



EXPERT COMMENTARY

Next Generation Engagement project

# Impact of community engagement on sustainability outcomes

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Impact of community engagement on sustainability outcomes – there is no sustainability without community engagement

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#### Community engagement is a goal for achieving sustainability

For the last 20 years, there has been increasing emphasis on community engagement to achieve sustainability goals, highlighted recently in the United Nations' Agenda for Sustainable Development (of which Australia is a signatory), with its 17 Sustainable Development Goals (SDGs). Within many of these goals is a focus on community participation. One example of this is SDG6 – ensuring the availability and sustainable management of water and sanitation for all – comprised of eight targets, of which one focuses on the importance of 'community participation' (SDG6b) in recognition that communities can affect the long-term success and impact of clean water, sanitation and hygiene (WaSH) projects. Community participation is also a key consideration to the related UN SDGs for gender equity (SDG5.5) and urban planning (SDG11.3).



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Yet much of the research looking at the success of community engagement in achieving sustainability outcomes is inconclusive. Though there are examples of great success, there are more examples of failure to achieve intended outcomes resulting in an even greater disadvantage for the most vulnerable communities.

In their 2013 book, Ghazala and Vijayendra [1] looked at hundreds of case of community participation development projects. Topics covered were: decentralise the identification of beneficiary households and communities for poverty reduction and social insurance programs; greater resource sustainability and equity; local infrastructure delivered through participatory mechanisms; efforts to induce greater community oversight in the delivery of health and education services; and the evidence on the poverty impacts of participatory projects. Key findings (italics from the book followed by author's interpretation):

- On balance, the evidence appears to indicate that local capture can overwhelm the benefits of local information. That is data collection over action.
- Demand-driven, competitive application processes can exclude the weakest communities and exacerbate horizontal inequities. Those who have money, time, education and networks are more successful.
- Co-financing requirements—which have become the sine qua non of participatory projects—can exacerbate the exclusion of the poorest households and communities and attenuate the impacts of poverty reduction programs. The wealthier can participate; the poor cannot and so their voice is not heard.
- On balance, the evidence suggests that greater community involvement tends to improve resource sustainability and the quality of infrastructure. Yet in the book, there are also many examples of where outcomes were worse, where success was dependent on the quality of the engagement and the ability for participants to be empowered.
- Decentralising education and health The most successful programs are implemented by local governments that have some discretion and are downwardly accountable. Some autonomy in decision-making, the ability to respond locally and accountability to their community are the key aspects here.
- Improving livelihoods There is some evidence, however, that projects with larger livelihood components (credit, skills) perform better than other participatory projects, at least in the short run. Creating benefit for participants; celebrating and rewarding them for their input into the project and their community through investment into their skills and ability to develop.

This is not the only research that has shown that participation can be hit and miss in the long-term. Yet, there is a sense that community participation is essential for a sustainable future. So why is it that the results aren't what we might expect? Again, there is much research on why participation fails and that is not the role of this paper, but if we accept that participation is something that will lead to a more sustainable future, how do we learn from what hasn't worked?

The discussion around this question is the key contribution of this paper. The paper argues that the issue is that we are trying to create sustainable outcomes that improve social and ecological wellbeing within the same worldview or framework that created the degradation. After decades of working towards sustainability, findings from a number of recent international studies, such as the Millennium Assessment Reports [2] and the 2014 IPCC assessment report on climate change, indicate that the situation is getting worse, not better; prompting the World Watch Institute, in their 2013 State of the World report, to ask whether sustainability is still possible [3]. Our current framework structuring sustainability practice is couched in the language of quantitative, performance-based indicators reporting on performance in isolated categories,

compliance with which is largely driven by individual interest: reputational, financial, or simply 'compliance'. Much has been written about the flaws in this framework and its foundation in the so-called mechanistic worldview, as well as the need to shift towards a more relational worldview that will help us develop frameworks suitable for working with living systems [4],[5].



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that improve social and ecological well-being within the same worldview or framework that created the degradation.

### The need for a new approach, a new worldview

This more relational worldview is called by many the ecological worldview, and its needs were highlighted in built environment practice as early as the 1960s by Ian McHarg [6]. Since then, numerous authors have explored the characteristics of the emerging ecological worldview and its main narratives [7], [8], [9]. The consensus is that the ecological worldview represents a shift from looking at the behaviour, performance and interests of individual 'parts', to considering the well-being of the whole as expressed through interdependent relationships – a web of life of which humans are irreducibly part. The focus is oriented at designing solutions that work at the biophysical level, within inherently nested systems, across scales including most importantly at the mental level. The critical aspects here are the interrelated and connectedness of the world and that the current approach to sustainable development has really forgotten the mind and the heart of people. It has forgotten that what we need to create is an irresistible narrative that will change behaviour not because we have to but because we want to. Unfortunately, the current irresistible narrative is based on the values of the mechanistic worldview: competition, imperialism and rationalism; and a narrative that rewards power, monetary wealth and status. In the next few pages, we will explore what the new narrative could look like and how this will result in successful community participation.

