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Case Study Report:

Community Participation in Natural
Resource Management

&

BRIBIE ISLAND ENVIRONMENTAL PROTECTION
ASSOCIATION



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EXECUTIVE SUMMARY

A case study of Bribie Island Environmental Protection Association (BIEPA) explores the role of community participation in natural resource management (NRM) and the impact that demographic change is having on the available volunteer pool. Field observation, semi structured interviews and text based analysis was used to analyse BIEPA's approach to community participation in NRM and response to the ageing membership base. Community based natural resource management (CBNRM) is a 'grass-roots, community-based approach' (Tennent and Lockie, 2013, p. 574) and has enabled government to devolve power and promote community participation through community catchment groups (CCGs) and volunteering (Cass 2015). Due to the ageing volunteer, there is a shift away from on-ground works to discussion and education (Lockstone-Binney et al. 2016; Curtis & Sample 2010). CCGs must be resilient, adapt and transform (Walker et al. 2006) in response. BIEPA demonstrates elements of this adaptive approach (Curtis & Lockwood 2000) to management. Literature acknowledges the impact of the changing demographic, however there appears to be a limited amount of work proposing how CCGs can address this change.

Strategies are proposed to address the reduced participation of younger volunteers, capable of on ground work and to address impact of tourism and the ineffective management practices from LG. These include, effective use of social media to promote "'connective" action and social movement ' (Vromen 2017, p.51), utilising tourists for 'episodic volunteering' (Handy et al. 2006), a new tourism model for BI as well as education of LG employees and modification of their current KPIs.

INTRODUCTION

Over recent decades, the approach to NRM has evolved significantly. CBNRM offers an alternative approach to the traditional centralised, top-down government centric approach to resource management (Armitage 2005). CBNRM has no universally accepted definition however Measham & Lumbasi (2013, p.650) define it as a 'principle that seeks to encourage better resource management outcomes through the participation of local communities in decision making and application of local knowledge systems in management processes'. This paradigm shift in NRM has led to a more holistic, 'bottom-up', inclusive and regional view (Broderick 2005) model for NRM. The model is centred around community participation with communities being the 'locus of conservationist thinking' (Agrawal & Gibson 1999).

To ensure a unified, regional approach to NRM, there are 56 regional bodies across Australia which support and co-ordinate these community groups (NRM Regions Australia n.d.). This report will focus on Healthy Land & Water (HLW) who are the regional body for South East Queensland.

A literature review and case study of BIEPA explore community participation in the context of NRM, focusing on the role of volunteering and the impact of the changing demographic. The conceptual framework of resilience, adaptability and transformability (Walker et al. 2006) is used to critique the strengths and challenges of BIEPA's approach to managing community participation and response to the change.

The report reviews the need for succession planning, the importance of adaptive management (Curtis & Lockwood 2000) and creation of networked structures (Agrawal & Gibson 1999) to ensure longevity. Limitations of the existing literature, especially in the area of succession planning and the impact of reduced on ground works is having on CBNRM effectiveness is reviewed. Solutions to address the current

challenges faced by BIEPA in relation to their volunteer base, their relationship with LG and the effectiveness of their conservation efforts on Bribie Island (BI) are proposed.

LITERATURE REVIEW

CBNRM allows for local communities to participate in and benefit from the management of their natural resource (Oliver 2001; Gooch 2005; Gooch & Warburton 2009; Cass 2015). Utilising community energy and resources has allowed for 'enhanced issue articulation, better communication and learning, increased trust and reduced conflict' (Harrington et. al., 2008). Literature reviews the success of CCGs being the cornerstone of Australia's model for CBNRM (Oliver et al. 2005; Agrawal & Gibson 1999; Buchy & Race 2001; Measham & Lumbasi 2013). In contrast, there is an equal amount of work looking into the failures of CBNRM (Buchy & Race 2001; Curtis & Lockwood 2000; Lockstone-Binney et al. 2016; Simpson & Clifton 2010).

The CBNRM model is founded on volunteers (Lockstone-Binney et al. 2016), generally defining the volunteer base as 'Communities of Place' (Harrington et al. 2008) with CCG members having a 'strong sense of place' (Gooch & Warburton 2009). The traditional volunteer base of CCGs is eroding (Simpson & Clifton 2010; Curtis & Sample 2010; Lockstone-Binney et al. 2016) as the younger generation aren't intrinsically motivated by volunteer works (Simpson & Clifton 2010). CCGs are adapting and transforming by 'moving away from doing on-ground works and becoming discussion groups which is undermining the founding ethos of CCGs' (Lockstone-Binney et al. 2016, p. 133). CCGs must ensure they are resilient, adaptable and transform in response to this changing demographic (Curtis & Lockwood 2000; Dover & Wild River 2003).

