



Volume 15 No 1

# *Our* Planet

The magazine of the United Nations Environment Programme



## **SEAS, OCEANS AND SMALL ISLANDS**

**Paul Raymond Bérenger**  
*Into the mainstream*

---

**The Ecumenical Patriarch**  
*Creation's forgotten days*

---

**Saufatu Sopoanga**  
*Stop my nation vanishing*

---

**Conrad C. Lautenbacher**  
*Oceans need mountains*

---

**Carlos Manuel Rodríguez**  
*An ocean corridor*

---

**Ronny Jumeau**  
*No island is an island*

---

**Anwarul K. Chowdhury**  
*Small islands, big potential*

---



### 3 Editorial

*Klaus Toepfer, Executive Director,  
UNEP*

### 4 Into the mainstream

*The Hon. Paul Raymond Bérenger,  
Prime Minister of the  
Republic of Mauritius*

### 6 Creation's forgotten days

*His All Holiness Bartholomew  
of Constantinople, Archbishop  
of Constantinople, New Rome, and  
Ecumenical Patriarch*

### 8 Restoring a pearl

*Timothy E. Wirth, President of the  
United Nations Foundation and Better  
World Fund*

### 9 Stop my nation vanishing

*The Hon. Saufatu Sopoanga,  
Prime Minister of Tuvalu*



Mark Lynas/Still Pictures



Mark D. Spalding

### 11 Energy release

*The Hon. Tom Roper,  
Project Director, Small Island  
States Energy Initiative,  
Climate Institute*

### 12 Oceans need mountains

*Vice Admiral Conrad C.  
Lautenbacher Jr, US Navy (Ret.),  
US Undersecretary of Commerce  
for Oceans and Atmosphere, and  
Administrator of the National  
Oceanic and Atmospheric  
Administration*

### 14 People

### 15 An ocean corridor

*Carlos Manuel Rodríguez,  
Minister of Environment and Energy,  
Costa Rica*

### 16 At a glance: Seas, oceans and small islands

### 18 Profile: Cesaria Evora

*'La diva aux pieds nus'*

### 19 No island is an island

*Romy Jumeau, Minister for  
Environment and Natural Resources,  
Seychelles*

### 20 Small islands, big potential

*Ambassador Anwarul K. Chowdhury,  
UN Under-Secretary-General  
and High Representative for the Least  
Developed Countries, Landlocked  
Developing Countries and  
Small Island Developing States*

### 22 Small is vulnerable

*Ambassador Jagdish Koonjul,  
Chairman of the Alliance of Small  
Island States (AOSIS)*

### 24 Natural resilience

*Albert Binger, Director of the  
University of the West Indies Centre for  
Environment and Development, and  
Visiting Professor at Saga University  
Institute of Ocean Energy, Japan*

### 26 Books and products

### 27 Keeping oil from troubled waters

*Paul Loeffelman, Director,  
Environmental Public Policy,  
American Electric Power*

### 28 Redressing the balance

*The Rt Hon. Don McKinnon,  
Commonwealth Secretary-General*

### 30 Neighbours without borders

*Ellik Adler, Regional Seas Programme  
Coordinator, UNEP*

### 32 Will Mother Nature wait?

*Jodi-Ann Johnson, student of  
psychology, University of the  
West Indies, Jamaica*

Also available on the internet at  
[www.ourplanet.com](http://www.ourplanet.com), with an  
additional article by Margie Falanruw  
on the Pacific Alternative

**Our Planet**,  
the magazine of the  
**United Nations Environment Programme (UNEP)**  
PO Box 30552, Nairobi, Kenya  
Tel (254 20) 621 234; fax 623 927;  
telex 22068 UNEP KE  
e-mail: [cpinfo@unep.org](mailto:cpinfo@unep.org)  
[www.unep.org](http://www.unep.org)  
ISSN 1013-7394  
Director of Publication: Eric Falt  
Editor: Geoffrey Lean  
Coordinator: Naomi Poulton  
Special Contributor: Nick Nuttall  
Circulation Manager: Manyahleshal Kebede  
Design: Roger Whisker  
Web Editor: Chris Cypert  
Production: Banson  
Printed in the United Kingdom  
Front cover: Hank Foto/UNEP/Topham

**This issue of *Our Planet* has been made possible by the generosity of the United Nations Foundation/Better World Fund.**

The contents of this magazine do not necessarily reflect the views or policies of UNEP, the United Nations Foundation or the editors, nor are they an official record. The designations employed and the presentation do not imply the expression of any opinion whatsoever on the part of UNEP or the UN Foundation concerning the legal status of any country, territory or city or its authority, or concerning the delimitation of its frontiers or boundaries.

