



# The Holy See

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**ADDRESS OF HIS HOLINESS JOHN PAUL II  
TO THE PARTICIPANTS IN THE STUDY WEEK  
ORGANIZED BY THE PONTIFICAL ACADEMY OF SCIENCES**

*Friday, 18 May 1990*

*Ladies and Gentlemen,*

1. It is with special pleasure that I welcome the distinguished men and women of science who have been taking part in the study week organized by the *Pontifical Academy of Sciences* in conjunction with the Swedish Royal Academy of Sciences on the *subject of "Tropical Forests and the Conservation of Species"*. The topic you have been studying is of immense importance. It is to the undeniable credit of scientists that the value of the biodiversity of tropical ecosystems is coming to be more and more understood and appreciated. However, the extent of the depletion of the earth's tropical biodiversity is indeed a very serious problem: it threatens countless other forms of life. Even the quality of human life, because of its dependence on the dynamic interaction of other species, is being impoverished.

2. Tropical forests deserve our attention, study and protection. *As well as making an essential contribution to the regulation of the earth's climatic conditions, they possess one of the richest varieties of the earth's species*, the beauty of which merits our profound aesthetic appreciation. Moreover, some plants and micro-organisms of these forests are capable of synthesizing unlimited numbers of complex substances of great potential to the production of medicines and antibiotics. Other plants possess value as sources of food or as a means of genetically improving strains of edible plants.

Unfortunately, the rate at which these forests are being destroyed or altered is depleting their biodiversity so quickly that many species may never be catalogued or studied for their possible value to human beings. Is it possible, then, that the indiscriminate destruction of tropical forests is going to prevent future generations from benefitting from the riches of these ecosystems in Asia,

Africa and Latin America? Should *a concept of development in which profit is predominant* continue to disrupt the lives of the native populations which inhabit these forests? Should a lack of foresight continue to harm the dynamic processes of the earth, civilization and human life itself?

3. If an unjustified search for profit is sometimes responsible for deforestation of tropical ecosystems and the loss of their biodiversity, it is also true that *a desperate fight against poverty threatens to deplete these important resources of the planet*. Thus, while certain forms of industrial development have induced some countries to deplete dramatically the size of their tropical forests, foreign debt has forced other countries to administer unwisely their hardwood resources in the hope of reducing that debt. And likewise, the attempt to create lands for farming, pasture or grazing is sometimes an unfortunate proof of how inappropriate means can be used for good or even necessary aims. In this case the solution of an urgent problem can create another, equally serious one.

Population pressure is very often cited as a major cause of the destruction of tropical forests. Here though, it is essential to state that *demographic expansion* is not simply a matter of statistics; it is a *cultural and profoundly moral issue*. Indeed, not "all demographic expansion is incompatible with orderly development" (Ioannis Pauli PP. II *Sollicitudo rei socialis*, 25). Besides condemning the pressures, including economic ones, to which people are subjected, especially in the poorer countries, in order to force them to submit to population control programmes, the Church untiringly upholds the freedom of couples to decide about children according to the moral law and their religious beliefs (Cfr. *ibid.*; Eiusdem *Familiaris Consortio*, 30) .

4. Every kind of life should be respected, fostered and indeed loved, as the creation of the Lord God, who created everything "good" (Cfr. *Gen* 1, 31). But it is precisely the special value of human life that counsels, in fact compels us, to examine carefully the way we use the other created species. There is no doubt that man is entitled to make use of the rest of creation: the Creator himself gave to mankind, as well as to the animals, "all plants and seeds and fruit-trees" in order to sustain their lives in this world (Cfr. *ibid.* 1, 29-30). This gift, however, together with the command to "dominate the earth" (Cfr. *ibid* 1, 26), is subject to *two limits set by God the Creator*.

*The first one is man himself*. He must not make use of nature against his own good, the good of his fellow human beings and the good of future generations. That is why there is a moral dimension to the concept and practice of development which must in every case be respected.

*The second limit is created beings themselves*; or rather, the will of God as expressed in their nature. Man is not allowed to do what he wishes and how he wishes with the creatures around him. On the contrary, he is supposed to "keep" and "cultivate" them, as taught in the Biblical narrative of creation (Cfr. *ibid* 2, 15). The very fact that God "gave" mankind the plants to eat and the garden "to keep" implies that God's will is to be respected when dealing with his creatures. They are "entrusted" to us, not simply put at our disposal. We are stewards, not absolute masters.

For this reason, the *use of created beings implies moral obligations* (Ioannis Pauli PP. II *Sollicitudo rei socialis*, 34 et Eiusdem *Nuntius scripto datus ob diem ad pacem fovendam dicatum pro a. D. 1990*, 6 ss., die 8 dec. 1989: *Insegnamenti di Giovanni Paolo II*, XII, 2 (1989) 1466 ss.). Ecological commitment is not only a question of concern for natural beings and the atmosphere around them. It is a question of morality, and therefore of man's responsibilities within God's designs. In this context, man's ultimate well-being may be summed up as "peace with God the Creator, peace with all of creation" (Eiusdem *Nuntius scripto datus ob diem ad pacem fovendam dicatum pro a. D. 1990*, 6 ss., die 8 dec. 1989: *Insegnamenti di Giovanni Paolo II*, XII, 2 (1989) 1463 ss.).

5. Today, the work of scientists such as yourselves is becoming more and more important. *An intense programme of information and education is needed*. In particular, your study and research can contribute to *fostering an enlightened moral commitment*, more urgent now than ever. I trust that the conclusions of your seminar, together with your personal work and responsible commitment as men and women of science, will help very much towards the attainment of such an aim. In this way, the present ecological crisis, especially grave in the case of the tropical forests, will become an occasion for a renewed consciousness of man's true place in this world and of his relationship to the environment. The created universe has been given to mankind not for selfish misuse but for the glory of God, which consists, as Saint Irenaeus said many centuries ago, in "the living man" (S. Irenaei *Adversus Haereses*, IV, 20,7).

I encourage you and invoke upon you Almighty God's abundant blessings.

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