Succession planning and persistent volunteer recruitment is important to group effectiveness and longevity (Lockstone-Binney et al. 2016; Simpson & Clifton 2010). However, the vital component of how to attract these younger volunteers is overlooked. To address this Handy et. al. (2006) have proposed new

models for volunteering such as episodic volunteering. I suggest further work is required to look into innovative ways to attract the younger generation.

It is imperative that CCGs network with each other to enhance the overall group effectiveness and conservation outcomes (Agrawal & Gibson 1999; Curtis & Sample 2010; Gooch & Warburton 2009; Oliver 2001). Networks of CCGs have a greater capacity to develop partnerships with the public and private sectors, improving group effectiveness (Curtis & Sample 2010). NRM Regional bodies do assist in this network creation however studies reveal that 'regional co-ordination among local governments is limited' (Stenhouse 2004, p.209).

LG and the NRM regional bodies are critical elements in Australia's model (Commonwealth of Australia, cited in Stenhouse 2004). HLW perform a governance role, provide project management support and financial management of public funds (Oliver et al. 2005). In contrast, LGs are assigned with the ongoing maintenance and management of lands. Research has suggested that council success in this area is limited, attributing this failure to lack of resources and employee environmental knowledge (Stenhouse 2004). Curtis and Sample (2010, p.44) also cite 'erosion in confidence, and perhaps trust, between groups and their government as a confounding factor in limited effectiveness of CCGs'.

A further limitation of literature is the assumption that CCGs are operating in a community with some level (even if minimal) of environmental awareness. A literature search did not locate any literature that discusses CCGs having to operate with constant conflict, threats and environmental vandalism. Community theory and participation does acknowledge that 'communities are diverse entities' (Jackson, cited in Harrington et al. 2008), with some level of discourse but doesn't allow for the majority of society being at odds with the CCG's agenda, plagued by self-interest and uneducated environmental opinions.

Agrawal (1999) does propose, to address conflict, that conservation initiatives should be founded on institutions rather than communities, yet there are no suggestions on how this should be applied. Cruz (2010) and Scott (1985), pose the concept of 'Weapons of the Weak', which discuss how everyday methods of resistance, such as spreading malicious rumours, pilfering, arson and slander are the modern version of open rebellion. It was interesting to see how the actions of Malay peasantry can be paralleled with modern day actions of the BI "resistors".

METHODS

For this case study report, I used a mix of qualitative ethnographic and phenomenographic approaches to the collection, synthesis and interpretation of information. My primary methods were field observation, semi structured interviews and targeted data collection through text based analysis.

The most valuable of my methods was field observation and semi structured interviews. I conducted a day trip to Bribie Island on 21st September 2017, meeting with the President of BIEPA Diane Oxenford. Diana hosted me for a day, driving me to key points of interest around the island. Informal semi-structured interviews provided historical and social context of the organisation, a personal perspective on BIEPA and community participation and the ongoing challenges they face. I also attended BIEPA monthly meetings at the Bribie Island RSL. These meetings provided an informal setting to observe BIEPA members and interview members. This method assisted me in critically assessing information gained via other methods, comparing different sources and provide rigour in assessment.

The targeted data collection was primarily through the internet, reviewing organisational websites and journal articles. Supporting documentation was provided from BIEPA including monthly newsletters, presentations, correspondences and local environmental management plans.

The conceptual framework, derived from Walker et al.'s (2006) theoretical works on socioecological systems and their resilience to change, was used to analyse community participation in NRM, using BIEPA as a case study.

RESULTS & DISCUSSION

BRIBIE ISLAND

BI is a 150km² sand-strip land mass located in the northern part of Moreton Bay in South East Queensland (Taulis et al. 2011, p.101). 59% of the island is nominated protected area (ABS 2017) and its wetlands and migratory birds and turtles are protected by international treaties. BI's population is 18,189 with 55.8% older than 55 years (ABS 2017). In 2011, 17.9% of BI population was undertaking voluntary work for an organisation (ABS 2017). BI is a popular tourist destination and has large variations in population during peak seasons (MBRC 2017a).

BI is under the control of two local governments; Moreton Bay Regional Council (MBRC) and Sunshine Coast Council (SCC). BIEPA primarily works in the southern, more urbanised region of the island, which is under the control of MBRC. For this report, discussions of LG will focus on MBRC.

