



IIASA

options

Spring '96

International Institute for Applied Systems Analysis

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Challenges for Research during Global Transition



Where Science Comes to Life



1996 Koopmans Lectures



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Now Available: IIASA Annual Report 1995

The Annual Report for 1995 is ready. The report is available on the World Wide Web at

http://www.iiasa.ac.at/docs/Admin/INF/AR95/IIASA_AR95.html

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Next Issue: Summer 1996

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Options is a journal featuring the activities of the International Institute for Applied Systems Analysis (IIASA), located in Laxenburg, Austria. IIASA is an interdisciplinary, non-governmental research institution sponsored by a consortium of National Member Organizations in 17 nations. The Institute's research focuses on sustainability and the human dimensions of global change. The studies are international and interdisciplinary, providing timely and relevant information and options for the scientific community, policy makers and the public.

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E D I T O R I A L

"The Times They Are A-Changing" and this issue of *Options* again provides numerous examples of how IIASA is responding to the changes in the world outside. The interview with Peter de Jánosi talks about how the Institute has responded to the major geopolitical transformations of the past six years. The *Agenda for the Third Decade*, which provides a new rationale and institutional framework, and the Intergovernmental Meeting of 1994, which reconfirmed the relevance of IIASA for governments, have been important milestones in this on-going process. However, not only the membership and research program of the Institute evolve over time. Major advances in computer technology are leading to changes in the way that information about the Institute is disseminated.

This is the first issue of *Options* that is also available concurrently on the World Wide Web (WWW). For some time now, selected IIASA Working Papers, the Research Plan and the most recent Annual Report have also been available on the Web. Statistics show that this form of information dissemination is becoming increasingly popular. In the coming year, we hope that more and more material from IIASA will be made available in electronic form.



Laxenburg Castle - home of IIASA

In recent years the Spring issue of *Options* had less pages than other issues during the year because it was sent out together with the Annual Report. This issue of *Options* is likewise shorter but instead of automatically receiving the Annual Report, the reader has a choice of requesting a copy or of reading all or parts of the report on the WWW. In this way, in these times of financial constraints and advancing computer technology, we hope to avoid the unnecessary mailing of reports.

Another way in which information about the Institute is spread is through the hosting of meetings. The First Open Meeting of the Human Dimensions of Global Environmental Change Community was held at Duke University, USA in June 1995. This very successful meeting brought together about 270 researchers, largely from the USA. There was wide agreement that a follow-up meeting in Europe would be an appropriate next step, in order to broaden the participation of the international research community. Therefore, the Director of IIASA and the President of the US Social Science Research Council (SSRC) have invited an international group of renowned scholars in this wide, interdisciplinary field to join a Scientific Planning Committee for a second meeting, to be hosted by IIASA in May 1997. More information on this endeavour will be given in the next issue of *Options*!



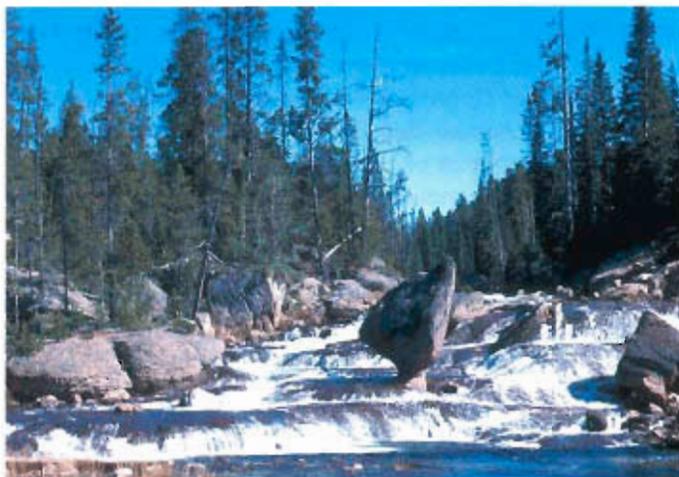
Dr. Jill Jäger
Deputy Director for Programs

Jill Jäger
Dr. Jill Jäger

RESEARCH UPDATES

New findings on carbon sequestration

Researchers in IIASA's Siberian Forest Study are developing a carbon cycle model for Russia and have combined it with significant new data on Russian forests and ecosystems previously not documented in the West. Intermediate results, presented in two articles submitted for publication in refereed journals, indicate that implementation of rational forest management and improved protection of forests can considerably increase carbon fixation (sequestration) by Russian forests.



