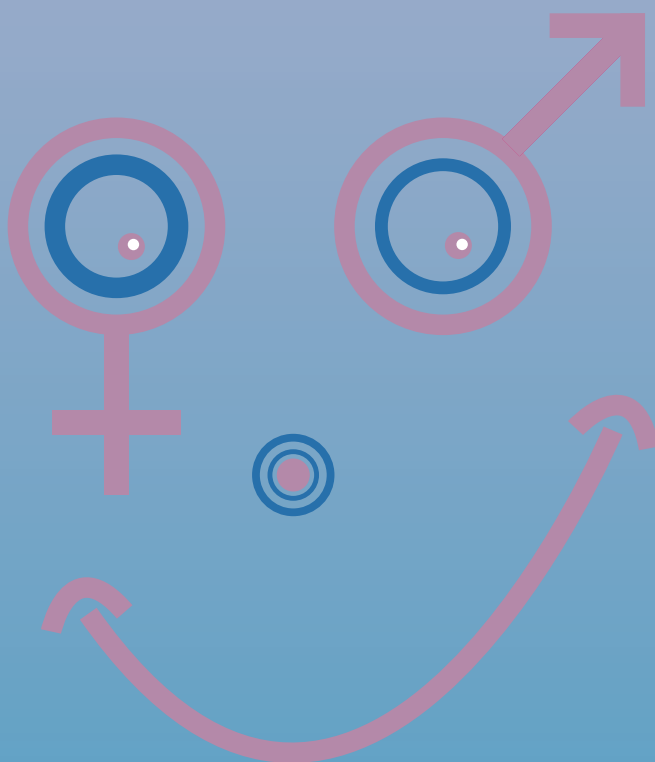


Gender equity & the environment

Why gender matters

Women who changed
environmental thinking



Green grannies

Working women

Kerala, land of equity

Future environmental leaders

TUNZA

the UNEP Magazine for
Youth is available at
www.ourplanet.com
and www.unep.org



United Nations Environment Programme (UNEP)

PO Box 30552, Nairobi, Kenya
Tel (254 20) 7621 234
Fax (254 20) 7623 927
Telex 22068 UNEP KE
E-mail unepub@unep.org
www.unep.org

ISSN 1727-8902

Director of Publication Eric Falt
Coordinator Wondwosen Asnake
Editor Geoffrey Lean
Guest Editors Karen Eng and Claire Hastings
Nairobi Coordinator Naomi Poulton
Circulation Manager Manyahleshal Kebede

Youth Contributors Preetam Alex, India; Nina Best, Brazil; Luis Carlos Campiz Mercado, Colombia; Pedro Chaffe, Brazil; Fika Fawzia, Indonesia; Manisha Ganeshan, India; Alfredo Gersava Jr, Philippines; Margaret Koli, Kenya; Marina Mansilla Hermann, Argentina; Tanya Mowbray, United Kingdom; Julien Paquin, France; Gabriel Rocha, Colombia; Elissa Smith, Canada; Renny Turangga, Indonesia

Other Contributors Julia Horsch, Bayer; Barbara Kingsolver; Martin Palmer, Vicky Finlay and Xiaoxin He, ARC; Rosey Simonds and David Woollcombe, Peace Child International

Design Daniel Lopez Zamora, Ecuador
Front cover Edward Cooper, Ecuador
Web Editor Graham Barden
Production Banson

Head, UNEP's Children and Youth/Sport and Environment Unit Theodore Oben

Printed in the United Kingdom

The contents of this magazine do not necessarily reflect the views or policies of UNEP 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 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 TUNZA and the author or photographer concerned are credited as the source and the editors are notified in writing and sent a voucher copy.

TUNZA 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 TUNZA on a regular basis and are not currently on the mailing list, please contact Manyahleshal Kebede, Circulation Manager, TUNZA, for subscription details, giving your name and address and your preferred language (English, Chinese, French, Japanese, Korean or Spanish).

Change of address Please send your address label together with your new address to: Manyahleshal Kebede, Circulation Manager, TUNZA, UNEP, PO Box 30552, Nairobi, Kenya, e-mail manyahleshal.kebede@unep.org

Contents

Editorial	3
Wild things 1	4
Why gender matters	4
Making peace	5
TUNZA answers your questions	6
Banking on poverty	7
Future environmental leaders	8
Building dreams	10
Wild things 2	11
Working women	12
No retreat	14
Thinking about everything	15
Super women	16
Who's who?	18
Greening their valley	18
What's cooking?	19
Tunza dedication	19
Bridging the generation gap	20
Poor, but rich...	21
Seven women who changed environmental thinking	22



Partners for Youth and the Environment



UNEP and Bayer, the German-based international enterprise involved in health care, crop science and materials science, are working together to strengthen young people's environmental awareness and engage children and youth in environmental issues worldwide.

