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Contribution Paper for the OWG on SDGs

For The Better Conservation and Management of Islands and Their Surrounding Ocean Areas

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Contents

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Policy Proposal by the Ocean Policy Research Foundation, the Australian National Centre for Ocean Resources and Security at the University of Wollongong and their contributing technical partners

1. Purpose of This Policy Proposal

The ocean covers some 70 percent of the earth's surface and plays a significant role in sustaining human life by supplying natural resources and stabilizing climate. Islands serve as an irreplaceable base from which to protect and develop ocean resources, and conserve the marine environment and biodiversity.

Island States have the right to explore, exploit, conserve and manage their natural resources, and a responsibility to protect and preserve the marine environment, including conserving the living resources therein under the United Nations Convention on the Law of the Sea (UNCLOS) and other international treaties.

Today, however, islands are faced with various conservation and management challenges due to local environmental problems and global change. In particular global climate change and its associated effects have raised the plight of small islands as a matter of international concern.

This Policy Proposal reflects the results of a 3 year international research program undertaken by the Ocean Policy Research Foundation (OPRF), the Australian National Centre for Ocean Resources and Security (ANCORS) at the University of Wollongong and their contributing technical partners, followed by a second phase of the research undertaken by OPRF, ANCORS and their contributing technical partners. This research has identified a

range of globally interlinked issues whose resolution is fundamental to the future sustainability and development of small islands. Its purpose is to draw the attention of the international community to the need for more effective means to address these growing problems, especially the use of precautionary and ecosystem based approaches. This research has focused on the Pacific Ocean, where many islands are found and vast areas of the ocean fall under the jurisdiction of island States.

The research and recommendations are focused on the characteristics of islands, acknowledging islands and their surrounding ocean as unified areas and considering how to conserve and manage them. The results are being shared to support discussion on the Third International Conference on SIDS in 2014 as well as the Sustainable Development Goals, in the hopes of fostering sustainable development of island societies and the exploitation and conservation of the ocean through cooperation and collaboration between island States and the international community.

2. Priority Issues and Directions toward Solution

2-1. On Conservation and Management of Islands

a. Development of Island Management Strategies

In order to address the challenges of global change to biophysical resources of islands, the international community should support practical initiatives to assist countries in the development of strategic planning and implementation of island-scale management decisions. Such support should be aimed, inter alia:

i) To develop effective management strategies for islands through classification by the socio-economic, cultural, and ecosystem-based characteristics not only of the islands themselves but also their surrounding environments.
ii) To develop robust environmental and socio-economic baselines against which management strategies can be designed and the success of outcomes evaluated. Environmental baselines should include: defining the natural dynamics of reef islands and high island

shorelines (erosion, accretion patterns and island migration rates) at a range of timescales; the health and status of island ecosystems (e.g., coral reefs, water quality) and water resources; and resolution and recognition of the critical inter-linkages between island biophysical systems that maintain landforms and support human populations. Socio-economic baselines should provide an understanding of current human uses and impacts, and their impacts and the values or forces which drive them.

iii) To better resolve the outlook or future changes in local island landforms and ecosystems that may be expected to arise from the combination of human uses and impacts and the effects of global environmental change.

iv) To develop comprehensive strategies to manage the threats to island biophysical systems that allow communities to co-exist with the natural dynamics of islands. Such management strategies should also aim to maintain the life-supporting capacity and natural dynamism of islands and their associated ecosystems; reflect the diversity of island types; recognize the complex interaction of island biophysical systems (people, land, water, ecology); and embrace a broad range of practical management solutions that comprise land use and resource planning as well as hard and soft engineering tools.

v) To identify, design and implement alternative adaptation strategies that are sensitive to the natural dynamics of island biophysical systems.

vi) To implement, monitor and evaluate ecosystem-based management plans for island biophysical systems through effective implementation of the Pacific Oceanscape.

b. Increased Safety and Resilience of Island Communities

b-1. The international community should continue to support a range of disaster risk management measures to assist island States to reduce their levels of vulnerability and risk. Measures that can be considered for support

are reflected in the priorities endorsed by representatives of Pacific island countries and territories at a range of regional and global fora such as the annual sessions of the Pacific Platform for Disaster Risk Management, and biennial sessions of the Pacific Climate Change Roundtable and Global Platform for Disaster Risk Reduction, to name a few.

b-2. Based on assessments grounded in scientific data of natural disasters such as typhoons, storm surges, earthquakes and tsunamis for individual States and islands, island States should draft a comprehensive disaster preparedness plan and implementation framework in order to improve their observation systems, protective infrastructure (e.g., breakwaters and seawalls) and evacuation facilities (e.g., storm surge and tsunami shelters, escape towers and escape ships), education for higher disaster preparedness (e.g., raising disaster awareness and carrying out emergency drills) together with early warning systems, including national communication systems. Disaster resilient societies require development of both hard and soft infrastructures.