Russia has more than 20 percent of the world's forested area (closed forests) and more than 40 percent of the growing stock of the world's coniferous forests. Whether and how this resource is emitting or absorbing carbon could play an important role in potential climate change.

Study results indicate a possible increase in carbon fixation in Russian forest ecosystems of some 245 million tons annually over 100 years with improved forest management, namely, large-scale reforestation and afforestation, replacement of low productivity and so-called soft deciduous species, and thinning. Furthermore, improved protection against forest fires and better control of insects and disease may result in additional annual carbon sequestration of up to 170 million tons of carbon.

For information, contact:
Sten Nilsson

The latest in water quality analysis

In its series of case studies to identify feasible and cost-effective strategies to improve water quality in Central and Eastern Europe, the Water Resources Project has completed its analysis of the Sió River System in Hungary. Using their own decision support system, DESERT, Project members evaluate alternative water quality management options that support sustainable progress towards a better environment in an affordable manner.

In the case of the Sió River System, which receives high wastewater loads from both industrial (chemical) and municipal sources, IIASA researchers describe the nature of the problem in light of several economic constraints. The study showed that enforceability of standards, credibility of administration, efficient delineation of responsibility in administration, and identification of least cost effluent limits for waste load allocation are essential to achieve water quality improvement. The Sió case study will be used to demonstrate the Project's approach for identifying alternative waste load allocations.

For information, contact:
Mark Smith

Advances in multiple-criteria model analysis

IIASA's Methodology of Decision Analysis (MDA) Project continues to make methodological advances and develop prototype software for model-based decision support.

Multiple-criteria model analysis (MCDA) is now mature enough for practical applications as a very useful extension of the traditional optimization and simulation techniques used

for decision support.

The key feature of any MCDA is an interaction with a user to help him/her in a progressive model analysis. A new modular tool called SAP, developed by MDA Project researchers, provides a user-friendly interface for MCDA and facilitates specification of user preferences, optionally also in terms of fuzzy sets.

SAP has already been successfully implemented in two IIASA decision support systems (regional water quality management of the Nitra River Basin in Slovakia and optimizing land use for sustainable agricultural development planning in West Africa), and in several applications outside IIASA.

For information, contact:
Marek Makowski

New economic approach explains small-country growth

An economic model that sheds new light on how comparatively small countries can achieve the same long-run rate of output growth as their larger, more technologically advanced counterparts has been developed by IIASA's Systems Analysis of Technological and Economic Dynamics Project in collaboration with the Institute's own Dynamic Systems Project and the Austrian Institute of Economic Research (WIFO). This model of self-sustained (endogenous) economic growth accounts for how small countries can catch up and become leaders in terms of knowledge stocks and productivity levels.

The model introduces the notion that a small country's capability to absorb knowledge from larger, more technologically advanced countries is key to that country's own economic and technological advancement. The concept of absorptive capacity introduced into the model adds a new twist to endogenous growth models that typically treat knowledge as either a purely national or global (universally available) public good.

For information, contact:
Iouri Kaniovski

Challenges to Research in Times of Global Change

Peter de Jánosi, Director of IIASA, reflects upon the key ingredients to successfully steer a world-class, international research institute into an unpredictable future.



→ **P**arallel to Peter de János's tenure as Director of IIASA, from 1990 to 1996, unexpected events took place across the globe, unthinkable only a decade earlier. Political borders became increasingly permeable, international trade ignited economic growth and development to previously unknown levels in various nations and regions, environmental consciousness reached new heights, and technological advances have facilitated unprecedented changes in products and processes and in the transmission of information. Under these conditions, managing an international research institute is exciting and challenging.

Q: International and interdisciplinary centers of scientific study have a special place in the research community; they draw on resources allowing them to address issues frequently beyond the scope and means of national institutions. But how does an international research institute consistently choose topical research subjects — to whose demand are they responding?

The Agenda setting process is one of the most complex and ill-understood aspects of international research

institutes. Of course, this is not true in what are referred to as "job-shops," that is, organizations that live entirely on specific contracts. They have it easy — they only do what they get support for. But those international, interdisciplinary institutions — of which IIASA is one — face a more difficult challenge as they must meet many different standards and demands. There is no single answer that settles, once and for all, which standard or whose demand must be met, and there must always be a balance between different interests and constituencies. Doing so requires a very open selection process that is well-tuned to the requirements of all sponsors and constituencies.