Let's begin with a case study set in Loreto Bay on the Sea of Cortez in Mexico. Here is a project that was looking to develop sustainable retirement living community for North Americans within an area often called the world's aquarium. In looking for sustainable building design solutions, the project team turned to regenerative development thinking – thinking based on the ecological worldview. Through the project came a strong narrative of the role that this place played within the ecosystems of the Sea of Cortez, before poor land management practices filled in the estuaries which had served as the nursery of the bay. This eureka moment catalysed the entire design, centering it on how this place could step back in to that role. This became such a binding narrative, such an engaging vision of role and the future of this place, that when the 2008 financial crisis came and the project was faced with closure, it was the community that ensured its survival.

"The Villages at Loreto Bay were just embarking upon its earliest phases of development when the economic crash of 2008 brought the project to a standstill. Remarkably, the vision for the project had galvanized "one of the most well-organized, powerful homeowners organizations in the world," which enabled a new developer to step in and revive the project." [10]

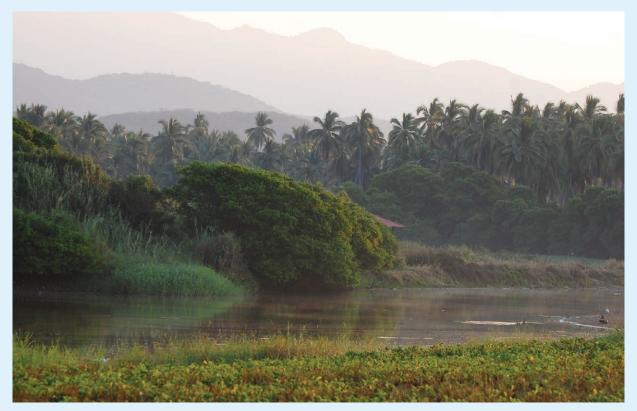


Photo courtesy of Playa Viva

Regenesis, a consulting company based in the United States, was part of the design and development team for the Loreto Bay project. The approach they bring to projects is called regenerative development, which they define as

#### "a whole systems approach that partners people and their places, working to make both people and nature stronger, more vibrant, and more resilient" [12].

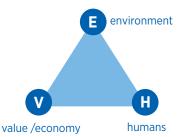
Building on their work and five years of research – resulting in the book *Designing for Hope: Pathways To Regenerative Sustainability* – the author summarises the wisdom that regenerative development brings to working in the ecological worldview into three key aspects:

- understand the flows through a system that bring it to life, flows are the various resources, including 'intangibles' like culture and social cohesion, that interact with the place,
- 2 design solutions that create multiple, mutual benefits between these flows through focusing on the opportunities for creating relationships and
- 3 operate within the context of the place to ensure its relevance, resilience and ability to adapt.

Taking the three steps to community participation and achieving sustainable development, one would firstly understand place and map the flows of that place, both at the time of the project but also in history. This would be done with the community, for they have for they have knowledge of the place. Then, working with the community and experts, the design process would look at the potential of the place, and focus on developing relationships between the flows to create the circumstances enabling movement towards that potential. Through development of this narrative, the benefits that would occur for all stakeholders would become apparent. Stakeholder engagement needs to be seen as integral to any development process, to be integrated at a fundamental level, firstly to build a shared vision through processes that surface and integrate common values while respecting different viewpoints; secondly to build the "capability and field of commitment" [13] that would enable stakeholders to act as both codesigners and future stewards of the project; and thirdly to stimulate the ongoing development and transformation of the stakeholders themselves. Reintegrating the aspects of the system that have been separated within the mechanistic worldview (humans and nature, interior and exterior) allows us to consider the whole of the system in design and development processes.