A partnership agreement lays down a basis for UNEP and Bayer, who have collaborated on projects in the Asia and Pacific region for nearly 10 years, to step up current projects, transfer

successful initiatives to other countries and develop new youth programmes. Projects include: TUNZA Magazine, the International Children's Painting Competition on the Environment, the Bayer Young Environmental Envoy in Partnership with UNEP, the UNEP Tunza International Youth/Children's Conference, youth environmental networks in Asia Pacific, Africa and Latin America, the Asia-Pacific Eco-Minds forum and a photo competition, 'Ecology in Focus', in Eastern Europe.

Cool & Cooler



COOL: Travelling by environmentally friendly train to see loved ones, rather than by car.



COOLER: Talking face-to-face, cheaply or for free, using webcams and programs like Skype, iChat or NetMeeting.



COOLEST: Cars that run on air. French company Moteur Développement International is developing lightweight cars whose pistons are driven by compressed air. Urban vehicles just use the air, and so emit no pollution. At longer distances and higher speeds, dual-energy engines switch to fuel mode – which can use both petrol and biofuels – and run an on-board compressor to refill the air tanks.



COOL: Eating locally grown food.



COOLER: Growing your own. One easy way – even in cities or arid areas – is to use a recycled-plastic EarthBox, which has its own fertilizing and water-efficient irrigation systems. The Growing Connection, a campaign developed by FAO and the American Horticultural Society, is introducing the EarthBox to young people around the world, including in Mexico, Ghana and Nicaragua.



COOL: Recycling plastic bags and bottles.

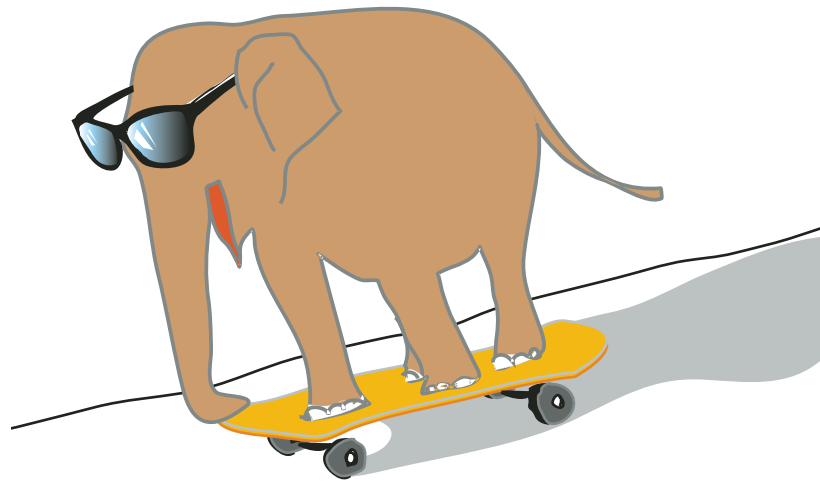


COOLER: Elevated Wetlands, an environmental sculpture by Noel Harding that uses a substitute soil made from recycled waste plastic to grow grasses, birch, and evergreen trees beside Toronto's Don River. Solar-powered pumps move polluted river water into the sculpture, which acts as a filter, cleaning the water while nourishing the plants.

WARM: Turning up the thermostat.

WARMER: Cuddling under a blanket.

UNEP promotes environmentally friendly practices globally and in its own activities. This magazine is printed on 100% recycled, chlorine-free paper using vegetable-based inks.



Editorial

We call it Mother Nature, and throughout the centuries poets and playwrights have described nature as female. Yet, ever since 'mankind' began to clear ground for agriculture, her fate has almost always been determined by men. And that may be one reason for the environmental crisis that now starkly faces the planet.

Women, generally, seem to be better connected with the need to live in harmony with the Earth, to care for it and nurture it. Partly this is the feminine approach, partly it is common sense, but partly it is also because women – particularly in the developing world – are both in closer contact with the natural environment and suffer most when it is harmed.

Yet, though there may have been a few matriarchal societies – about which little has been established – it is men and male values that have ruled, and ruined, the world. Even now there is not a single country, as the United Nations Development Programme's *Human Development Report* tells us, where women and men enjoy true equity. Over most of the world fewer women than men can read or write, and fewer girls go on to secondary school than boys. Everywhere, in developed and developing countries alike, women's earnings are lower and their work in running households and bringing up children is not regarded as economically valuable.

