



RELIGION, SCIENCE and THE ENVIRONMENT

Symposium III

'A River of Life'

Down the Danube to the Black Sea

under the auspices of

His All Holiness The Ecumenical Patriarch Bartholomew I

His Excellency Mr. Jacques Santer, President of the European Commission

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June 26th – July 8th 1999

Introduction

The Danube is Europe's greatest river. But as the 21st century approaches, it is threatened by profound problems. Its pollution, the future of its wetlands and living ecology, the management and control of this huge waterway passing through many sovereign states and its impact on the Black Sea must all be addressed before it is too late.

The Danube runs for nearly 2,850 kilometres through the heart of Europe. Its immense drainage basin covers significant parts of 13 countries: Austria, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Romania, Slovenia, Slovakia, Ukraine and Yugoslavia. It even receives small amounts of water from Italy, Switzerland, Albania, and Poland. Those who live on its banks include Catholics, Jews, Moslems, Orthodox Christians and Protestants. As a waterway, it is important for navigation, for sustaining wild life, for water supply, for recreation and - unfortunately - as a convenient receptacle for waste products of human activity.

The river discharges into the Black Sea, already one of the most degraded enclosed seas on the planet. The nitrogen and phosphorus - rich effluents flowing down the Danube are one of the main causes of "eutrophication" in the Black Sea - the algae blooms which destroy marine life.

The Danube itself, though polluted, is far from dead, and still hosts remarkable ecosystems and places of great beauty. But it is afflicted by many other problems. It is the site of acute conflicts between users disputing water use and navigation rights. It has also been part of a war zone, during the recent conflicts in former Yugoslavia. In the past, international agreements managed its use, starting with the 1856 Danube Navigation Convention. In 1994 most riparian states signed the Sofia Convention on "Co-operation for the Protection and Sustainable Use" of the Danube. The Convention came into force in October 1998. With the support of the European Commission and the UN Global environment facility, the signatories adopted the "Strategic Action Plan for the Danube River Basin". Now they are struggling to implement the Plan, but with varying success.

Despite the Plan and Convention, the Danube basin is under serious threat. The rescue actions required can only be taken with the full participation of the communities living along the river and its tributaries. This is not just a technical matter. The fate of both the Danube and the Black Sea is bound up with the lifestyles of the Basin's inhabitants, and with the social, economic and cultural forces which influence them. In other words, the link between this "river of life" and the lifestyles of the Danubian peoples is as much spiritual as technical. The two previous Symposia, "Religion, Science & the Environment", succeeded in raising the awareness of both the participants and world opinion to the urgency of this scientific-religious cooperation to protect the natural environment. We hope that the process will develop until there is global appreciation that humanity and nature are inseparable.

The previous Symposia have emphasised the protection of the seas. Now, attention is turned to the great rivers which flow into the seas. The third Symposium will travel down the Danube to examine the source of some of the most pressing environmental problems of our times. The Symposium will provide an opportunity to reflect on individual attitudes and promote a continuing dialogue among religious leaders, scientists, and policymakers. It will also generate practical projects designed to support on-going initiatives to protect the Danube Basin and the Black Sea, and to apply the lessons learned in other parts of the world. By bringing together religious leaders, scientists and NGO's, the message will be heard throughout the Danube Basin with emphasis placed on the role each member of the community can play.

Themes and speeches

The Symposium will combine personal experience with discussions on important issues in which ethical values and science must act together if the environment is to be protected. A programme of closely interlinked presentations, discussions and land visits will continue the main work of the Symposium.

Theme 1: "Sources and flows"

In early Christian tradition, the waters of the earth originate in the foundations of the Garden of Eden, which divide the world's great streams. Hindu and Buddhist traditions place mythical Mount Meru, the dwelling place of the gods, as the centre of the universe and the source of all the great rivers of the earth. These myths arise in part from the sacred role of water in sustaining life and in part from our early ignorance of the functioning of the global water cycle.