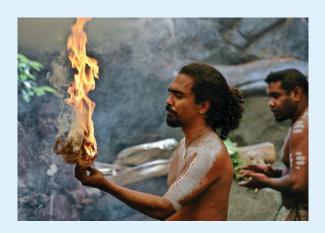
What we are in fact creating here are custodians of place, drawing upon the lessons from indigenous cultures and how they view their role with land and in nature. The indigenous peoples saw themselves as caring for country in a three-way relationship between humans (H), environment (E) and economy or value (V), mindful of the tensions and relationships between all three that maintain a thriving system where the system is no longer balanced if one is over-emphasised [14]. Taking this way of thinking forward, economic benefits cannot exist in isolation from social and ecological benefits. As such, it makes no sense to prioritise economic growth over social or ecological. This interconnected or ecological worldview is being seen in many other research fields such as quantum physics, psychology, medicine and so forth.

The interesting aspect of this indigenous model is that it in fact argues that nature is better off because they are a part of it, because of what they bring to it. This cannot happen without participation based on an understanding of the land and its systems. This makes complete sense if we return to the concept of the ecological worldview where in fact we are nature – we are as integral to it as it is to us.



"Caring for Country conceives the land and its nonhuman inhabitants as deeply embedded in both the practical use of natural resources and the spiritual nourishment of society (Head, Trigger, Mulcock & others, 2005). ). This interrelatedness eliminates any demarcation of separate sectors of life such as economy, environment, society, culture, technology, science etc. Rather each sector becomes fluid and deeply dependent on all others in order for Traditional Owner groups to fulfil their obligations to Country (Atkinson, 2004)." [15]

"Caring for Country views humans and nature as entirely bound in a mutually beneficial relationship of responsibility and reciprocity. Rather than Country having to be protected from humans, **Country necessitates the** 



activities of humans to thrive. This is a practice of resource use whereby human modification and employment of nature nourishes Country rather than degrading it. An example of this can be found in firestick farming where traditional burning techniques facilitate the germination of a number of native tree species (Goston & Chong, 1994)." [16]

Let's look at another case study, one that challenges how we think of conservation. Within the ecological worldview the approach towards conservation shifts from the belief that we should leave nature alone, to an understanding that together we can develop a stronger more resilient and sustainable ecosystem. That entails shifting to active participation, shifting the disempowering conversation that whenever we touch nature we make it worse, to a conversation around how we can make it better. Engaging all stakeholders, particularly the local community is critical. See, for example, the case of Playa Viva below, where the eco-resort engaged the community in the restoration of the area by shifting the mindset of the turtle poachers encourage acting as rangers with a stake in the thriving of the turtles for the community.

Excerpt adapted from *Designing for Hope: pathways to regenerative sustainability*[17]

#### Playa Viva, Mexico

"Playa Viva is designed to provide an environment that will broaden your perspective, open your heart and remind you of the interconnection between all living things."[18]

The conceptualization of the project, a sustainable boutique hotel in Juluchuca, near Zihiuatanejo/Ixtapa Mexico, was influenced by the owners' passion for sustainable building and community engagement. They saw the boutique hotel as a leverage point for reconnecting nature and providing good social impact, and wanted this ethos to be reflected in the design of the boutique hotel.[19] On engaging the Regenesis team (specifically Tim Murphy and Bill Reed), their thinking moved towards a more integral approach. The owners saw the role of the sustainable hotel as developing the regenerative capacity of both natural and human systems; setting its goal as "not just to make less damage (building green) or net neutral (sustainable), but to make a significant impact in creating a better local economy, more resilient and thriving ecosystems, and still have a profitable business endeavour."[20]

The importance of this project does not lie in the architecture, but in the role the project plays in the regeneration of the social and ecological systems. While the hotel is beautiful, peaceful, passively designed and inspiring, the building project served only as a node of influence that resulted in the establishment of community businesses, the restoration of the local ecosystem, and an ongoing process of engagement with stakeholders, including visitors, to transform both people and place.

Playa Viva sits at a meeting point between saltwater and freshwater systems. This convergence of ecosystems enables a symbiotic exchange and transformation of resources. The Integral Assessment and Story of Place identified several "potential-rich transformative nodes" where ecological, social and economic flows intersected to create potential leverage points.[21] The first set of these enabled the restoration of the local ecosystem, which helped the natural bio-diversity to return, and increased the resilience of the native ecosystem. The Playa Viva Reserve aims to restore at least 85% of the resort's 200 acres (86 hectares) to coastal forests and wetlands, bringing back mangroves, hardwood trees and a variety of indigenous flora and fauna. Odin Ruz, head of permaculture, describes how the removal of invasive grasses and dredging of the water courses to restore water flow saw the return of shrimp, and with them also the return of ducks and many other bird species.[22]