BIEPA

BACKGROUND & MEMBERSHIP

BIEPA is a volunteer CCG that undertakes conservation, education and collaboration with the local community, with the aim to conserve the unique and natural assets of BI. BIEPA was established in 1978 by a group of island residents (BIEPA 2017a), and is a member of South East Queensland's Regional NRM Member Association (HLW 2017). BIEPA has 120 members with an average age of approximately 65 years and the management committee consists of a President, Vice President, Secretary, Treasurer and three committee members (D Oxenford 2017 pers. comm., 21st September). Any member of the public can join BIEPA for \$15 per year (\$20 family) and can join online, at monthly meetings or any public BIEPA event. Members represent a 'community of place' (Harrington et al. 2008) with a majority of members residing on BI, sharing common interest to protect the local environment. Confirmed by a survey of members

(BIEPA 2017b), revealing that ‘80% were attracted to BIEPA as they agreed with the mandate “to care for the special habitat and its residents” and enjoyed the friendliness of members’.

BIEPA has formed a network with other local volunteer groups (BIEPA 2017; D Oxenford 2017 pers. comm., 21st September), namely Friends of Woorim Beach (FoWB), Wallum Action Group (WAG), Bribie District Wildlife Rescue (BDWR), Lions Club, Neighbourhood Watch and Rotary. This is a strength of BIEPA, as it is imperative that CCGs form networks with other groups to maximise their effectiveness, longevity and reputation in the community (Curtis & Sample 2010; Gooch & Warburton 2009; Agrawal & Gibson 1999; Oliver 2001).

ACTIVITIES & PROJECTS

COMMUNICATION

Regular and focused communication has been found to be important to CCGs in maintaining membership engagement and organisation resilience (Simpson & Clifton 2010). BIEPA’s primary form of communication is the monthly newsletter, “BIEPA News”. This is on their website and emailed to members, State and Federal Members of Parliament including the Prime Minister and Premier and opposition leaders and shadow ministers (Environment), LG and HLW. The member survey (BIEPA 2017b, p.1) confirms relevance of BIEPA News with ‘93% regularly read the BIEPA News and found content interesting and enjoyable’.

BIEPA regularly updates its website (BIEPA 2017a) and Facebook page (BIEPA 2017c). The website is professionally designed with a wealth of historical and current information. This creates a professional image and assists in strengthening its reputation when lobbying stakeholders for change and attracting memberships. The Facebook page could be used more strategically in attracting younger members and

generating “connective” action and social movement’ (Vromen 2017, p.51). However, it is noted that skills in Facebook marketing would need to be outsourced. Members of their network have these skills.

Monthly meetings are held at the BI RSL where an expert from an environmental organisation or government body present. In a hope that ‘our members become more empowered with qualified information they share in the broader community’ (D Oxenford 2017 pers. comm., 21st September). 66% of members regularly attend meetings and cite the guest speaker and catching up with members was the incentive for attendance (BIEPA 2017b, p.1). Curtis & Sample (2010) discuss that regular, informative meetings are critical for promoting group effectiveness and member and community engagement.

ACTIVITIES, PROJECTS AND PARTICIPATION

BIEPA, in conjunction with other CCGs have undertaken “Caring for our Country” and EnviroFund grant projects (BIEPA 2017a; D Oxenford 2017 pers. comm., 21st September). These have included the ongoing protection and stabilisation of Woorim Beach, replanting the dune system and fencing it off to prevent pedestrian destruction. Also, water and frog monitoring and the annual monitoring and protection (relocation) of turtle breeding sites. BIEPA is currently applying for Unity Water grants for the monitoring of island water resources. This data will form part of HLW enQuire database.

BIEPA have a stall at the monthly Rotary markets. Promotional activities of this form are reported as being critical to CCGs acceptance in the local community (Curtis & Sample 2010). This has strengthened BIEPA’s reputation, evidenced by an increase in community members calling BIEPA to report environmental concerns (D Oxenford 2017 pers. comm., 21st September).

BIEPA members mentor local students for the Academic Challenge Project, judge the “Reading Rocks Day” and donate to the annual environmental award at the local schools (BIEPA 2017a). These activities are an effective means of educating the younger population on local environmental issues (Measham & Barnett 2008). Further study is required to look into ways in which BIEPA can convert these activities into memberships. Perhaps promoting the social media platform to this audience could be beneficial?

The annual Wonders of the Wallum Spring Wildflower Walk, organised in conjunction with WAG and SCC, promote and educate participants in the local environment. In 2017, this walk attracted 90 people from across Australia (BIEPA 2017a). Networking and educational activities such as these are seen as critical for CCGs to retain and attract memberships (Curtis & Sample 2010).