Worse, women only play a small part in making the decisions that determine the future of the Earth and its peoples. Things are better than they were – the number of national female legislators has quadrupled in the last 60 years. But still only 15.3 per cent of legislators in developing countries are women – and developed countries do little better, with just 21.1 per cent.

Of course, we should not overgeneralize. Many men fight passionately for the environment; many women have been instrumental in helping to destroy it. But there can be little room for doubt that a better balance of genders in decision making would help us achieve a better balance with nature.

WILD THINGS



John Cancalosi/Still Pictures

GIANT WATER BUG

Male insects typically shun parenting duties, but the giant water bug – up to 5 centimetres long and 2.5 centimetres wide – is willing to shoulder the load. During mating, the female glues around 100 eggs to the male's back, and then leaves. The single father carries his offspring piggyback for a month, agitating the eggs underwater to provide oxygen, and stroking them and airing them in the sun to prevent infection. Once the eggs hatch and the babies swim off, he stops eating so that he won't inadvertently consume his progeny.

SWANS

Swans have long been thought to mate for life. But advances in DNA technology have found this to be a romantic fiction. Scientists have discovered that the eggs in a paired couple's nest can have been fathered by several different males. This suggests that while swans



Bruce Montagne/UNEP/Topham

are socially monogamous – staying together as a couple over long periods and nurturing their young together – they are not necessarily sexually monogamous. You could call it an open marriage, or maybe just swanning around.

SONORAN SPOTTED WHIPTAIL

The Sonoran spotted whiptail, from North America, is one of 15 similar species made up of only females. The single-sex lizards are the hybrid offspring of two bisexual species (having both males and females). Usually, only sterile offspring result from interspecies breeding, but in this case, females are born that are able to reproduce without sperm: as adults, they lay unfertilized eggs that hatch into more females, a form of asexual reproduction called parthenogenesis.



John Cancalosi/Still Pictures

Why gender matters

'Women', so the saying goes, 'hold up half the sky'. In fact, they do more than their share when it comes to looking after the planet. And as they usually live and work in closer contact than men with nature and the land, they suffer more from environmental pollution and degradation. They are in the front line of the fight over the future of the Earth.

In developing countries women are almost entirely responsible for growing food to feed their families; in sub-Saharan Africa, for example, they produce and market over 90 per cent of all the food grown locally. So they are the first to be hit by soil erosion and deforestation.

As the trees are felled, women also usually have to spend more time getting both fuel and water. Not long ago, women in the Indian state of Gujarat only had to go out to collect firewood every four of five days; now they have to spend four of five hours every day at the back-breaking task. Collectively, women in India spend a staggering 150 million work days a year fetching water, and in South Africa they walk the equivalent of going to the moon and back 16 times every day.

Both fuel and water often bring sickness home with them. Unclean drinking water causes diseases that kill more than 3 million people a year, mainly children, and as the carers of the family, women take the strain. Meanwhile, the smoke from burning firewood swirls around the homes of the poor, carrying a toxic load of pollutants, and killing more than another 1.5 million people each year, mostly women and children, who spend the most time indoors.

Women are also generally more vulnerable to chemical pollution than men because they tend to carry more fat and thus store more of the poisons that build up in it. And they



pass them on to their unborn babies and through breast feeding: scientists at the University of Groningen in the Netherlands, for example, found a cocktail of at least five toxic chemicals in the blood of every newborn baby they examined, and some had as many as 14.

Children born to mothers exposed to pesticides in countries as different as the Sudan and the United States of America have been found to be more likely to die soon after birth. Near North America's Great Lakes, women exposed to toxic polychlorinated biphenyls (PCBs) have given birth to children with dramatically lower intelligence and delayed motor development, while boys whose mothers were contaminated with the ubiquitous 'gender-bender' phthalates were born with smaller penises and other signs of feminization of their genitals.

It is no surprise, therefore, that women are in the vanguard of the battle for the environment. They formed the Chipko movement which halted the felling of forests in Northern India. In Sierra Leone, one study found, they could name 31 uses of trees, whereas men only knew of eight. And they often conserve important food crops: research on 60 kitchen gardens managed by Thai women found 230 different vegetable and other species, many saved from a nearby forest before it was cut down. The soil in women's plots in Ghana keeps its fertility longer than the earth tilled by their menfolk, while half of Britain's organic farmers are female, 10 times the proportion of women farmers in the country as a whole.

Women do seem to be better attuned to the needs of the environment, and more committed to protecting it, than men. But until they are given at least an equal share in taking the decisions that determine how the world is run, there is little chance of stopping the sky metaphorically falling on our heads.

