

The Brisbane Declaration on Ecosystem Services and Sustainability in the Oceania Region

We the participants of the Oceania Ecosystem Services Forum having met in Brisbane, Australia (27th – 31st March 2017), reaffirm for the universal call to action to ‘end poverty, protect the planet and ensure people enjoy peace and prosperity’ as agreed by nations signatory to the United Nation’s Sustainable Development Goals (UNDP 2016).

The Brisbane Forum provides a platform for our community of practice (ACES), and symbolises ‘the spirit of partnership and pragmatism’ necessary to respond to sustainability challenges in the Oceania region (UNDP 2016).

We the participants of the Brisbane Forum recognise the fundamental role that ecosystem services play in sustainability; and identify the following challenges to sustainability in the Oceania region: mitigating and adapting to climate change and climate variability; reducing species loss and meeting Aichi Biodiversity Targets; ensuring food security through productive ecosystems; addressing global chronic health issues; transcending disciplinary thinking and information sharing; and existing policies, plans and regulatory frameworks.

We the participants of the Brisbane Forum call for governments, international and regional programs/platforms, academic and philanthropic organisations, and those with authority and capacity to enact the following Actions to increase the use of ecosystem services approaches to address sustainability in the Oceania region.

Actions

1. Data quality should not stop action on climate change
2. Technical and methodological support is required to:
 - a. Develop a common language
 - b. Develop/implement environmental-economic accounts
 - c. Develop/communicate maps and spatial infographics
 - d. Report on state and trends in environmental assets
3. Respect and support participatory/action research
4. Actively incorporate indigenous and local knowledge
5. Support youth skills development and empowerment
6. Support forums for ongoing dialogue across sectors.
7. Build the capacity of existing networks and community of practices
8. Support businesses’ shift in thinking about ecosystem services
9. Support the banking and finance sector
10. Provide aid to support linking ecosystem services and Sustainable Development Goals.



The Oceania Ecosystem Services Forum (the Forum) brings researchers, practitioners, decision makers and knowledge holders from different sectors (e.g. government, business and industry, communities, indigenous, academia) together into A Community on Ecosystem Services (ACES). Through the Forum, those mentioned above discuss, workshop, present and brainstorm innovative approaches and state-of-the-art methods to using ecosystem services concepts to address sustainability challenges in the Oceania region (i.e. Micronesia, Polynesia, Australasia, Melanesia).

From 27th – 31st March 2017, 176 members of the Forum met face-to-face in Brisbane, Australia, to discuss *healthy ecosystems for resilient communities* (www.oceaniaesforum.com). The Brisbane Forum brought some of the best ecosystem services research, practice and knowledge from around the world to the Oceania region; and showcased some of the best ecosystem services research, practice and knowledge occurring in the Oceania region to the rest of the world. The next face-to-face meeting of the Forum will be held in 2019.

The Brisbane Declaration derived from the Brisbane Forum provides a call to action of all persons and organisations with authority and capacity to implement the 10 Actions prescribed by participants.

Preamble

Ecosystem service approaches have significant potential to address complex sustainability issues. All individuals and sectors operating or residing in the Oceania region are direct beneficiaries of ecosystem services derived from the region; indirect beneficiaries include the entire global population. Whether as an individual, community, national government, trans-national business or international non-government organisation, your decisions and actions in some way directly (e.g. through use) or indirectly (e.g. through green-house gas emissions, waste) impact on the ecosystem services provided by the Oceania region. Whilst governments globally continue to ignore the impacts of climate change in Oceania, and locally we continue to degrade and exploit our stock of natural capital, we are directing communities, economies and the environment in the Oceania region to an uncertain future.

Section 1: Challenges to Sustainability in the Oceania Region

The challenges to sustainability in Oceania are complex - non-linear, multi-scalar, cross-sectoral and multi-disciplinary. Major challenges to delivering *healthy ecosystems for resilient communities* and sustainability in Oceania include:

1. Mitigating and adapting to climate change and climate variability

Climate change and climate variability are the greatest challenge to sustainability in the Oceania region. The impacts of climate change and variability ARE happening NOW. As climate change intensifies, future impacts are likely to worsen and become more variable. From global to local scales biodiversity, ecosystems and people are exposed to rising sea levels, cyclonic storm events, flood and drought disasters. Climatic changes do not occur in isolation but are coupled with other drivers of unsustainable growth, such as population growth and land-use change, making it particularly challenging for communities to adapt. Ecosystem services are part of the solution in helping communities to adapt to climate change (such as restoring coastal wetlands to lessen the impacts of storm events); however, the scale, pervasiveness and uncertainties associated with climate impacts mean that developing tangible actions to ensure the short and long term resilience of communities remains elusive.

