UN Sustainable Development Goals
Oceans & Seas, Biodiversity and Forests Keynote
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INTRODUCTION

Honorable Co-chair, Excellencies, delegates, Thanks for the opportunity to share some thoughts today on oceans and seas, biodiversity and forests. I welcome the opportunity to start today's discussion on the environment.

Your task of identifying a reasonable number of Sustainable Development Goals to focus global attention and action is both exciting and daunting. Although everyone <u>says</u> that social, economic and environmental issues are intimately intertwined, the task of identifying broad goals for the world community tempts everyone to focus on specific individual issues, not the connections among them, and the path of siloed choices will limit the outcomes.

My focus today is on linkages across isssues such as food security and nutrition, disaster reduction, poverty eradication, energy, etc. In my view, we should be thinking of these important issues in a more holistic, interconnected fashion.

In thinking about your challenges, I have four suggestions:

- 1. Choose goals that integrate the social, economic and environmental pillars and bring benefits across them, not just within one.
- 2. Choose goals where the time is ripe for significant progress.
- 3. Incorporate into goals the understanding that real and durable progress on social and economic issues will not happen without significant progress on environmental issues.
- 4. Ground your choices in good science.

Let me expand on these themes.

For far too long, people have, naturally, focused on people, and on our social and economic systems, and they have treated the environment as a second tier issue -- to be dealt with only after progress has been made in eliminating poverty, improving health, achieving gender equity, providing water and food security, etc.

We have historically taken the environment for granted and simply assumed that it would continue to provide what it always has. This lack of attention has resulted in degradation and we suffer from that degradation.

Consider oceans. For millennia, oceans have served as our grocery stores, pharmacies, playgrounds, highways, and places of inspiration. We simply assumed the myriad benefits oceans provide would always be there, despite the wastes we dumped into oceans -- from plastics to pharmaceuticals, from mercury to carbon dioxide, from excess nitrogen to oil and other toxins. We simply assumed the abundance of benefits oceans provide would always be there, despite what we removed from oceans – top predators that control the balance of other species, millions of metric tons of seafood, and habitat that provides homes for life in oceans. But that ignorance has resulted in serious depletion and disruption of ocean ecosystems. We're not just using oceans, we're

using them up, and that has real consequences for our lives and livelihoods, our health and safety.

These are not new points. Knowledge of these problems and their consequences has been highlighted in multiple UN documents, including *Agenda 21*, the *Johannesburg Plan of Implementation*, and the 2013 Rio+20 declaration "The Future We Want". However, translating that knowledge into meaningful action has been elusive.

Oceans are clearly important, but there has been little to no incentive or political backing to actually reach the targets made to improve ocean ecosystem health. The international community needs to take ownership of our oceans, and realize that just because it is "out of sight" for many, it cannot be "out of mind".

We now know that oceans and seas are vulnerable to our actions; and we now know that oceans and seas are immensely valuable in creating benefits we need to solve other problems. Coral reefs, sea grasses, kelp beds, and mangroves, for example, provide healthy protein and sea vegetables, medicines, good jobs, and protection from hurricanes, storm surge and tsunamis. We now know oceans and seas play a key role in sequestering carbon and regulating climate.

Nonetheless, we continue to pollute them with excess nutrients and carbon dioxide, destroy them with destructive fishing gear, overfish, drain and convert coastal areas into shrimp ponds or cities. Despite informed and strong aspirations to address these problems, the basic drivers of ocean degradation persist.

We now also know that benefits provided by healthy, productive and resilient ecosystems such as oceans are not only important, but they are the key to progress on many vital economic and social fronts. One clear message from the *Millennium Ecosystem Assessment* and an

abundance of work since then is that human health, prosperity and well-being in fact depend directly on a healthy environment. These findings turn conventional wisdom on its head: to make meaningful and durable progress on economic, social and environmental issues, we must understand the coupled nature of human-natural systems. Addressing them piecemeal will not succeed. We must protect or restore the ecosystems that provide our life support systems. The health of our forests, oceans, seas, and land is critical to the health of people, their economic opportunities and social fabric.

