

International Symposium
29–30 January 2013
Stockholm, Sweden

Global **O**utlook

FUTURE COMPETITION FOR LAND AND WATER



ROYAL SWEDISH ACADEMY OF AGRICULTURE AND FORESTRY

GLOBAL OUTLOOK – an International Symposium as part of the celebration of the 200th anniversary of The Royal Swedish Academy of Agriculture and Forestry

The world of today is characterized by an ever increasing globalization. The terms of the global trade affect our Swedish basic industries. The turmoil in the financial markets is greater than it has been for many years, creating uncertainty and disturbances. One of the challenges is to support a growing world population with food, water and energy in a sustainable way.

The times were turbulent also when our academy was founded 200 years ago. Sweden was a poor country that had just lost Finland to Russia. One of Napoleon's marshals was put on the royal throne and became King Karl XIV Johan. The new king of Sweden chose to develop the country within its boundaries, and to improve agriculture, through research, development and dissemination of knowledge. Therefore, he took the initiative in establishing an Academy for Agriculture.

Much has happened since then. Sweden has indeed developed within its borders to become a successful industry and welfare nation. The role of the Academy is different today. We do not exercise any public authority or have any official administrative tasks any longer. Instead, we have become an important meeting place and a forum for discussion and exchange of information and experience. In the circle of fellows there are experienced and knowledgeable practitioners from agriculture, forestry and industrial operations as well as well-reputed researchers and also officers in high positions in the Swedish public administration. Our valued foreign fellows hold corresponding positions in their home countries.

Global development requires a sustainable use of natural resources and protection of people and the environment. Environmental degradation and depletion of natural resources is a result of a number of factors in a complex context. There is now a broad consensus that greenhouse gases contribute to climate change. The conditions of the agricultural sectors are affected, by a clear political focus on greenhouse gas emissions, as well as by the consequences of climate change that alter the international competitiveness of farming. Primary products from forests and fields will play an increasing role both as energy carriers (as replacements for coal, gas and oil), as replacements for petrochemical products and processes, and as substitutes for energy-intensive, non-renewable building materials.

In 2013, the Academy's 200th anniversary will be celebrated by both historical retrospection and looks at future scenarios in the international perspective. Part of this celebration is the symposium "Global Outlook".

Welcome!

Kerstin Niblaeus
President

Carl-Anders Helander
Academy Secretary and Director

The Royal Swedish Academy of Agriculture and Forestry
www.ksla.se

THIS SYMPOSIUM IS FINANCED BY THE KNUT AND ALICE WALLENBERG FOUNDATION.

Global Outlook

Future Competition for Land and Water

With an expected world population of 9 billion people in 2050, the global need for Food, Feed, Fibre and Fuel has become a matter of high political concern. In order to satisfy the ever increasing needs of “the four Fs”, there will be a progressively severe competition for limited land and water resources. We will highlight this from four different perspectives:

Agricultural policies over the past 40 years – three cases

The overarching goal of this session is to draw attention to the political aspects of farming, emphasizing that policies are as important for development and increasing production as are for example good soil conditions. Three cases have been chosen to illustrate different courses of development during the last 40 years: the EU, the US and New Zealand.

Opportunities and challenges for farmers, researchers and business in the agricultural sector

To feed an ever growing global population we will need to produce 70 percent more by 2050. This we have to achieve from less land, while at the same time reducing our use of resources such as fossil energy, fertilizers and plant protection systems. This session, however, will focus on the farmer’s challenge to produce a range of crops, livestock and biomass in the sustainable way that is needed with respect to the generations to come.

Opportunities and challenges in the forestry sector

The growing demand for wood fibre contributes to the pressure on the land resources. Currently, this is mainly seen in Asia and other growing economic regions of the developing world. Investors are increasingly interested in Africa, which, in spite of its own rapidly increasing needs for wood is considered to have major reserves of under-utilised land. In South America and Northern Europe the number of social conflicts is increasing as a result of land use and rights disagreements.

From knowing to acting – paths to a sustainable future

To create a sustainable future, scientists, economists, politicians and social scientists will need to work together with practitioners and local communities. Broad collaborations will be needed on the regional as well as the international arena. The concept of planetary boundaries sets the scene, and we need to find new, smarter and more efficient ways to give people better lives within nature’s limitations. Research and practical knowledge is the foundation, but it is worth nothing if not put to use.



