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Community consultation in the setting of resource condition targets for dryland salinity – did it work?

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Abstract: A consultative approach was used to set resource condition targets for dryland salinity in the south west of Western Australia. It was anticipated that farmer development of the targets would lead to a sense of ownership and therefore a desire to achieve the targets. Workshops were held at which farmers were presented with the latest information on salinity risk for their catchment. The farmers described their aspirations for salinity management and simple models were used to predict the impact of management options. Given this information, the farmers set what were considered realistic and achievable targets for dryland salinity. The project was evaluated to determine the impact of the consultative process. This qualitative evaluation involved semi-structured interviews with 20 farmers who attended the workshops. Results show that the process had a direct impact on the capacity of the majority of farmers interviewed. In addition, there was evidence that participation resulted in the implementation of management actions. The process that was used, rather than the targets themselves, appeared to be the key influence. The three key learnings from this work were: 1) there are added benefits to using a consultative process; 2) important elements of consultation are the interactions between participants and two-way discussions with experts; and 3) level of impact is dependent on the experience level of participants.

Introduction

Community consultation is a way to involve the community in decisions that may impact upon them. Consultation encourages community ownership of the decisions and a vested interest in following through with action. It is for these reasons that a consultative process was used to develop targets for dryland salinity. The project, commissioned by the South West Catchments Council and delivered by the Department of Agriculture and Food, endeavoured to set SMART (**S**pecific, **M**easurable, **A**chievable, **R**ealistic, **T**ime-bound) resource condition targets for dryland salinity in the low to medium rainfall zone of the south-west of Western Australia. (These are targets for the condition of the natural resources e.g. for salinity, the target might be something like 'no more than a 10% increase in the area of salinity in x catchment by 2020'). Rather than set the targets themselves and then extend these to the landholders, the project team felt there may be advantages in having landholder participation. In particular, it was anticipated that landholder involvement in developing the targets might lead to a sense of ownership and therefore enhanced motivation to achieve the targets. Clearly, it is the landholders' actions on the ground that are key to ensuring the targets are met.

The project was evaluated in 2008 to determine the impact of the process on four separate stakeholder groups – landholders, Natural Resource Management (NRM) officers, members of the project's Community and Stakeholder Reference Group and the project team. This paper focuses on the impact of the process on the participating landholders. For the complete evaluation findings see Heath et al. (2009).

The consultative process

Ten catchment-based workshop sets (consisting of two separate workshops) were held, presenting groups of landholders with the latest information on salinity risk. At the first workshop landholders were presented with information on the current salinity situation in their catchment. They were also provided with scenarios based on different levels of recharge reduction tailored for the catchment. The second workshop focused on future scenarios. The workshop participants had the opportunity to describe their aspirations and preferred options for salinity management, and simple models were used to predict the impact of these options. Using this process, landholders were able to make what were considered informed decisions to set realistic and achievable catchment-scale targets for dryland salinity.

The workshops with the first five catchment groups were overseen by a Community and Stakeholder Reference Group, which was established to help develop and review the target-setting process. The Reference Group, which included representatives from the South West Catchments Council, key catchment groups, Natural Resource Management officers and landholders, was responsible for setting out the criteria on which the catchment selection process was based, providing advice on how to engage landholders, evaluating the process and making recommendations for improvement. Using the refined target-setting process, a further five catchment-based workshop sets were conducted.

One important difference between the first five workshop sets and the second series was the inclusion of funding. The review of the process conducted by the Reference Group revealed that the catchments groups were keen to implement on-ground actions in order to work toward their newly acquired target for salinity, but the momentum to follow-through was lacking. To partly overcome this, groups that participated in the second series of workshops were eligible for \$10,000 funding to implement on-ground salinity management works.

Evaluation methods

The impact of the target-setting process was qualitatively evaluated using face-to-face, semi-structured interviews with 20 landholders. Two criteria were used to select these:

12. Catchment – landholders were grouped according to the catchment in which they attended the workshop (total of 10 catchments).
13. Workshop attendance – landholders were categorised as attending 'workshop 1', 'workshop 2' or 'both workshops'. Forty-one of the 91 workshop participants attended both workshops in their catchment.