RELATIONSHIP WITH HLW & LOCAL GOVERNMENT

HLW play a governance role in CBNRM and supports the creation of networks, assisting in shared resources and knowledge (Curtis & Sample 2010). HLW also provide a regional perspective on issues, speaking at their monthly meetings. HLW provides grant support through writing, project administration and funds management (D Oxenford 2017 pers. Comm., 21 September). Oliver (2005) cite this as a common and effective role for NRM regional bodies across Australia.

MBRC is tasked with the management, conservation and enforcement of lands in the southern section of BI (MBRC 2017a). BIEPA and MBRC have historically been at odds on environmental management strategies. BIEPA has cited (D Oxenford 2017 pers. comm., 21 September) numerous historical examples of LG removing excessive amounts of vegetation, environmental vandalism by the public with limited LG enforcement, authorising unnecessary burns and installing infrastructure at odds with the environment. MBRC performance is key performance indicator (KPI) driven. MBRC’s have reportable KPIs (MBRC

2017b); 'Customer request addressed within 3 days' and 'Hectares of planned burns completed'. It is concluded that KPI driven performance, coupled with the lack of environmental knowledge of employees has resulted in MBRC appearing to be at odds with conservation. This finding is supported by Stenhouse (2004), showing that vandalism, a lack of resources and specific environmental knowledge are main contributors to the limited success of LGs to conserve local natural assets.

It is noted that this relationship has improved over recent years with the growth of the Environmental division and their perceived reputation within LG (D Oxenford 2017 pers. Comm., 21 September). MBRC now involve BIEPA for all planned tree removals and seek their advice on environmental matters.

ISSUE: AGEING DEMOGRAPHIC OF BIEPA MEMBERS

The ageing demographic of BIEPA's membership is of particular concern when reviewing community participation and effectiveness of BIEPA. BIEPA have implemented adaptive strategies to counter this phenomena, which Curtis & Lockwood (2000) believe critical for long-term sustainability. BIEPA's response is analysed using Walker et al.'s (2006) conceptual framework of resilience, adaptability and transformability. Innovative ideas are suggested to assist in attracting younger membership, continue with on-ground works and improve their lobbying position. Suggestions are also made that could improve LG effectiveness in conservation and reduce the impact that tourists and community have on the local environment.

RESILIENCE

Walker et al. (2006, p.2) define resilience as the 'capacity of a system to experience shocks while retaining essentially the same function, structure, feedbacks and therefore identity'. Using this definition and looking at BIEPA as a social system, it can be argued that BIEPA is resilient. BIEPA has continued to protect

the environment, under the same mandate for almost 40years, in the face of conflict, social change and increased urbanisation.

This resilience can be attributed to strong effective leadership and application of good governance principles (Lockwood et al. 2010; Walker et al. 2006; Lockstone-Binney et al. 2016). Walker et al. (2006, p.7) has listed 'strong leadership and social networks' as a determinant of success to respond to change'. BIEPA's current president is a highly motivated, passionate and reputable member of the community. The leadership provides the group with a clear set of goals and plans (BIEPA 2017a). Simpson & Clifton (2010) found that having clear and formulated goals and plans is fundamental in retaining and attracting members.

The member surveys (BIEPA 2017b) also demonstrate resilience ensuring they are sensitive to volunteer needs and proactive in facilitating the older generation (Measham & Barnett 2008; Warburton & McDonald 2009). Similarly, resilience also requires clearly defined roles and responsibilities (Oliver et al. 2005). BIEPA is developing such a document to assist with succession planning, addressed by Lockstone-Binney et al. (2016) and Curtis and Lockwood (2000) as essential for longevity. An observation of BIEPA's approach though, is that it is not clear how they will translate this document into actions that will retain and attract members.

ADAPTABILITY

Walker et al. (2006, p.3) describe adaptability as the 'capacity of actors in a system to manage resilience'. BIEPA members are now limited in their ability to perform ground works. Evidence of their adaptability is the shifting of their activity to lobbying, monitoring and education. This phenomena is documented by researchers (Lockstone-Binney, Whitelaw & Binney 2016; Simpson & Clifton 2010; Warburton &

McDonald 2009) however there appears to be a conflicting view if these activities will deliver a sustainable approach to CBNRM, where community participation is key. Simpson & Clifton (2010) acknowledge that further study is required to investigate the impact.