b-3. Adoption of conservation measures that are sensitive to individual characteristics of an island contributes to the establishment of a disaster resilient society. For example, in the case of the 2011 tsunami disaster in Japan, re-establishment of settlements in the areas that were affected by tsunamis in the past increased the damage. In order to build societies resilient to natural disasters, it is critical that island States develop and implement appropriate land use plans or national land plans to minimize the use of land, which is deemed vulnerable, based on detailed damage predictions. Particularly for very small islands, there is also a need to provide accessible shelters for populations in vulnerable areas.

b-4. In order to cooperate with island States to carry out the actions identified above, it is necessary for the international community to support scientific research on disaster risks for individual islands and observation systems (e.g., establishment of a core regional observatory), data and information sharing, and establishment or improvement of comprehensive disaster preparedness plans and their implementation, from technical, capacity building, and financial perspectives.

c. Implementation of Waste Management

c-1. The international community should support island States in the development and implementation of comprehensive waste management strategies in accordance with the Pacific Regional Solid Waste Management Strategy 2010-2015, designed by the Secretariat of the Pacific Regional Environment Programme (SPREP).

c-2. There is an urgent need to improve waste disposal facilities that may affect the region's environment and reduce waste in particular (e.g., by introducing the 3R (Reduce, Reuse and Recycle) system and refuse compost). It is also important to increase the understanding and awareness of island residents about waste management issues.

c-3. For atoll islands, which are small in land area and so have difficulty securing waste disposal facilities, it is essential to develop and implement a medium- to long-term national strategy.

c-4 It is recommended that island States consider the utilization of economic mechanisms so as to control commercial product inputs which are released as waste products in time. In addition, consideration should also be given to establishing zero waste measures ("bring it in, take it out"). Developed countries that export goods to island States such as cars, equipment, electric and electronic goods) should assist in the implementation of such an approach.

c-5) To implement sustainable management of waste in island States, it is important to use treatment techniques appropriate to the various types of waste (e.g., plastic marine litter and organic waste need be collected and processed separately), make efforts to reduce waste and raise public awareness, and obtain the support of the international community to support these activities.

d. Development of Renewable Energy

d-1. A key to the economic independence of island States is to encourage societies that do not depend excessively on imported energy. Consequently, it

is necessary to promote renewable energy innovation according to the natural conditions of each island, and provide business operators with the necessary incentives to promote the use and development of renewable energy as appropriate. In addition, there is a need to encourage measures to save energy and promote increased energy efficiency, including awareness-raising at both the political and civil levels.

d-2. The international community should assist island States in the identification and adoption of feasible renewable energy technologies and their dissemination schemes appropriate to the environmental conditions of each country.

e. Conservation of Coral Reefs and Mangrove Forests

e-1. Coral reefs and mangrove forests play an important role not only in environmental conservation but also in disaster prevention. For example, coastal erosion is prevented by the breaking of waves at the reef margin, creating sheltered areas along island coasts; also, bottom sediment stability is secured by mangrove root systems, reducing tsunami traction force. Island States thus need to take an adaptive and perceptional approach to maintaining island ecosystems by using well-designed structures and beach nourishment; also, a long-term approach that takes into account coral and foraminifera ecological systems is required to achieve social, economic and environmental services (ecosystem services).

e-2 Island States need to establish environmental criteria and monitoring mechanisms to manage excess land-based nutrient budgets or hazardous material spills (e.g., oil spills) that could damage coastal ecosystems.

e-3 The international community should support a multifaceted approach by island States based on the aforementioned utilization plan and conservation plan for conserving coral reefs and mangrove forests to promote achievement of the Aichi Target, which was set at COP10 of CBD in consideration of the environmental and geomorphologic features of islands.

2-2. Management of the Surrounding Ocean Areas

a. Establishment of Baselines and Maritime Limits

a-1. In order to fully implement integrated ocean management, it is important that island States that have not done so, establish their maritime baselines, zones, and outer limits as well as negotiate maritime boundary treaties. Likewise, where applicable, island States also need to complete the procedures for the extension of their continental shelf in accordance with UNCLOS. It should be noted that charts at appropriate scales are necessary to depict baselines and to publicize maritime limits.

a-2. Where appropriate the international community should continue to give island States technical and legal assistance to establish baselines and maritime zones and update existing maritime legislation and charts as well as to conduct surveys necessary for States to establish their continental shelf.