FINDING THE INTERDEPENDENCIES

What do these experiences and this knowledge tell us about crafting new SDGs? In short, multiple opportunities exist to connect the dots across vital issue areas in each of the pillars.

In framing the SDGs, it would be all too simple to continue to focus on issues within a single pillar. One might choose, for example, three social, three economic and three environmental goals, or some other partitioning that looks myopically at specific issues.

However, the ability to achieve most of those would be compromised by the lack of integration across them. They are interconnected. They are intertwined. The integration of the pieces is key to the success of the whole. Simply dividing the world up into social, economic and environmental issues misses the essential power of the whole. The action – and, yes the challenge – is in the integration. Let me say that again: The action – and, yes the challenge, but also the opportunity – is in the integration. The whole is much greater than the sum of the parts. Truly achieving sustainable development can only be done by understanding the interconnectedness of the system. Do not be tempted to focus only on the parts. Focus instead on the connections.

Let's examine some options for that integration.

ENVIRONMENTAL HEALTH UNDERPINS SOCIAL AND ECONOMIC WELL-BEING

Healthy, productive, and resilient ecosystems enable healthy people, healthy economies and vibrant communities. Because healthy ecosystems maintain essential biodiversity and ecosystem functioning, they provide a suite of benefits that affect both social and economic well-being.

Here are seven quick examples from oceans:

- 1. Healthy oceans and coasts contribute directly to the eradication of hunger. Healthy fisheries, aquaculture and production of animal feeds are essential for food security and nutrition, providing 4.3 b people more than half the world's people with about 15% of their intake of animal protein. In small island developing states and poorer coastal areas, 90% of protein can come from marine resources.
- 2. Healthy oceans and coasts, especially intact near-shore habitats, significantly reduce the risk of coastal disasters. Mangroves, kelp forests, coral reefs and salt marshes protect shores from storm surge, hurricanes and tsunamis. Coral reefs alone have been shown to reduce wave energy by more than 85%, and provide storm protection to over 200 million people worldwide (TNC CDRR). According to the 2012 World Risk Report that focused on environmental degradation and disasters, 14 of the top 15 countries at risk are developing coastal or island nations (Vanuatu, Tonga, Philippines, Bangladesh, Solomon Islands, Costa Rica, Cambodia, Timor-Leste, El Salvador, Brunei Darussalam, Papua New Guinea, Mauritius, Nicaragua, Fiji).

- 3. Healthy oceans and coasts reduce outbreaks of pests and pathogens that can affect human health. Healthy marine ecosystems harbor fewer harmful algal blooms (such as some red tides) or blooms of jellyfish.
- 4. Healthy oceans and seas help eradicate poverty by providing job security for numerous occupations associated with fishing, aquaculture, tourism, and recreation. As overfishing depletes fisheries, jobs plummet. As illegal, unregulated and unreported fishing destroy habitat such as coral reefs, tourism jobs disappear. Restoring fisheries, eliminating use of destructive fishing gear and protecting critical habitat can rebuild fisheries and restore secure jobs.
- 5. Healthy oceans and seas sequester carbon and help regulate climate. Coastal wetlands, marshes, kelp beds, mangroves, coral reefs all sequester and store carbon so called 'blue carbon.' In fact, mangroves and coastal wetlands capture carbon dioxide two to four times faster than mature tropical forests, and they store three to five times more carbon per area than tropical forests (NOAA).
- 6. **Healthy oceans and seas are essential to human health**. They provide around half of the oxygen we breathe.
- 7. Healthy oceans and seas provide an abundance of culturally important services e.g., species and places for ritual ceremonies and identity, attractive places for recreation and inspiration, and untapped potential for education.

These seven connections emphasize the multitude of ways that oceans support social and economic progress. Moreover, loss of ocean

services impacts differentially on the poor and vulnerable, women, children and indigenous peoples.

