




**Next Steps**



*If action responses to the population/environment dynamic are to address human needs and protect the Earth's remaining biodiversity, they must have effect at a variety of levels and include a range of institutional and individual actors.*

# *Opportunities* for Action

**W**hile WWF and its current partners are taking steps to address the threat and impact of population pressures at the field level, action is also required at the political (governance), policy, and planning scales. Such action will depend on the input and commitment of many actors and stakeholders in the fields of population, environment, and development—and across cultural and geopolitical boundaries. Partnerships among this diverse group of actors are essential, as is the full participation of stakeholders in the development and implementation of strategic responses.

The realities, experiences, and lessons presented in *Disappearing Landscapes*, and through the work of environment and development NGOs around the world, ought to provide, WWF believes, sufficient motivation for all concerned to promote, implement, and/or partner in actions—both large and small—that will address the population/environment connection.

### *Actions at the Policy Level*

- ▶ Raise awareness among national governments and international agencies of the complexity and impact of population and environment interactions on people and biodiversity;
- ▶ Mobilize additional resources (financial and human) to address biodiversity conservation and the demand for education, reproductive health care, and economic activities that do not threaten the natural resource base;
- ▶ Convene and participate in cross-sectoral dialogues on population/environment interactions and responses at international and national levels;
- ▶ Support increased funding for full implementation of the Programme of Action agreed at the 1994 United Nations' International Conference on Population and Development in Cairo, Egypt; and
- ▶ Bring experiences of addressing population and environment intersections and collisions to on-going international and national policy processes and forums (e.g., to the Rio+10 Conference [Johannesburg 2002: The World Summit on Sustainable Development] that will review 10 years of progress on Agenda 21 in South Africa in September 2002).

The experiences of conservation and development partners that address the population/environment dynamic need to be brought to international and policy forums such as the Rio+10 Conference in 2002 in Johannesburg, South Africa.

The demographic and environmental changes under way are rapid and the pace is quickening. Time is precious if the structural factors that are causing population and environmental collisions are to be addressed.

### *Actions at the Program Design and Planning Level*

- ▶ Incorporate population dynamics (including consumption patterns, migration, and gender realities) as a key factor in determining conservation strategy and program initiatives;
- ▶ Promote and practice cross-sectoral planning at national and community levels that takes into account the state of the environment, agricultural needs and practices, land use, migration patterns, and socioeconomic realities like health and economic status, gender roles, and demographic patterns;
- ▶ Create partnerships (e.g., with bilateral and multilateral institutions and local and regional NGOs) to increase access to reproductive health care, education, and economic opportunity, and potentially leverage funding for such efforts;
- ▶ Undertake gender analysis and craft interventions that seek to advance gender equity and ensure women's full participation in program design and implementation and policy making; and
- ▶ Draw on the analysis and research of local, national, and international organizations and institutions with population/environment expertise, and convene key

stakeholders (governmental and NGO) to brainstorm policy and program strategies.

### *Actions in the Areas of Education and Outreach*

- ▶ Identify channels through which to share information about population/environment linkages and challenges at local, national, and regional levels (e.g., public awareness campaigns by governments or NGOs, community-based organizations, environmental education programs, stakeholder forums, the media, and other, nontraditional communication channels; and
- ▶ Provide information on population/environment connections to constituents and funders at national and international levels.

### *Actions in the Area of Research*

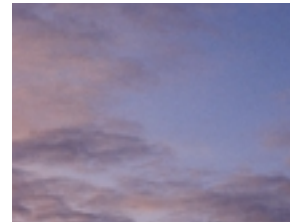
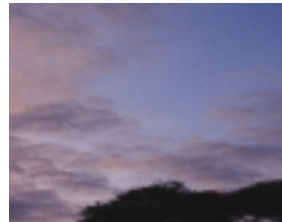
- ▶ Document the linkages among population and environmental realities (e.g., through overlay maps of demographic and socioeconomic data with ecological data) to set priorities for interventions and to gain support for and input into actions of NGO and community-based partners and policy makers;
- ▶ Develop the means to monitor and anticipate trends and drivers, including those related to gender relations,

health and education, and legal status (e.g., women's rights to land or inheritance); and

- Evaluate the impacts of interventions designed to address population and environment linkages to determine what does and doesn't work.

The demographic and environmental changes under way are rapid and the pace is quickening. Time is precious if the structural factors that are causing population and environmental collisions are to be

addressed. WWF is taking a number of the steps described above, in regions around the world where biodiversity conservation is a priority and securing sustainable livelihoods a necessity. To be successful, WWF and others must respond to the population/environment dynamic with programs and policies delivered at the community, national, regional, and global level. WWF invites others to join in a global response to address the pressures on people and biodiversity in today's world. ■



# Readings, References, and Resources

## SUGGESTED READINGS

American Association for the Advancement of Science (AAAS). 2001. *Atlas of Population & Environment*. Berkeley, CA: University of California Press.

Brown, L. R., Gardner, G., and B. Halweil. 1999. *Beyond Malthus: Nineteen Dimensions of the Population Challenge* (Worldwatch Environmental Alert Series). New York, NY: W.W. Norton and Company, Inc.

Livernash, R., and E. Rodenburg. March 1998. Population Change, Resources, and the Environment. In *Population Bulletin* vol. 53. no. 1. Washington, DC: Population Reference Bureau.

UNFPA. 2001. *The State of World Population 2001: Footprints and Milestones: Population and Environmental Change*. New York, NY: UNFPA.

UNFPA, UNEP, IUCN. 1999. *Report of the International Workshop on Population-Poverty-Environment Linkages: Key Results and Policy Actions, 23-25 September 1998, Gland, Switzerland*. New York and Geneva: UNFPA and IUCN.

