Part 1: Introduction—What You Need to Know About Water

Segment 1A: Welcome

Welcome to our course Water, Environment and Development. My aim in developing the course is to make it not merely informative but also useful to you as well. The goal is to inform you about the basic physical, social, economic, and technical aspects of water supply and use so that you can apply the concepts that you study to specific problems you encounter in the communities in which you live and work. These concepts will enable you to do the following:

• First, to assess conditions in your community and region to determine the nature of water concerns that affect a particular location, and
• And second, to design courses of action to address those concerns.

To support this undertaking, this course provides an introduction to diagnosing and identifying solutions to water problems through the use of case studies of successful interventions.

My emphasis on specific local solutions is deliberate and central to this course. The availability of water differs by region and climate, and the types of difficulties communities face in terms of water differ as well. One area may be faced with a water shortage, while another may have plenty of water but the water supply is undrinkable. Or, a community may experience difficulties in accessing water because of distance or cost. These are distinct problems that require specific and different solutions.

As you see in your Course Guide, our course is divided into five parts. Part 1 introduces the fundamentals of water science, Part 2 addresses water sufficiency, Part 3 discusses water availability, and Part 4 focuses on water quality. Parts 2, 3, and 4 are organized in the same format, first examining problems, then presenting research that is applicable to solving those problems, and, finally, concluding with developing courses of action to solve the problems that we have discussed. Part 5 provides you with the opportunity to complete a portfolio of your investigation and action regarding water issues in your community.

Having a clean, adequate water supply is essential for the well being of all people. This course will provide you with the knowledge and tools that will allow you to work with your partners, constituents, and stakeholders to identify problems and devise solutions that will serve the needs of your community.

Your first activity in this course will be to take a pre-test. You will note that a post-test is also part of the course. These are important for gauging your success in the course. All of us know a fair amount about water, but this knowledge is most often based on “common sense” rather than science, and that knowledge is almost always incomplete. These tests will allow you to assess the growth of your knowledge as a result of your study in this course.