A STAND-ALONE SDG ON OCEANS AND COASTS

For these reasons, a stand-alone SDG goal of achieving healthy, productive and resilient oceans and coasts would provide an explicit pathway for integrating across the social, economic and environmental pillars and achieving great and timely progress. Ocean ecosystems provide integrated benefits, benefits that are essential for sustainable development.

Oceans are important to the entire world and essential for sustainable development. They are in serious decline, but with concerted action and international attention, much of this degradation could be reversed. Moreover, the importance of oceans will increase in the coming decades, as more people look to the ocean for food security, transportation and energy. Hence unified focus and action on oceans now will bring multiple benefits in the future.

The ocean goal is timely. And it can be accomplished if it is tackled in the near future. Oceans can be resilient if changes are made before the ecosystem becomes too degraded. Scientific studies of no-take marine protected areas, for example, illustrate that once extractive and destructive activities stop, biodiversity, abundance, size and reproductive potential increase dramatically inside the area, and that some of this recovered bounty spills over to outside the areas.

Countries that have mandated that overfishing end and depleted stocks be rebuilt are demonstrating that remarkable progress is possible and can bring rich rewards. After decades of overfishing, the U.S. has turned the corner in ending overfishing. It now has management plans in place for every one of the fisheries the U.S. manages. Each plan includes annual catch limits and accountability measures. And with assistance of fishermen, the tough measures are working. The number of overfished species continues to decline and over 30 previously depleted fisheries have been rebuilt since 2000, with most of those in rebuilt the last few years.

Achieving sustainable fishing on the high seas will be much more difficult, which is why a focus on governance with an SDG on oceans and coasts is essential.

Numerous exciting, innovative efforts are underway that provide hope for achieving sustainable use of oceans, but they are not at the scale needed. Concerted efforts to elevate the importance of oceans and highlight good practices have huge potential to bring multiple social and economic benefits.

International conservation NGOs, academia, industry, governments and philanthropic foundations have already started to recognize the importance of the environment to solving social and economic problems, and are creating innovative programs that incorporate good science to make major strides. Here are three examples.

- 1. FishForever a partnership between Rare, En ironmental Defense Fund, and the University of California at Santa Barbara is combining rights based fisheries with no-take marine reserves in an innovative effort to provide profitable fishing livelihoods, thriving sustainable fisheries, protect biodiversity and ecosystem functioning.
- 2. The Natural Capital Project a partnership between Stanford University, The Nature Conservancy, World Wildlife Fund and the University of Minnesota is providing tools to understand tradeoffs across different ecosystem services under different possible

development scenarios. Numerous countries are currently engaged in NatCap projects.

3. SNAP – Science for Nature and People – a partnership of The Nature Conservancy, Wildlife Conservation Society, and National Center for Ecological Analysis and Synthesis with the focus on data aggregation and model development to produce usable, relevant products to help solve "wicked problems" – starting with Coastal Defenses and Amazonian Fisheries.

CONCLUSION

In conclusion, I began by making four suggestions for you to consider in selecting and framing SDG goals:

- 1. Choose goals that integrate the social, economic and environmental pillars and bring benefits across them, not just within one.
- 2. Choose goals where the time is ripe for significant progress.
- 3. Incorporate into goals the understanding that real and durable progress on social and economic issues will not happen without significant progress on environmental issues.
- 4. Ground your choices in good science.

And I have suggested that a stand-alone SDG goal on oceans meets these criteria and more: Significant progress on achieving healthy productive and resilient ocean ecosystems is essential for sustainable development, is timely, and feasible. And it would integrate the three pillars. Having a dedicated OCEANS goal would systematically address:

- i. Food security
- ii. Income stability
- iii. Disaster risk reduction
- iv. Human health
- v. Climate regulation

- vi. Marine biodiversity and ecosystem health
- vii. Governance

Moreover, the growing importance of oceans and the existence of models that are ripe for scaling up suggest this goal could result in transformative benefits for all of humanity.

You have a great opportunity to set the standard for sustainable development, and dedicating a goal specifically to OCEANS would highlight a commitment to successfully achieving integration of social and economic well-being with environmental health

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