

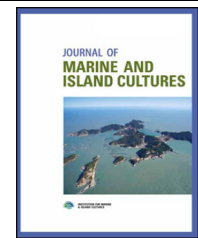
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# Islander innovation: A research and action agenda on local responses to global issues



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**Abstract** Local economies and livelihoods, cultures, and sustainability around the world are being challenged by wide ranging social and environmental changes. Despite many negative impacts, these changes also bring opportunities to initiate and implement innovations. Island communities are experiencing the forefront of much such action, particularly since they are often highly local and localised societies. Yet in many cases, global changes are being imposed without adequate support to the communities for dealing with those changes. The key question investigated by this paper is: How can local responses to global issues be improved for island communities? Examples of successes and problematic approaches, as well as those exhibiting both, are described in this paper. A research and action agenda on islander innovation is presented for researchers, policy-makers, and practitioners to highlight local responses to global issues.

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### Why focus on islands?

Island communities encapsulate many of the sustainable development challenges facing humanity today (Connell, 2013;

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Lewis, 1999). From the densely populated, 100% urban island of Malé, the capital of Maldives, situated at sea level, through to the poor and corruption-ridden Hispaniola experiencing severe resource overexploitation—with strong differences nonetheless seen between Haiti and the Dominican Republic—islands emerge in numerous sizes and with varying characteristics. In many instances, global changes are imposed on island communities without adequate support forthcoming to address those challenges. Through the question “How can local responses to global issues be improved for island communities?”, this paper provides and explores examples of successes and problematic approaches, as well as those

exhibiting both, in order to propose a research and action agenda on islander innovation for researchers, policy-makers, and practitioners with island interests or who might wish to learn from island experiences.

Islands used to be perceived as being isolated, perhaps pristine, laboratories which are perfect for academic studies because external influences were assumed to be minimised (Weatherly, 1923). This view has since been heavily critiqued (e.g. Baldacchino, 2007; Greenhough, 2006) and is now rarely raised as an academic justification for studying islands, yet it can nonetheless still be explored and critiqued constructively for understanding particularities and key dimensions of island societies (Fitzhugh and Hunt, 1997; Greenhough, 2006). The ocean, for instance, is seen as much as a connector of island peoples as a separator from the rest of the world (D'Arcy, 2006). Studying islands and island communities evolved into a case for 'island studies' (Dommen and Hein, 1985; McCall, 1994, 1996) which is now a fully accepted field (Baldacchino, 2004, 2007).

Islands and islanders are yielding important insights into sustainable development, providing advice and recommendations that are as diverse as maintaining community trust during disaster (Haynes et al., 2008) and supporting tourism livelihoods (Graci and Dodds, 2010). Insights are also gleaned from cases where islanders adopt unsustainable practices; for instance, many Pacific islanders' preference for imported, unhealthy foods over traditional, subsistence fare, leading to high energy costs for the imports and health problems from non-communicable diseases such as obesity and diabetes (Swinburn et al., 2011). Meanwhile, external forces add to the challenges. Climate change is altering the environment so rapidly that traditional and local knowledge is becoming somewhat obsolete in many island communities while nevertheless being retained as a needed anchor for trying to deal with the witnessed changes (CICERO and UNEP/GRID-Arendal, 2008; Kelman, 2010).

Consequently, for islands and environmental change in particular (e.g. Connell, 2013; Lewis, 1999), the 'island laboratory' viewpoint holds limited traction considering that many environmental problems severely influence islands, islanders, and island communities, yet were not caused by islanders (see also Walker and Bellingham, 2011). In particular, climate change has minimal contribution from islanders, yet their future in some locations might be determined by climate change's outcomes (Kelman, 2010; Roper, 2004). Similarly, almost no persistent organic pollutants were released by Arctic peoples on islands such as Baffin Island, Greenland, and the Aleutians, but their ecosystems and cultures have been severely affected by those chemicals (Downie and Fenge, 2003).

Given such examples, island communities and contexts provide case studies and learning for innovative local actions for sustainable development, including for paradigms such as livelihoods and resilience informing and comparing with non-island locations (for illustrations in particular sectors, see Briguglio et al., 2008; Streeten, 1993). Irrespective of external influences and constraints on local or external interests and resources, islanders need to address the challenges by using their own skills, ideas, and approaches. That might sometimes be with external support if and when needed and requested, but the reality is that no guarantee exists that external support would be forthcoming, or, if forthcoming, would be effective.

