# Chapter 7 Cultivating Resilience

#### **ABSTRACT**

Adaptation to the challenging impacts of global warming, especially extreme weather events such as intense heat waves and hurricanes, is much more effective when the members of a community look out for each other. As we will see in the case example from the great Chicago Heat Wave of 1995, among the poor communities that were hardest hit, the neighborhoods that had social cohesion fared far better than those whose members were socially isolated. Social networking cultivates resilience, which protects vulnerable populations before, during, and after emergencies. In addition, the use of technologies is vital to address the impacts of extreme weather events; this chapter demonstrates how technologies aid in addressing heat waves and other natural hazards by providing a platform for database management, dispensing health and emergency information rapidly, and providing timely, effective medical relief.

#### INTRODUCTION: DEFINING SOCIAL COHESION

The term "social cohesion" has been used for decades by social scientists and sociologists. The Organisation for Economic Cooperation and Development (OECD, 2011), based in Paris, defines a cohesive society as follows:

A cohesive society works towards the well-being of all its members, fights exclusion and marginalisation, creates a sense of belonging, promotes trust, and offers its members the opportunity of upward social mobility.

DOI: 10.4018/978-1-5225-3414-3.ch007

#### **Cultivating Resilience**

A cohesive society works towards enhancing the well-being of all, creating a sense of belonging and promoting trust; it eschews exclusion and marginalization (OECD, 2011). Social cohesion has a synergistic effect, which makes its collective body stronger than the sum of its individual members. It provides an avenue for upward mobility. Fostering social cohesion requires that the joint stakeholders of a society—or community—work actively together to address collective action.

The OECD (2011) notes that in the decade from 2000 to 2010, there was a shift in economic growth, from West to East, and from North to South, with developing countries growing much more rapidly than in the past. Increased global mobility and migration led to increasing numbers of immigrants seeking their fortune outside their native countries. The migration problem has accelerated since 2010, due to drought, political instability, warfare, and military takeovers of governments. To facilitate the integration of immigrants into their new homes, a set of policies is needed covering employment, education, and housing, preventing discrimination and social exclusion, and facilitating entrepreneurship (OECD, 2011).

## SOCIAL COHESION AS A TOOL FOR ADAPTATION TO CLIMATE CHANGE

Social cohesion is a useful tool in adaptation to climate change, as it fosters both social resilience and climate resilience. Social resilience is needed to cope with disparities in resources; when residents in a poor neighborhood work together as a collective group, in tandem with civic leaders, they develop an outreach network to inform them and help them stay safe during extreme weather events. Social resilience helps to address issues of environmental justice. Poor people usually fare the worst in natural disasters and extreme weather events, due to inferior housing, limited access to transportation, and fewer resources, including alternative places to stay. Low-income housing is particularly vulnerable in extreme weather events. Eight years after Hurricane Katrina devastated New Orleans, less than half of its public housing units had been rebuilt. The large public housing developments were torn down and redesigned as mixed-income communities; many low-income residents were pushed out of the city, as they could no longer afford the rents. Five years after Hurricane Ike destroyed 70 percent of the structures in Galveston, Texas,

# 30 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/cultivating-resilience/189794

#### **Related Content**

## Experiment to Test RTK GPS with Satellite "Internet to Tractor" for Precision Agriculture

Stacey D. Lyle (2013). *International Journal of Agricultural and Environmental Information Systems (pp. 1-13).* 

www.irma-international.org/article/experiment-test-rtk-gps-satellite/78154

## Examining Statistical Distributions and Statistical Behavior of Stem Tapers of Fagus Sylvatica in Municipal Forest of Naoussa

Messaritakis Spyridon (2019). *International Journal of Agricultural and Environmental Information Systems (pp. 57-70).* 

www.irma-international.org/article/examining-statistical-distributions-and-statistical-behavior-of-stem-tapers-of-fagus-sylvatica-in-municipal-forest-of-naoussa/216452

#### Lowlands Mapping in Forest Guinea

S. Saïdi, A. Camara, L. Gazull, M. Passouantand M. Soumaré (2013). *International Journal of Agricultural and Environmental Information Systems (pp. 20-34).*www.irma-international.org/article/lowlands-mapping-forest-guinea/76650

### Flow-Based Structural Modelling and Dynamic Simulation of Lake Water Levels

Nashon Juma Aderoand John Bosco Kyalo Kiema (2011). *Green Technologies: Concepts, Methodologies, Tools and Applications (pp. 798-814).*www.irma-international.org/chapter/flow-based-structural-modelling-dynamic/51732

### Assessing the Hydrological Effect of Climate Change on Water Balance of a River Basin in Northern Greece

Panagiota G. Koukouli, Pantazis E. Georgiouand Dimitrios K. Karpouzos (2018). *International Journal of Agricultural and Environmental Information Systems (pp. 14-33).* 

www.irma-international.org/article/assessing-the-hydrological-effect-of-climate-change-on-water-balance-of-a-river-basin-in-northern-greece/212658