1813–2013

GLOBAL OUTLOOK – INTERNATIONAL SYMPOSIUM

Tuesday 29 January – Session 1 09.30–12.30

Agricultural policies over the past 40 years – three cases

Welcome address and introduction to the Symposium

Dr. Kerstin Niblaeus, President of the Royal Swedish Academy of Agriculture and Forestry (KSLA)

Programme

Moderator: Professor Mats Morell, Department of Economic History, Stockholm University, Sweden

- The EU's Common Agricultural Policy 1973–2013 – a policy reformed, or is it just the same?
Professor Alan Swinbank, University of Reading, United Kingdom
- Cultivating Conflict and Change – the contours of US Agricultural policy
Professor Bill Winders, Georgia Institute of Technology, USA
- Agricultural policies in New Zealand – taking advantage of the global knowledge economy
Dr. Philipp Aerni, Swiss Federal Institute of Technology Zurich, Switzerland
- Panel discussion

Speakers

PhD Alan Swinbank is Professor Emeritus of Agricultural Economics at the University of Reading. His research has focused on the farm, food and bioenergy policies of the EU and their interaction with the WTO. He has lectured, advised, and published extensively on these topics. His latest books are *Ideas, Institutions, and Trade: The WTO and the Curious Role of EU Farm Policy in Trade Liberalization* (with Carsten Daugbjerg, Oxford University Press 2009) and *An Inside View of the CAP Reform Process: Explaining the MacSharry, Agenda 2000, and Fischler Reforms* (with Arlindo Cunha, Oxford University Press 2011).

PhD Bill Winders, Associate Professor at Georgia Institute of Technology, is a sociologist whose research focuses on topics including the politics of national policies (especially agricultural policy), the world economy, and social movement dynamics. His book, *The Politics of Food Supply: US Agricultural Policy in the World Economy*, won the 2011 Book Award from the Political Economy of the World-System, given each year to recognize outstanding scholarship in global or comparative-international sociology. His current research examines food crises in the world economy, such as the 2008 food crisis that saw food prices and world hunger rise dramatically.

Dr. Philipp Aerni graduated in Geography and Economics at The University of Zurich and received his PhD from the Institute of Agricultural Economics at ETH Zurich. Subsequently he continued his postdoctoral research at Harvard University and the Institute for Comparative and International Studies at ETH Zurich. His main research interest is innovation for development. In this context he co-founded the organization African Technology Development Forum (ATDF) in Geneva (www.atdforum.org). He is currently employed at the Institute for Environmental Decisions at ETH Zurich and the Food and Agriculture Organization of the United Nations (FAO) in Rome, where he coordinates a project called 'Remuneration of Positive Externalities (RPE)/Payments for Environmental Services (PES) in the Agricultural and Food Sectors'.

Professor Mats Morell, moderator, has published extensively on early modern and recent Swedish agricultural history and is the author of part 4 of *The Swedish agrarian history (1870–1945)*. Together with Janken Myrdal he edited *The agrarian history of Sweden from 4000 BC to AD 2000* (2011). He is also co-editor and co-author of the Corn volume *Rural Economy and Society in North-Western Europe, 500–2000: Social relations, Property and power* (2010).

GLOBAL OUTLOOK – INTERNATIONAL SYMPOSIUM

Tuesday 29 January – Session 2 14.00–17.00

Opportunities and challenges for farmers, researchers and business in the agricultural sector

Programme

Moderator: *Dr. Bo Andersson, Vice President of KSLA*

- Global agricultural policy from a farm gate perspective
Professor Robert Thomson, University of Georgetown, USA
- New targets for plant breeding and the challenge of sustainable intensification
Professor John Pickett, Rothamsted Research, United Kingdom
- The consumer perspective – not just market solutions?
EU parliamentarian Marit Paulsen, Sweden
- A farmer's perspective
Dairy farmer Elisabeth Gauffin, Sweden
- Panel discussion

Speakers

Dr. **Robert Thompson**, Professor Emeritus at the University of Illinois at Urbana-Champaign, where he held the Gardner Endowed Chair in Agricultural Policy. Dr. Thompson was formerly Dean of Agriculture at Purdue University and Director of Rural Development at the World Bank. He is a Fellow of the Royal Swedish Academy of Agriculture and Forestry and a Visiting Scholar at Johns Hopkins University's School of Advanced International Studies in Washington, DC.

Professor **John Pickett** is Michael Elliott Distinguished Research Fellow and Scientific Leader of Chemical Ecology at Rothamsted Research, north of London, which has initiated and implemented research in cropping systems and soil science since 1843. He is Honorary Professor at the University of Nottingham, Honorary Member of the Academic Staff at the University of Reading and a Fellow of the Royal Swedish Academy of Agriculture and Forestry.

