Hans Rudolf Herren

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Hans Rudolf Herren (born 1947 in Muehleberg, Switzerland)[1] is a Swiss entomologist, farmer[2] and development specialist. He was the first Swiss who received the 1995 World Food Prize and the 2013 Right Livelihood Award for leading a major biological pest management campaign in Africa, successfully fighting the Cassava mealybug and averting a major food crisis that could have claimed an estimated 20 million lives.[3]

Herren is the president of the Washington-based Millennium Institute[4] and co-founder and president of the Swiss foundation Biovision[5] He co-chaired the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) until 2008[6] and is the former Director General of International Centre of Insect Physiology and Ecology (*icipe*) and is currently involved in the preparations of the United Nations' 20th Conference on Sustainable Development with Biovision Foundation and Millennium Institute.

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Career

After receiving his M.Sc. in Agronomy from the ETH Zurich and his doctorate in Biological Control from the same University in 1977, Herren did his post-doctoral studies in Biological Control of insect pests at the University of California at Berkeley.[7]

Only 32-years old, Herren then went to work for the International Institute of Tropical Agriculture (IITA) in Ibadan, Nigeria. There he built the Biological Control Program and designed and implemented the largest biological pest-management known to date fighting the Cassava Mealybug (*Phenacoccus manihoti*) and saving an estimated 20 million lives by averting a major food crisis. For this achievement he received numerous awards including the 1995 World Food Prize[3] and the 2003 Tyler Prize for Environmental Achievement.[1]

Herren then developed a number of other biological control programs against field and tree crops as well as aquatic weeds across sub-Saharan Africa.[8] Subsequently Herren became Director of the International Centre of Insect Physiology and Ecology (ICIPE) and from 1994 until 2005 was also the Editor-in Chief of the Journal *Insect Science and Its Application*.[2][9] Since 2005 he has headed the Washington-based Millennium Institute dedicated to system dynamics modeling for scenario-based sustainable development policy support.[10] With some of his prize money he went on to co-found Biovision Foundation in 1998 in Zurich. The organization works with pilot projects, communication projects and political projects to foster ecological development in the global North and South and has grown to an annual budget of over 5$ Mio. Herren is also part of Worldwatch Institute's Nourishing the Planet Advisory Group.[11]

From 1999 until 2007 Herren was the President of the International Association for the Plant Protection Sciences (IAPPS).[7] From 2006 until 2010 Herren was a two-term member of the Consortium of International Agricultural Research Centers (CGIAR) Science Council.[12] Herren was also a member of the Scientific Advisory Council of the Swiss Institute of Technology in Lausanne from 2005 until 2011.[7]

Opinion

Dr. Herren frequently holds lectures, and has been interviewed on the radio and in print magazines.[13][14]

Based on his deep and long experience in biological control, sustainable agriculture and rural development issues Herren is an outspoken proponent of agro-ecology, organic and other forms of sustainable agriculture. He criticizes that GMOs currently, and most probably also in the future, offer no significant economic or social advantages to poor small-scale farmers, that they reduce the resilience of agricultural systems through reducing the diversity of crops

and the genetical diversity within varieties at a time when more diversity is needed from crop/animal to system levels. According to Herren: "today's GMOs don't produce more food, they help cut production costs, in the first few years until insects and weeds catch up again, as we have seen earlier with the use of insecticides. That's why we introduced Integrated Pest Management (IPM), which was meant to treat the causes of pest outbreaks. The GMO crop cultivars that are used today are basically a step back, to the pre-IPM period. Many pest problems can actually be solved with classical breeding and marker assisted breeding methods, that do not force farmers into costly licensing agreements with seed companies or lock them into the use of specific herbicides."[15]

Dr. Herren believes the way forward was well described in the IAASTD Report co-chaired by himself. It called for a change in paradigm, the transition of the industrial and external energy dependent agriculture into a multifunctional agriculture that promote a systems approach to production and problem solving. The report suggests that business as usual is not an options and recommends at five sub global and global level a number of action in research and implementation that address from a causal approach the food and nutrition security now and for the decades ahead. Dr Herren has been at the forefront of the conversation and action for the implementation of the IAASTD report, which was sponsored by 6 UN agencies and the World Bank, involving over 400 scientists, NGOs and the private sector and had been endorsed at the final plenary by 59 countries from around the world.[16][17]

Prizes and memberships

Dr. Herren was awarded an honorary professor title (Prof. h.c.) from Hubei University, Wuhan, PRC in 2004 and received an honorary doctorate (Doctor es Science Honoris Causa) from Kenyatta University, Nairobi, Kenya

- 1991 Sir and Lady Rank Prize for Nutrition[18]
- 1991 Merit Award for Outstanding Service to Crop Protection from the XII International Plant Protection Congress at Rio de Janeiro[2]
- 1995 World Food Prize[3]
- 1995 Kilby International Award
- 2002 Dr. J.E. Brandenberger Prize[19]
- 2003 Tyler Prize for Environmental Achievement[1]
- 2010 One World Award[20]
- 2013 Right Livelihood Award[21]

