

Chapter 4



Women, energy and water

The effects of gender and culture on the roles and responsibilities of women

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Summary

This chapter on Women, Energy and Water focuses on women and their capacity to access, use and control water and energy resources.

It also explains how water and energy are two resources that are interlinked and should be managed on the basis of the synergies that benefit both in achieving a sustainable energy future and watershed management.

The crucial role of environmental management is seen in case studies in developing countries in Latin America and special emphasis has been placed on the role of rural women in the production and use of energy.

The health aspects of the incorrect use of energy sources such as charcoal and firewood for cooking on a global scale have been reviewed. This leads to a broad analysis of how energy availability is one of the main limitations on social and economic development and the importance of involving women in future management and planning for improving energy planning.

1. Introduction

This chapter is about the relationship of gender, and specifically women, and their ability to access, use and control the water and energy resources available to them in their countries. The emphasis will, of course, focus on the Americas but especially on the countries of Central and South America including the Caribbean. We hope to demonstrate that women, particularly those in developing countries and those who are described as ‘underserved’ with respect to energy and water are, in many instances, the primary users of these resources yet they have little control over their management or their development. It will also be shown that the heavy burdens imposed on women to manage, and in some instances even find these resources, severely limits their ability to access education and generally to improve their lives and that of their families. The “Women for Science” advisory report of the Inter Academy Council (2006) which is being implemented in the Americas by the IANAS Women for Science program, deems engagement and empowerment of these underserved women in development projects to be of the essence.

Most of the contemporary globalized world concentrates on increasing the supplies of energy in the form of oil and gas; and much of modern geopolitics is based largely on where these energy sources are found. Witness the importance of Middle Eastern oil producing states and emirates; the close

attention paid to populist led countries such as Venezuela and most recently the Russian military incursions into the oil producing region of the Crimea. Even in North America, the political battles over oil carrying pipelines has influenced important decision making. Moreover, enormous financial resources are also expended on experimentation with alternate sources of energy including nuclear, wind, solar and others. This intense concentration on maintaining, finding and exploiting sources of traditional and modern scientific energy largely overlooks the fact that many millions of people, primarily women, live in circumstances off the electrical grid where even older sources of energy such as wood, and various forms of biomass are used primarily for domestic purposes. (Taboada-Serrano, 2011)

With respect to water, most of the world’s 1.2 billion poor people lack access to safe and reliable water, two thirds of whom are women. Diversion of water for industry, agriculture, and power generation reduces the availability of water for domestic use, making it even more difficult for the poor to access water. Worldwide, over 2.6 billion people still lack access to flush toilets or other forms of improved sanitation and difficulties with access to usage of water often lead to health problems primarily affecting women. Lack of water or unsafe water generates a very large range of water-borne, water-based, water-related, water-washed and water-dispersed diseases. In most cultures, women and men have different roles and responsibilities in the use and management of water. Women use water for production, consumption and domestic purposes, including cooking, cleaning, health and hygiene, and, if they have access to land, also for growing food. In rural areas, women and girls walk long distances to fetch water, often spending 4 to 5 hours a day carrying heavy containers and waiting in lines. The burden of fetching water (and firewood) inhibits their access to education, income generation, cultural and political involvement, and rest and recreation. (UNCTAD, 2011; BOTH ENDS, 2006).

Before presenting a more detailed discussion of women and their role in the use of energy/water, this chapter will begin with a brief discussion of terminology and the important role of culture in shaping and even determining the roles of men and women in human societies.



Women washing clothes in the lake shore Atitlán, Guatemala

We will then move onto a more comprehensive analysis of how water and energy resources impact the lives of women.

- beginning with a discussion of the relationship or nexus between water and energy;
- followed by an in-depth case study of Peru and the Andes region.
- a case study of innovative programs for rural women and energy production
- a specific case study on the effects of the use of firewood on women's health.
- and finally, the crucial importance of 'how and why' women must be included in development and planning initiatives undertaken in many areas of the world.
- A general conclusion.

a. Culture and Gender

There are many definitions of culture but a fairly comprehensive one states that "Culture... is... the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or a social group. It includes not only arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs." (World Conference on Cultural Politics, 1982) Gender, originally a linguistic term categorizing masculine, feminine and neuter, became used by anthropology to refer to the social roles of men and women in society. Although traditionally it was traditionally assumed that the roles of men and women were naturally or even biologically determined by one's sex, anthropological cross-cultural studies established that while sex, male or female,¹ is a natural condition of the human species, gender roles vary across human societies. Thus, the attributes of men and women, the behaviors and relations appropriate to each other and their overall approach to life and living are largely determined by the cultural history and patterning of the many societies inhabiting this world. Gender is one of the most essential dimensions of human life because it influences not

only daily life as lived in families but also the wider community, and indeed the wider world of which it is part. Gender is thus a fundamental organizing principle of human societies which goes far beyond the biological differences between men and women.

b. Importance

In studying the culturally defined ways in which gender functions in society, we are therefore exploring the many roles of both men and women. Traditionally, women's domestic and reproductive roles as wives and mothers have been the focus of most attention but even the ways in which these roles are culturally defined varies considerably from group to group. Of critical importance in many societies is the division of labor between the sexes. In most societies, women's and men's work are differentiated by cultural patterns and explanations. In many developing and modern societies, changes in these roles have been at the forefront of social and cultural transformation. Consider, for example, how the traditional roles of women have changed from domestic and agricultural responsibilities to wage labor in increasingly industrialized areas of the world. Their relationship to energy and water have changed and in fact in some areas where women do both types of labor, their needs have become greater.

In order to understand the relationship between energy, water and women's roles in modern and traditional societies, we will first explore the complex relationship between energy and water.

2. The Link between Energy and Water

a. Introduction

Energy and water are linked in two primary ways. Water is used in the production of almost all types of energy, and energy is necessary to assure the supply and provision of water as well as wastewater treatment. The availability of water has an impact on the quantity of energy supply while the generation of energy affects the availability and quality of water.

The use of water for energy is becoming a global challenge. As the world economy grows at a faster pace, the demand for water will increase and will

1. We wish to acknowledge and recognize the roles of transgendered people in some countries today. For the purposes of this chapter, however, we focus on the more traditional male and female roles.