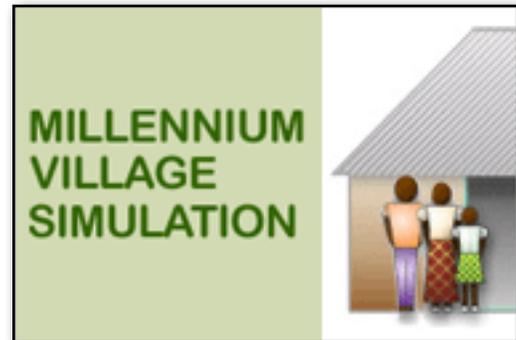## FEATURED PROJECT : MILLENNIUM VILLAGE SIMULATION

The Millennium Village Simulation is a Web-based simulation of economics and survival for one family and their village in a sub-Saharan African village. Developed by the Columbia Center for New Media Teaching and Learning (CCNMTL) and Jeffrey Sachs, Quetelet Professor of Sustainable Development, professor of Health Policy and Management, and director of the Earth Institute, the simulation was created as a study tool for students in Professor Sachs' undergraduate course, Challenges of Sustainable Development. The Millennium Village Simulation is freely available to sustainable development practitioners and the general public.

In a virtual world of extreme poverty, disease, and environmental variability, students are challenged to help a family of two survive and prosper over a fifty-year period. By making decisions regarding the family's allocation of time and financial resources, students develop a greater understanding of the manifold disciplines—such as agronomy, nutrition, economics, epidemiology, public health and development management—that constitute sustainable development and how those disciplines interact with each other in "real world" scenarios.

Students may interact with the simulation from two perspectives —they can opt for the "Family View" where they make purchasing, sales, and effort allocation for a single family, or students can work within the "Village View" and make decisions for the village as a whole. The Millennium Village Simulation simultaneously employs models such as agricultural, logistical growth, climatological, disease, and subsistence/health, all of which are introduced through the environment and with explanations and tutorials about the models and their role in the simulation. Instructors can manipulate these models to produce more challenging scenarios for students to experience in the simulation.

The creators and project partners of the Millennium Village Simulation hope that, by immersing themselves in the daily life of a family, students will identify more deeply with the complex experience of extreme poverty. The integrated approach of the simulation makes this project the first of its kind that allows students to interact in an environment reflective of the realties in impoverished settings around the world.

"The Millennium Village Simulation represents a new level of engagement for students, where they address the intricate issues of sustainable development in an experiential learning situation that mirrors real-word challenges. Students can step outside of the classroom and into a village, testing what they have learned to further develop their knowledge and understanding of global needs," explains CCNMTL executive director Frank Moretti.

The simulation's Web site is available to the public: http://millenniumvillage.ccnmtl.columbia.edu.

Students in the Challenges of Sustainable Development course discover how to use the simulation.

The simulation's user interface allows students to view aggregate results of their performance.

For more information please visit http://ccnmtl.columbia.edu/ or email ccnmtl@columbia.edu