Photos courtesy of Playa Viva by Randolph Langenbach





The turtle nursery. Photos courtesy of Playa Viva by Daniel Camarena

The second set of leverage points deals with the role of the project to build capacity in the community, as without the support of the community, gains made in terms of biodiversity can be quickly undermined. Programs in the community focus on "the golden triangle" of education, health and economic development. Programs include improvements to the structure and providing supplies to local schools and health clinic, a recycling program that raises money and keeps trash out of the river; a partnership with a local artisanal salt manufacturer; and support for the local sea turtle nursery, which is 100 per cent volunteer-based. The resort also began offering local farmers organic agriculture courses after noting that the workers who helped to establish the organic gardens were "taking home the principles of poly-cultivation, soil regeneration, organic pest control and use of plants for medicine."[23] The hotel purchases the organic produce and is helping to expand the organic food market into the broader community. The strategy is to provide both push and pull for greening the local supply chain.

The third set of leverage points was to provide a transformative experience for visitors. As the owner describes, these experiences can be "as simple as transforming from a busy hectic life to one of observation ... or it can be a much deeper transformation that creates a bond with the ecology and local community". [24] Aside from enjoying the amenities and natural environment of the resort, visitors can also participate in existing community and ecological projects, or suggest their own programmes.

After completion of the first phase of the project, the decision was made to delay the next phases to ensure that ongoing development of infrastructure, ecosystem and communities remain within the capacity of the system to deal with the growing impact and needs of the resort community. However, the strong relationships built with the community and guests will ensure the continuation and evolution of the project. As Bill Reed states: "...the real victories in this project are the relationships between the Village, the visitors, its farming practices, its economy, the watershed and the ecosystem in general; the buildings are the least important aspect of regeneration. In fact what I think is the most powerful, is that the teenagers are coming back to live in the community."[25]

This is reiterated by David Leventhal, the project developer, when he states:

"I am most proud that we have created the biggest employer in the area with 15 employees, all local, who are learning to live a more sustainable life and taking those principles home to their families." [26]

E - Restoration of the wetlands, restoration of the estuary, removal of invasive species, biodynamic pesticide free agriculture, nurturing and protecting of turtles, etc.

V – Local economy, history, place, eco-resort, food production, nursery, etc. H - Health,
 education, livelihood,
 visitor connection
 to community,
 celebrations, etc.



Local food production, salt making and recycling. Photos courtesy of Playa Viva by David Leventhal

Coming back to the main aim of this paper, what follows are some thoughts and comments on the importance of community engagement. It becomes clear that if we accept that we cannot become sustainable within the same framework that created our unsustainability, and that this new framework is a more interrelated ecological one, then we recognise that we are part of an integrated whole in which humanity is nature. The consequence, therefore, is that our engagement in both the development of solutions to our current problems and our ability to thrive into the future is critical. As we saw in the Loreto Bay example, and the fact that in Australia we have the longest living culture, this engagement leads to connection to the story of place, the ability to see ourselves as custodians of place. Critically. as the work of *Regenesis* shows, this connection leads to the ability to see the potential that a place has, like a parent sees the potential in their child, and therefore the ability to work with it and develop it adaptability to change and foster resilience. It solves some of the problems in the research that looked at community engagement and sustainability outcomes that were listed at the beginning of this paper. The figure below is an adaptation from Bush and Hes (forthcoming) [27]; it shows a trajectory from ineffective participation in the old mechanistic framework where the individualistic and competition based narrative requires regulation for compliance (Aa leading to B.). At the other end is a city based upon the principles of nature, operating within the social-ecological systems view, or ecological worldview, where people see themselves present and active within the narrative of their place and therefore are self-motivated, and want to participate in a sustainable thriving future (Ad leading to C.).

The participation literature reviewed here is pointing to this need to shift towards an ecological worldview. This is illustrated by the two studies outlined below, which give recommendations for effective community participation projects.

From Hall *et al.* [29] looking at 60 WaSH projects (words in italics quoting the report; other interpretation by the author):

• Recommendation 1: Develop a common definition, framework and principles for community participation in WaSH. Give the community a voice in creating the narrative.

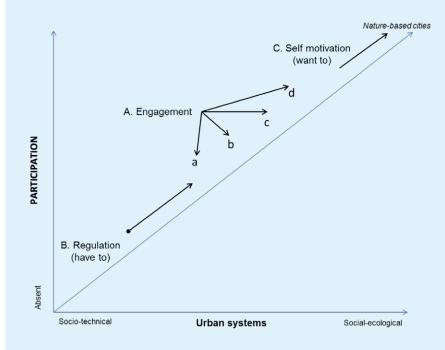


Figure 1 – importance of increased presence within narrative to achieve nature-based cities (adapted from Bush and Hes (forthcoming) [28]).