2. Reducing species loss and meeting Aichi Biodiversity Targets

In general the Oceania region is on track in achieving some of the Aichi Biodiversity Targets but many member countries are likely to fall far short of achieving them by 2020 - species loss in terrestrial and marine systems is still at an all-time high; protected areas in the region cover only approx. 5% of land area and 2% of the marine area; many ecosystems are losing endemic species; biodiversity and ecosystems are at greater threat and at risk due to the increasing and combined impact of direct and indirect drivers. Examples include:

- The rate of deforestation in the Oceania region as a whole has been higher than the global average since 1990. Commercial logging and invasive species remains a major cause of this deforestation as well as reduced forest quality and habitat area.
- The availability and reliability of fresh water resources is limiting economic and social development for nations in Oceania. The quality of freshwater systems in the region is predicted to become significantly worse as a result of depleted resources, mismanagement, poor governance and increasing pressure from human populations.
- The greatest pressures on marine ecosystems comes from climate change - temperature rise, ocean acidification, eutrophication, physical disturbance, over-fishing, loss of habitat, sedimentation, competition and predation by crown-of-thorns starfish. The Great Barrier Reef is currently experiencing its second consecutive mass bleaching event, the previous in 2016 resulted in the mortality of 22% of coral. Reports identify this pressure is from climate change, poor water quality, coastal development and illegal fishing.

3. Ensuring food security through productive ecosystems

Population growth, expanding urbanisation, climate change, globalisation and free trade agreements are pressuring primary producers (farmers and fishermen) to ‘produce more with less’, causing adverse environmental, social and cultural impacts. For example, invasive alien species are replacing economic plants and reducing ecosystem productivity and stability. Further, inappropriate fishing practices, over fishing by large scale fisheries and unregulated small scale fisheries threaten marine and ocean resources.

4. Addressing global and regional health and wellbeing issues

Our natural assets which are being depleted or degraded provide ecosystem services that regulate disease, enable spiritual and cultural connection to the land and sea, and enable populations to recreate and learn which provides many physical, mental and social health benefits. These ecosystem services help to address global, regional and local chronic health issues such as obesity, depression and diabetes and generate value that can be measured in avoided health burdens.

5. Transcending disciplinary thinking and information sharing

The concept of ecosystem services is difficult to mainstream into the policy sphere because of the: incomplete and bounded knowledge on ecosystem services; the scattering of environmental data across organisations when in existence; the continued push for quantitative data and limited respect for qualitative; and the need for interdisciplinary and cross-sectoral work (agreeing on concepts, definitions, objectives).

6. Weak and ineffective existing policy, planning and regulatory frameworks

Many policy, planning and regulatory frameworks for ecosystem services to ensure social and environmental safeguards are weak, less than effective, incoherent or suffer from poor enforcement. Policies focusing purely on biodiversity conservation for its own existence fail to include consideration of ecological processes underpinning the functioning of the ecosystem/habitat. Most importantly the link between human well-being (environmental, social, cultural and economic) and ecological processes continues to be overlooked. Cross sector policies and plans and consistent metrics that recognise the benefits of sustainable natural assets for human health and wellbeing are further required.

Section 2: Actions to Address Sustainability in the Oceania Region through Ecosystem Service Approaches

Quick reforms to policies, plans and programs relevant to the delivery and management of ecosystem services by different sectors are necessary - the time for broad implementation of ecosystem service approaches is now. While the Actions listed below cost money, the cost of inaction to economies, communities and the environment is greater and often irreversible.

- 1. Data quality should not stop action on climate change** – ‘perfect’ data is not required to tell the story of real climate change impacts and deliver knowledge to audiences at different scales (local - global). Local stories (e.g. cultural implications of climate change induced translocation) are just as important as global stories (e.g. climate change reports). Government needs to stop working in silos; and reducing human life to numerical quantifications, money and economics. Citizens of all countries are impatient with decisions made by governments of large developed countries (Australia and G20 countries), who exasperate the problem of climate change whilst ignoring the impact of their decisions on small island developing states. The importance of coastal and marine environments (key characteristic ecosystems of the Oceania region) in buffering and mitigating the impacts of climate change can no longer be ignored.

