

CONFERENCE PROGRAMME

TUESDAY 29 JUNE 2010

ATV



SUSTAINABLE FOOD SYSTEMS

FOOD FOR ALL
FOREVER



INTRODUCTION

There is no simple solution to sustainably feeding 9 billion people.

Therefore, it is with great pleasure that the Danish Academy of Technical Sciences, ATV, and the International Council of Academies of Engineering and Technological Sciences, CAETS, invite you to Copenhagen to participate in an international conference on 29 June 2010.

The world is facing a major challenge: Match the fast changing demand for food from a larger and more wealthy population; do so in ways that are environmentally, economically and socially sustainable; and ensure that the world's poorest people are no longer hungry.

Such a challenge requires changes and new solutions in the way food is produced, stored, processed, distributed and policy reformed.

The right **technological solutions** combined with the **right policy directions** for the future are explored on the conference. ATV and CAETS believe that in combination these can effectively contribute to a sustainable and equitable global food system.

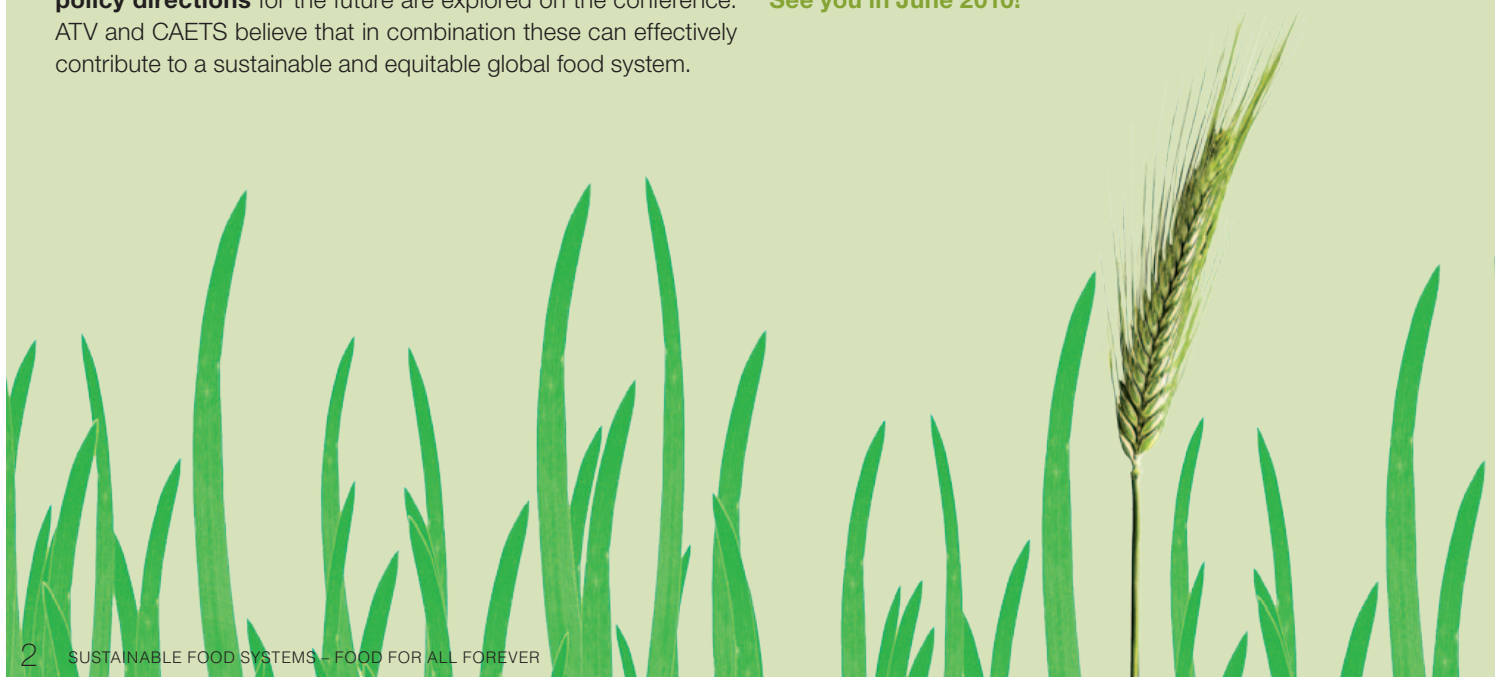
ATV and CAETS wish to facilitate an open debate, a free exchange of ideas and discussion of new future-oriented solutions. Our joint challenge on the conference is to identify the real problems and the effective answers which - at the same time - will increase food production, reduce poverty and hunger and reduce over-exploitation of natural resources.