Two landholders that had attended both workshops were randomly selected to be interviewed from each of the 10 catchments (total 20 interviews). An interview guide that listed the questions to be explored was used to ensure the same format and topics were covered with each landholder. All interviews were recorded digitally and via handwritten notes.

All audio files and notes were transcribed and independently read then re-read by the evaluation team to identify patterns and associated themes. The transcripts were imported into N-Vivo 7 qualitative analysis software and coded according to the identified patterns and themes. The data were summarised and interpreted by the team, and associations between themes explored.

Findings

Did it work?

There were two key reasons for involving the landholders in the development of the targets: 1) to ensure the targets were realistic and achievable; and 2) to encourage ownership and therefore stimulate action to achieve the targets.

Ten of the interviewees saw value in having targets, particularly because they were seen as *'a necessary thing to have because you've got to have something to aim for'*. These interviewees had either implemented practices to actively help achieve the targets - *'I have more of an idea of what flows downstream, so put in banks to hold the water back and help achieve the targets.'*; or would like to reach the target (and have plans in place) but do not have the resources at present to implement - *'Well it's [changed my], what's the word, my ideals it has but in reality... because it comes back to time and money. When you're not making anything it's very hard to spend it.'*

For ten of the interviewees, the targets set at the workshops were an arbitrary figure that did not have any impact on individual management of salinity. The majority of these interviewees had their own targets for their own farms and were working towards these. However, it was recognised that, even though the catchment salinity targets did not come into play, individual works would ultimately assist the catchment in achieving the target. It is interesting to note that these ten interviewees appeared to have had considerable practical experience and/or theoretical knowledge, in terms of salinity management. In general, the other ten evaluation participants seemed to have less experience in this field.

As alluded to above, a number of interviewees wanted to take action to address salinity but did not have the money and/or time to implement any work. This brings into question how realistic and achievable the set targets actually were. Nine out of seventeen farmers believed the targets were achievable and realistic, four said that they weren't, and four could not remember their targets and therefore could not comment. Several farmers indicated their belief that the targets were a 'stretch' but it was useful to have something to aim for even if it was possibly unachievable. The project team confirmed this view, believing that some groups had set optimistic targets given the scientific information at hand. Further comments were made that targets were achievable if resources (money) were made available to do the work required. Comments made by interviewees suggested that the workshop discussions about targets and management options, and the to-ing and fro-ing of ideas and information helped make the targets more realistic.

Additional benefits: Impact of the process

Knowledge and understanding In order to assist in the development of realistic targets, the workshops brought participants up-to-date with the latest information on salinity for their

catchments and provided scenarios that modelled the impact of management actions, chosen by participants, on the future extent of salinity. Large, catchment-scale maps were used to highlight the areas of future salinity. The interviewee reactions to these salinity projections were varied, but to the majority they were a real 'eye-opener'. Some appreciated that they now 'know how it is', while others, although resigned to the fact that salinity was a real threat, did not believe the spread would ever be as great as projected. Conversely, one interviewee thought that the projections were underestimated. The impact of these projections on landholders, including those that were disbelieving, was profound, evoking words such as 'devastated', 'horrific', 'scary stuff', 'distressing', 'frightening'. The emotive language used, and strong recollection (*'That was something I will never forget.'*) illustrate the power of visual aids.

However, when the landholders were directly asked how the workshops improved their understanding of salinity and its impact, the majority felt that no improvements were made. The reason for this response in all cases was because they felt they already had a good understanding - *'I've been aware of salt for a long time and I know what it does.'* This is inconsistent with the reactions to the salinity projections described above. In fact, of the 11 interviewees that believed the workshops did not improve their understanding of salinity and its impact, nine of these were clearly affected by the salinity projections.

The information delivered regarding the projected spread of salinity in their catchment was the reason for improvement given by interviewees that believed the workshops improved their understanding of salinity and its impact - *'Well it certainly helped mine (understanding) in the sense that I didn't realise there was so much land that is susceptible to salt.'*

Interviewees were evenly divided over whether the workshops had improved their understanding of the impact of salinity and salinity management options or not. There were three key reasons given by those that said that the workshops did improve their understanding:

14. 'Discovering' new options - 'Because we ran through it with different farmers, of what they would do or what their options are, it did widen my horizons to think 'Yes, I could do that as well.' Like I had never thought before to plant lucerne, for example ... And because others were doing it, I thought 'Oh yes, that's quite a good idea really.'
15. Realisation that saltland can be productive - 'I think that was the main one, was actually getting productivity off your salt land. We've got the salt land, let's do something with it to get productivity off it...not just lock it up and leave it.'
16. Reinforced the suitability of current salinity management strategies/ideas - 'For me, it just concreted what we were doing. I don't think I changed my view on what we're wanting to do and things like that. I think that it's concreted it.'