The non-copyrighted contents of this magazine may be reprinted without charge provided that *Our Planet* and the author or photographer concerned are credited as the source and the editors are notified in writing and sent a voucher copy.

*Our Planet* welcomes articles, reviews, illustrations and photos for publication but cannot guarantee that they will be published. Unsolicited manuscripts, photographs and artwork will not be returned.

**Subscriptions:** If you wish to receive *Our Planet* on a regular basis and are not currently on the mailing list, please contact Mani Kebede, Circulation Manager, *Our Planet*, for subscription details, giving your name and address and your preferred language (English, French or Spanish).

**Change of address:** Please send your address label together with your new address to: Mani Kebede, Circulation Manager, *Our Planet*, UNEP, PO Box 30552, Nairobi, Kenya.

This magazine is printed using vegetable-based inks on paper made from 100 per cent recycled waste material. It is bleached without any damage to the environment.



UNEP

*From the desk of*

## **KLAUS TOEPFER**

**United Nations  
Under-Secretary-General  
and Executive Director,  
UNEP**

**T**he great philosopher who developed the *Principle of Responsibility*, Hans Jonas, once remarked: 'Today, mankind is a bigger threat to the sea than the sea has ever been to mankind.'

This edition of *Our Planet* marks the annual World Environment Day celebrations. The theme 'Sea and Oceans! Wanted Dead or Alive?' reflects Jonas' observations, his concerns. From overfishing and the discharge of untreated, raw, sewage to the clearing and destruction of precious habitats like coral reefs and mangrove swamps, the world's marine environment is under assault as never before.

UNEP, and the rest of the United Nations system, is not standing idly by, merely a witness and chronicler of the damage. The United Nations Millennium Development Goals and the World Summit on Sustainable Development's (WSSD) Plan of Implementation give us clear targets and timetables for addressing a wide range of pressing issues including those relating to oceans and seas.

Under the plan, we all have the

responsibility to restore fish stocks to healthy levels by 2015, where possible. Significantly, it also urges establishing a global network of marine protected areas. Already we are seeing action on this – from proposals dramatically to extend Australia's protection for its Great Barrier Reef to moves by six West African countries – Cape Verde, Gambia, Guinea, Guinea Bissau, Mauritania and Senegal – to develop a network of marine protected areas aimed at reducing overfishing and possible threats from oil exploration.

### **Key target**

One key target and timetable set at WSSD was to halve the number of people without access to basic sanitation by 2015. Not only will this reduce sickness and misery, it will also reduce the levels of toxic, algal blooms in the oceans which threaten human health and wildlife – and spread low-oxygen areas, so called 'dead zones'.

Reducing sewage pollution will also cut discharges which can choke precious marine habitats, like coral reefs. These are fish nurseries and significant generators of tourist dollars for often poor coastal communities.

Delivering the WSSD sanitation target should lead to further spin-offs for the marine world. In some situations, modern wastewater treatment works may be appropriate. But natural systems – some of which, like mangrove swamps, are coastal and marine – can provide low-cost alternatives. Many are being cleared for agriculture and other uses. By focusing attention on their sewage and pollution filtering properties, valuable habitats for spawning fish and birds can be saved.

The seas are special but there are some areas that are especially vulnerable to interference by humankind.

### **Pervasive threat**

In small island developing states, water supplies, agriculture, terrestrial and marine wildlife and unique cultures are threatened not only by overfishing, pollution and insensitive development. They are also threatened by probably the greatest and most pervasive threat of all, namely climate change.

Solutions to their plight will be the

focus of the Barbados+10 meeting to be held in Mauritius later in 2004.

These activities are not carried out in isolation.

The United Nations Convention on the Law of the Sea (UNCLOS) and its implementing agreements are now in force alongside numerous regional fisheries agreements.