We are pleased to release the final version of the conference programme. The programme is balanced with presentations, panel discussions and Q&A sessions, all added interactivity.

This final version of the programme for the Food for All Conference contains abstracts of the presentations and a short biography of all speakers.

ATV and CAETS look forward to welcoming you to Copenhagen. We have the makings of an outstanding conference, with opportunities to meet old friends and to make new ones.

See you in June 2010!





FEEDING 9 BILLION PEOPLE





LOOKING TOWARDS 2050 AND BEYOND

This section will present the best available estimates of future trends for food security and natural resource management and identify the most important factors that will influence these trends. Policy interventions will be suggested to guide the trends towards desired societal outcomes and the compatibility of food security and sustainability goals will be analyzed.

PROGRAMME

→ 8.30 **REGISTRATION**

9.00 **OPENING**

Welcome by Chairman of the Organising Committee Executive Director **Michael Stevns**, Danish Agriculture & Food Council

Opening address by The Danish Minister for Development Cooperation H.E. Søren Pind, MF

Opening remark by former EU Commissioner for Agriculture Mariann Fischer Boel

Conference moderator Kim Bildsøe Lassen, Danish Broadcasting Corporation

ASSURING FOOD FOR ALL

Director General **Shenggen Fan**, International Food Policy Research Institute

See abstract and short biography on page 9.

ASSURING SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

President, Dr. **Marion Guillou**, French National Institute of Agricultural Research

See abstract and short biography on page 9

ARE THE TWO GOALS COMPATIBLE?

Professor **Per Pinstrup-Andersen**, Cornell University

See abstract and short biography on page 10.

BREAK



SOLUTION ASPECT I

REFORMING THE FOOD PRODUCTION SYSTEM

AGRICULTURE, FOOD SECURITY AND CLIMATE

Professor, Dr. Agro **John R. Porter**, University of Copenhagen
See abstract and short biography on page 10.

➡ 12.40 - 13.50 LUNCH

SYNERGY BETWEEN FOOD SECURITY AND NATURAL RESOURCE MANAGEMENT THROUGH AGRO-ECOLOGICAL METHODS

Chairman **Thomas Hartung**, International Centre for Research in Organic Food Systems
See abstract and short biography on page 11.

