THE PRESIDENT OF THE REPUBLIC OF CHILE, MICHELLE BACHELET, AT THE OPENING CEREMONY OF THE INTERNATIONAL CONFERENCE "ICE AND CLIMATE CHANGE: A VIEW FROM THE SOUTH"

Valdivia, 1 February 2010

I wish to start by giving a warm welcome to all the scientists from 22 countries who have gathered in this beautiful city to discuss with rigor and passion about the past, the present and the future of glaciers around the world and about climate change, an issue which has now become the focal point of global debate.

The opening of the International Conference "Ice and Climate Change: A View from the South" is the first activity of what we call "La Carpa de la Ciencia", a "Tent for Science" set up by the Centro de Estudios Científicos, and this is no mere coincidence.

The pursuit of science means to be exposed to the elements, to deal with the fact that you have more questions than answers, to dare to explore, to expose oneself to nature in order to learn from it. Probably glaciologists identify best with these principles and therefore we are delighted to welcome you under this tent.

This tent –built in just a few months-, is also a good metaphor to show our commitment to science and to glaciology in particular. It took only 10 years for our country to become a major player in this discipline and to broaden our contribution to the understanding of geophysical phenomena and climate change.

This is not a coincidence either for a country like Chile, given the remarkable natural beauty of our glaciers and their strategic importance for our future. This gift of nature imposes on us –as a nation and as responsible members of the international community- the duty to study them in a courageous and rigorous manner.

The glaciers and icecaps found in Chile are an invaluable tool to understand climate changes in the past and those that are presently taking place.

Their ice dynamics dramatically attest to the changes that are taking place in the Southern Hemisphere and throughout the planet, and therein lie important clues to understand, predict and undertake the responsibilities that are incumbent upon all of us vis-à-vis this phenomenon.

Over time, Chile has become increasingly committed to the task of studying its cryosphere. We take part in world-class international research in a sustained and responsible manner, and likewise, we play a leading role in major research projects in the Andes, Patagonia and the Antarctic.

None of the above would have been possible in such a short period of time if it hadn't been for the true sense of purpose that the expeditionary groups were capable of conveying and the impact that they made on numerous sectors and institutions in our country, be it in the long-range expeditions using tractors on the snow jointly with the Army, or in the airborne explorations using Navy and Air Force aircrafts.

These initiatives also led us to understand that whenever we face challenges as a unified nation, we are capable of major achievements.

Furthermore, these undertakings have also given us the chance to re-discover part of our identity as a country of explorers, inquisitive and enthusiastic, capable of contributing to the world with our science.

Dear friends:

This is the first international conference in glaciology after the Copenhagen Summit on Climate Change. It is therefore timely to emphasize the major contribution being made by the scientific community, and to acknowledge its crucial role in creating a worldwide awareness of the seriousness of the problem of global warming and how imperative it is for us to take steps in order to halt it.

The work of the scientists has to be untiring as it will be critical to underpin the difficult decisions that political leaders all over the world will have to take within the next few years and in the forthcoming decades.

World politics needs more well-founded and accurate predictions.

We need greater intelligence to enhance our ability to adapt and improve our mitigation programs.

We will never be able to make important decisions if they are not based on hard evidence.

Based on the conviction that nothing productive can result from denying that climate change is taking place, we cannot simply resign ourselves to an apocalyptic future. Today, more than ever, we cannot afford to lose our optimism.

Thanks to the work of the glaciologists, we are now aware that in Chile there are approximately 3 thousand glaciers, comprising a surface area greater than 21 thousand square kilometers. In other words, more than 80 per cent of the existing ice in South America.

Close to ninety per cent of the glaciers studied in our country have shown signs of shrinking during the twentieth century, a phenomenon that seems to be accelerating as shown by faster glacier retreat and thinning in recent decades.

The Fourth Assessment Report drafted by the Intergovernmental Panel on Climate Change (IPCC), released in 2007, made a number of projections regarding climate changes and their effects on humanity. These projections have led to the conclusion that the sea-level rise is due to three factors, being the ocean thermal expansion the most relevant one.

More recent data show that IPCC predictions underestimate sea-level rise. New estimations predict a sea-level rise of over 80 centimeters in 100 years. Likewise, there is growing consensus that the contribution from glaciers and polar ice sheets exceeds that of ocean thermal expansion.

Antarctica as a whole exhibits a negative balance and is contributing to an increase in sea level, due to significant mass losses in West Antarctica (Pine Island and Thwaites glaciers), as well as in the Antarctic Peninsula.

The Antarctic Peninsula has undergone increasing glacier retreats and the partial collapse of floating ice shelves, such as the loss of more than 600 square kilometers in the Wilkins ice shelf in the last few years. The glaciers nourishing those collapsed ice shelves have continued thinning.

The Government of Chile has been tackling the problem of global warming and the retreat and gradual loss of our glaciers at various levels.

At a multilateral level, Chile has openly put forward the need for a new global agreement based on the principle of common but differentiated responsibilities, and has emphasized the need for ambitious commitments, both in terms of reducing emissions by developed countries, and of technological transfer and financing to allow developing countries to adapt.

The Copenhagen Summit was unable to achieve the expected outcome. It demonstrated nevertheless that climate change has become a main focus of international politics and that the process leading to a new binding agreement must follow as soon as possible

Furthermore, I wish to underscore the fact that during the last few years, we have realized historical leaps, as a country, to advance towards an environmentally sustainable economy, as evidenced by the new environmental institutionality established during my administration.

The above comprises the recently approved Ministry of the Environment, an Environmental Superintendent's Office, with strong supervisory authority; the Environmental Assessment Service, in charge of handling environmental permits; the Environment Court –whose approval is still pending-, and the Council of Ministers for Sustainable Development, as a public policy deliberative body.

Together with the establishment of the new environmental institutionality, we set up a National Climate Change Plan, including within its remit the development of increased knowledge about glaciers, both in terms of their nature as special ecosystems and of their relevance in the hydrological cycle and as fresh water strategic reserves.

Consistent with the foregoing, in May 2008, we amended the Environmental Impact Assessment System to take into consideration the protection of our glaciers in particular; we created a National Glaciers Registry; we established a Special Glaciology and Snow Science Unit at the General Water Directorate, thus institutionalizing the expertise and technology available within the State Administration; and we are progressing towards an inventory of all glaciers in Chile.

At present we know more about our glaciers. This has allowed us to set up a National Glaciers Policy and Strategy to preserve them and to identify the potential effects of glacier changes on human activities and the environment, and -conversely-, the potential impact of human activities upon glaciers.

Overall, these policies have resulted in changes which are now being acknowledged. By way of illustration, last week, at the World Economic Forum, the latest Environmental Performance Index saw Chile climbing 13 places to be ranked 16th among 163 countries.

Dear friends,

I would not want to conclude without paying due tribute, from Valdivia, to Jens Wendt, expert in geodesy at the Centro de Estudios Científicos, who gave his life in the course of his indefatigable effort to push the boundaries of our knowledge. At the same time, I want to express our great joy to be able to continue benefitting from the precious scientific contribution of Anja, his wife and companion. Her presence in this beautiful city fills us with pride and attests to the fact that our country has earned itself a place in the global debate on glaciology and climate change.

I wish now to invite you to engage in a fruitful debate.

Because very much is at stake, we rely on your commitment and integrity. I'm confident that we can count on you.

Thank you very much.