



Professor Malin Falkenmark

Professor Malin Falkenmark is the Senior Scientist at the Stockholm International Water Institute (SIWI). Until 2003 she was also Chair of the Scientific Program Committee for the Stockholm Water Symposium, an annual meeting on global water issues which she helped establish in 1991 and which today is convened each August to develop practical solutions and strategies that will help to alleviate the world water crisis.

Prof. Falkenmark is Professor Emerita of Applied and International Hydrology at the former Swedish Natural Sciences Research Council and tied to the Department of Systems Ecology at the Stockholm University.

For many years Prof. Falkenmark worked as a hydrologist at the Swedish Meteorological and Hydrological Institute in Stockholm. Since 1965 she has served as Scientific Secretary and later also Executive Member of the Committee for Hydrology at the Natural Sciences Research Council, Stockholm, where in 1986 she received a personal chair as Professor of Applied and International Hydrology. During her career, Prof. Falkenmark has served as an expert in several international and Swedish Governmental Committees. Since 1993 she has been a member of the UN Committee on Natural Resources and was in 1999 elected to the Committee on Energy and Natural Resources for Development by the United Nations' Economic and Social Council (ECOSOC).



Among her most influential achievements in Sweden is the chairing of two preparatory committees at Linköping University and the planning of interdisciplinary research at a new Department on Water and Environmental Studies, which has now produced more than 80 PhDs.

Prof. Falkenmark is an outstanding environmental scientist and synthesiser, with particular interest in the linkages between humans, land and water. She is one of a small group of analysts of large-scale global and regional water problems whose work with broad perspectives has been instrumental in raising the profile of water issues internationally. Prof. Falkenmark takes a geographical approach, involving both natural and social science in her broad-scale analyses.

Her work has resulted in an increased interest in applying holistic views on the complex hydrological processes, in which the socio-economic and the environmental aspects are added to the hydrological processes.

Much of Prof. Falkenmark's work deals with the problem of water scarcity in developing countries. She showed early on that the number of individuals that society can successfully support depends on many factors, among which are climate, patterns of water use, technology used and water management capability. She has also claimed that population growth drives countries with low per

capita water availability towards a water barrier, which will make it increasingly difficult to satisfy further water demands.

Prof. Falkenmark's achievements in comparative hydrology are outstanding. She was the first scientist to demonstrate what incorrect and unusable conclusions may arise when results obtained from the temperate zone analyses are applied to other climatic zones. Hydrological predictions are often not transferable from one region to another. This is an extremely important discovery that will seriously question the benefits of many scientific and technical assistance projects to developing countries.

Prof. Falkenmark challenged the Brundtland Commission in 1987 since it grossly overlooked global water issues. She has demonstrated that water should have the same as or higher priority than global warming, ozone depletion, biodiversity and forestry.

In an August 18, 1998, acceptance speech in Helsinki, Finland, when she received the 1998 International Hydrology Prize, Prof. Falkenmark said: "My ambition has been to get scientists in other fields like ecology and social sciences to understand fundamental hydrological phenomena and processes; in other words, to realise that one can never cheat the water cycle."

She also issued a call to action for hydrologists. "Due to the central role of the water cycle for life on this planet, hydrologists are crucial for attacking both the pollution-related problems that are already with us, and the life support problems that we can foresee when we are to feed a world population expanding with some 80 million people every year well into the next century."

Prof. Falkenmark is a globally well-known generalist in the field of water resources and has written some 250 papers. Her particular interests are interdisciplinary and focus on regional similarities and differences, especially land/water linkages and their policy implications. Within UNESCO's International Hydrology Programme she initiated and co-edited (with Tom Chapman) the textbook "Comparative Hydrology."

In 2004, "Balancing Water for Humans and Nature," the book she authored together with Dr. Johan Rockström, was published by Earthscan Publications.

She has been Scientific Advisor to the Global Environment Facility and to the Comprehensive Freshwater Assessment of the World. She is a Global 500 Laureate and was awarded the Great Prize of the Royal Institute of Technology in Stockholm in 1995 and the Volvo Environmental Prize in 1998 (shared with Prof. David Schindler, Canada). In 1999, she also collected another prestigious prize, The Henry Darcy Medal, awarded by the European Geophysical Society.

Since 1998 she has been one of the Scientific and Technical Advisors to the Global Water Partnership. In 2000, she was a distinguished presenter at the World Economic Forum meeting in Davos, and in 2003 was invited to join the Millennium Project as a member of the Task Force on Environmental Sustainability.

Prof. Falkenmark received her education at Uppsala University, Sweden. In her Ph. Lic. she specialised in hydrology with a thesis in 1963. In 1975 she was conferred a Ph. D. Honoris Causa at Linköping University.

She is regularly invited as a speaker to key water and related fora around the world.

SIWI - Independent, Leading-Edge Water Competence for Future-Oriented Action

The Stockholm International Water Institute (SIWI) is a policy think tank that contributes to international efforts to combat the world's escalating water crisis. SIWI advocates future-oriented, knowledge-integrated water views in decision making, nationally and internationally, that lead to sustainable use of the world's water resources and sustainable development of societies.