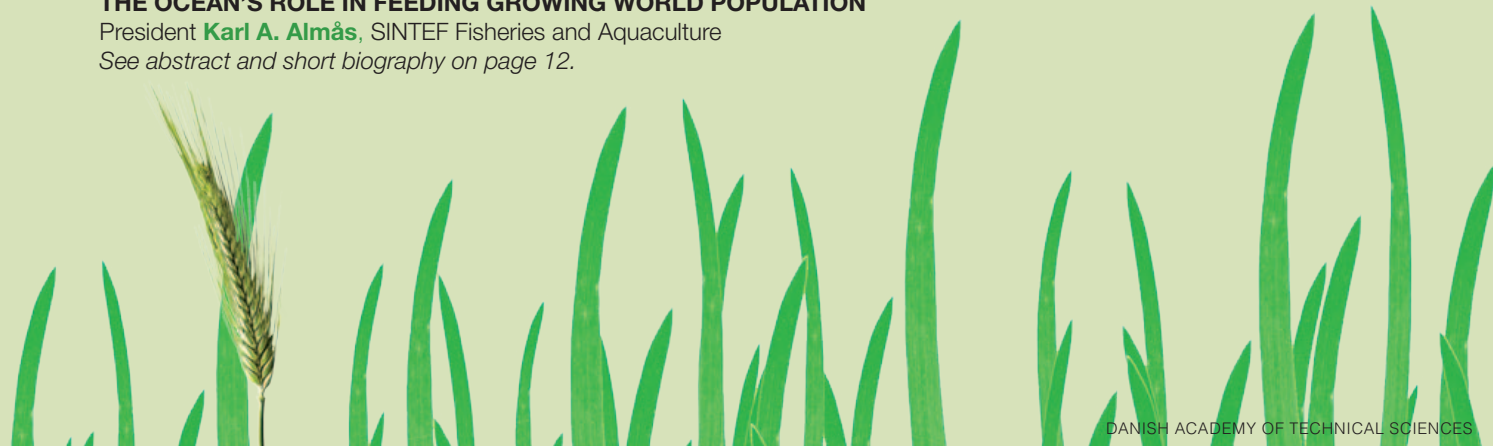


THE ROLE OF AGRICULTURE RESEARCH AND MOLECULAR BIOLOGY TO ACHIEVE SUSTAINABLE FOOD SECURITY FOR ALL

Coordinator **Roberto Rodrigues**, GV Agro
See abstract and short biography on page 11.

THE OCEAN'S ROLE IN FEEDING GROWING WORLD POPULATION

President **Karl A. Almås**, SINTEF Fisheries and Aquaculture
See abstract and short biography on page 12.



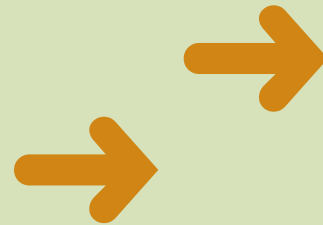
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SOLUTION ASPECT II

RETHINKING THE PROCESSING AND SUPPLY CHAIN



THE REAL VALUE OF FOOD

Global Supply Chain Director Sustainable Agriculture **Jan Kees Vis**, Unilever
See abstract and short biography on page 12.

TOWARDS SUSTAINABLE FOOD PACKAGING

Manager Environmental Affairs **Ola Svending**, Stora Enso
See abstract and short biography on page 13.

ENERGY EFFICIENCY IN THE FOOD CHAIN

Dr. **Dennis R. Heldman**, University of California, Davis
See abstract and short biography on page 13.

BREAK



SOLUTION ASPECT III

MOVING TOWARDS ECONOMIC INCENTIVES AND FULL COSTING

MARKET ORIENTATION AND POLICY REFORMS

Chief Economist and Senior Vice President **Justin Yifu Lin**, The World Bank
See abstract and short biography on page 14.

FULL COSTING – STICK OR CARROT

TBC

IT'S ALL ABOUT GOVERNANCE

Professor **Robert L. Paarlberg**, Wellesley College
See abstract and short biography on page 14.

CLOSING 17.30

➔ 18.15 - 20.00 DINNER

Conference sum-up

Closing address by President of CAETS Professor **Klaus Bock**, Chairman ATV

DRINKS AND REFRESHMENTS

SPEAKERS



ABSTRACTS OF THE PRESENTATIONS



SPEAKERS



LOOKING TOWARDS 2050 AND BEYOND



Director General **Shenggen Fan**
International Food Policy Research Institute

ASSURING FOOD FOR ALL

Progress in cutting hunger in the past several decades has been disappointing. The number of hungry people has surpassed 1 billion and emerging trends, such as population growth and demographic changes, rising land and water constraints, and climate change, are further threatening food security in the future. Assuring food for all in 2050 and beyond can be achieved but business as usual will not be enough. What is needed to enhance food security is “business as unusual” – a smarter and more innovative, focused, and cost-effective approach.

The elements of this new approach include: (i) invest more in agriculture and social protection with a focus on nutrition and health; (ii) bring in new players to assume growing roles in enhancing food security; (iii) adopt country-led and bottom-up approach to development; (iv) design policies using evidence and experiments; and (v) walk the walk – keep commitments and implement timely policies.

SHORT BIOGRAPHY

Dr. Shenggen Fan was appointed Director General of the International Food Policy Research Institute (IFPRI) in December 2009. He joined IFPRI in 1995 as a Research Fellow and led IFPRI's program on public investment before becoming the Director of IFPRI's Development Strategy and Governance Division. Prior to working at IFPRI, he held positions at the International Service for National Agricultural Research (ISNAR) in the Netherlands and the Department of Agricultural Economics and Rural Sociology at the University of Arkansas. He received his PhD in applied economics from the University of Minnesota and his bachelor's and master's degrees from Nanjing Agricultural University in China. Dr. Fan's research, which has been widely published, has centered on pro-poor development strategy, pro-poor investment, and rural-urban linkages in developing countries in Asia, Africa, and the Middle East. He has served in editorial boards of various academic journals and is currently an Executive Committee member of the International Association of Agricultural Economists.