- 2. Provide technical and methodological support** – support is required in the following technical and methodological areas:
- a. A common language - to communicate across sectors and disciplines which often use similar terms but interpret these with different meanings - a consensus document for common terminology and meaning is required. This document must be developed by bringing together different stakeholders (economists, business sector, scientists, government, community representatives etc.) – see points 6 and 7;
 - b. Environmental-economic accounting - the application and benefits of environmental-economic accounting are not bounded by scale. Ensure environmental-economic accounting is done by all groups (e.g. business, levels of government, catchment management authorities) as it is not limited to national governments. Accounting approaches provide a consistent method for collecting foundational data for ecosystem service assessments and provide a framework to link political and economic decision-making to changes in the condition and extent of ecosystem assets. The links between people and the environment transcend those identified through accounting practices however, and points 3 and 4 need to be considered within this context.
 - c. Maps and spatial infographics - expertise and other resources need to be made available for collaboration with Pacific islanders to produce culturally appropriate maps and other infographics to convey complex ideas and improve practical management of interactions between humans and nature application at the landscape scale.
 - d. State and trends in environmental assets - the skills and resources which have promoted the considerable progress made in Australia and other developed countries on assessing state and trends in environmental assets need to be made available to Pacific island nations.
- 3. Respect and support participatory/action research** – there is a need for decision makers to consider local context and they must give greater recognition to social and cultural knowledge as essential information to support their decisions. Funding programs must provide support (design programs, fund projects) that assists in the collection and articulation of this knowledge in a way that can be applicable in policy (e.g. relative terms or absolute terms). Participatory/ action research can bridge the gap between policy (national government) and community science (social/ecological).
- 4. Actively incorporate indigenous and local (Pacific island culture) knowledge** - Indigenous and local Pacific islander knowledge complements western science. Genuine dialogue is required; Australian (and other G20 country) decision makers must sit down with people from Oceanic nations to listen and understand. Together we must seek and work to develop culturally and situationally appropriate approaches to managing social, economic, and ecological values holistically (many values cannot be translated into \$ value). Spiritual and religious perspectives towards the environment are the foundation for its management in many Oceania communities.
- 5. Support development of skills and the empowerment of youth** – support (funding, programs etc.) is required to ensure youth training and support at the technical level (e.g. GIS, modelling). This opens opportunities for learning new technological innovations that can be integrated into traditional use. The concept of ecosystem services transcends traditional ecology to its interaction and application in people’s daily lives providing an opportunity for youth to explore community involvement – and for the voices of our young people to be heard through youth programs (e.g. through the church, schools) and placement programs (e.g. exchange of knowledge with peers).
- 6. Support forums for ongoing dialogue across sectors** - ongoing dialogue is required to clarify and communicate language that helps all levels of decision makers understand how the natural environment interacts with human welfare in economic, physical, cultural and psychological

ways. Greater communication across sectors of government and society that currently do not acknowledge the complex interactions between the natural environment and many aspects of human wellbeing is necessary to mainstream ecosystem services into decision making. Cross-sectoral and disciplinary forums/platforms for dialogue open opportunity to transfer information and understanding across knowledge systems.

- 7. Build the capacity of existing networks and community of practices** – to understand and address issues such as climate change and environmental degradation decision makers need to support existing collaborative, equitable networks in Oceania to maintain genuine, sustained, meaningful engagement and dialogue. A key practical priority for the Pacific island countries is to address the dire shortage in capacity (firstly the low numbers of people in any government or organisation, the limited knowledge and skill levels, and the shortage of financial resources and innovative financial mechanisms to support long-term (not short-term) programmes of work). The thematic areas of need include:
 - a. improving the number of multi-sector, collaborative governance programmes and mechanisms in countries (at all governance levels); and
 - b. to include other sectors such as banking, insurance, development sectors, entrepreneurs.Networks and communities of practice play a brokering role between different disciplines; they can translate information across scales; increase the saliency of research outputs; provide protection against pressures and ideological bias and increase credibility; and help build long-term trust and understanding across sectors of society.
- 8. There is a shift in the way business is thinking about ecosystem services and government must support this** – business is starting to realise the impacts, but also the dependencies industry has on nature and that there are large risks associated with not incorporating this into current decision-making. However, there are also many opportunities to be found. Government needs to support new thinking within business and the financial sector that recognises monetary and other values of the natural environment and how monetary and other values can coexist and even be synergistic with addressing climate change realities and risks. Environmental evaluations are important and the ability to value nature's services is a useful tool for business to enhance decision making. Companies are doing this, it's not just talk. Furthermore, they are looking beyond direct operations and looking throughout the entire supply chain to improve sustainability.
- 9. The role of the banking and finance sector requires supporting** - government must support the banking and finance sector to lay a path for others to transition to a more sustainable future. We are seeing the development of financial mechanisms that are beginning to assist this transition such as green bonds, impact investment and financial incentives like cheaper loan rates. Philanthropy is not the way to fund conservation, it is limited, we need to use innovative methods that enable a return for investment. Investors and consumers are wanting and demanding green products, they are driving change. Financing to recognise linkages beyond the environment to broader social well-being – culturally appropriate.
- 10. Aid and support to link ecosystem services to Sustainable Development Goals** – ecosystem services analysis should be integral to policy making processes as ecosystems and their provision of goods and services are integral to achieving the United Nations' Sustainable Development Goals. Support is required for government departments to use ecosystem services approaches. As a high priority, aid and other support for Oceanic nations needs to be linked to the Sustainable Development Goals, which provide a comprehensive framework for harmonising human wellbeing with environmental policy and management.

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Sources

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