We now have 13 regions covered by the UNEP Regional Seas Programme, the latest of which covers the North East Pacific. There are also three, non-UNEP, regional seas agreements including the Oslo Paris Commission (OSPAR) Convention.

UNEP, with funding from the Global Environment Facility, is also leading the four-year Global International Waters Assessment or GIWA. This is a sort of marine and freshwater equivalent of the Intergovernmental Panel on Climate Change (IPCC).

Sixty-six international waters are being assessed with the aim of giving the international community crucial information on where current problems are.

Significantly GIWA will also develop scenarios of the future conditions of these waters as a result of social, economic and environmental pressures, allowing the international community to prioritize efforts.

I am delighted to say that GIWA is well under way. Work on several significant regions, including the Amazon Basin, the Indian Ocean Islands and the Caspian Sea, has been successfully completed.

UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was also given big backing by WSSD.

By 2006, up to 40 mainly developing countries are expected to have national programmes of action in place to reduce the levels of pollution entering the sea from the land and from rivers ■

### **YOUR VIEWS**

*We would really like to receive your feedback on the issues raised in this edition of **Our Planet**. Please either e-mail [feedback@ourplanet.com](mailto:feedback@ourplanet.com) or write to:*

*Feedback, Our Planet  
27 Devonshire Road  
Cambridge CB1 2BH  
United Kingdom*



Jochen Tack/Still Pictures

# *Into the* **mainstream**

**PAUL RAYMOND BERENGER** calls on the international community to recognize the seriousness of the plight of small island developing states and take concrete action to promote their sustainable development

**A**chieving the objectives of sustainable development is the greatest challenge facing nations – specifically small island developing states (SIDS) – and, indeed, the human race in general, at the dawn of the 21st century. This is why the United Nations International Meeting – which will undertake a full and comprehensive review of the implementation of the Barbados Programme of Action for the Sustainable Development of SIDS – will be of such vital importance, not only to

SIDS but also to the whole international community.

As preparations gather momentum for the hosting of the International Meeting in Mauritius, we cannot help looking back on the important landmarks which have paved the way to this historic event.

The 1972 Stockholm Conference on Human Environment, by relating environment to development, placed the concept of sustainable development on the world's agenda for the first time.

Twenty years later, in June 1992, the United Nations World Conference on Environment and Development in Rio adopted Agenda 21 as a blueprint for sustainable development.

The inherent disadvantages and vulnerabilities of SIDS – whether at economic, social or environmental level – were recognized during the Rio Summit and this was reflected in Agenda 21. Since then, SIDS have been acknowledged by the international community at large as a 'special case both for environment and development'. The factors identified as major constraints to the socioeconomic development of SIDS are:

- their smallness
- their remoteness
- their vulnerability to natural disasters
- the fragility of their ecosystems
- isolation from markets
- vulnerability to exogenous economic and financial shocks
- a highly limited internal market
- lack of natural resources
- limited freshwater supplies
- heavy dependence on imports
- brain drain

## We have no choice but to develop and reinforce partnership with the development partners

- their limited ability to reap the benefits of economies of scale.

The Global Conference on the Sustainable Development of SIDS held in Barbados in 1994 expanded further the notion of their 'special needs', and more particularly the need to build resilience against vulnerabilities: the end result was the adoption of the Barbados Programme of Action. The programme addresses 14 of the most specific island issues – including water resources, sanitation, land use, biodiversity, conservation and protection, and marine resources – which are the fundamental pillars of their economies and sustenance. The Barbados conference was also the opportunity for building new partnerships for a sustainable development plan for SIDS.

Unfortunately, no new or additional funds were made available, as committed, for implementing the Barbados Programme, nor were any monitoring and review mechanisms put in place to report on the implementation process. The five-year review held in 1999 came and went, and it was business as usual. Very little progress had been achieved on addressing island-specific issues through implementing the programme.

In the meantime, the world order had taken a turn for the worse both in economic and environmental terms. Countries with small economies and with little or no resilience were sinking lower and most SIDS were in a worse situation than when the Barbados Programme was approved.

Very few SIDS were able to mobilize extra resources for implementing the programme, and those which did had to divert already scarce resources from other important development projects.