UNEP/Topham



Making peace

In the beginning there were only the Sea Goddess, Maguayen, and the Sky God, Kaptan. The two were terrible rivals. Maguayen created whirlpools, hurricanes and tsunamis, and Kaptan retaliated with thunderbolts, rain and lightning. When the thunderbolts and rain hit the sea, Maguayen would conjure up storms and waves that reached the sky. To stop her, Kaptan threw stones into the sea. Over the aeons of their feuding, the stones built up to become the islands of the Philippines.

A bird – a kite – suffered from Maguayen and Kaptan's fighting, as the incessant storms and raining boulders kept it restlessly flying over the sea. It tried to make peace between the sea and the sky by persuading them to meet twice a day at the horizon. Over time, the enemies became friends – and then fell in love.

From Maguayen and Kaptan's love a small bamboo seed fell into the shallows beside one of the islands. It grew into a tall stalk, finally providing the kite with a perch. From inside the bamboo came a voice. 'O please, Lord of the birds, let us out.' The kite thought it was strange that the stalk should speak to him, but it spoke again. 'O gracious and kind bird, please let us out.'

As the cautious kite pondered what to do, a small lizard scampered across the bamboo stalk. With a quick reflex, the kite pecked hard at the lizard and the bamboo split open. Slowly a beautiful woman and a strong man climbed out of the stalk. They were the first people. In time they married, had many children and populated the Earth.





Q&A

TUNZA answers your questions

Q What is the difference between gender equity and gender equality? And what can young people do to promote gender equity?

A Gender equity is being fair to both women and men. It is a precondition of, and leads to, equality. Gender equality is about equal access to resources, opportunities and rewards – allowing both men and women truly to work together. Young people have a special responsibility to ensure everyone enjoys the same opportunities, rights and obligations in all spheres of life – and that theirs and future generations do not suffer from the gender imbalances of the past.

Q Are women better at caring for the environment than men? If so, why is this?

A In many parts of the world women are the providers of food, water, heat and other resources for their children and extended families. To survive, many have developed an intimate understanding of nature and are in the front line of managing and preserving our natural resources.

Q Women authors like Rachel Carson and Barbara Ward played a major role in starting the modern environmental movement in the 1960s. Are their writings still relevant?

A Both women were passionate about the environment, the disparity between rich and poor, and the well-being of all humankind – and were among the first to warn about the crisis of sustainability that we now face. Their writings are, if anything, more relevant than ever.

Q How does a safe, close supply of clean water affect women's lives in rural areas? How can we achieve universal access to clean water?

A Women and girls are the providers of water in many parts of the world, walking hour after hour to fetch it. A nearby supply can cut their workload and allow more girls to attend school in the time saved. Access to clean water saves the lives of children who would otherwise perish from waterborne diseases, and helps improve maternal health. We must press governments and the private sector

to invest in providing safe and affordable water for all, and ensure that the people directly affected – particularly women – participate in the decisions that are made.

Q If women have better access to health care services, including family planning, does the environment also benefit?

A Indira Gandhi called poverty 'the greatest form of pollution'. Healthy women with healthy families – with access to modern medicine and reproductive health services which empower them to decide how many children to bear and when – contribute to their family's economic well-being and are better able to maintain a healthy home and a healthy local environment. However, as countries develop and people move out of poverty, many other factors that affect the environment, such as rising consumption levels, come into play.

Q Does the fact that, in many places, women may not own land have a bad effect on the environment?

A Ownership gives people the rights and responsibilities to control the use of the environment. It is also our strongest connection with the natural world. Many women do not have the right to own or inherit land, and as such they lack the rights to cherish their natural resources. This leads to other forms of inequality in their lives. Ownership empowers them, and gives them access to credit and other economic opportunities that help the functioning of our planet.

Q How does better education of women affect the environment?

A Through education communities become aware of the dangers caused by degraded environments. Education also increases women's ability to use and manage environmental resources and empowers them to play a bigger role in decisions affecting their families and thus the community. It also means that they are likely to have smaller families, with the potential to reduce pressure on the environment. And of course, better understanding leads to better decisions, whether by men or women.

Do you have any QUESTIONS on environmental issues that you would like the experts at UNEP to answer?

Please send them to unepub@unep.org, and we will try to answer them in future issues.

Banking on poverty



Donna Morris/FINCA International



Shehzad Noorani/Still Pictures

Can \$27 beat global poverty? Economist Muhammad Yunus thinks so. In fact, he knows so.

Thirty years ago he lent just that amount to a group of poor artisans in Bangladesh to pay off their debts. It started a financial services revolution. It's called microcredit and it has won him the 2006 Nobel Peace Prize.