b. Implementation of Practical Fisheries Management Policies

b-1. It is recommended that island States strengthen conservation and management of small scale fisheries in coastal areas and of fishery resources in their EEZs. Support should be provided for the implementation of community based fisheries management measures, utilizing the best available scientific data. In order to support this implementation, further socio-economic research is required into fishing activities, indigenous knowledge, and community benefits. Coastal fisheries management should be considered a priority area for capacity building and institutional strengthening.

b-2. It is recommended that island States and their distant water fishing State partners should strengthen monitoring, control and surveillance (MCS) at the national and regional levels to better combat illegal, unreported and unregulated (IUU) fishing, taking into account the global nature of these issues. Particular consideration should be given to measures that combat misreporting and strengthen enforcement of license conditions. Some island States may benefit from the establishment and enhancement of enforcement organizations such as coastguards or national MCS committees to coordinate and maintain law and order at sea. The possibility of establishing joint coastguards and multi-lateral surveillance enforcement

agreements among some island States should also be considered. Furthermore, as measures from the consumer side, additional consideration needs to be given to increasing traceability of products.

b-3. The international community should promote sustainable fisheries through regional fishery management organizations, including activities that remove excessive fishing capacity, address IUU fishing problems, prevent overexploitation of fishery resources, and implement an ecosystem based approach to fisheries management. Consideration should be given to the development of new processes that ensure an equitable distribution of the conservation burden in a transparent manner. At the same time, the international community should provide support to island States to add value through processing and export of seafood products, which lead to job creation and economic development.

b-4. The international community should increase its support for the strengthening of fishery management systems in the Pacific islands, including capacity building and institutional strengthening at the local, national and regional levels

c. Maintenance and Securing of Shipping Services

c-1. Island States need to address the maintenance and safety of shipping services which are essential for transportation among the islands. The introduction and promotion of vessels that can easily be operated, managed and maintained should be encouraged. It is also recommended that island States and flag States act to prevent marine pollution and ecological damage caused by ships to island environments and to promote efficient use of energy.

c-2. The international community needs to provide financial support for island States to secure maritime transportation and technical support for human resource development to implement conservation measures.

d. Exploitation of Marine Mineral Resources and Preservation of Marine Environment

d-1 Island States need to enact effective regulatory measures based on a precautionary approach and environmental impact assessment for environmentally responsible exploitation of seabed mineral resources. This requires implementing legal measures covering prospecting, exploration, and production. Seafloor mineral resource activities should be undertaken with careful attention to public health, preservation of marine life, safe operation of relevant processing facilities, appropriate management of resources and social and financial benefits.

d-2 It is imperative to provide appropriate assistance to island States to establish special guidelines and policies to guide all aspects of this new industry and ensure the protection of islands States' interests and environments when developing mineral resources on the seabed.

d-3. The international community should support workshops and processes that facilitate the sharing of technical knowledge related to environmental impact assessments and management of seabed mining activities, particularly for the benefit of developing countries.

e. Conservation and Sustainable Use of the Marine Environment and Marine Biodiversity

e-1. Island States should consider utilizing a range of management tools, including Marine Protected Areas (MPA), and other similar tools to achieve integrated ocean management and ecosystem-based management (EBM) to conserve and use the marine environment and marine biodiversity in a sustainable manner, while taking into account local conditions and circumstances.

e-2. To be effective, it is necessary that scaled up MPAs (e.g., by networking) are designed around clear objectives, developed and implemented in harmony with other objectives for use of marine space and resources. Marine conservation is about stewardship and thus is much more than no-take areas. The broader approach to EBM is important for addressing the complex issues already facing island States, such as sustainable development, the human environment and maintenance of

ecosystem processes and biological diversity, as reflected in the Aichi Targets set at COP10 of CBD.

e-3. It is desirable that island States develop and adopt guidelines as appropriate for establishing and managing MPAs and applying suitable environmental impact assessment measures. The international community should strengthen technical and financial support for island States.

2-3. Response to Climate Change and Variability

a. Adaptation to Climate Change and Variability by Island Societies

a-1. The small land area of islands and their vulnerability to natural threats raise the likelihood that they will be more affected by climate change and variability. Climate change and variability may affect islands through damage to coral reef and near-shore ecosystems due to sea surface temperature increase and emerging ocean acidification. Climate variability already affects islands through changes in the intensity and frequency of disasters due to ongoing ENSO cycles, El Niño Modoki and other meteorological irregularities; and climate change is expected to increase possible variability and extremes. Understanding of data relating to climate/oceanic extremes and socio-economic indicators offer many important lessons to reduce vulnerability of islands (e.g., droughts caused by El Niño Modoki or urbanization). It is also important to undertake further targeted scientific research and to implement evidence-based, practical solutions to climate stress. This will engender long-term resilience and enable islands to appropriately adapt to disasters and climate change impacts.