Q: What balance between applied and basic science is required to most usefully address global change and sustainability issues? And, what about the natural/social science balance?

What is so challenging about working on global change and sustainability issues is that they require the attention of virtually all disciplines. I should add that we too often make distinctions between natural and social sciences, or soft and hard, or basic and applied,

that are associated with the view that one may be intrinsically superior to the other. However, the only distinction worth making, I think, is between good and bad science. Unfortunately, there is little tradition to pursue interdisciplinary research, as most universities and research centers are organized around disciplinary inquiries. Of course, the disciplinary organization has also been a major reason for the advancement of knowledge, but there are times when the barriers among disciplines are counterproductive; research on global change and sustainable development is one of them.

Q: Why are integrated, interdisciplinary scientific approaches becoming indispensable to analyze and understand real world problems?

Problems are becoming more complex, and our expectations that we can deal with them adequately has also risen enormously. Alas, no single discipline has a monopoly on providing an adequate understanding of problems that touch on the political, social and economic fabric of a high technology world. An integrated approach, which will probably never be perfectly integrated, gives us an opportu-

"We must strive to provide a fertile environment for interactions, a constructive atmosphere to foster it, and to avoid at all costs bureaucratic barriers."



nity to glean some wisdom from many domains of knowledge.

Q: *In the late 1980s and early 1990s, our world underwent major changes, some without precedent. The Berlin Wall fell and became the symbol of a new era of intensified internationalization and economic disintegration and reintegration. Almost all the world's political leaders met in Rio at the 1992 UNCED meeting and committed their countries to jointly combat uncontrolled environmental degradation. The political, social, economic and technological changes have also changed the environment for international scientific research, from setting priorities to procuring funding and realizing new collaborative possibilities.*

How has IIASA responded to these changes?

IIASA has been quick to recognize that the dramatic changes in the world open up a new era of opportunities and challenges, and that we cannot continue to do "business as usual." Under the splendid leadership of the late Academician Vladimir Mikhailovich, then Chairman of the Governing

Council, and the participation of some outstanding Council members, Professors Wolf Haefele (Germany), Jan Borgman (the Netherlands), and Hans Landberg (Sweden), to mention but a few, we engaged in a year-long review of the appropriate new role for IIASA in the 1990s.

This process culminated in a document entitled *Agenda for the Third Decade*, which formulated the research framework and style of work for us. It calls for IIASA to conduct international and interdisciplinary research on global change and sustainability issues, with a special emphasis on their human dimensions. The Council wisely decided to interpret this mandate to include not only environmental topics, but also economic, technological and methodological ones.

The transformation sounds easy from today's vantage point. But it was a daunting task to accommodate a very diverse set of interests, and yet develop a consistent framework for our new program.

Q: *One of IIASA's unique qualities is the collaboration it fosters between its 15 diverse research projects. Could you talk about how and why this quality came about?*

We do indeed have fifteen projects at present, but I would not want to have us believe that this is a magic number. While I could well imagine IIASA dealing with fewer subjects, our current staff size would make it difficult to mount more projects if we are serious about pursuing research with international, interdisciplinary teams. On the other hand, there have been calls for significantly fewer projects — perhaps only two or three. I believe that the diverse interests of our constituency will not allow us to go that far.

Having fifteen projects and a coherent program requires much interaction and collaboration amongst them. There is no secret formula to achieve this. We must strive to provide a fertile environment for interactions, a constructive atmosphere to foster it, and to avoid at all costs bureaucratic barriers. That is why IIASA is now

"What is so challenging about working on global change and sustainability issues is that they require the attention of virtually all disciplines."

organized so horizontally. I should add, it is not entirely facetious to claim that many of our best collaborative efforts had their beginnings in IIASA's cafeteria over a cup of coffee.

Q: *Advances in computer technology have allowed humans to approach problems and develop solutions in novel ways. How has IIASA taken advantage of these technological advances?*

For IIASA's scientific orientation, computer technology has always been important. As modeling, databases and geographic information systems are essential ingredients of many of our projects, we could not do without computers. IIASA's RAINS model, for example, could not have been developed and utilized by policy makers without computers, and neither could our valuable Siberian Forest database have been assembled and used. There are, of course, many other examples, such as IIASA's energy, water and land use work. They would simply be inconceivable without computer technology.