This applies for single-community studies, such as Tarawa in the Pacific (Gaillard, 2012) as well as for comparative studies of island communities, such as Antigua, Isle of Portland (UK), Sri Lanka, and Tonga (Lewis, 1999).

A strong motivation for focusing on island communities, singly and in comparative analysis, is that their relatively small land size and relatively small human population numbers can make it easier to encompass many data forms, many knowledge forms, and many disciplines within the same study (Mercer et al., 2010). All are required for local, innovative responses to the challenges faced, which is why island case studies have had such a large impact on participatory processes for sustainable development (Kelman et al., 2011). That includes the recognition and acceptance of the limitations and challenges of participatory processes, such as the participatory process itself perpetuating the same power imbalances it seeks to overcome (Cooke and Kothari, 2001). Incorporating different data, knowledge, and disciplines for understanding and effecting innovation on islanders' terms is detailed in the next section to answer this paper's overarching question about improving local responses to global issues for island communities.

## Island innovation

### *Theorising innovation*

Many tend to view 'innovation' mainly in technological and economic terms, seeking new products based on the latest technological development or private sector entrepreneurship that creates and fills a market niche. Such innovations must continue to be recognised, embraced, and investigated, while going beyond by stressing innovation for governance and culture as well (Baumgartner and Burns, 1984; Carson et al., 2009; Fagerberg et al., 2005; Hage and Hollingsworth, 2000; Kranzberg et al., 1989; Mowery and Rosenberg, 1998; Nelson, 1993; Woodward et al., 1994). Governance innovations concern new public, private, and hybrid regulatory regimes and related institutional arrangements. Cultural innovations cover the formation and development of new conceptions, paradigms, and value systems; for example, to deal with global challenges. Technological and economic innovations can rarely be successful without governance and cultural adaptations and innovations.

Three types of innovation are highlighted here to be applied to islander action on local responses to global issues. First, entrepreneurship and business innovation in private and public (as well as joint) ventures. Because islands tend to have comparatively small human populations, it is important to highlight innovation through small- and medium-sized enterprises (e.g. Lévy and Powell, 2005; Stonehouse and Pemberton, 2002) and from the grassroots, such as community members trying to make their own homes and lifestyles more sustainable (e.g. Midttun, 2009). Second, innovation in public, private, and public-private governance and regulation, i.e. new regulatory regimes and standards. Third, innovation in culture. That includes formal education processes as well as more informal or spontaneous efforts to initiate campaigns and programmes for stimulating concerns, consciousness, value reorientation, and development of new practices. The focus is on identifying public and private agents, along with hybrids and coalitions,

that govern by facilitating, constraining, selecting, and regulating innovation processes and resultant products.

Island communities lend themselves to understanding such processes of innovation due to the need to succeed despite their comparatively small scales for some aspects. The resulting islander innovation has been shown to produce, for instance, unique crafts, food and drink products, and remote services for information and communication technologies (Baldacchino, 2005a, 2005b; Baldacchino, 2006; see also <http://www.islandvulnerability.org/livelihoods.html>).

While aspects of isolation, marginalisation, and smallness are often viewed as theoretical difficulties to overcome with respect to livelihoods, they can instead (or also) be an impetus and opportunity towards generating innovation. An example is selling collectibles, such as coins, stamps, and medals. The uniqueness of the location tends to increase interest, as exploited by the U.K. island territories of Tristan da Cunha in the South Atlantic and Pitcairn Island in the Pacific. The archipelago of Senja, above the Arctic Circle in Norway, has some accommodation sites supporting its fledgling tourist industry by marketing the isolation as being ideal for conferences and corporate retreats. These demonstrate the three types of theoretical innovation: entrepreneurship in formulating the livelihood idea, governance in permitting the livelihood to be pursued, and culture through convincing non-islanders to avail themselves of a unique—or, at times, non-unique—product or service.