a-2. It is important to take measures to address the following three issues. First, as to global scale climate change, there is a need to deepen our understanding through observation and experimental research of vulnerable ecosystem services and resources (e.g., coral reefs, fish, mangroves, shoreline systems, etc). Second, as to climate variability, basic climate monitoring capacity must be strengthened in small islands to provide critical baseline data and broader research on meteorological irregularities such as decadal climate cycles, ENSO and El Niño Modoki. Third, in terms of aggravation of

local inshore marine environments caused by existing anthropogenic stress, appropriate action and exploration of impact-response mechanisms should be taken in line with Sub-section 2-1 of Section 2 of this document.

b. Response to International Law Issues Related to Climate Change

b-1. The low water lines of islands are important, as they constitute the normal baseline for measuring the breadth of territorial seas, contiguous zones, EEZs and continental shelves, as well as the base point for drawing straight baselines and archipelagic baselines.

b-2. Current rules of international law do not adequately address the adverse impacts of climate change on the limit and the status of territorial seas, contiguous zones, EEZs and continental shelves in cases where low water lines shift or part or the whole of the island territory is submerged due to sea level rise. It is therefore desirable for the international community to consider adopting new rules to mitigate unfair impacts by Climate Change. In this respect, consideration should be given to adopting a supplementary agreement to UNCLOS.

3. Capacity Building and Institutional Strengthening

Capacity building is essential to ensure that island States are able to effectively implement their national and international obligations and to ensure the long term conservation and sustainable use of their marine environments. Accordingly, the international community should support research into identifying priority institutional strengthening and capacity building needs for small island States in the fields of marine management, governance and development. Support should be given to capacity building and institutional strengthening programmes that target national and regional priorities while minimizing disturbance to ongoing management responsibilities. As far as possible, such support should be coordinated through existing regional agencies.

4. Suggestions for Responding to the Challenges

4-1. Various types of scientific knowledge should be accumulated in order to effectively respond to natural threats, problems associated with climate change and climate variability, maintenance and conservation of islands, and environmental preservation of islands.

4-2 In order to respond to issues relating to the degradation of the living environments and increasing vulnerability of marine and coastal environments and communities, it is desirable for island States to establish and implement appropriate land use plans or national planning mechanisms, taking due account of environmental conservation.

4-3 It is recommended that island States work towards sustainable development through effective management of the ocean areas under their jurisdiction so as to conserve and manage the environment and resources, in order to achieve a long-term sustainable utilization of marine living resources.

4-4 In their effort to achieve sustainable development, the nature, history, culture, politics, and institutional arrangements (e.g., traditional use and ownership of land and the sea) that are unique to the States and islands concerned should be taken into account.

4-5 It is recommended that the international community work with island States to identify the necessary forms and level of support through proper evaluation and analysis of the problems and their causes. The international community should provide focused cooperation and financial support to address identified needs.

4-6 In order to manage islands and their surrounding ocean areas effectively, it is necessary to establish systems or frameworks for the management and development of islands, to enhance capacity in national administrations and to support national community awareness programmes. Close working relations with NGOs should be explored and harnessed.

4-7 It is important to manage the various problems impacting the conservation and management of islands and their surrounding ocean areas

through approaches that recognize the interconnected nature of islands and their surrounding ocean areas.

5. Toward Realization of This Policy Proposal

5-1. Island States are facing various challenges affecting their islands and surrounding oceans. These issues are closely interconnected and thus it is important to find solutions to them in an integrated manner.

5-2 We recommend that in order to respond to these issues, island States should develop and adopt integrated policies and plans for oceans, coasts, and islands based on their respective social and cultural backgrounds, and then establish implementing institutions and organizations.

5-3 We support the development of island State policies and plans that promote an integrated approach, given the interconnected nature of ocean management issues and the requirements for States to share in the responsibility of managing the oceans under UNCLOS and other international initiatives, such as The Future We Want (Rio+20), Agenda 21 (Rio summit), the World Summit on Sustainable Development (WSSD) Plan of Implementation, the Barbados Programme (1st SIDS) of Action and the Mauritius Strategy(2nd SIDS). It is desirable that the Ocean Declaration (Ocean Days, Rio+20), which calls for action to meet the sustainable development goals for oceans, coasts, and SIDS, is used as a reference.

5-4 OPRF, ANCORS and their technical partners urge the international community to give full consideration to these recommendations, promote their implementation, and work for their inclusion in the Action Plan for the Third International Conference on SIDS in 2014 and the Sustainable Development Goals in 2015.