Microcredit lends tiny amounts of money – typically \$50 to \$100 – to poor entrepreneurs who cannot get traditional bank loans because they don't have the money or property to guarantee repayment. It enables them to finance projects that help them escape poverty.

Many were sceptical when Yunus first developed the idea. But today, the World Bank estimates that there are 7,000 microcredit institutions around the globe serving 16 million people – and the United Nations declared 2005 the International Year of Microcredit. Since Yunus founded the Grameen Bank ('Bank of the Villages' in Bangla), the lives of some of the world's poorest people have been turned around.

It all grew out of Yunus' commitment to the rural poor. 'I made a list of people who needed just a little bit of money, and when the list was complete there were 42 names,' he says. 'The total amount of money they needed was \$27. I was shocked.'

The artisans had been borrowing money from a moneylender each week to buy the materials for basket making and other crafts. Most of their profits went to paying off their debts and interest. Yunus continues: 'I saw how people suffered for a tiny amount of money, and the moneylender took advantage of them, squeezed them in a way that all the benefits passed to the moneylender and none remained for the borrowers.'

Focusing on the poorest of the poor, the Grameen Bank meant dealing with women. Yunus understood, as the Nobel

Committee put it, that: 'Economic growth and political democracy cannot achieve their full potential unless the female half of humanity participates on an equal footing with the male.'

But in traditionally Muslim Bangladesh, getting women to participate was not easy at first: 'When I began I wanted to make sure half the borrowers were women,' says Yunus. 'It was not easy because women themselves did not think that they should borrow money. I had to do a lot of convincing.'

Gulbadan Nesa is one of them. Five years ago she borrowed \$90 to buy chickens so that she could sell eggs. 'Not long ago I was almost begging for money to feed my family,' she explains. 'Today I have my own house and enough money to feed my children and send them to school.'

Now 96 per cent of the Grameen Bank's clients are women, and microcredit organizations worldwide have found women to be a good bet. They are more likely to pay back their loans than men, and more likely to invest income in their families, thereby spreading the benefits. And when women have financial control and responsibility, they are better able to participate in society.

And that's the whole point of microcredit. In stark contrast to ordinary banks, which aim solely to make a profit, microcredit institutions set out to benefit their clients socially and financially. The Fonkoze Bank of Haiti, for example, offers basic literacy and numeracy classes for its mainly uneducated female clients. In Uganda, the Foundation for International Community Assistance provides life insurance and outpatient health services. And at the Grameen Bank, saving is encouraged as an integral part of lending. But as Yunus is quick to point out: 'This is not charity. This is business: business with a social objective, to help people get out of poverty.'



‘Environmental protection is always an investment in the future, and we are ready to support young people worldwide in their commitment

to it and to sustainability,’ says Bayer Director Dr Wolfgang Plischke.

He was speaking at the opening of the 2006 Bayer Young Environmental Envoy Conference. The company founded the Young Environmental Envoy Program, today a mainstay of the UNEP/Bayer partnership, in Thailand in 1998. It has since grown to include young people from 16 countries with fast-growing, emerging economies in Asia, Africa, Eastern Europe and Latin America.

Bayer Young Environmental Envoys submit project reports and essays to selection panels in their home countries, and undergo a thorough interview process before being chosen to head off to Germany for a week of field trips, lectures and networking opportunities. This year, the 48 envoys were chosen from 1,200 applicants – to get there candidates must display strong leadership and environmental involvement as well as a good command of English.

‘We want to foster dialogue between young environmentalists and scientists from around the world,’ adds Dr Plischke, ‘and we hope the envoys learn more about existing technologies,



Future environmental leaders



‘PLANTING 15,000 trees? No big deal. Good planters can do 800 to 1,000 a day.’

Grabbing a potato fritter and a couple of spoons from his plate, Gabriel Rocha explains. ‘You work in pairs. One works the shovels to make a hole’ (the spoons dig into the salad), ‘and the other plants the seedling’ (the potato is firmly planted). ‘The whole thing takes about seven seconds.’

It’s the third day of the Bayer Young Environmental Envoy Conference and

other and have confidence in their own innovations. So we work with indigenous farmers and learn as much from them as they do from us.’

That’s what the Conference – held each November at Bayer’s international headquarters in Leverkusen, Germany – is all about. The 48 Envoys – described by UNEP’s Communications Director, Eric Falt, as ‘environmental leaders of tomorrow’ – include scientists, law students, engineers, medics and foresters.

For them, the trip is an opportunity to experience modern environmental protection in Germany, first-hand. It’s

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_10839



云报告
https://www.yunbaogao.cn

云报告
https://www.yunbaogao.cn

云报告
https://www.yunbaogao.cn