

## Chapter 4.23

# Promoting E–Governance Through Capacity Development for the Global Environment: UNEP’s Training Strategy in Integrated Environmental Assessment (IEA)

**Jim Perry**

*International Institute for Sustainable Development, Canada*

**Leslie Paas**

*International Institute for Sustainable Development, Canada*

**Maria Eugenia Arreola**

*United Nations Environment Programme, Kenya*

**Elena Santer**

*United Nations Environment Programme, Kenya*

**Nalini Sharma**

*United Nations Environment Programme, Kenya*

**Johara Bellali**

*United Nations Environment Programme, Kenya*

## EXECUTIVE SUMMARY

Solving the world’s great crises and taking advantage of the world’s greatest opportunities requires innovation and capacity. E-governance uses Information & Communication Technologies (ICT) to broaden participation and make problem solving more effective. Environmental issues represent some of the world’s greatest crises and

most significant opportunities. The United Nations Environment Programme (UNEP) is a global leader in tackling such issues. UNEP’s Global Environmental Outlook (GEO) relies on contributions from many experts from all regions of the world. Because capacity development is critical to UNEP’s ability to fulfill its mandate, UNEP collaborated with the International Institute for Sustainable Development (IISD) to commission more than 50 experts to develop training resources

DOI: 10.4018/978-1-60960-472-1.ch423

for integrated environmental assessment and reporting at the sub-global level. These resources were adapted to an eLearning format, significantly broadening their utility and reach. All materials are organized onto the Moodle Learning Management System and use a facilitated interaction model. The eLearning curriculum and approach has been peer reviewed and pilot tested. This research has further developed a blended learning, Train-the-Multipliers program to train facilitators. This eLearning implementation has clearly demonstrated potential and is advancing e-governance at global, regional, national and sub-national levels in the area of environmental assessment and reporting. Although UNEP's position as a strong proponent of global environmental governance is unique, the detailed approach described for the eLearning programme is generic and therefore, would be a useful model for others who wish to develop eLearning curricula.

## **UNEP'S GLOBAL ROLE IN ELEARNING FOR ENVIRONMENTAL POLICY AND MANAGEMENT**

It is widely recognized that effective use of ICTs can advance e-governance through promoting greater inclusivity and involvement (White, 2005). Capacity building for governments and decision-makers is also a key aspect of advancing e-governance. This chapter presents the strategy developed by the Department of Early Warning (DEWA) of the United Nations Environment Program (UNEP) for using ICTs in building capacity for Integrated Environmental Assessment. UNEP plays a strong role in promoting global governance of environmental resources through its several efforts, including training decision-makers, researchers and key actors at global, regional, national and sub-national (local) levels to manage, monitor and influence decision-making regarding natural resources. One of the ways it does this is through its Global Environment Outlook series-

called GEO, which aims to keep under review the state of the world's environment, identify emerging issues that require international attention and provide options for policy making and action planning. Each GEO product is created through a methodology called "integrated environmental assessment (IEA)" – a consultative, participatory, capacity-development process and series of reports that analyses environmental change, causes and impacts of those changes, and policy responses. Its IEA training program started as workshop-based training materials used a delivery strategy called the *IEA Training Manual*. Quickly it was recognized by leveraging UNEP's ICTs, this training strategy for global environmental assessment and monitoring could be greatly expanded.

This chapter describes how UNEP came to develop its ICT strategy for promoting capacity building for global environmental governance. It begins with a brief background on UNEP, its mandate and recent reform process which brought greater focus on capacity building for managing the global environment. It describes the division responsible for this Programme of Work, and the chain of events which resulted in strategic use of ICTs, which in turn led UNEP to play a more active role in promoting e-governance. It gives a brief history of the need for and development of the IEA training materials, and how that culminated in creation of a community platform and an eLearning programme. The last section focuses on the eLearning approach, including instructional design, pedagogical methodology, platform and general characteristics, and how that serves as material relevant for teaching with this case.

## **ORGANIZATION BACKGROUND**

The United Nations Environment Programme (UNEP) is the United Nations (UN) system's designated entity for addressing environmental issues at the global and regional level. Its mandate is to coordinate development of environmental

29 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/promoting-governance-through-capacity-development/51742](http://www.igi-global.com/chapter/promoting-governance-through-capacity-development/51742)

## Related Content

---

### Land Degradation and Biodiversity Loss in Southeast Asia

Rajendra P. Shrestha (2011). *Land Use, Climate Change and Biodiversity Modeling: Perspectives and Applications* (pp. 303-327).

[www.irma-international.org/chapter/land-degradation-biodiversity-loss-southeast/53758](http://www.irma-international.org/chapter/land-degradation-biodiversity-loss-southeast/53758)

### Nano-Bioremediation: Nanotechnology and Bioremediation

Sandeep Tripathi, R. Sanjeevi, J. Anuradha, Dushyant Singh Chauhan and Ashok K. Rathoure (2022). *Research Anthology on Emerging Techniques in Environmental Remediation* (pp. 135-149).

[www.irma-international.org/chapter/nano-bioremediation/291231](http://www.irma-international.org/chapter/nano-bioremediation/291231)

### Design of a Transactional Environmental Support System

R.E. Kenward, N. M. Casey, S. S. Walls, J. M. Dick, R. Smith, S. L. Turner, A. D. Watt, J. Papathanasiou, Z. Andreopoulou, S. Arampatzis, O. Papadopoulou, G. von Bethlenfalvy, C. Rio Carvalho, R. Morgado, R. J. A. Sharp, Z. Tederko, L. Szemethy, J. Gallo, D. Székely, K. Piirimäe, M. Ivask, E. Aruvee, I. Navodaru, B. Avcioglu, Engin Gem, J. A. Ewald, N. Sotherton, A. C. Newton and K. H. Hodder (2013). *Transactional Environmental Support System Design: Global Solutions* (pp. 209-245).

[www.irma-international.org/chapter/design-transactional-environmental-support-system/72919](http://www.irma-international.org/chapter/design-transactional-environmental-support-system/72919)

### Modeling: A Central Activity for Flexible Information Systems Development in Agriculture and Environment

Petra Papajorgji, François Pinet, A. Miralles, E. Jallas and P.M. Pardalos (2010). *International Journal of Agricultural and Environmental Information Systems* (pp. 1-25).

[www.irma-international.org/article/modeling-central-activity-flexible-information/39025](http://www.irma-international.org/article/modeling-central-activity-flexible-information/39025)

### Use of Remote Sensing Data for Landslide Change Detection: Montescaglioso Large Landslide (Basilicata, Southern Italy)

Stefania Pascale, Vittoria Pastore, Francesco Sdao, Aurelia Sole, Dimitri Roubis and Pietro Lorenzo (2012). *International Journal of Agricultural and Environmental Information Systems* (pp. 14-25).

[www.irma-international.org/article/use-remote-sensing-data-landslide/62063](http://www.irma-international.org/article/use-remote-sensing-data-landslide/62063)