Q: *Over the course of your career, you have witnessed changes in global priorities time and again. →*



Arkadii Maltsev, Secretary to IIASA, and Peter de Jánosi, Director, participating in one of IIASA's many international scientific meetings.

→ *What would you identify as the major challenges for international science in the decades to come?*

I have learned to be very cautious about identifying specific problems that will be topical 10 or 20 years from now. Who would have thought 20 years ago that climate would be receiving so much attention now? The interests and concerns of the world shift in unpredictable ways.

“The era when scientists and research institutes could pursue their own scientific agenda, without an awareness of the world around them, is over.”

Yet, I am certain that the future will require a strong and healthy science establishment that is internationally minded, and able to respond to the

challenges of our society. It is precisely for this reason that the current trend of science budget cutting might have such a pernicious effect. Scientists must become much more active as spokespersons for the importance of science, and for maintaining adequate support.

Q: What ingredients do research institutes need to meet those challenges?

Is this where IIASA's role as a locus of global research networks built over the last 25 years sets the Institute apart from other international scientific institutions?

Research institutes are becoming more conscious of the changing world, and that they need to be responsive. This requires a flexibility and a willingness to satisfy new demands, without following “fashions.” The era when scientists and research institutes could pursue their own scientific agenda, without an awareness of the world around them, is over.

This is particularly true of international research institutes that are buffeted by so many different pressures, and that always face financial and programmatic uncertainties. These are realities that must be faced. Yet, particularly because of the increasing interrelatedness of the globe, the challenges for international institutes have never been greater.

IIASA is fortunate that its almost 25 years of existence have enabled it to

carry forward excellent work, and build up an extensive network of collaborators and alumni. IIASA has also proven its capacity to change and to develop new interests. There are very few, if any, similar organizations that have managed their reorientation as smoothly as IIASA.

Q: Considering these ingredients, how do you see IIASA evolving?

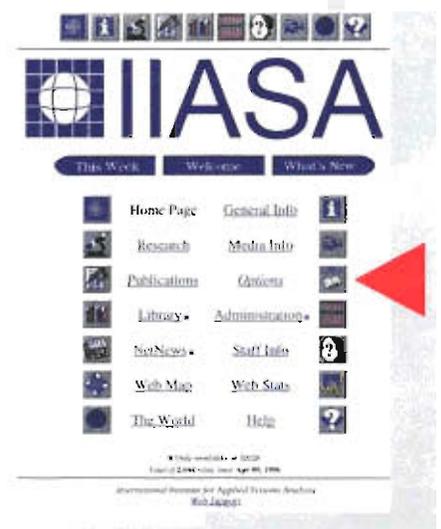
Institutions evolve in ways that are difficult to forecast. My hopes for IIASA are that a few new member countries could be attracted; particularly from Asia, Latin America and Africa, to give us an appropriate global character. But if IIASA were to grow well beyond 25 members, the Institute would lose some of its informality and unbureaucratic ways that have been such important ingredients for our success.

I would expect IIASA will continue to focus on the broad agenda of global change and sustainability with a special emphasis on their human dimensions. The emphasis should be on the words “broad agenda.” I also hope that the work will remain both science and policy oriented. These are some of the directions toward which I have tried to steer IIASA. Hence, my views are not surprising.

However, future directors and Council will have their own views about IIASA. I am confident that IIASA, the resilient, flexible and high quality institute it is, will respond splendidly to the new challenges. ■

Options on-line

In the ongoing effort to rapidly bring our readers the most recent developments at IIASA, we present the new *Options* on-line, the electronic version of the Institute's magazine. Using today's fastest growing information medium, the World Wide Web, we hope to disseminate IIASA research results and information to our growing number of readers. Check out the IIASA home page (<http://www.iiasa.ac.at/>) and look for the *Options* icon or go directly to http://www.iiasa.ac.at/docs/IIASA_Options.html. ■



Where Science Comes to Life: IIASA at AAAS '96

A selection of IIASA research results were presented to a wide international audience of scholars, policy-makers and media at the 1996 Annual Meeting of the American Association for the Advancement of Science (AAAS) in February. It was the second time that the Institute was represented at this major scientific conference in the USA. Several IIASA researchers made the trip to Baltimore, Maryland, to participate in various ways.