From its source in Donaueschingen, Germany, the Danube flows 2,850 kilometres to the Black Sea where it discharges 6,000 cubic metres of water every second, nearly three times the amount of water that the Volga River, Europe's longest, discharges into the Caspian Sea. Despite the large flow at its mouth, serious concerns about the diversion and damming of water in the upper and middle reaches of the Danube have been raised. This session will examine the sacredness of water in life, the management of river flows and the allocation of water in major rivers of the world, and specific concerns about water quantity in the Danube River basin.

Speeches:

- Principle of life: water as a source of beauty and fertility.
- The Danube, the source of life.
- Modification of the flow of rivers

Theme 2: "The River as a Living System: Regeneration and Healing"

Historically the Danube and other major rivers have been modified and transformed through human activities and actions. River navigation, for example, is often best facilitated by cutting channels to straighten out and eliminate the natural meanders of the river. In addition, dyking for flood control often cuts the river off from its natural floodplains and the wetlands that cleanse and modify the flows of water. Damming for energy and dyking for agricultural production, while bringing benefit to human settlements, have also reduced the natural floodplain ecosystems and damaged the river as a living system.

Concern about the condition of rivers has in recent years led to a rethinking about our relationship with rivers. Questions have been raised about whether human development, including transport, energy production and flood safety, can occur while at the same time maintaining living rivers. In Austria, for example, the government agencies responsible for water and environment and non-government groups have initiated a Living Rivers Campaign which has involved reconnecting rivers with their wetlands and restoring natural dynamics in river system. Mindfulness and respect for natural functions of ecosystems is not merely technically desirable in human development but a moral responsibility.

Speeches:

- Healing of life: Water as a source of purification and regeneration.
- A highway across Europe or a green lifeline?
- Wetlands: Restoring the connection to the river.

Theme 3: "Times of transition: Setting the priorities"

Several of the countries along the Danube have recently had a drastic change of social and economic organization. As a consequence, they have been forced to face a series of difficult decisions, some related to a transition to a market economy, in other cases, like that of Slovakia, related to a newly established national sovereignty. In these countries the transitions have been accompanied by severe economic hardships, as a consequence of the collapse of entire sector of the productive system. The struggle to recover basic needs during the transition makes environmental protection appear an unaffordable luxury. How can environmental issues be kept high on the political agenda? What is the role of scientists, religious leaders, educators and politicians in such a situation?

Of special interest is the role of the churches in this context. Over the centuries, churches have played a significant role in the development of the Danube area and of its landscape. Such historical perspective may indicate yet another option towards regeneration

- Speeches:
- The soul of the river: Stewardship in the Danube basin.
 - Moral choices in economic and technological development.
 - Local priorities in times of transition.

Theme 4: "Rivers in transition: Water of life"

Protection of the environment of rivers that cross international boundaries from degradation and the over-exploitation of their resources and amenities is no longer a matter solely of concern for each individual riparian state, but raises issues of community interest. Principles of cooperation, equitable utilization, inter and intra-generational equity and the need for an anticipatory and precautionary approach have been endorsed in the Declaration of Principles and Agenda 21, adopted by the 1992 United Nations Conference on Environment and Development (UNCED), and in the recent United Nations Convention on Non-Navigable Uses of International Watercourses. Common management systems need to be devised, and existing systems adapted as required, to take account of existing international standards and concerns and the responsibilities as well as the rights of riparian states.

- Speeches:
- Ethical values of common concern: Solidarity, commonality, equality.
 - International rivers: responsibility and common concern.
 - Conflicting interests and regional cooperation.

Theme 5: "The Environmental consequences of war"

Armed conflicts have a devastating impact on the environment. This adds to the immense suffering of the many innocent victims of war. Weapons and military equipment tear apart the earth, saturate it with chemicals, destroying at the same time plant and animal life. The destruction does not end with the silence of arms. Landmines remain hidden and unmarked, a threat to both life and land; entire communities are deprived of access to their land; normal life cannot be resumed. The sense of collective insecurity, real or imaginary, reduces dramatically the perceived priority of the environment. In the name of security the environment is often sacrificed, without any consciousness that this is yet another cost of conflict. The silence of arms does not bring reconciliation among peoples in conflict. They need the support and prayers of others in their effort to live again in peace. Together, then, they can heal the land and live in harmony with the environment.