With the theory being demonstrable in practice, key research questions can be developed about theorising island innovation in order to examine the theory further in practice. These questions, assisting in formulating a research agenda for connecting theory and practice, are modified from the list proposed by Rosa et al. (2011):

1. Where is the locus of the innovation and what role does the innovation context play in the types of solutions articulated and selected?
2. Who (agents, organisations, coalitions, governments, academics, non-governmental players, others, or what combinations?) initiates and develops the innovation?
3. What resources do they mobilise, and how, to launch and carry forward an innovation?
4. What are the drivers—not only motivations but also pressures, internally and externally—of the innovation efforts, and what is the impact of drivers on innovations adopted? How does, for example, local configuration of agents (such as businesses, governments, and societal groups)—and their particular perspectives or frames—affect the innovations explored, selected, and rejected?
5. Who, including organisational structures, supports and hinders innovation initiatives for sustainability and the implementation of proposed solutions? What resources do they mobilise? How are the ultimate outcomes explained?
6. To what extent are innovations in different areas compatible with one another? What types of problems do they generate, especially in their overlap, and how are these addressed? Does success create new problems or exacerbate existing problems, either in the location of the success or elsewhere?
7. What role do higher government levels (national authorities or supranational structures such as the EU) play, actively and passively, in these initiatives and developments?

Answering these questions to enact the proposed agenda should be pursued by researchers, policy-makers, and practitioners with island interests, as well as those or who might wish to learn from island experiences. In this instance, research contributes to knowledge for its own sake, but not just for that, additionally aiming to assist islanders and island communities, at policy and practice levels, to formulate and effect local responses to global issues. Policy makers and practitioners should be involved in the research from the beginning to the end, whilst the researchers should be willing to return the research results to the island communities and to follow the implementation, monitoring, and evaluation of recommendations. Ultimately, the agenda is supporting evidence-based policy and action.

### *Innovation in practice*

How have the questions concluding section “Theorising innovation” been seen in practice through island jurisdictions showing innovativeness—which perhaps could be termed “innovativity”? This section provides further practical examples to demonstrate that the discussion is not mainly theoretical.

Island jurisdictions have created innovative supranational structures to assist in tackling sustainability challenges. One policy example is implementing international environmental treaties, such as on ozone depleting substances and on biodiversity. An island government might fully support the treaty in principle, but not have the on-island technical expertise to address it in practice (Cherian, 2007). The *Convention on International Trade in Endangered Species of Wild Fauna and Flora* and the *Convention on Biological Diversity* have complex technical and legal aspects often requiring someone with specific expertise and experience in the topics to implement the requirements and to monitor and maintain outcomes. With the comparatively small populations of some island countries such as Tuvalu and Seychelles, it would be unusual to find people with the time and ability to ensure that the country meets all the requirements for every such treaty.

An example of practices is patrolling the country’s territorial waters to monitor and intercept poachers, such as illegal fishers (e.g. Brown, 2005), and smugglers, perhaps of people, weapons, drugs, tobacco products, alcohol, or other items. That requires modern boats, sufficient training for the personnel on the boats, and the unfortunate reality of weapons along with ability and will to use them. Not all countries have the funds or technical capability to take action for monitoring and stopping illegal activities within their waters (Bergin and Bateman, 1999).

Consequently, for these policy and practice difficulties, island countries and territories have created multi-lateral groups and alliances which pool resources. Sharing equipment and expertise in a centralised organisation can yield a single resource run by the best people that several countries can offer, often supplemented by staff from outside the island group. Any member can ask for technical assistance and receive the same level of specialist advice that all other members receive. Skilled negotiators often represent several countries in talks on international environmental treaties, backed up by shared technical advisors.

The Organisation of Eastern Caribbean States (OECS) was founded in 1981 and now has nine members with a mission “to

be a Center of Excellence contributing to the sustainable development of OECS Member States by supporting their strategic insertion into the global economy while maximising the benefits accruing from their collective space” (<http://www.oecs.org/about-the-oecs/who-we-are/mission-objectives>). OECS supports its country members in meeting their international law obligations and responsibilities, in harmonising their foreign policy, and in promoting economic integration. OECS often represents members in overseas venues and in stating political positions on specific topics. The Eastern Caribbean Currency Union—involving all OECS members except for the British Virgin Islands which uses the US dollar—promotes economic unity while pooling resources for the costs necessary for managing and maintaining an effective monetary system.

The Pacific islands have set up several supranational organisations to assist members with international environmental and sustainability obligations. The Pacific Regional Environment Programme (SPREP) is the region’s focal point for environmental protection and sustainable development, including climate change. The Secretariat of the Pacific Community’s Applied Geoscience and Technology Division (the SOPAC Division of SPC) applies geoscience and technology to support Pacific islander livelihoods and sustainability.

The supranational island entities extend to higher education, such as the University of the South Pacific and the University of the West Indies. Both institutions have various campuses around their respective regions. Each Caribbean or Pacific country running its own higher education institute would overtax resources and would be challenging to achieve high academic performance standards, whereas pooling resources helps to serve several countries while achieving high standards. That provides on-island opportunities for higher education from an islander perspective.

