

Researchers study human impact on nature

By **KARIN STANTON**

Associated Press

KAILUA-KONA — A Big Island think tank is leading a 20-year study focused on the intersection of human and natural systems.

The Kohala Center, an independent academic institution, is partnering with Yale University to research the development of a long-range industrial ecosystem model that could have global implications.

The study will monitor some 77 indicators in the three broad areas of environment, economy and community to determine how human actions influence natural resources.

The results will provide ideas, methods and tools to use as a foundation to better manage and sustain communities.

“It’s really looking at the complexity of those systems and informing residents, the public and private sectors of their choices,” said Matthews Hamabata, the center’s executive director. “We see this as a splendid opportunity to further Hawaii Island as a global knowledge resource. This is one of the few — indeed a very rare example — of a true local-global partnership.”

The project, unveiled Friday at a summit of Big Island public and private decision-makers, is an extension of the work already done by Marian Chertow, a Yale University professor of industrial environmental management.

Chertow and a team of Yale School of Forestry and Environmental Studies students spearheaded the county’s energy sustainability plan, which the county funded and adopted three years ago.

“This is the next phase of the work really,” Hamabata said.

Chertow said the Big Island is an ideal place to conduct such a long-term study because it is relatively easy to track ecosystem changes — from raw materials to solid waste to infrastructure and growth.

“It’s an unbelievable opportunity,” she said. “We’ve studied individual systems, but we want to look at the whole picture and how they interlock. The systems are complex, but they are accessible. We can get a good read on them here.”

Chertow said the way people relate to the natural environment is constantly changing, with a recent focus on sustainability and weaning the state off fossil fuels.

“Connecting with the past and projecting into the future is really becoming part of the consciousness. It’s all about looking back and forward,” she said.

“We are using nature to support our habits, but there are different ways to go about it,” she said. “That’s what you have to think about. People in the academic world have fights about what

sustainable means. It's in the acts and in the process that you will understand true sustainability.”

The summit included nearly 100 county staff and business leaders, the majority of whom were enthusiastic about the potential of such a long-term study, Hamabata said.

“Everybody understands this is an opportunity to see what we are doing and where we are going as an island,” he said. “The work we’ve already done has really opened up the possibilities.”