Jill Jäger, Deputy Director for Programs, participated in a session on "Social Learning in the Management of Global Environmental Risks" organized by IIASA alumnus Professor William Clark of Harvard University and Miranda A. Schreurs from the University of Maryland. Dr. Jäger's presentation, "Knowledge-Action Relationships in the Management of Global Environmental Risks," focussed on the management of the risks of acidification, stratospheric ozone depletion and anthropogenic climate change over the past 20 years.

Wolfgang Lutz, Leader of IIASA's Population, Development and Environment Project, was invited to speak at the AAAS International Directorate's Program on Population and Sustainable Development Symposium entitled "International Perspectives on Population, the Environment and Consumption: Science and Policy Issues." AAAS President-elect Dr. Jane Lubchenco chaired the session in which scientists and policy makers from five world regions discussed how population change and natural resource consumption affect regional environments, and the

policy and scientific issues associated with these effects. In his talk on "Global versus Local Approaches to Population, Development and Environment Analysis," Lutz also presented new probabilistic projections for the world population over the next century. These projections indicate a 64 percent chance that the world population will not double from the current 5.75 billion. In addition, he presented a recent study on the environmental impacts of population trends, showing that the growing number of households has a greater affect on the growth of CO₂ emissions in developed countries than the growing number of individuals.

Joanne Linnerooth-Bayer, Co-leader of IIASA's Risk, Policy and Complexity Project, assembled an international team of distinguished researchers and collaborators for an IIASA session with the title "Siting Hazardous Facilities: Views on Fair Process and Outcome" (see box). Siting hazardous facilities is a major policy problem throughout the industrial world. The session speakers presented conceptual and empirical research on the different views on fair process and outcome for siting hazardous waste facilities in North America, Europe and Asia. According to the speakers, compensation is a key and controversial issue that underlies the acceptance of market approaches, not only for siting hazardous facilities but for allocating the burdens of environmental policies more generally. Research on local siting issues can contribute to understanding conflicting concepts of fair distribution that are at the core of global environmental disputes. ■

Siting Hazardous Facilities: Views on Fair Process and Outcome

**IIASA Session
at the AAAS '96
Annual Meeting
Baltimore,
February 8-13, 1996**

Concepts of Fairness

H. Peyton Young, Johns Hopkins University, USA, and IIASA, Austria

Siting Experience in North America, Europe and Asia

Howard Kunreuther, University of Pennsylvania, USA

Compensating Host Communities: Views from Austria and New York

Joanne Linnerooth-Bayer, IIASA, Austria

Fair Process: Siting Waste Facilities in Switzerland

Ortwin Renn, Center of Technology Assessment, Germany

Hosts and Neighbours:

Considerations of Fair Outcome

Felix Oberholzer-Gee, University of Zurich, Switzerland

Explaining Unsiteability

Michael Thompson, The Musgrave Institute, UK.



Jill Jäger presenting linkages between science assessments and other risk management functions to the AAAS '96 audience.



Wolfgang Lutz (right) speaking at a press briefing during the AAAS meeting.



Joanne Linnerooth-Bayer and Felix Oberholzer-Gee considering compensation and fair outcomes.

Meetings

*(European Union of Operation Research Societies)
Winter School on
Stochastic Optimization
7-18 January, Semmering, Austria*

The purpose of the Winter School was to promote the use of stochastic optimization models and methods in decision support under uncertainty. The Winter School not only treated stochastic decision models, their properties and solution algorithms, but also emphasized software and, in particular, integrating simulation and optimization procedures. The 80 young researchers in attendance heard plenary talks on topics including optimality conditions, approximation techniques, statistical properties, and algorithmic methods. The Winter School was co-organized with the Institute for Statistics and Computer Science, University of Vienna, Austria.

Contact: Andrzej Ruszczyński

*Russian Enterprises on the
Path of Market Adaptation
and Restructuring
1-3 February*

Two dozen Western and Russian scholars met to discuss the pace and direction of enterprise restructuring in Russia. Focussing on enterprise performance under transition, the scholars reported recent empirical findings and analyses concerning the following issues: typical models of enterprise behavior; development of the financial situation at the enterprises and its determinants; impact of emerging markets and competition on enterprises; the consequences of privatization and patterns of restructuring; and enterprise social assets divestiture and conversion.

Participants arrived at both analytical conclusions and recommendations for policy measures stimulating "constructive" enterprise behavior. An article on the workshop appeared in the 22 March 1996 issue of *Transition Magazine*. Selected workshop papers are available as IIASA Working Papers.