Not all such initiatives are intergovernmental. A community-based example—but also involving governments, researchers, non-governmental organisations, international organisations, and the private sector—is Many Strong Voices (MSV; <http://www.manystrongvoices.org>; e.g. [CICERO and UNEP/GRID-Arendal, 2008](#); [Kelman, 2010](#)). MSV was founded in 2005 at the request of peoples from the Arctic and Small Island Developing States (SIDS). SIDS are several dozen (the number varies depending on the source and year) countries and territories in the tropics and sub-tropics which have joined forces under UN auspices to tackle their similar development and sustainability challenges ([UN, 1994, 2005, 2014](#)). SIDS and Arctic peoples recognise that, as part of addressing current climate change impacts, they need to factor in major expected changes to their surrounding environment and culture. Their voices, knowledge, and wisdom tend to be sidelined, in terms of describing not only their observations of their changing environment, but also possible solutions from their own experiences and abilities as well as possible solutions for which they are requesting outside assistance.

For instance, in 2012–2013 a project funded by the U.S. National Science Foundation brought together people from Newtok, Alaska and people from the Carteret Islands, Papua New Guinea (which is a SIDS, despite being larger in population and area than New Zealand). They exchanged stories and advice regarding the two communities’ migration decisions resulting from their rapidly changing environment under climate change. The approach illustrates communities taking charge of their own migration-related decisions that are forced

upon them due to external influences (see [Bronen and Chapin, 2013](#)). The ethos of MSV is thus exemplified: exchanging knowledge about and devising responses to the challenges brought by climate change—while developing understanding why those responsible for climate change are so unwilling to assist the communities in relocating due to climate change.

As with the Newtok–Carteret collaboration, other MSV activities are about information sharing, story exchange, capacity building especially for influencing international fora, mutual support for decision making, and networking to learn from each other. Cutting-edge scientific research is being conducted and published by MSV (e.g. [Kelman, 2010](#); [Kelman et al., 2011](#)) providing a baseline for understanding the needs of MSV participants and ways to ensure that the voices which should be heard are not marginalised.

Drawing on that ethos, an example of a technological innovation from islanders is the development and testing of coconut oil to replace diesel for vehicles and electricity generation ([Cloin, 2007](#)). Concerns are raised about avoiding a plantation approach to provide enough coconuts, as well as recognising that the provision of local biofuels could encourage an increase in consumption. In practice, technological innovations need to be implemented only after considering possible consequences—positive and negative—while being matched with accompanying social innovations and adaptations. That requires understanding the local social and environmental contexts, including the people’s own interests and knowledge alongside the changes they are experiencing.

#### *Developing knowledge and wisdom for innovation in a dynamic context*

Given that the environmental regime which the globe is entering is outside of human experience, solutions cannot be solely along similar lines to previous environmental governance. Instead, they need a significant component of originality and innovation, requiring the development of knowledge and wisdom—and the combination of different forms. Such wisdom is based on reflectivity and meta-knowledge about the limits of knowledge (e.g. unintended and unanticipated consequences) and the importance of taking into account context and system interconnectedness; for instance, between the human and other biotic worlds (e.g. [Bateson, 1979](#)). It also implies life as ever-changing, so requiring flexibility and adaptation alongside multiple values and dilemmas, meaning that no single metric of judgment exists, but that balance and harmonization need to be stressed ([Reclaiming Ecological Wisdom for the Crisis of our Time, 2010](#)).

For supporting innovativity for islander action in local responses to sustainability issues, many types of knowledge are needed, drawing on science but also on other forms, such as indigenous knowledge, vernacular knowledge, traditional knowledge, and local knowledge (which are not mutually exclusive). Island studies have contributed significantly to combining knowledge types to deal with the ongoing social and environmental changes being experienced (e.g. [Baldacchino, 2012](#); [Gaillard, 2007](#); [Kelman et al., 2011](#); [Lewis, 1999](#); [Mercer et al., 2010](#)). Each knowledge type has its essential and important contributions, yet can cover only some needed aspects for tackling an issue as diverse and complicated as sustainability.