- Speeches:
- Security and the environment.
 - Dealing with the impact of war on the environment.

Theme 6: "Energy and the Environment"

Viewed from outer space at night, the Danube basin is illuminated by a myriad of clusters of light, a reminder of a human use of energy which we tend to take for granted. The countries along the Danube are very much part of the global energy market and have been sharply aware of this in times of transition. Countries such as Bulgaria have been hard-hit by global conflict: Prior to the Gulf War, much of Bulgaria's energy supply came as fossil fuel from Iraq, traded for agricultural produce. The embargo on Iraq forced Bulgaria onto the world energy and food market where it fared badly, obliging it to rely upon the ailing nuclear power station in Koslodoy for energy to supply the winter needs of the human population. There are many other examples of the emerging 'energy crisis' which have forced countries to make difficult short-term decisions on essential energy supplies. To where should countries short of capital turn? All energy sources used have an impact on the natural environment – fossil fuel, hydropower or nuclear power. The nuclear option is a particularly difficult one to consider, especially following the tragic accident in Chernobyl.

The symposium will consider the moral and scientific challenges of meeting energy needs and defining the needs themselves. How much energy do we really need? Do we have to follow the example of the west? The

session will include a special group discussion where four specialists will present differing views of the nuclear energy debate: Is nuclear energy worth the risks? What are the alternatives?

- Speeches:
- The Danube and the world: Production, consumption, sustainability.
 - Energy efficiency: examining the options.
 - Nuclear energy: Is it worth the risks?

Theme 7: "Development and Environmental Degradation: The Green Revolution"

Environmental degradation along the Danubian riverine landscapes is most reflected in agricultural development and related river regulation works. The Green Revolution of the 1960s changed traditional farming practices by introducing the widespread use of fertilisers and pesticides as well as animal husbandry techniques based upon intensive rearing (e.g. pig farms with up to one million animals) rather than open grazing. In the Lower Danube, large parts of former floodplains were drained (in Braila island and in the delta on more than 200,000 hectares). Huge collective farms replaced smallholdings and traditional practices with their high diversity of crops were, often forcibly, eliminated. The environmental and social consequences were enormous as the former balances were tilted. Nitrogen and phosphorus from liquid manure and excess fertilisers found its way into the rivers and eventually accounted for some 30 % of the discharge of these substances into the Black Sea.

In addition to concerns about wetland habitat losses and the effects of water pollution on wildlife, millions of people in all the Danube countries face groundwater pollution when using their local drinking water wells. Microbiological contamination from urban and agricultural sources is also a serious public health risk. Today, farmers have to pay the full cost of chemicals, and land is gradually being reprivatised. This gives an opportunity to re-examine agricultural practices and to adopt techniques that can increase productivity as well as environmental protection (e.g. ecologically sustainable farming). However, there is also the risk that the land is being opened up for new agrarian technologies. If food production is to satisfy the needs of present and future generations without destroying the natural environment, a new consumption ethic and pattern must emerge.

- Speeches:
- Consequences of environmental degradation.
 - Water quality – quality of life.
 - Water quality and development in the Danube basin.

Theme 8: "Responsibility toward future generations"

While environmental problems of the past are now being considered and countered, both former and current concerns will inevitably influence future generations. Therefore, questions of water pollution (groundwater, rivers and oceans) become issues of water consumption and of public health, with direct and indirect effects on millions of people along the Danube River, as well as throughout the world.

The concluding session of this Symposium will focus on the inter-generational obligation and responsibility of our common vision, policy, and action with regard to the environment. It will further concentrate on the particular rights of children to a cleaner, safer world.

Finally, a general synthesis and discussion will seek to bring together the various individual areas of concern and priority covered during the Symposium.

- Speeches:
- Children of the river: Inter-generational obligation.
 - Children's rights.