Dr. Herren is a foreign associate of the US National Academy of Sciences (NAS) since 1998[22] and an Associate Fellow of TWAS, the academy of sciences for the developing world.[23] He is also a member of the Entomological Society of America, the African Association of Insect Scientists, the International Organization for Biological Control, the American Institute of Biological Science and the American Association for the Advancement of Science.[2]

In 2011 the journalist Herbert Cerutti published Herren's biography titled "Wie Hans Rudolf Herren 20 Millionen Menschen rettete" in German. The organizers of the World Food Prize produced a video on Dr. Herren's achievements.[24]

Publications

Herren has published extensively (over 70 articles).[1][2] His own publications include the following:

- Herren, H.R. (2011). "No sustainable development without healthy, nutritious and culturally adapted food for all". UNEP Perspectives on Rio+20 on http://www.unep.org/environmentalgovernance/PerspectivesonRIO20/HansHerren/tabid/78431/Default.aspx
- Pretty, Jules; Sutherland, William J.; Ashby, Jacqueline; Auburn, Jill; Baulcombe, David; Bell, Michael; Bentley, Herren, Hans; …. "The top 100 questions of importance to the future of global agriculture", International Journal of Agricultural Sustainability, Volume 8, Number 4, 2010-11-30
- Herren, H.R.; Mbogo, C. "The Role of DDT in Malaria Control", Environmental Health Perspectives, 2010
- Beverly D. McIntyre, Hans R. Herren, Judi Wakhungu, Robert T. Watson. "IAASTD International Assessment of Agricultural Knowledge, Science and Technology for Development: Global Report", International Assessment of Agricultural Knowledge, Science, and Technology for Development (Project), Island Press, 2009
- Andrea M. Bassi, A. Drake, E.L. Tennyson and H.R. Herren. 2009. "Evaluating the Creation of a Parallel Non-Oil Transportation System in an Oil Constrained Future", TRB Conference: Annual Conference of the Transportation Research Board of the National Academies of Science, Engineering, and Medicine, January 11–15, 2009, Washington DC, USA.
- Pasquet RS, Peltier A, Hufford MB, Oudin E, Saulnier J, Paul L, Knudsen JT, Herren HR, Gepts P. 2008. Long-distance pollen flow assessment through evaluation of pollinator foraging range suggests transgene

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- Herren, H. & Baumgärtner, J. (2007). From Integrated Pest Management to adaptive Ecosystem Management. In S.J. Scherr & J.A. McNeely (Eds.), Farming with Nature: the science and practice of ecoagriculre. Washington D.C.: Island Press.
- Fritz J. Häni, Laszlo Pinter and Hans R Herren. 2007. Sustainable Agriculture: from common principles to common practices. Proceeding and outputs of the first symposium of the international forum on assessing sustainability in agriculture. March 16, 2006, Bern, Switzerland. Edited by Fritz J. Häni, Laszlo Pinter and Hans R Herren. Published by IISD
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- Herren, H.R. 2003. Genetically engineered crops and sustainable agriculture, in: Methods for Risk Assessment of Transgenic Plants, 35, IV. Biodiversity and Biotechnology. K. Ammann, Y. Jacot and R. Braun (eds), 2003 Birkhäuser Verlag Basel/Switzerland
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Herren was coordinating author of the Agriculture Chapter of UNEP's "Green Economy Report" (2011).[25]

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2. ^ a b c d e "Spring 1998 York Lecturer Biographical Sketch: Hans Herren" (http://yorklecture.ifas.ufl.edu/Herren.htm). University of Florida. Retrieved 2012-10-24.
3. ^ a b c "1995: Dr. Hans Rudolf Herren" (http://www.worldfoodprize.org/en/laureates/19871999_laureates/1995_herren). World Food Prize. Retrieved 2012-10-24.
4. ^ http://www.millenniuminstitute.net/about/hans.html
5. ^ http://www.biovision.ch/en/biovision/wer-wir-sind/stiftungsrat/dr-hans-rudolf-herren/
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12. ^ Media biographies (http://www.cgiar.org/pdf/agm07/agm07_media_biographies.pdf). CGIAR.
13. ^ Brussels Policy Brief (http://brusselsbriefings-videos.net/110202/EN/05/)
14. ^ interview on the Gary Null Show (http://www.progressiveradionetwork.com/the-gary-null-show-wnye/)
15. ^ "Hans R. Herren" (http://www.globalchange-discussion.org/interview/hans_herren). Global Change Discussion. Retrieved 2012-10-24.
16. ^ "What Will the World Eat? Dr. Hans R. Herren (2 of 5)" (http://www.youtube.com/watch?v=bo7mxGzGkOU&feature=related). YouTube. 2010-01-27. Retrieved 2012-10-24.

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External links

- Biovision Foundation (http://www.biovision.ch)
- Millennium Institute (http://www.millennium-institute.org)
- IAASTD Report (http://www.agassessment.org)
- World Food Prize (http://www.worldfoodprize.org)

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