Both the Millennium Summit of World Leaders in September 2000 and the Johannesburg World Summit on Sustainable Development in 2002 called for a firm renewed commitment to meet the objectives of sustainable development at the highest political level and provided a golden opportunity for SIDS to claim lost recognition.

The International Meeting in August-

September 2004 in Mauritius provides us with another opportunity to revisit the Barbados Programme. This time, we cannot afford to make any mistakes. We have no choice but to develop and reinforce partnership with the development partners.

The Programme is still as valid today as at the time of its adoption ten years ago. However, new elements have compounded our already serious situations, such as difficult trade rules, erosion of acquired access rights to traditional trading markets, diseases such as HIV/AIDS (which are exacerbating an already critical lack of human resources), serious natural disasters (more cyclones, droughts, flooding, etc.), coastal erosion and overexploitation of marine resources, and security problems affecting air transport and the tourism industry amongst others.

Global problems need global solutions and, to that end, we believe that a holistic and integrated approach is called for. The Mauritius International Meeting is a unique forum for challenges and opportunities, for sharing experiences, and drawing lessons from the past with a view to bringing SIDS into the mainstream of sustainable development. We are looking forward to its outcome, which should not only contain recommendations, but also be target oriented with clear timetables as provided for in the Millennium Development Goals and the Johannesburg Plan of Implementation. In addition, it will be necessary to ensure monitoring through a mechanism set up for follow-up implementation.

In Mauritius, we are perfectly conscious of the heavy responsibilities incumbent upon us as the host country, but it is a privilege to assume them. Every effort is being undertaken to make the International Meeting a success in terms of organization, as well as recommendations and outcome.

We want our development partners to realize the seriousness of the stakes for SIDS and we expect they will find no difficulty in providing the necessary support.

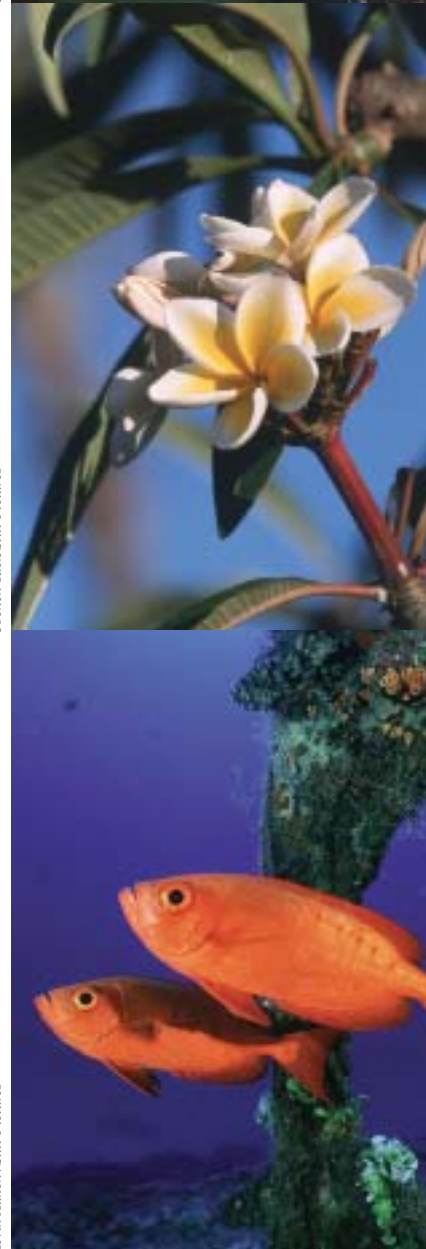
Naturally, this will require the massive and active participation and cooperation of one and all: SIDS, United Nations and the whole international community.

We welcome you to Mauritius!

*The Hon. Paul Raymond Bérenger, GCSK is Prime Minister of the Republic of Mauritius.*



Joehen Taack/Still Pictures



Joehen Taack/Still Pictures

Kevin Aitken/Still Pictures



Nikolaos Manginas

# Creation's forgotten days

## HIS ALL HOLINESS BARTHOLOMEW OF CONSTANTINOPLE

says that water is the binding force between heaven and earth and that pollution of the sea represents paradise lost

dying sea is more than simply the result of industrial or chemical waste, of oil spills and water mismanagement. Marine pollution is nothing less than paradise lost.