Dr. of Veterinary Medicine h.c. **Marit Paulsen** is a EU-parliamentarian from Sweden. The focus and commitment of her political work has been on issues regarding production and consumption of food from a Swedish as well as from an EU perspective. She is the vice chair in the Committee on Agriculture and Rural Development at the European Parliament.

MSc Agriculture **Elisabeth Gauffin** runs a dairy farm together with her family 70 km north of Stockholm. Their farm, in collaboration with seven other farms, markets their dairy products in the Stockholm area under their own brand. She is the chairman of KRAV, the Swedish member organization of IFOAM, the International Federation of Organic Agriculture Movements, and she has been vice chairman of Federation of Swedish Farmers (LRF) and a member of the board of Arla FoodsAmba. She is also a Fellow of the Royal Swedish Academy of Agriculture and Forestry.

Dr. **Bo Andersson**, moderator, is the vice president of the Royal Swedish Academy of Agriculture and Forestry. In the early 1980s he upheld an appointed professorship in farm business administration at the Swedish University of Agricultural Sciences and is today retired from a position as Senior Vice President at Swedbank, one of Sweden's largest banks.

GLOBAL OUTLOOK – INTERNATIONAL SYMPOSIUM

Wednesday 30 January – Session 3 09.30–12.30

Opportunities and challenges in the forestry sector

Programme

Moderator: *Dr. Björn Lundgren, Chairman of the Committee for International Forestry Issues, KSLA*

- A global overview: is there enough land for food, fibre and fuel?
Professor Sten Nilsson, CEO, Forest Sector Insights AB, Stockholm, Sweden
- Future development in Africa
Professor August Temu, Deputy Director General, World Agroforestry Centre, Nairobi, Kenya
- Future development in China
Professor Jintao Xu, Natural Resource Economics, Department of Environmental Sciences, Peking University, China
- Tenure and land use issues in industrial forestry – South America and the Nordick countries
Professor Jan-Erik Nylund, Swedish University of Agricultural Sciences, Uppsala, Sweden
- Panel discussion

Speakers

Professor **Sten Nilsson** has had a distinguished academic career in forest sector analysis with emphasis on policy analysis. He joined the International Institute for Applied Systems Analysis (IIASA) in 1986, where he was Deputy respectively Acting Director between 2002 and 2009. He is a Fellow of, among others, the Royal Swedish Academy of Agriculture and Forestry, and has held a number of consultancies in industry, governments and organisations such as the World Bank, FAO, OECD, European Commission and SIDA.

Professor **August Temu** is Deputy Director General for Partnership and Impact at the World Agroforestry Centre (ICRAF). Earlier he served as Dean of the Faculty of Forestry and Nature conservation at Sokoine University in Tanzania. He has written extensively on forestry, agriculture and natural resources education and research. He established and was the first Executive Secretary of The African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE). In 2000 he was admitted as a Fellow of the Royal Swedish Academy of Agriculture and Forestry.

Professor **Jintao Xu** is currently a professor of natural resource economics at the College of Environmental Sciences and Engineering, Peking University. Currently his research focuses on surveys and analyses of forest tenure and regulatory reform in rural China. He has been active in policy dialogue and consultation in China's forest and environmental sectors. Currently he is the leader of the Environmental Economics Program in China (EEPC), where he is building capacity to conduct rigorous economic analysis into China's environmental and natural resource policies.

Professor **Jan-Erik Nylund** has an MSc in Forestry from Helsinki University and a PhD from Uppsala University. He is teaching Forest Policy in the Masters' programme Forest Industrial Economics at the Swedish University of Agriculture. He has sandwiched academic work with long term overseas assignments since the 1970s. During the last decade, he has been focusing on social consequences of large-scale pulp ventures in South America, particularly Brazil, but also on forest legislation, land right issues and related conflicts in Sweden.

Dr. Björn Lundgren, moderator, has a broad international experience, especially from Africa, but also from Asia, Central America and the Caribbean. Among others he is Founder Member and Member Governing Council of the African Forest Forum and was a member of the Board of the African Forest Research Network (AFORNET), Kenya. He has been Director General of the International Centre for Research in Agroforestry (ICRAF) Nairobi and director for the International Foundation for Science (IFS) in Stockholm. He is also an Honorary Fellow of the Royal Swedish Academy of Agriculture and Forestry.