UNDP, UNEP, World Bank, WRI. 2000. *World Resources 2000-2001: People and Ecosystems: The Fraying Web of Life*. Washington, DC: World Resources Institute.

WWF, UNEP-WCMC, Redefining Progress. 2000. *Living Planet Report 2000*. Gland, Switzerland: WWF International.

## WEB RESOURCES

**Planetwire** [www.planetwire.org](http://www.planetwire.org)

**Population Action International**  
[www.populationaction.org](http://www.populationaction.org)

**Population Reference Bureau** [www.prb.org](http://www.prb.org)

**United Nations Development Program**  
[www.undp.org](http://www.undp.org)

**United Nations Population Fund** [www.unfpa.org](http://www.unfpa.org)

**U.S. Census Bureau** [www.census.gov](http://www.census.gov)

**Worldwatch Institute** [www.worldwatch.org](http://www.worldwatch.org)

## REFERENCES

UNDP. 2000. *Human Development Report 2000*. New York, NY: Oxford University Press.

U.S. Census Bureau. 2000. *2000 U.S. Census Report*. Online at: [www.census.gov](http://www.census.gov).

WWF. 1999. *Biodiversity Basics: An Educator's Guide to Exploring the Web of Life*. Tustin, CA: Acorn Naturalists.

## Quotes

Bartram, William. 1778. In *Travels through North & South Carolina, Georgia, East & West Florida*. 1998. New York, NY: Penguin Group.

Caicedo, Antonio Maria. 1999. In *Mountains, Rivers, and Cities: Territories, Identities from the Black Communities in Columbia*. Bogotá: ECOFONDO.

de Commerson, Phillipe. 1771. In Lanting, F. (photographer), A. Jolly, G. Durrell, and J. Mack (contributors). 1990. *Madagascar: A World Out of Time*. New York, NY: Aperture Foundation, Inc.

Percival, A. B. 1924. In *A Game Ranger's Notebook*. London: Nisbet & Co.

Wilson, Edward O. 1994. In *The Naturalist*. Washington, DC: Island Press.

## WWF CONTACTS

### **WWF Eastern Africa Regional Program Office**

PO Box 62440  
Nairobi, Kenya  
Tel: +254 2 577 355  
Fax: +254 2 577 389

### **WWF Lake Nakuru Conservation and Development Project Office**

PO Box 33  
Nakuru, Kenya  
Tel: +254 037 215 476  
Fax: +254 037 215 476

### **WWF Madagascar Program Office**

PO Box 738  
Antananarivo 101  
Madagascar  
Tel: +261 20 22 34885  
Fax: +261 20 22 34888

### **WWF Taolanaro Office**

PO Box 42  
Taolanaro 614  
Madagascar  
Tel: +261 20 92 21707

### **WWF Southeastern Rivers and Streams Project Office**

2021 21st Avenue, S.  
Nashville, TN 37212  
USA  
Tel: +615 297 1423  
Fax: +615 291 1429

### **WWF Colombia Program Office**

Carrera 35, No. 4 a 25.  
San Fernando  
Cali, Colombia  
Tel: +57 2 558 2577/2586/2587  
Fax: +57 2 558 2588

### **WWF–United States**

1250 Twenty-Fourth Street, NW  
Washington, DC 20037  
USA  
Tel: +202 293 4800  
Fax: +202 293 9211

## PUBLICATION CREDITS

*Author:* **Mia MacDonald**

*Project Director:* **Bronwen Golder**

*Publication Manager:* **Kimberley Marchant**

*Editor:* **Alice Taylor**

*Research Assistant:* **Gautham Rao**

*Map Coordinator:* **Timothy Green**

*Design:* **Nancy Gehman Design**

*Conservation Strategies Unit Director:*

**Sheila O'Connor**

*Center for Conservation Innovation Vice President:*

**Diane Wood**

## PHOTO CREDITS:


Corbis (pp. ii, 2, 5, 44, 47); Gerry Ellis (pp. 13, 14); Deborah Gainer/WWF (p. 10); Diego M. Garces/WWF (pp. 36, 38, 39, 40, 41, 42); Kate Newman/WWF (pp. 11, 12, 15); Edward Orth (pp. 28, 34, 35); Jean-Paul Paddock/WWF (p. 20); Photodisc (Covers 2, 3, p. 9); Mark Pidgeon (pp. 18, 21); Kevin Schafer (pp. 16, 17, 19, 23, 24, 25, 26, 30, 32, 33); Tennessee Department of Environment and Conservation (p. 31); Alan Watson (pp. 37, 43).

**Please cite this publication as:** WWF Conservation Strategies Unit. 2001. *Disappearing Landscapes: The Population/Environment Connection*. Washington, DC: WWF.

## ACKNOWLEDGMENTS

The Conservation Strategies Unit wishes to thank the people who contributed to this project: Ramesh Thampy, program coordinator, WWF Rift Valley Lakes Program; Mohamed Awer, former project manager of the WWF Eastern Africa Regional Program Office; Anitry N. Ratsifandrihamanana, monitoring and evaluation program officer for the Spiny Forest Ecoregion Program of the WWF Madagascar Office; Wendy Smith, director of WWF's Southeastern Rivers and Streams Project Office; Ximena Barrera Rey, environmental policy officer of the WWF Colombia Program Office; and Mary Lou Higgins, country representative, WWF Colombia Program Office.

WWF gratefully acknowledges the Summit and Hewlett foundations for their support of the writing and publication of *Disappearing Landscapes*.

 Printed on processed chlorine free, recycled paper using soy-based inks.