### No water, no world

In Eastern Orthodox iconography, blue is interchangeable with green. These colours are predominantly used for foregrounds and backgrounds, being reserved also for the depiction of the celestial. As in the viewpoint from space, so also in the perspective of icons: both heaven and earth are blue! We tend to call earth our habitat; yet, in many ways, water might be more appropriately hailed as our home or natural environment. If there were no water, there would be no world. Marine pollution is nothing less than the devastation of our earthly premise.

An early mosaic of the crucifixion of Christ, found in San Clemente, Rome, portrays streams of water flowing from the foot of the cross, a symbol for the Sacrament of Baptism (John 19:34). Like the Sacrament of the Eucharist (or Communion), the Sacrament of Baptism derives from the loving passion of Jesus Christ. Just as blood issued from the body of Christ, water constitutes the blood of the Church and of the Earth. Marine pollution is nothing less than an assault upon a delicate cosmic balance, preserved over millions of years.

Orthodox spirituality employs water imagery to describe the struggle to redress a balance between matter and spirit, between body and soul. In Orthodox ascetic practice, tears function as a way of reversing habits that abuse creation and divide the world. The silence of tears and the stillness of water (Psalm 22) echo the need to refocus attention on sharing God's gifts fairly. The depths of the ocean resonate with the depths of silence. This is why Orthodox spiritual practice emphasizes stillness as a way into the human heart and as a window into the divine abyss. Paul Claudel once observed: 'Everything the heart desires can be reduced to a water figure'. Some 2,500 years ago, Thales of Miletus founded his school of philosophy on the same conviction: 'All things are water'.

There is, then, something sacred, almost sacramental in the very fabric of water. The meaning of water somehow conceals the very mystery of God. In this respect, Orthodox theology proposes a model of environmental action based on the spiritual significance of water. On a planet where oceans and rivers are polluted, we would do well to remember the original and radical relationship

When we consider the creation story in Genesis, we tend to recall the first moment – or perhaps the sixth day – of creation. We often overlook what occurred on the third and fifth days, when the world's waters came into being. Yet these days are an essential part of the whole story. They are a critical part of our own story.

At the foundation of the world, 'in the beginning ... the spirit of God swept over the face of the waters' (Genesis 1:1-2). The Judeo-Christian scriptures speak of water as a sign of blessing and peace (Deuteronomy 8:7). The way we relate to God is reflected in the way we respect water. Water pronounces the sealed covenant between God and the world; drought and thirst announce the rupture of this binding relationship, an apostasy from the divine commandments (I Kings 17). The heavens, too, are set among the waters (Revelation 4). Marine pollution is nothing less than the violation of a hallowed promise.

Our fourth-century predecessor in the See of Constantinople, St John Chrysostom, understood the spiritual and mystical connection between the creation of water, the creation of humanity and the role of the Creator:

*'We experience a sense of wonder before the boundless extent of the seas;  
we are filled with awe before the unfathomable depth of the oceans;  
we confess our amazement before the marvelous works of the Creator.'*

In the same city of Constantinople, beneath the magnificent Church of St Sophia (the wisdom of God), there flows a channel of water. The Byzantines believed that this stream issued from the church itself, since water has traditionally been considered to be the symbol for life and wisdom (John 7:37). Moreover, rivers of green marble on the floor of the Great Church represent the streams of paradise. Water is the binding force between heaven and earth. A



Schinogrotzki/UNEP/Topham

between living sources of water and the life-giving spirit of God. In a world where the unjust demands of the few stifle the fundamental survival of the poor, water reminds us of the need to live simply and simply to live. At a time when wastefulness has become so rampant and pervasive, we are challenged to recall the implications of our actions as well as to assume responsibility for a society where water is justly shared and where everyone has enough.