GLOBAL OUTLOOK – INTERNATIONAL SYMPOSIUM

Wednesday 30 January – Session 4 14.00–17.00

From knowing to acting – paths to a sustainable future

Programme

Moderator: Executive Director **Johan Kuylenstierna**, Stockholm Environment Institute, Stockholm, Sweden

- Key Note Address: Creating a Sustainable Future – how to get more out of less on this only one earth
H.E. Dr. Jacques Diouf, Minister and Personal Adviser to the President of the Republic, Senegal
- Inspired by nature – how science and knowledge of nature's own materials, methods and mechanisms can give us a sustainable future
Professor Paul Alan Cox, Institute for Ethnomedicine, Wyoming, USA
- Knowing but not doing. Why changing is so hard even with abundant knowledge
Professor Susan Baker, Cardiff University, Wales, United Kingdom
- Panel discussion

Speakers

Dr. **Jacques Diouf**, Director-General of FAO 1994–2011, has played a decisive role in raising awareness among world leaders about the need for peace and freedom from hunger. Dr. Diouf has tirelessly insisted on the necessity for investments in agriculture as the path to food security and economic growth. After an illustrious career, including 18 years as head of the Food and Agriculture Organization of the United Nations, Dr. Diouf has been appointed Minister and Personal Adviser of the President of the Republic, Senegal, and an Honorary Fellow of the Royal Swedish Academy of Agriculture and Forestry.

Dr. **Paul Alan Cox** is Director of the Institute of Ethnomedicine in Wyoming. He was the first King Carl XVI Gustaf Professor of Environmental Biology in 1997–1998, jointly hosted by the Swedish Agricultural University and Uppsala University. As an ethnobotanist, he seeks to explore the cornucopia of nature in search for new medicines, materials, and designs that can lead towards a sustainable society. Dr. Cox is a Fellow of the Royal Swedish Academy of Agriculture and Forestry since more than a decade.

Dr. **Susan Baker** is Professor of Environmental Social Science at the Cardiff School of Social Sciences and Lead Academic at the Sustainable Places Institute, Cardiff University, Wales. She is deeply interested in the governance requirements for the promotion of sustainable development, especially in the context of global environmental change. She has recently been working on ecological restoration, including the use of restoration initiatives for improvements in ecological integrity (Borneo) and for the provision of food security (Turks and Caicos Islands). Professor Susan Baker was the first woman to receive the prestigious HM Carl XIV Gustaf Professorship in Environmental Science and spent 2002–2003 at Umeå University. Dr. Baker is also a Fellow of the Royal Swedish Academy of Agriculture and Forestry.

Mr. **Johan L. Kuylenstierna**, moderator, is Executive Director for SEI and Adjunct Professor in international water resources issues at Stockholm University. He has held positions within the UN system in Rome, Geneva and New York, focusing on water and climate change issues. Mr. Kuylenstierna has also worked as a consultant for many years with a focus on environmental management, corporate social responsibility (CSR) and communication. Mr. Kuylenstierna is a Fellow of the Royal Swedish Academy of Agriculture and Forestry.

GLOBAL OUTLOOK

FUTURE COMPETITION FOR LAND AND WATER

- DATE & TIME** Tuesday 29 – Wednesday 30 January, 2013, 09.30–12.30 and 14.00–17.00.
Each session day starts with registration and coffee from 08.30.
NB. Seats need to be taken no later than 5 minutes before the beginning of each session.
- PLACE** **Norra Latin City Conference Centre**, Stockholm, Sweden
Entrance: Barnhusgatan 7 B
Information about the venue: <http://www.stoccc.se/en/norra-latin-/norra-latin/>
- REGISTER** No later than 21 January, 2013: <http://www.ksla.se/aktivitet/global-outlook/>
- FEE** No fee, but SEK 500 will be invoiced to cover our costs if cancellation is made after 25 January, 2013.
- INTERNET** The Symposium will be webcast. Please find link on www.ksla.se.
- INFORMATION** Ms. Gun Askerö, gun.askero@ksla.se, tel +46 8 54 54 77 12 or
Ms. Eva Ronquist, eva.ronquist@ksla.se, tel +46 8 54 54 77 06

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KSLA 1813–2013

Mark the dates – more activities to celebrate the anniversary!

23 May: Reception/"Open House". The Academy building, Drottninggatan 95 B, Stockholm.

11 June: Anniversary Conference "for Future Harvests". Aula Magna, Stockholm University, Frescati, Stockholm



THE ROYAL SWEDISH ACADEMY OF AGRICULTURE AND FORESTRY