President **Marion Guillou**
French national Institute for Agricultural Research

ASSURING SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

The world's natural ecosystems are under increasing pressure to provide an expanding population with a sustainable supply of food, fiber, fuel and other commodities while still providing services related to biodiversity, soil, water and air. Human activities such as agriculture and forestry for food and progressively for non food uses affect a wide range of ecosystem services and may increase or, on the contrary, minimise risks associated with their degradation. Climate change is already having a significant impact on biological systems. A challenge for agriculture and food in 2050 is to assure a sustainable management of ecosystems and natural resources.

SHORT BIOGRAPHY

Marion Guillou has been President (CEO) of INRA (Institut National de la Recherche Agronomique) since 2004 after having been Director-General of the same organisation from 2000 onwards. She is also the President of Agreegium, the French consortium for research and education in agriculture, food and nutrition, animal health and the environment, created in May 2009. Marion Guillou is a member of the boards of the International Research Center for Tropical agriculture (CIRAD), the European Food Safety Authority and chairs the Board of Ecole Polytechnique (Paris). Previously, as General Director for Food (1996-2000), she participated actively in European work as to food regulation and in the Codex Alimentarius working sessions. Marion Guillou is a member of the French Academy of Agriculture and the National Academy of Technology; she qualified as a doctor in physico-chemistry, is an engineer of water and forestry and has a diploma from the merited Ecole Polytechnique (X73).



SPEAKERS



Professor **Per Pinstrup-Andersen**
Cornell University

ARE THE TWO GOALS COMPATIBLE?

This presentation will address potential trade-offs between achieving food security for all, alleviating poverty and assuring sustainable management of natural resources now and in the future. The author will reject the widespread notion that efforts to assure food security for all must necessarily be at the expense of the environment. Triple wins, i.e. food security for all, poverty reduction and sustainable management of the environment, are not only possible but may be achieved with economically and politically feasible government interventions, some of which will be suggested.

SHORT BIOGRAPHY

Per Pinstrup-Andersen is the H. E. Babcock Professor of Food, Nutrition and Public Policy, the J. Thomas Clark Professor of Entrepreneurship, and Professor of Applied Economics at Cornell University and Professor of Agricultural Economics at Copenhagen University. He is past Chairman of the Science Council of the Consultative Group on International Agricultural Research and Past President of the American Agricultural Economics Association. He has a B.S. from the Danish Agricultural University, a M.S. and Ph.D. from Oklahoma State University and honorary doctoral degrees from universities in the US, UK, Netherlands, Switzerland, and India. He served 10 years as the International Food Policy Research Institute's Director General. He is the 2001 World Food Prize Laureate and the recipient of several awards for his teaching, research and communication of research results. His research and teaching include economic analyses of food and nutrition policy, globalization and poverty, agricultural development, the interaction between the food system and human health and nutrition, and agricultural research and technology policy.

SOLUTION ASPECT I **– REFORMING THE FOOD PRODUCTION SYSTEM**



Professor **John R. Porter**
University of Copenhagen

AGRICULTURE, FOOD SECURITY AND CLIMATE

Agriculture both contributes to and is highly affected by climate change. The talk will consider how the future of agriculture is central to the three elements of the 'perfect storm' of population increase, changing energy sources and food production. These will be interpreted in the light of possible scenarios for agriculture in the future.

SHORT BIOGRAPHY

John R. Porter is Professor of Agroecology, Faculty of Life Sciences, University of Copenhagen, and is an internationally known scientist in crop ecology and physiology, biological modelling and agro-ecology. His main contribution has been multi-disciplinary and collaborative work in the response of arable crops, energy crops and complex agro-ecosystems to their environment with an emphasis on climate change and ecosystem services. He has published nearly 100 papers in reviewed journals out of a total of about 300 publications and has personally received three international prizes for his research and teaching. He has been a member of IPCC since 1994.

SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES NOW AND IN THE FUTURE



Chairman **Thomas Harttung**
International Centre for Research in Organic
Food Systems

SYNERGIES BETWEEN FOOD SECURITY AND NATURAL RESOURCE MANAGEMENT THROUGH AGRO-ECOLOGICAL METHODS

How can a future food security be achieved by improving synergies with ecosystem services?

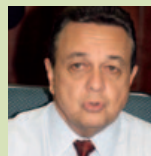
To secure long term resilient and productive agriculture we need to develop agro-ecological methods which build on and enhance

- biodiversity for pollination, pest control, disease resistance and cropping resilience
- long term soil fertility for nutrient and water supply and human health
- conscious organic matter and grassland management and for carbon sequestration

Such methods correspond to the basic principles of organic agriculture which have proven to increase yields in Africa and other tropical and sub-tropical regions. In temperate and high input regions organic agriculture cannot always compete one-to-one in pure yield terms but is often more profitable than conventional agriculture at the farm level.

SHORT BIOGRAPHY

Thomas Harttung is the chairman of ICROFS - The International Centre for Research in Organic Food Systems – a transdisciplinary and transinstitutional initiative - which identifies and coordinates organic research agendas worldwide - based on the 10 successful years of DARCOF (FØJO). He is an organic farmer since 1995 - and the co-founder and chairman of AARSTIDERNE.COM - an organic food company which grows and delivers organic vegetables, fruit, meat and a range of dry goods to the doorstep of more than 50.000 households across Denmark, Sweden and Northern Germany. Thomas Harttung is also the founder of GreenCarbon and Black Carbon which addresses the complex interface between environmental sustainability, food security and climate change. In 2009 Thomas Harttung was acknowledged as a “hero of the environment” by TIME Magazine.



Coordinator **Roberto Rodrigues**
GV Agro

THE ROLE OF AGRICULTURE RESEARCH AND MOLECULAR BIOLOGY TO ACHIEVE SUSTAIN- ABLE FOOD SECURITY FOR ALL

How do biotech and the industrialized Brazilian agriculture contribute to sustainability?

Brazil is one of the few countries with an abundance of both water and land available for agricultural purposes. In an era of global anxieties over food shortages, this places Brazil in a unique position. Today, land management is the biggest challenge for Brazilian agriculture. What are the opportunities and limitations in the Brazilian model – and is it in fact possible to implement the model in Africa?

SHORT BIOGRAPHY

Roberto Rodrigues, former Brazilian Minister of Agriculture from January 2003 to June 2006, Coordinator of the Getulio Vargas Foundation Agribusiness Center (GV Agro) and President of the Superior Council of Agribusiness of São Paulo's Federation of Industries (FIESP), is an agricultural producer and an agricultural engineer by training, following in the steps of his father and grandfather. He is also a Professor (currently on leave), holding the Chair of Rural Economics at the São Paulo State University. A strong supporter of the cooperative movement, he chaired the Brazilian Cooperatives Organization, the World Committee on Agricultural Cooperatives and the International Cooperative Alliance. He has travelled the world in that capacity, visiting – as he likes to point out – 80 countries while performing his duties. A well-known agribusiness leader, Roberto Rodrigues served as President of the prestigious Brazilian Rural Society and the Brazilian Agribusiness Association. He is also a member of the Board of dozens of Brazilian producers' associations.

SPEAKERS



President **Karl A. Almås**
SINTEF Fisheries and Aquaculture

THE OCEAN'S ROLE IN FEEDING GROWING WORLD POPULATION

Could the ocean become the next revolution in human food provision? And is it possible to transfer the production of animal protein from land to the ocean? The global catch of wild fish has approximately been at the same level for the last two decades. Half of the fish stocks are fully exploited and more than one third is overexploited. The production of fish by aquaculture has to be doubled during the next 30 years to compensate for a growing population. Marine aquaculture holds a large potential for sustained growth. Although some environmental impacts can be expected from the expansion of marine aquaculture, these are modest compared to those resulting from food production on land.