In light of this commitment, the Ecumenical Patriarchate has to date organized five international, inter-religious and interdisciplinary symposia: in the Aegean Sea (1995), on the Black Sea (1997), along the Danube River (1999), around the Adriatic Sea (2002) and in the Baltic Sea (2003). A sixth is currently being prepared for the Caspian Sea in the summer of 2005. The purpose is to call attention to the plight of our seas; to attract religious leaders, scientists, environmentalists, politicians and journalists; and to raise awareness about collective responsibility for our environment for future generations. None of us is able to resolve the environmental crisis alone; 'everyone has a part to play', as we stated in a Common Declaration with Pope John Paul II at the closing ceremony of the Adriatic symposium.

All of us know that we are surrounded by rivers, seas and oceans. What we do not immediately recognize is the way in which these are intimately and innately connected to one another as well as to our environment. We may not immediately discern the close relationship between the world's waterways, the world's people and the world's Creator. There is an interconnection and interdependence between the water of baptism, the sap of plants, the

## **We tend to call earth our habitat; yet, in many ways, water might be more appropriately hailed as our home or natural environment**

tears of humans, the bloodstream of animals, the rainfall of a forest and the flow of rivers to the sea.

We are called to avow water as the wonder of life if we are ever to avert the world crisis in water pollution and distribution. In order to correct the wrongful politics of water by those who regard it as their rightful property, we must first celebrate water as the irreplaceable patrimony of all humankind; we must accept the indiscriminate and inalienable right to water for all people in the world. Water can never be reduced to a marketable commodity for profit – especially for the affluent, especially for the few. It must always be protected as part of the fundamental quality of life – especially for the more vulnerable, especially for our children.

On the third day of creation, 'God gathered the waters under the sky into one place; and God saw that it was good. ... So God created every living thing, with which the waters swarm. And God saw that it was good.' (Genesis 1:9-21). The Greek word for 'good' implies beauty and harmony. The very least that we owe God, this world and our children, is to preserve the beauty of our planet's water, to leave behind a world that remains good ■

† *BARTHOLOMEW Archbishop of Constantinople, New Rome, and Ecumenical Patriarch*

# Restoring A PEARL

**TIMOTHY E. WIRTH** describes the environmental devastation that has led to political turmoil in Haiti, and suggests how it can again become 'the pearl of the Caribbean'

**M**uch has been written about the sad and recurring spectre of political turmoil in Haiti. The tug and pull between democracy and dictatorship has been on display for the past few decades, personified by the desperate boat people risking everything to try to find hope and opportunity for the future. Far too little attention, however, has been given to the environmental underpinnings of the Haitian crisis and to the environmental destruction accelerated by the crush of poverty and rapid population growth.

Arriving at Haiti in the late 15th century, Columbus wrote in his journal of the island's wonders: 'The mountains and hills, the plains and meadow lands are both fertile and beautiful. They are most suitable for planting crops and for raising cattle of all kinds... the trees, fruits and plants are very different from those of Cuba.'

## Environmental exhaustion



acts as an unofficial but unmistakable border between Haiti and the Dominican Republic.

The daily grind of meeting basic needs for an impoverished people is a major force in eroding Haiti's essential natural resources and core economic assets. Too many people scraping too few natural resources from the land has led to one of the world's highest rates of deforestation. Topsoil is lost to erosion. Rivers are filled with the resulting sediment and the freshwater resources are diminished. These trends – and associated pollution – lead to waterborne diseases and damage to human health. And all these developments push rural residents toward the island's urban centres, where there are too few jobs. In this despair, the seeds of discontent and political chaos germinate and grow.



Mark Edwards/Still Pictures

## Too many people scraping too few natural resources from the land...

## Comprehensive strategy

The other driving force is rapid population growth. Haiti's population of 7 million is growing at almost 1.5 per cent annually and will increase by 30 per cent in the next 20 years. The average Haitian woman has 4 or 5 children, each entering a nation whose economic, environmental and political prospects are headed in the wrong direction.

Any serious effort to stabilize Haiti and help its residents pursue sustainable development must fundamentally address both its people's need for family planning and other basic reproductive health services and the issue of rural agriculture, the primary endeavour of two thirds of the population. A comprehensive population strategy would provide

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_11493](https://www.yunbaogao.cn/report/index/report?reportId=5_11493)



云报告  
<https://www.yunbaogao.cn>

云报告  
<https://www.yunbaogao.cn>

云报告  
<https://www.yunbaogao.cn>