- Recommendation 2: Ensure that the community participation approach for WaSH is designed to include five key elements: establishing an agreed participation objective; ensuring inclusiveness; providing information and capacity building; enabling spaces for dialogue; and ensuring transparency; and that it involves a 'bottom-up' approach. Increase the ability for the community to be present within the narrative.
- Recommendation 3: Provide meaningful community participation opportunities as early as possible in the development of WaSH projects. As well as increasing the ability for community to be present

within the narrative, this also points to the need for the community to be involved throughout the project.

 Recommendation 4: Establish robust indicators to monitor community participation in WaSH, and document participation from a community perspective to improve future efforts. Monitoring and evaluation needs to be applied cautiously, so that they do not create one of the first contradictions mentioned at the beginning of this paper, where data collection outweighs participation. Nevertheless, it is important to have continual feedback and the ability to learn and evolve.



Guber [30] showed, based on 24 research and practitioner projects looking at Community-Based Natural Resource Management, that projects which succeeded had some of the following features:

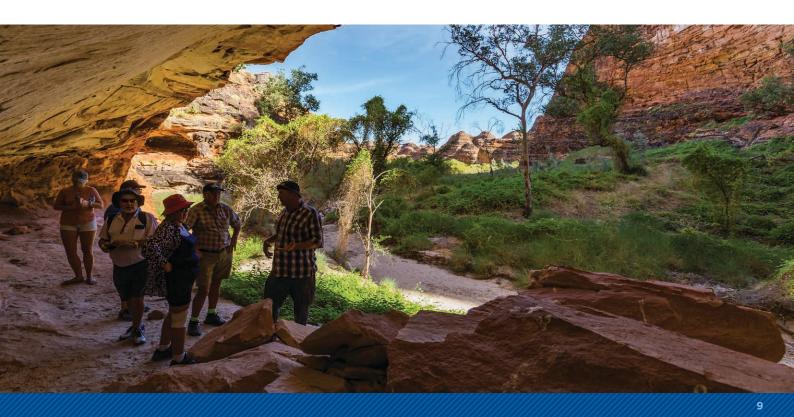
- There is a designed link between the public participation process and mobilization of the public support and involvement. Increase the ability for the community to be present within the project narrative.
- There is a central role of stakeholder trainings, workshops, and other learning opportunities in the raising of knowledge and awareness and the building of commitment.

Allow participants to continue their own developmental journey, building their own ability to adapt.

- The financial factors that are critical to stability of the organization or initiative are adequately addressed.
   Foster the ability to have adequate resources to engage and adequate value to be able to contribute.
- There is effective information dissemination using a wide range of multi-media approaches. Ensure that useful feedback loops enable continual learning; support continual development and the ability to increase resilience.
- There is a core focus on engaging and building commitment of local community members. Increase the ability for the community to be present within the project narrative.
- The critical roles of leadership and management to engage and mobilize local community members in the work of the organization are recognized.
   Support local capacity building to be able to engage and participate and take ownership of the project.
- There are availability of financial and other resources that are needed to support start-up and transitional costs. Foster adequate resources to engage and adequate value to be able to contribute.

## Conclusion

What this short paper has argued is that the current approach to community engagement in sustainable development projects is a hit and miss affair, with good intentions suffering from use of the same framework that created the problems in the first place. The paper argues for shifting this framework or worldview from mechanistic and linear to ecological and complex. Within this new framework, community involvement as part of scoping development implementation and ongoing ownership is critical. This means that the tools and models to apply ecological thinking to sustainable development need to be developed, taught and implemented. Communities need to be empowered to understand their role and responsibilities within their place. We can learn much about this way of working from Australia's indigenous culture and their ideas of custodianship and reciprocity.



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#### **DR DOMINIQUE HES**

Dominique has degrees in Botany, Engineering and Architecture. Her key research questions are: 'why, when we have been 'doing' sustainability for so long, are we having an ever increasing impact?' People create such beauty with music, food, art, buildings and community why is it so difficult to be a thriving part of the earth's systems? and how can the built environment be part of this thriving? As such she has looked at biomimicry, biophilia, regenerative design, permaculture, placemaking,

green infrastructure and positive development. This resulted in the publication of the award winning book 'Designing for Hope: Pathways to Regenerative sustainability', co-authored with Professor Chrisna du Plessis. Her continued research centres on how to create a built environment that is good for people and the nature they are a part of.