SHORT BIOGRAPHY

Karl A. Almås is head of Europe's largest research institute for fisheries and aquaculture technology, SINTEF Fisheries and Aquaculture, Norway, a private research organisation consisting of 8 research institutes with total of 2200 people doing contract research for private industry and the public sector. Karl A. Almås holds a PhD in biochemical engineering from the Norwegian University of Science and Technology focusing upon fish. He has published approximately 40 scientific papers, book chapters and patents related to fish processing and utilization of marine biomass for other products than for human consumption. At the moment, Karl is the acting board chairman of 2 newly established companies, professional member of The Institute of Food Technologists (IFT) and member of committees organized by the Norwegian Research Council. He is the vice president of the Norwegian Academy of Technological Sciences

SOLUTION ASPECT II – RETHINKING THE PROCESSING AND SUPPLY CHAIN



Global Supply Chain Director Sustainable Agriculture **Jan Kees Vis**
Unilever

THE REAL VALUE OF FOOD

Are there limitations to what food-business can do in developing countries? Is it in fact possible to secure supply?

SHORT BIOGRAPHY

Jan Kees originally trained as a chemist, but left the laboratory for a career in Unilever in the area of environmental lifecycle analysis. He has headed the company's sustainability programmes since their conception in 1996. His main role is to support Unilever's 11 lead sustainability programmes around the world in their efforts to put sustainable agriculture into practice. This means talking to buyers, supply chain managers and in-house brand developers to build awareness of sustainable agriculture as a viable business option. Jan Kees also represents Unilever more widely, with links to a variety of NGOs and other food.

THE PRODUCTION OF FISH
BY AQUACULTURE HAS
TO BE DOUBLED



Manager **Ola Svending**
Stora Enso

HOW DOES PACKAGING CONTRIBUTE TO SUSTAINABILITY?

Sometimes packaging is considered to be an undesired waste appearing when the food has been consumed. However, a packaging's outer most important property is to protect a packed product throughout a chain of logistics. Regardless of material, packaging does contribute to sustainability in terms of minimizing food waste, but different sustainability aspects must also be regarded from raw-material sourcing via manufacture and filling to consumption. Packaging's contribution to economic, environmental and social sustainability can be illustrated by the fact that in developing countries inadequate packaging results in 30% to 50% of all food produced never reaching the final consumer, compared with 2% to 5% in developed countries. On the other hand, a third of all food brought home from supermarkets is wasted. What the world actually needs is more and better packaging from renewable and sustainable sources.

SHORT BIOGRAPHY

Ola Svending has worked in Stora Enso since 1997, mainly with Life Cycle Assessment related issues. He holds a MSc in Environmental Engineering and a Lic Eng in Environmental Systems Analysis. Today, Ola is active in various industry organizations, including the Confederation of European Paper Industries, The Alliance for Beverage Cartons and the Environment (e.g. in the SCP Food Round Table) and EUROPEN, The European Organization for Packaging and the Environment. Ola is also a board member of Returkartong (managing carton recycling in Sweden) and a member of the steering group of Swedish Miljöpack (helping companies implementing the European Packaging and Packaging Waste directive) while also managing daily environmental affairs issues within Stora Enso Packaging.



Dr. **Dennis R. Heldman**
University of California, Davis

ENERGY EFFICIENCY IN THE FOOD CHAIN

There are numerous opportunities for food engineers to contribute to global food security. These opportunities include increased efficiency in the conversion of raw materials into consumer food products and in reducing losses throughout the food chain. These contributions can be achieved through application of new technologies as well as using appropriate scale technologies in developing countries.

SHORT BIOGRAPHY

Dennis R. Heldman holds B.S. and M.S. degrees from The Ohio State University and PhD from Michigan State University. He has been a professor at Michigan State University, the University of Missouri and Rutgers, The State University of New Jersey. Dr. Heldman has held R&D positions at the Campbell Soup Company, the National Food Processors Association, The National Food Laboratory, and the Weinberg Consulting Group Inc. He served as President of IFT, the Society for Food Science and Technology from 2006-07. Dr. Heldman was elected Fellow in the International Academy of Food Science & Technology in 2006. Currently, he is Adjunct Professor of Food Engineering at the University of California, Davis.

