

Ladies and Gentlemen,

Distinguished guests,

Dear Friends,

I am delighted to bring your day to a close in this place that my great-great-grandfather, Prince Albert hoped to create when he declared that he "*wanted to give oceanography an international temple consistent with the considerable scale of its role in the progress of human knowledge.*"

This text, written in 1912, is still valid and now more than ever.

The oceans are not covered by a single discipline but by a melting pot of all disciplines and all nations which must work together.

This is why I am particularly pleased to see specialists in life sciences and the humanities here in a bid to provide practical solutions to the problems that humans have inflicted on their environment.

This co-operation was one of the recommendations of the Monaco declaration that I called for right here in 2008 and which was signed by 155 scientists from 26 nations.

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I thank the Monaco Scientific Centre and the laboratories of the International Atomic Energy Agency for helping to address this recommendation. It is entirely appropriate that these internationally recognised bodies have organised this Workshop, supported by my Foundation, my Government and the Oceanographic Institute that plays host to us, by the French Ministry of Ecology, Sustainable Development and Energy and by the American State Department in collaboration with UICN and the Mediterranean Science Commission.

However, this co-operation between disciplines is not always easy because of differing working methods or vocabulary. Furthermore, some scientists dispute the fact that humans are permanently changing their environment.

Two years ago, the first of these workshops helped us to bring your disciplines closer together, with tangible results. I am sure that this second workshop will go even further in terms of practical recommendations, judging by the wealth of the conclusions that you have produced.

Environmental protection must not occur at the expense of the common good of our Planet, which is closely linked to its resources. If these resources are not managed properly, economic development prospects will diminish and poverty will increase.

This acknowledgement, highlighted by Sir Nicholas Stern in terms of the terrestrial environment, is still embryonic with regards the marine environment. It is true that used to living with the resources of the sea, we are no longer aware of the services it provides. In addition to fishing and aquaculture, on which this work is particularly focused, the oceans are also essential for climate regulation, oxygen synthesis, tourism activities, shipping and source of raw materials.

Ocean acidification, the effects of which are often intensified by climate change, will impact all these benefits by varying degrees.

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While the scientific data is not yet sufficient to provide the key elements to policy makers, this is no reason to wait on the sidelines, because inaction today will affect the quality of life for our children tomorrow.

The effects of ocean acidification can however been seen right now, and the oyster farmers on the western coast of the USA are already seeing the first consequences on their production. When you consider that seafood is the major source of protein for just over one billion people, it becomes clear that ocean acidification is not simply an environmental protection issue but is also a key political concern for the health and well-being of humanity.

This is consistent with the recommendations of the Rio+20 workshop on food security, advocated by my country.

Reflecting the impact of these phenomena on human life, on how societies operate on their economy and their balance, also lends substance to a complex phenomenon.

This is precisely the interest of the economic approach which brings us here today. Of course, the consequences of ocean acidification must be measured and technical ways in which to counter them considered. We know of some avenues, in particular the assumed fertilisation that has recently been highlighted by some who have taken things into their own hands, which is obviously worth careful examination by scientists. But it is also through the economy, by changing our approach to acidification and making it a priority in the public debate, without waiting for a distant future.

If we succeed, I believe we can achieve two objectives.

The first is to raise even more awareness among our peers to the causes of ocean acidification and remind them of our collective responsibility to protect our Planet from climate change.

At a time when the current economic crisis is weakening many populations and driving them to favour their short-term interests, the need to act is more urgent than ever.

Sooner or later, the damage inflicted on the Planet has a cost. And this often seems disproportionate.

That is therefore the second goal of your work : to outline an objective economic assessment of a development model that we are struggling to consider as a whole.

This assessment is now a necessity, because it must enable us to incorporate the value of environmental parameters into our economic forecasts. In other words, it must help us change our short-term view into a longer-term perspective, the only guarantee of our future on earth.

Long ignored by scientists, through the efforts of a handful of researchers, ocean acidification is now a genuine research subject. 250 researchers attended the second symposium entitled "The Oceans in a High CO<sub>2</sub> World" held here in 2008. By the third symposium, held a few weeks ago in Monterey and which I attended, there were 540! Greater numbers of scientific teams are studying this problem which for the first time, will be addressed in several chapters of the report by the Intergovernmental Panel on Climate Change to be published in 2014. The only weak point in this research is still the assessment of socio-economic consequences.

Your participation in this workshop is therefore particularly important.

The solutions will come from a reduction in carbon dioxide production which should protect our planet's energy supply. However, the solutions are also local. An increase in the number of marine protected areas, championed by my Foundation in partnership with the Oceanographic Institute under the *Monaco Blue Initiative* is a real local solution to a global problem, since it has now been shown that these environments facilitate the resilience

of organisms. We trust the scientists to find solutions in order to establish a sustainable aquaculture with species that are more resistant to the new pH conditions in seawater.

We rely on the economists to convince the policy makers who need accurate data to guide their decisions and explain them to the general public. It is your role, as experts to provide this information, taking into account the uncertainties related to it, without being alarmist. The green economy must extend to the world of the oceans, now described as the blue economy. Your works are only just beginning and I am confident they will give rise to a new consideration of environmental issues with its multi-disciplinary components.

Only an objective economic approach will prove that the interests of everyone are not always located in a hasty view of things.

Ladies and Gentlemen, a rigorous approach will help explode certain false ideas, and show the way to a sustainable, and genuinely profitable, economy.

This is of course a vast task. As John Maynard Keynes once said, "the difficulty lies, not in the new ideas, but in escaping from the old ones."

I am confident you can help us do so!

Thank you.