources (DNR). Unless something was found amiss in the permitting process, CAFOs could not be excluded. The interest of the Commissioners was to create some other barrier to their establishment in the County. One approach which interested them, and had been used by another County, would be to pass a health ordinance which would regulate these entities, in terms of groundwater and air contamination, beyond permits required by EPA and DNR. A public meeting was held and it was discovered that not

all Commissioners felt the same about CAFOs, and they had concern over the legal basis for implementing this ordinance. The ordinance was put on hold while more information was sought.

The process in Saline County took place in five stages over three and a half years.

Stage 1. The "expert" approach.

After putting the health ordinance on hold, the first process used by the Commissioners was the "expert" model. The Commissioners met with the University Outreach and Extension Commercial Agriculture Program, and "stressed the need for 'knowledge-based' decision-making in regard to the potential for such development". The scope of the knowledge was narrow, focusing on economic impact, with University faculty deciding what knowledge was relevant. Core issues, such as impact on the cultural and historical assets in the County, and personal and property rights, were not going to be addressed (Powers & Pettersen 2001).

This decision erupted into controversy with a number of statewide groups, including conservation and sustainable agriculture interests, questioning the agenda of experts and voicing their opposition to this approach. A new agreement was reached which placed the responsibility for the process in the hands of Saline County - it was to be a County-based decision making effort. The people in Saline County would drive the process and be active co-learners throughout. They would involve the "experts" when they felt it was warranted

Stage 2. A shift to a co-learning, co-creating model.

Once the Commissioners became comfortable with control of the process and knew that it would not be dictated by the University, rapid progress was made. A twelve member Steering Committee was chosen locally by the Saline County Commissioners. Different perspectives were represented with gender, geographic and occupational diversity. Members had one year terms but could renew. It was self-organized and self-directed.

The Study Commission, not the experts, guided the study. While University faculty could suggest options, it was ultimately the Commission that chose which suggestions to use. People on the Commission were committed to the process, with most attending more than 58% of the 38 meetings. Everything that happened was publicly recorded and a web page kept citizens informed. A great number of Saline County residents learned computer skills as a result of this process. The local media was involved and reported on all meetings.

Stage 3. *Framing the issue.*

Once information was gathered, a draft Issue Book was prepared which framed the problem and proposed several approaches to addressing it, and presented to all County citizens.

Stage 4. Public forums, where citizens engaged in deliberation on the issue.

Seventeen public forums, with over 200 people participating, were held around Saline County to facilitate community consultation. The draft Issue Book provided the basis for deliberation at all forums. Each forum had a moderator and a recorder and the notes from each forum were recorded on the community website. The local newspaper attended almost every forum and reported on each one. At least one member of the Study Commission attended each forum. What people said mattered, and was incorporated into the final recommendations.

Stage 5. Recommendations from the Study Commission presented to the County Commissioners.

The whole process revealed much deeper concerns from the citizens than just passing a health ordinance to deter CAFOs. People realized the critical issue was the future of Saline County as it related to its natural resource base, and CAFOs were just a part of this. This process resulted in a two-part recommendation from the Study Commission:

1. A temporary planning committee was established to develop natural resource plans for Saline County, and
2. County Commissioners should put in place a "good neighbor" policy, that requires neighbors be involved in decisions regarding an individual's proposal to establish an activity which might be of concern. This would allow them to work it out themselves, and if not, people in each township would be trained in conflict resolution to help mediate any disputes.

Conclusions

Community empowerment will always be difficult to achieve because of political interference, "expert" driven processes where community interests are framed by outsiders, and policy development which lacks long term vision. Political interference is an inherent characteristic of policy development and implementation, and is considered a natural component of the process (Forester 1999). However, it can be addressed depending on the process used for community decision-making. Deliberation offers advantages over traditional top-down, "expert" processes because it gives the community a voice and makes them collaborators in the process.

While these cases vary in their content, the context is the same: where an entity, be it Government, University or other agency, controls the process, decides what "expert" information is needed and defines the interests and needs of the

community. In the case of RMCs in NSW, had the community been responsible for driving the process, the results might have been very different. In Saline County, had the "expert" process remained the process of choice, it is doubtful the underlying issue - the vision of the community with regard to natural resources - would have surfaced. The collaborative learning and deliberative process caused people to take ownership of the process, to become involved, and to go beyond merely economic issues to a vision of what they wanted their County to look like, which was clearly important to them. While the recommendations may appear very general, it is the *process* which is most important here. It caused community members to think together, work together and make decisions together. An additional outcome is that a number of agencies are now using the deliberative process for citizen participation.

Authors

Sandra Hodge
Sandra's work has focused on the human dimensions of natural resource and community based issues. She is currently Associate Professor in rural sociology at the University of Missouri and the State Specialist for Public Policy in university extension. Dr. Hodge leads the State wide program Discovering Common Ground, which assists communities in building their capacity to engage in more sustainable community-based decision making.

Neil Southorn
Neil is lecturer and consultant in Property Management Planning, member of the Lachlan (Unregulated) River Management Committee, and farm owner in central west NSW. Although coming from a technical background, specialising in farm water supplies and irrigation, Neil has become increasingly involved in the development of integrated management plans for sustainable agriculture at farm and catchment scale.

References

Barr, N. & Cary, J. 2000. Influencing Improved Natural Resource Management on Farms: A Guide to Understanding Factors Influencing the Adoption of Sustainable Resource Practices. Discussion Paper, Bureau of Rural Sciences, Commonwealth of Australia, Canberra.

Productivity Commission. 1999. Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies. Commonwealth of Australia, Canberra.

Depaertment of Land & Water Conservation. 1999. Lachlan Catchment Stressed Rivers Assessment Report. NSW Government, Sydney.

Daniels, S.E. & Walker, G.B. 2001. Working Through Environmental Conflict. Praeger, Westport, Conneticut.

Forester, J. 1999. The Deliberative Practitioner. The MIT Press, Cambridge, Massachusetts.

Goldney, D.C. & Bauer, J.J. 1998. Integrating Conservation and Agricultural Production: Fantasy or Imperative? In: Pratley, J. & Robertson, A. (Eds). Agriculture and the Environmental Imperative. CSIRO Publishing, Melbourne.

Powers, R.C. & Pettersen, W. 2001. Saline County Study: A Case Study of Community-Based Decision Making. Proceedings, 33rd Annual Conference of the Community Development Society, Duluth, MN.

Schnierer, S., Faulkner, A., & Fisher, C. 2001. Aboriginal Cultural Values of the Native Vegetation of NSW. Background Paper No. 5, Native Vegetation Advisory Council, Department of Land and Water Conservation, Sydney.