PROCEEDINGS

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FIRST CARIBBEAN ISLANDS WATER RESOURCES CONGRESS

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KEYNOTE ADDRESS

by

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Everyone in this First Caribbean Island Water Resources Congress knows that water plays a critical role in the total-resource systems, both natural and human. Historic concerns about supply, floods, drought and erosion were vastly broadened as we have grown into consideration of all of the water resources problems in the use, planning and development of water. We also have grown to consider water as a segment of planning and coordinating the comprehensive development of our human, economic, and physical resources.

Dr. Herman Kahn, co-founder of the Hudson Institute, is described in a recent issue of Readers Digest as one of the foremost brains of the century. We research faculty in colleges and universities must relearn Dr. Kahn's early lesson about the human factor. As a little boy working in his aunt's food market he analyzed customer orders over a typical week and then confidentially presented her with a money saving projection on how many of each size grocery bags she should stock. She introduced Herman to the human factor by telling him, "Customers all want large bags so they can carry out the garbage".

The human factor plays an important role as we try to focus our university based water resources research programs on the priority problems. Whose problem? Whose priority?

The September 1980 issue of Civil Engineering featured a 14 page special section entitled "The Environment of the 1980's"-- defining the most urgent problems facing the United States and the world. The writers stated that the key environmental issues and problems will stem from our struggle to come to grips with the energy crisis. They also predict that ground water pollution and pollution from non-point sources will be major issues. Does their water problem statement agree with yours?

One of the difficulties of setting priorities for water research can be illustrated by attempting to answer two questions:

1. From a technical standpoint, what is the number one water resources problem in your area today, and
2. From a political standpoint, in what problem areas would you spend your research money today?

Listen to the language from Congressional hearings -- "Set disciplined research priorities based on real public needs -- then stick with them to make the best use of scarce research dollars". Listen again: "Priorities must be more than scientific -- they must recognize and build on social, political and economic realities".

Priorities also must recognize and build on the mission of our colleges and universities. From that viewpoint we would not adopt priorities that result in a directed research program. Rather, we would design a focused research program that is related to our graduate teaching programs and that seeks answers to identified societal problems while continuing to probe for definition of new areas of inquiry.

We are faced with two scarce components in our research programs. One is manpower -- the highly skilled and dedicated individuals who are the research-oriented faculties of our colleges and universities. The other scarce component is financial support. Here comes the part where he tells us how to get that extra $100,000 grant. Right? Wrong!

Dr. George A. Keyworth, who until late June was President Reagan's science advisor, noted that the Federal government has increased its support for basic research and cut nondefense funding for applied research and development. Dr. Keyworth said, "The primary role of the Federal government in science and technology is to support high-quality basic research". Research in

-such fields as neurophysiology, molecular biology, microelectronics, materials sciences, astronomy and high-energy physics will shape the technological possibilities of the 21st century. New technology from research in such exotic fields will help solve water resources problems.

By its very nature, high technology requires a large investment in basic scientific research, much of which is best undertaken in an academic rather than an industrial setting. Colby H. Chandler, Chief Executive Officer of Eastman Kodak Co., says cooperation between industrial and academic scientists is vital to a high-tech future. Today only about 10% of university based research is supported by industry. We are working to improve that while maintaining the distinction between research that may appropriately be done by universities and research that is more appropriately done in the private sector.

Our state universities were established in a national framework by the Federal Land Grant Acts of 1862 and 1890, and chartered by the states in the service of local public needs. Our universities have grown, changed tremendously, and prospered. In the area of research, together with some 25 leading independent research universities, they conduct perhaps 80 percent of all the basic research in the United States -- research vital to the national prosperity and security.

Dr. Edward Bloustein, president of Rutgers University and chairman of the National Association of State Universities and Land-Grant Colleges, recently announced establishment in the NASULGC of a special committee to undertake the first major study of state universities in two decades -- the first attempt to reexamine and restate the mission of these institutions since they were founded over a century ago. The goal is a concensus of educators and state and federal legislators on the role of state universities as we approach the year 2000.

New opportunities? Yes!

Where? Wherever you are!

When? Now and in the future!

You can make it happen.

Build your research on what you have, not on what you don't have.

Be a part of the changing role of our universities.