Similar to the 'salinity and its impact' responses above, the interviewees who felt the workshops did not improve their understanding of salinity management options believed they already knew the information being presented. Whether or not this means that the workshops reinforced the applicability of their current management actions is unclear.

It is important to note that, particularly when talking about farm management issues, landholders value information from other landholders (Heath et al. 2006). The target-setting process gave participants the opportunity to discuss salinity management options and experiences with one another, which was important for a number of interviewees who were actively looking for options to try on their own properties.

It appeared that improvements in capacity correlated with the landholders' experience with salinity management – the less experienced interviewees learnt more.

Attitudes and aspirations The workshops appeared to have brought about a change in approximately half the interviewees attitudes and/or aspirations. These changes were categorised into four key areas:

17. Call to action (11 response) – the 'wake-up call' regarding salinity management. That is, the realisation that more can be done and that it needs to be done soon;
18. Working together (5 responses) – the realisation that they needed to work together as a catchment for the benefit of other farmers within the catchment, public assets (i.e. reserves, lakes), infrastructure and/or aesthetics;
19. Productive saltland (4 responses) – that saline areas need to be managed, and can be productive; and
20. Don't give up (2 responses) – realisation that it will take time for any effect of management to be noticeable (*'Being prepared for the fact that, don't be disappointed because we're losing ground, because that's to be expected. So it's not that we've done something wrong...That's I think the change in attitude that says 'alright, if that's the salt*

scald, we're not going to be sowing into it, it's not going to be moving back like this, but if we're only moving back this far all the time, well that's probably to be expected.').

Note: responses are not mutually exclusive

For the interviewees whose attitudes/aspirations had not changed, all had been (and continue to be) proactive in their management of salinity, which again correlates with the experience level of the participants.

Management actions Although implementation of salinity management actions was never a direct intended outcome of the project, the process used did result in implementation by half the interviewees. Of these:

- Six had learnt something new at the workshops and applied this to their own farms. 'I didn't know what to do, apart from fence it off. And then do what? That was the question. So, if it wasn't for the workshop we wouldn't have put the w-drain in. We would have probably fenced it off, because of the funding, but we wouldn't have known what to do on it.'
- Four interviewees used the funding associated with the workshop (i.e. \$10,000 for the catchment group) to implement some salinity management works.

A further three interviewees had learnt something at the workshop that they wanted to try, but had yet to implement. For the remaining interviewees, in many cases the workshops served a pertinent role in revealing to the participants the potential impact of salinity in their catchment and, as mentioned above, brought salinity to the fore after a period of relative inactivity. Furthermore, it is likely that the workshops reinforced the validity of the management that had already been undertaken and, in some instances, lead them to prioritise some options over others.

Three of the catchment groups involved in the workshops received substantial funding (\$200,000 per group) to implement on-ground works. For two of these three catchments, the funding had a great impact at both the individual and catchment-scale. The funding allowed them to work together as a group to implement ideas that had been discussed at the workshops. In one case, the group was going to fold, but the funding actually kept the group 'alive'. Furthermore, many interviewees believed that by collectively participating in a process to set targets for their catchment there would be a greater chance of success when applying for funds in the future.

