PROCEEDINGS OF THE AUSTRALIAN RANGELAND SOCIETY BIENNIAL CONFERENCE
Official publication of The Australian Rangeland Society

Form of Reference
The reference for this article should be in this general form;

Author family name, initials (year). Title. *In*: Proceedings of the nth Australian Rangeland Society Biennial Conference. Pages. (Australian Rangeland Society: Australia).

For example:

Anderson, L., van Klinken, R. D., and Shepherd, D. (2008). Aerially surveying Mesquite *(Prosopis* spp.) in the Pilbara. *In*: 'A Climate of Change in the Rangelands. Proceedings of the 15th Australian Rangeland Society Biennial Conference'. (Ed. D. Orr) 4 pages. (Australian Rangeland Society: Australia).

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CONNECTED REGIONAL, RURAL AND REMOTE COMMUNITIES: A CENTRAL AUSTRALIAN SCOPING STUDY

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INTRODUCTION

Advances in information and communication technologies (ICT) are increasingly enabling improvement in public and private service deliveries to communities. Various types of communities (communities of location, practice and interest) are also using ICT to share experiences, communicate aspirations and participate in relevant programs. This study was part of a wider scoping project called 'Connected Communities', which explored the role of ICT in the articulation of community aspirations and the delivery of services by various organisations to regional, rural and remote communities. The project had case study communities in the Northern Territory, New South Wales and Queensland. The project included three major tasks:

1. Gaining an understanding of ICT in the context of remote, rural and regional communities.
2. Gaining an understanding of community aspirations.
3. Undertaking a workshop with community, industry and government to discuss options for ICT projects, select preferred directions, and secure support.

This paper presents a case study involving people from the Natural Resource Management (NRM) community in Alice Springs, and focuses largely on outcomes of Task 2.

APPROACH

The initial task in the Connected Communities project was to undertake a general review of the role of ICT in regional, rural and remote communities, using web-based searching, literature, and monitoring of discussion groups. From this review the role of ICT in facilitating community demands and aspirations for NRM emerged as the focus for the Alice Springs case study.

To undertake Task 2, we interviewed 17 people from different government, non-government and private NRM-related agencies through semi-structured discussions. NRM agencies in Alice Springs play a key role in identifying NRM-related aspirations and needs of surrounding communities and enterprises, and the delivery of services to these communities. These agencies are also in a position to assess the feasibility of using advances in ICT in regional NRM planning and implementation processes. Stakeholders of these organizations include pastoral, indigenous, government, mining and public interests and private landholders.

Interviews were analysed for common themes, a synthesis document was circulated to interviewees and their feedback was obtained to ensure interpretations were correct.

FINDINGS

Five main activities which ICT could facilitate emerged from the Task 2 interviews:

- Regional NRM planning in the Alice Spring region, where coordination is a challenge given the sparse population density and remoteness of communities.
- Networking NRM agencies to reinvigorate an existing informal email network of NRM officers for various purposes such as facilitating the regional planning process and promoting inter-organisation cooperation.

- Making information from diverse collaborating agencies accessible and dynamic through appropriate data sharing platforms and timely updates.
- Developing coordinated and customised information delivery to satisfy information demands of overlapping client bases of the various NRM agencies.
- Capacity building to enable local governments, private agencies and communities to participate in various NRM activities. Visual and interactive communication media were suggested for improved community participation in NRM.

For instance, regarding the fourth activity, ICT has the potential to substantially improve coordinated delivery of existing services involving several different agencies. Coordinated information delivery could help to:

- Reach beyond traditional client groups (e.g. N.T. Bushfires Council could distribute fire information to Aboriginal landholders as well as pastoralists),
- Engage clients' interest by delivering different but relevant information as an ongoing activity rather than being event-driven,
- Promote cooperation of agencies and officers at different levels, and
- Value-add to existing ICT and other infrastructure found in different organisations.

Interview participants also identified institutional and technology-related barriers and constraints as well as enablers. The key institutional barrier that could limit the potential use of ICT was weak inter-agency relations. Other barriers included high turnover of ICT skilled personnel and slow adoption rate of new ICT technologies. Potential enablers included existing interpersonal relationships among officers involved in NRM activities in different agencies, and their complementary resources that make value adding possible.

Participants raised various other issues that may need to be considered in the development of any future activities. For instance, interviewees noted that the remoteness of communities in the case study area indicates a substantial role for ICT in the delivery of customised services. However, the cost of delivery and the capacity of clients to purchase services given widespread socio-economic disadvantage of remote communities meant that a market model may not be appropriate. Sparse client density and low short term economic returns associated with demands of natural resources management compound the problem.

In addition, the use of advanced technology such as satellite mobile phones was noted as possibly contributing to a loss of social cohesion in pastoral communities, through the reduction of social events like bush races, and local group interactions. The possible negative impacts of expanding the use of advanced ICT into regional, rural and remote communities needs to be considered, along with the potential advantages.

CONCLUSION

The research process was adaptive and participatory where the project direction was determined by local context and active involvement of research participants. A key finding of the case study was that better interpersonal and interagency communication was as important as any technical improvement in ICT for the delivery of NRM outcomes.