BIEPA's networking and willingness to form partnerships is further evidence of BIEPA's adaptability. Creating these networks has allowed them to tap into additional resources and strengthen their lobbying position (D Oxenford 2017 pers. Comm., 21 September). These networks are critical for CCG effectiveness and survival (Agrawal & Gibson 1999; Oliver 2001; Curtis & Sample 2010; Lockstone-Binney, Whitelaw & Binney 2016).

TRANSFORMABILITY

BIEPA has begun a transformation into a lobbying based environmental group. Transformability is 'the capacity to create a fundamentally new system when the existing system is untenable' (Walker et al. 2006, p.3). This report does not view the current BIEPA structure as untenable however it is recognised that they have started to transform, responding to the impact of the ageing members.

Lobbying is now BIEPA's primary means to enact change. Their strong reputation and persistence is proving successful. Examples of their successful lobbying include the stopping of unnecessary tree removal, persuasion of LG to perform regeneration works of vandalised conservation land, stopping the downgrading of national park and the cancellation of unnecessary control burns (D Oxenford 2017 pers. comm., 21 September). BIEPA's current focus is heavily involved with lobbying all levels of government to stop 4WD on BI beaches.

PROPOSED STRATEGIES FOR THE LONGEVITY OF BIEPA

BIEPA could more effectively utilise the powers of social media to strengthen their lobbying position and attract a younger pool of members. Vromen (2017) evaluates the strengths of using social media as a tool for social and political engagement. To assist BIEPA's lobbying to stop 4WDs on beaches, an online, emotive, viral activism campaign, similar to those generated by National Parks Association of Queensland (NPAQ) (NPAQ 2017) is suggested. BIEPA is networked with NPAQ, potential assistance could be provided here. This may not only result in a strengthened lobbying position but could attract new members, outside of the 'community of place' (Harrington, Curtis & Black 2008).

BIEPA should investigate alternate modes of volunteering to combat the decline in volunteers capable of on ground works. Viewing tourist as an opportunity rather than a threat (Weaver & Lawton 2017). In association with MBRC, BIEPA should engage with tourists during peak seasons, leverage their passion for the local environment, to perform short term ground works. Handy et al. (2006) investigate this style of 'episodic volunteering' where volunteers are used for short term projects.

The third proposal looks to modify the current tourism management strategy for the Island, as was tabled by the BIEPA president. This proposal is bigger than BIEPA however, I believe their lobbying and relationship with LG could motivate change. Weaver (2017, p.141) supports this idea stating a need for a change in tourism models 'once accessibility and demand inevitably give way to higher visitation from a broader array of social classes'. BI is still under the 'Parks for Visitors' model (Weaver & Lawton 2017) where visitors directly impact the local environment. It is suggested that a tourism strategy, similar the Noosa region, focusing on 'value over volume' (Tourism Noosa 2017), attracting a 'wealthier, high yield, low volume and presumably well behaved' (Weaver & Lawton 2017, p.141) tourist may be more beneficial for the BI environment and economy.

Finally, to address the ongoing conflict between BIEPA and LG's environmental mismanagement it is suggested that MBRC embark on an intensive and ongoing environmental education program of its employees as well as modifying its KPIs to stop the council from hastily actioning requests without any thorough environmental review. This is supported by Stenhouse (2004) citing lack of environmental knowledge of staff as being a challenge to LG environmental performance.

CONCLUSION

This report, using the BIEPA case study, has explored community participation in NRM, the role of volunteering and the relationship with LG and HLW. Literature review identified CCGs as the primary means for community engagement and their participation generally is on a volunteer basis (Measham & Barnett 2008). Literature presents many strengths of this approach to engaging the community in environmental conservation (Oliver et al. 2005; Agrawal & Gibson 1999; Buchy & Race 2001; Measham & Lumbasi 2013), yet there was also an equal amount of research suggesting the failures and limitations (Buchy & Race 2001; Curtis & Lockwood 2000; Lockstone-Binney, Whitelaw & Binney 2016; Simpson & Clifton 2010) .

An issue of relevance for CCGs, and BIEPA is the impact that the ageing demographic of volunteers is having on community participation. BIEPA has shown an adaptive approach to managing this change. BIEPA has been resilient with effective leadership, adapted its method of conservation and has begun to transform into an effective lobbying organisation, forcing change and environmental conservation on BI.

On assessing the challenges BIEPA face, the report proposed four strategies to enhance community participation and BIEPA effectiveness. These strategies identify how BIEPA can locate new members and volunteers by utilising social media and embracing the concept of episodic volunteering and viewing tourists as an opportunity rather than a threat (Weaver & Lawton 2017). The report also proposes education and KPI redesign to improve MBRC's effectiveness at conserving and protecting the unique environment on BI.

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