



Address to the Study Week on the Subject 'Persistent Meteo-Oceanographic Anomalies and Teleconnections'

The Pope declares that science does not only have the task of studying natural phenomena but should also 'make a decisive intellectual and ethical effort to foresee the development and consequences of those phenomena'. Scientists should inquire into the universe and thereby enter into communion with God. Powerful natural forces should be dominated 'so that they may be placed at the service of all'. The resources of the world must not be corrupted or squandered. A 'harmonious environmental balance' is needed which will 'favour human security and dignity'.

Mr. President,

Ladies and Gentlemen,

1. The present study week on 'Persistent Meteo-Oceanographic Anomalies and Teleconnections' offers a fresh proof of the intention of the Pontifical Academy of Sciences to be of service to humanity, especially by its interest in the main scientific problems of the day. The subject of your Symposium is in fact one of the most urgent at the present time.

I extend a most cordial greeting to the eminent specialists in the fundamental oceanographic and atmospheric problems that you are dealing with. I am pleased to see that you come from many different parts of the world: from North and South America, Europe and Asia. This is yet another demonstration of the harmonious collaboration that exists between scientists and which is of such benefit to world peace.

2. Science does not merely have to study natural phenomena in themselves. It also has to *make a decisive intellectual and ethical effort to foresee the development and consequences of those phenomena*, in order to safeguard and enhance the welfare of humanity. This is the aim that you have set yourselves. You have been studying phenomena such as El Niño, the monsoons and their worldwide effects, the causes of the climatic disturbances in the eastern zones of the Pacific Ocean, as well as the prolonged drought in the Sahel.

The studies which you have carried out in the institutes which you represent individually and which you have been dealing with in the tranquil surroundings of the Casina of Pius IV, the seat of the Pontifical Academy of Sciences, will enable you to provide those who are threatened by these and other negative phenomena with timely weather forecasts, thus making it possible to take the necessary steps to avoid the most serious effects of approaching natural disasters. In various parts of the world it is now possible, as a result of dedicated efforts, to set up systems for recording climatic phenomena and to gather facts on a worldwide scale which affect the entire

globe.

3. Through your work you are carrying out the Biblical command to subdue the earth, to control the catastrophes that harm the human family, and to make the earth obedient to our service. Science encourages legitimate human curiosity to know the universe and to admire and contemplate its beauty and goodness. In this way we enter into communion with God Himself, who looked upon what He had created and saw that it was very good.¹ But *we are also called by God to control the movements of violence and death that occur in nature*, subject as it is to inevitable adjustments of its balance. We are called to discover new sources of energy, to replace those that are non-renewable or that prove to be insufficient. Unfortunately it sometimes happens that, in order to satisfy his unlimited craving for material well-being, man corrupts and squanders the world's resources, with effects that are especially harmful to those least able to defend themselves, who possess the fewest technical skills, and who inhabit the least hospitable territories. You, on the other hand, are engaged in the genuine task of the scientist: you are studying in order to contemplate and understand, to control and make fruitful. In the course of your studies, you cannot fail to *admire the powerful forces of nature*. But at the same time you see that these forces can pose dangers and threats to humanity, and *you teach how to dominate them, so that they may be placed at the service of all*.

4. Ladies and Gentlemen, I am particularly grateful to the Pontifical Academy of Sciences and to its President for bringing you together. I invoke upon you the blessings of God, the Provident Creator, for the studies that you are engaged in to secure a harmonious environmental balance which will favour human security and dignity, and which will especially benefit those who are unprepared and defenceless in the face of natural catastrophes.

¹ Cf. *Gn* 1:31.