Considering possible limitations of local environmental knowledge, Tibby et al. (2007) show that for a lake in New South Wales, Australia, community perceptions of environmental parameters can differ from other evidence such as biological data, historical maps, and photographs. Local knowledge by definition is focused on what local people can observe or have been able to observe in the past. That negates options beyond timeframes longer than humans have settled the area, changes in scales out of human observation abilities, or locations beyond human access such as deep underground. As society and the environment change rapidly, traditional knowledge in many locations seems to be becoming less relevant in terms of using the past to predict the future, but it nonetheless provides an anchoring and starting point—a familiar base—to assist people in understanding the changes that they are experiencing, especially through providing important clues for dealing with changing conditions (CICERO and UNEP/GRID-Arendal, 2008; Yodmani, 2001).

Scientific publications also have limitations, such as not always being able to incorporate directly locally contextual information, spiritual aspects, or the intuitive understanding of a place and environment that emerges from living in a single location for a long time (e.g. Sillitoe, 1998; Dekens, 2007). As with local knowledge, science can assume that the past is appropriate for predicting the future (which can be termed “uniformitarianism”). Meanwhile, both local knowledge and scientific analyses have significant strengths in terms of providing baseline data and past examples of dealing with environmental changes. Those strengths should be combined by drawing on each knowledge form to overcome others’ limitations. Innovation requires a combination of various knowledge types and various approaches to knowledge integration.

In island communities, this form of work has been carried out in SIDS including Papua New Guinea (Mercer et al., 2010), Samoa (Daly et al., 2010), and the Eastern Caribbean (Lewsey et al., 2004). Making use of all technology forms across all media, rather than seeking technology as the end unto itself, can assist in combining knowledge forms and disseminating information. An illustration is an idea by Glantz (2007) of a “Spare Time University” which develops and distributes sustainability-related “nuggets” of information and advice—for instance, how to reduce energy use or how to save water in agriculture—that will reach people on their own terms with media to which they already have access. This is innovation using existing technology rather than a case of technological innovation *per se*. Many isolated peoples, including islanders, often have mobile phones, meaning that even simple text messages can reach a wide audience. That permits combining and triangulating external information with people’s own knowledge for decision-making about improving their sustainability approaches. If the audience is not literate, then pictures and videos would form the information nuggets from Spare Time University.

The challenge is in the details: developing, testing, and confirming the information “nuggets” while determining how best to communicate the information to reach the desired audience and to inspire actions by that audience. The three forms of innovation appear once again: entrepreneurship in developing media and dissemination platforms (even if not new technology); governance to permit the “nuggets” to be produced and to reach those who need them; and culture to tailor the

messages to the people and communities being reached in the communication forms which they prefer.

An example in action emerges from Fiji. Tadra Kahani is an annual theatre and dance competition for schoolchildren. One year, the theme was to select one United Nations Millennium Development Goal and to choreograph a dance to illustrate the goal’s meaning. This task reaches educators, youth, the youth’s families, the wider community, the national level, and tourists, more or less in that sequence. In fact, Fiji’s national airline advertised the public show of competing teams on board flights to Fiji, reaching Fijians and visitors alike. That promoted the show, Fijian youth, and the Millennium Development Goals. School competitions on sustainability themes could challenge pupils to develop theatre, dance, sculpture, music, visual art, and other artistic expressions in order to involve the wide community in these topics through thinking innovatively about communication and knowledge diffusion.

In learning from and building on such work, the power of MSV, Spare Time University, and other similar programmes is further revealed. The Arctic and SIDS peoples have indicated their strong willingness to contribute, bringing their own knowledge, wisdom, and experience while acknowledging what they do not have and their desire to learn from, teach, and exchange with others. They have awareness of the messages that work for themselves and experience at communicating with others, alongside a long history of living in and developing livelihoods for environments that can be challenging and frequently undergo major changes. They provide a solid baseline for innovation led by islanders for islanders—while contributing and learning beyond their own communities—so that a research and action agenda which serves the islanders can be developed and implemented.

### Beyond islands: an innovation research and action agenda

Recognising the advantages of islands as case studies with the islanders’ consent and participation does not mean using exclusively islands. Island thinking should not mean insular thinking, especially since no case is made—and it is not the case—that the innovation discussion applies exclusively to islands, islanders, or island communities. Instead, island thinking should be used to place insular thinking in context, to avoid stymieing innovation, particularly since not everyone always accepts all innovations. Social innovations can become political flashpoints such as same-sex marriage or restricting car use. Technical innovations in solar and wind power are subject to intense debate regarding their sustainability and ability to substitute for other energy supply sources.