SOLUTION ASPECT III – MOVING TOWARDS ECONOMIC INCENTIVES AND FULL COSTING



Chief Economist and Senior Vice president
Justin Yifu Lin
The World Bank

MARKET ORIENTATION AND POLICY REFORMS

SHORT BIOGRAPHY

Justin Yifu Lin is the World Bank's Chief Economist and Senior Vice President. On leave from Peking University since June 2008, Mr. Lin received his PhD in economics from the University of Chicago in 1986. He is the author of 18 books and has published more than 100 articles in refereed international journals and collected volumes on history, development, and transition. Justin Yifu Lin was a deputy of China's People's Congress, Vice Chairman of Committee for Economic Affairs of Chinese People's Political Consultation Conference and Vice Chairman of the All-China Federation of Industry and Commerce. He served on several national and international committees, leading groups, and councils on development policy, technology, and environment including: the United Nations Millennium Task Force on Hunger and the Working Group on the future of the OECD. He was awarded the 1993 and 2001 Sun Yefang Prize (the highest honour for economists in China).



Professor **Robert L. Paarlberg**
Wellesley College

IT'S ALL ABOUT GOVERNANCE

Who governs the world food system? The politics of food and agriculture are changing fast in the 21st century – what is good governance of the food system? How could the future food system be governed - are there some innovative recommendations?

SHORT BIOGRAPHY

Robert L. Paarlberg is the Betty Freyhof Johnson Class of 1944 Professor of Political Science at Wellesley College and Associate at the Weatherhead Center for International Affairs at Harvard University. He received his B.A. in government from Carleton College in Minnesota and his Ph.D. in government from Harvard. He has served as visiting professor of government at Harvard and as a legislative aide in the U.S. Senate. His principal research interests are international agricultural and environmental policy. In his latest book "Food Politics: What everyone needs to know", he speaks about the current food system, the surrounding politics and their implications for the livelihoods and overall welfare of its dependents, particularly the rural poor in developing countries. He has also published books on the use of food as a weapon and on international agricultural trade negotiations. Paarlberg's most recent research focus has been on the regulation of modern technology, including biotechnology. He has worked most intensively on policies toward genetically modified crops and foods in developing countries.

WHAT IS GOOD GOVERNANCE OF THE FOOD SYSTEM?

A large haystack in a field with mountains in the background under a blue sky.

THE WORLD IS FACING A MAJOR CHALLENGE

...but the opportunities
to succeed and meet the
challenge are on the other
hand great.

PRACTICAL INFORMATION

VENUE

The venue for the conference is **Eigtveds Pakhus, Asiatick Plads 2, DK-1402 Copenhagen K**

All sessions are plenary. Working language is English and no translation will be provided.

REGISTRATION

The registration fee includes:

- Conference
- Lunch and dinner
- Breaks and refreshments
- Memory stick

PLEASE REGISTER NO LATER THAN FRIDAY 18 JUNE 2010

REGISTRATION FORM

Conference:

Please register [here](#)

CAETS Annual Meeting (*Only CAETS delegates*):

Please register [here](#)

PARTICIPATION FEE

Participants: DKK 3050

CAETS delegates: DKK 3400

Academy members and Finance Council members*: DKK 2300

PhD students: DKK 2300

Students: DKK 500

All prices are exclusive of 25 % VAT

*Registered representatives of members of the ATV Finance Council

PAYMENT

Invoice and confirmation will be forwarded upon receipt of registration.

CANCELLATION

If cancellation is received later than the 15 June 2010 the participation fee cannot be reimbursed, but another delegate may attend in the original delegate's place.

ORGANISING COMMITTEE

The Conference is organised by an Organising Committee set up by the ATV Governing Board. Chairman of the committee is Executive Director **Michael Stevns**, Danish Agriculture & Food Council.

MEMBERS

Professor **Jens Adler-Nissen**, Technical University of Denmark
Managing Director **Asbjørn Børsting**, DLG Group
Head of Department **Svend Christensen**, Copenhagen University, Faculty of Life Sciences
Director **Niels Halberg**, ICROFS
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Professor **Liisa Lähteenmäki**, Aarhus University
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CEO **Thomas Bagge Olesen**, FDB (The Co-operative Retail and Wholesale Society of Denmark)
State Secretary for Development Policy **Ib Petersen**, Ministry of Foreign Affairs
Professor **Per Pinstrup-Andersen**, Cornell University
Managing Director **Sven Riskær**, Pluribus

WEB

Please continue to consult the Conference website www.atv.dk for updates to the programme and for practical details concerning registration, accommodation and travel.

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