Most significant change

A diverse range of responses was obtained from the landholders as to what they saw as the most significant change resulting from the workshops. However, these were able to be categorised into three key areas:

- Greater insight into the salinity problems that they face and possible actions to take (8 responses). The workshops got the participants thinking about salinity in their catchments and the effect that this may have on them, and other landholders, in the future. The participants had the opportunity to discuss management options and came to the realisation that they need to work together as a catchment. *'The most significant change, possibly - I mean for all us members of our catchment that went to the workshops, we see what's going in on our farms everyday and even within our catchment. So maybe the one thing that we do sometimes become is a little bit complacent, which means that we don't realise enough about the overall picture and that. And you sort of think you're doing your little bit in your farm, but everyone's got to be doing that little bit for it all to help at the end of the day. Yes, so probably the change factor is in your mind that there's a bigger problem out there than a lot of people realise.'*
- Getting them back into action (7 responses). As mentioned previously, the workshops brought salinity to the front of the workshop participants' minds and motivated individuals to take action. In addition, the opportunity to discuss the issue and solutions with others from the catchment resulted in follow-on action by reinvigorated catchment groups. In some cases, the funding was an important catalyst for action. *'That we've done some management now. Our whole catchment has done different things to control where water and salinity and trees - only as a result of that. The LCDC group will be better because everyone has done something either for salinity like we have, or water, trees. And they probably wouldn't have done that unless we did that [the workshop]. So for sure, if we hadn't had that workshop and the funding, probably very little of that would have been done. Probably we might have fenced this off, but we probably wouldn't have spent a lot*

of money on big w-drains and anything. Well that's one thing about that, if it wasn't for that [the workshop], that wouldn't have happened.'

- No change (4 responses). Some reported no change, in that they did nothing differently after the workshops. Others reported no change insofar as there had been no measurable change to the extent of salinity.

Process was key

Achievement of the targets was not the priority for half the evaluation participants interviewed. However, the workshops did bring salinity (and the management of it) to the front of the landholder's minds. It made them think back on what they had done, and think forward on where they would like to be in the future. In general, it was recognised that *'we better continue our efforts, we can't just back off'* and, in some cases, it kick-started them into action. The workshop process used, rather than the targets that were set, was the catalyst for action.

The experience level of landholders prior to the workshops appeared to have affected the impact of the workshops. Those interviewees that seemed to have had many years of addressing salinity and/or involvement in catchment group activities (e.g. active participation in Landcare) appeared to be less enthusiastic about the process. In general, the workshops did not affect the way this group of landholders did business – they knew the information being presented, they already had plans for the management of salinity on their properties and they were putting these plans into place. Having targets did not impact on what they were doing. In contrast, the workshops were of great importance to the less experienced, in terms of salinity management. This group of interviewees were actively looking for ways to address salinity on their farms and the workshops provided an ideal venue to discuss these issues with other landholders and experts. Much of this group were invigorated to work together to tackle the issue for the benefit of the whole catchment, including achievement of the salinity targets. It must be noted that interviewees were not asked about their experience level; these judgements were based on the observations of the evaluators.

Conclusions

Salinity was a familiar issue to all the interviewees, with the majority having implemented one or more management options to address the problem prior to the workshops. Nevertheless, the interviews revealed that a number of interviewees had become lax in their management of salinity. In particular, dealing with the problem had often been deferred because of constraints such as time and money (*'...too many crises around the place, isn't there, to be worrying about salt at the moment.'*). A consultative process was used in the belief that the targets set would be realistic and achievable, and landholders would have a sense of ownership of the targets and therefore a desire to achieve them. In general, the workshop process that was used, rather than the targets that were set, was the catalyst for action – the workshops inspired groups/individuals to take action (Viv Read & Assoc. 2006), but almost half were not doing this to help meet their catchment's salinity target. Furthermore, although inspired to take action, many did not have either the means or encouragement to persist with the preliminary plans or ideas discussed at the workshops. This raised the question of whether the targets set were indeed realistic and achievable. It is possible that achievement of the salinity targets would be more of a driver for action if progress towards the targets was actively monitored and discussed, and management plans put in place that were periodically reviewed.

The process used to set the catchment-scale salinity targets incorporated several elements that combined to inspire the landholders to take action. Important aspects included the catchment maps, which visually showed the area of salinity and areas at risk, and interactions (one-on-one, group discussion/debate, access to expert input, sharing experiences with other landholders). In particular, bringing together landholders with common interests (i.e. from the same catchment) to discuss their aspirations for their catchment built enthusiasm and motivation on a group-scale.

Another key benefit of using a process involving individuals from a defined catchment was the advantages this brought in terms of successful funding submissions. The catchment-scale planning driven by landholder input ensured that members had a clear, shared vision and agreed targets or actions required to fulfil the vision. This planning enabled groups to demonstrate their commitment toward the management of salinity in their catchment.

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