Factors accounting for differences in accepting innovation, and for differences in perceptions and reality of innovation acceptance, need to be understood better. Uptake can display odd outcomes, such as the best purported technical innovation having less popularity than another form. Examples are Mac and PC computers (Belk and Tumbat, 1995); VHS and Beta video tapes (Cusumano et al., 1992); and DVDs and Blu-Ray (Brookey, 2007). Examining these examples, albeit non-island, contributes to identifying entrepreneurs and other change agents; to describing how governance could assist innovation; and to indicating and influencing opportunities, facilitators, and barriers.

Challenges exist for changing attitudes, values, and behaviours to support rather than inhibit innovation. Simple conceptual models are rarely accurate and empirical evidence is not always straightforward. Studies indicate that, even when people have the correct attitude and identify the correct sustainability behaviour, such as flying less to save fossil fuels, they do not necessarily change their behaviour in order to implement what they know (McKercher et al., 2010). Environmental scientists participating in global conferences are a good example (Stohl, 2008).

With such knowledge and wisdom alongside island experience, how could a research and action programme move forward without creating the same problems that it seeks to overcome, but instead supporting the local change implied by innovation? The overarching question is: How can local responses to global issues be improved for island communities—and then use that experience to support non-islanders for similar action? To understand how to research and act on answers to this question, five framing points are suggested here, based on experience from MSV and Spare Time University amongst others, as a starting point for discussion and debate:

1. Involving knowledge users and potential change agents, on and off islands, from the beginning, especially for research projects and programmes. Too often, science is seen as a linear process whereby knowledge is produced and then provided to users for application. Instead, users can contribute to defining the problems to be solved, also giving them an indication of the intricacies and uncertainties of scientific investigation. That further provides the users with some degree of ownership of the knowledge and results, hopefully inspiring them to continue to be involved in the scientific process and to be more enthusiastic about applying the knowledge that they helped to produce.
2. Integrating different knowledge types, such as combining different knowledge forms within science and external to science. Within science, that means drawing on social science, natural science, humanities, and professions. External to science, that means drawing on vernacular knowledge and local knowledge in all its forms, including indigenous and non-indigenous traditional and non-traditional knowledge forms.
3. Exploring framing and articulation alternatives. One example is framing results for users based on the users' interests and needs, but without sacrificing scientific accuracy or precision. That can be achieved by disseminating and communicating to various audiences on each audience's own terms in order to inspire action for themselves based on science. Characteristics to consider for presenting and communicating the results include frequency of the message(s), media for dissemination, length, and form of communication. In addition to standard oral and written forms, other possibilities to consider are interviews, comic strips, games, and different art forms (see also the next point).
4. Extending publication and dissemination. Publishing in scientific venues advances knowledge and permits others to build on that new knowledge. Meanwhile, publishing in popular venues brings the knowledge to those who might not access scientific venues. Communication forms in addition to oral and written forms can be used, such as the performing arts described for Tadra Kahani.
5. Developing wisdom. Learning from the processes enacted improves and builds knowledge up into wisdom through iteration that is evaluated internally and externally—and then innovative change can be initiated based on the evaluations. Knowledge creation and application is never a static process, but must respond to evolving situations and circumstances. It is rarely possible to know exactly the deliverables, timeframes, outputs, and outcomes in advance. Flexibility and responsiveness are needed to avoid becoming mired in a rut or trapped on a specific pathway. Part of that is accepting feedback and altering one's course, based on re-assessments and wisdom-based judgments.

Island situations and communities tend to integrate many of the sustainability challenges faced around the world, with possibilities for transferring and scaling up the results from island case studies (e.g. Connell, 2013; Lewis, 1999; Kelman et al., 2011) since few innovation challenges and solutions are exclusive to islands. Yet all possibilities are not always feasible or appropriate, so it is important to determine what can and cannot be transferred and what can and cannot be scaled up. Parallels with other coastal locations as well as with high altitudes (e.g. mountain communities), along with differences with locations such as megacities and large deserts, assist in putting islands, islanders, and island communities into wider geographic contexts.

This paper has provided ways forward for exploring such topics through providing a research and action agenda on islander innovation for researchers, policy-makers, and practitioners to highlight local responses to global issues. The key question 'How can local responses to global issues be improved for island communities?' has been expanded, with a baseline of specific examples—successful and requiring improvement—provided to advance investigations through pursuing the agenda. All such work assists in determining what innovation lessons can be taught and learned amongst various locations for achieving local action for the global issues affecting all of humanity.

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