Contact: Alexandre Bim

*International Workshop on
Climate Change: Integrating
Science, Economics and Policy
19-20 March*

Economic analyses of global climate change have received increasing attention during the past few years from audiences both within and outside the economics profession. Beginning in 1992, a series of international workshops were organized at IIASA to analyse the economics of global climate change.

The third in this series was held in March to review the most recent developments in science and economics related to climate change and climate policy focusing on integrated assessment. The Workshop's 60 participants attended seven sessions on topics ranging from Climate Change to Policy Issues.

Contact: Nebojša Nakićenović

*Energy Modeling Forum-14
21-22 March*

Based at Stanford University, the Energy Modeling Forum is a network of researchers who perform joint model comparisons and sensitivity analysis to improve their understanding of critical energy problems. Round 14 — the so-called EMF-14 — is organized jointly with IIASA. This March meeting continued and reviewed the work on integrated assessment models for climate change policy analysis with standardized scenarios. More than 100 participants took part in the review sessions and developed plans for future activities.

Contact: Nebojša Nakićenović

*3rd Workshop on
Russian Applied R&D:
Its Present State and Future Promise
11-13 April*

The aim of IIASA's Russian Applied R&D Project is to prepare a comprehensive book/report about the current state and alternative development opportunities for the large science and technology sector in Russia. At this third workshop, book chapter drafts were presented to a public policy-oriented audience of more than 20 Western and Russian science and policy experts.

Contact: János Gács

Appointments

Plamena Gaydarova (Bulgaria), a recent graduate of the Higher Institute for Chemical Technology, Sofia, and **Huinan Sun** (China), formerly with the Institute of Geography, Chinese Academy of Sciences, have joined the Project on Modeling Land-Use and Land-Cover Changes in Europe and Northern Asia.

Noritaka Katatani (Japan), from the Faculty of Engineering, Yamanashi University, has joined the Transboundary Air Pollution Project.

Maria Lacko (Hungary), from the Institute of Economics, Hungarian Academy of Sciences, has joined the Environmentally Compatible Energy Strategies Project.

Vladimir Malov (Russia), from the Institute of Economic and Industrial Engineering, Siberian International Center for Regional Studies, has joined the Project on Forest Resources, Environment and Socioeconomic Development of Siberia.

Hans Metz (Netherlands), from the Institute of Evolutionary and Ecological Sciences (Section Theoretical Biology), Leiden University, has joined the Advanced Dynamics Network within the Dynamic Systems Project.

Massimo Sbracia (Italy), Dipartimento di Economia, Università La Sapienza, Rome, has joined the Systems Analysis of Technological and Economic Dynamics Project.

Hirokazu Tatano (Japan), from the Department of Social Systems Engineering, Tottori University, has joined the Optimization Under Uncertainty Project.

Evert Verkuijlen (Netherlands), from the Department of Environmental Science, University of Amsterdam, has joined the Project on Regional Material Balance Approaches to Long-Term Environmental Policy Planning to work on the Black Triangle Study.



Awards

Mirosław Mossakowski, the Polish representative of IIASA's Governing Council, has been elected as a Vice President of the Polish Academy of Sciences, Warsaw. He also has been nominated as the Scientific Secretary of that organization.

Peter de János, Director of IIASA, has been appointed to the International Steering Committee of the International Human Dimensions of Global Change Programme, co-sponsored by the International Council of Scientific Unions and the International Social Science Council.

Günter Fischer, project leader of IIASA's Project on Modeling Land-Use and Land-Cover Changes in Europe and Northern Asia, has been appointed to the Scientific Steering Committee of the International Geosphere-Biosphere Programme/Human Dimensions of Global Environmental Change Programme's jointly sponsored Core Project/Programme on Land-Use/Land-Cover Change.

IIASA alumni Professor **Åke E. Andersson** of the Swedish Institute for Future Studies has been awarded the 1995 Honda Prize at a ceremony in Tokyo. Professor Andersson was chosen for his achievements in the field of Regional Planning and Economics. The Honda Prize, awarded by the Honda Foundation, advocates "Eco-Technology" that is geared toward harmony with the environment surrounding human activities. Professor Andersson was Deputy Program Leader of IIASA's Forest Sector Project, and acting leader of the Institute's Regional Issues Project, in the mid-1980s.

Nicholas Sonntag, an IIASA alumni who worked in the Institute's Adaptive Policy Design for the Sustainable Use of Resources Project in 1983, has been appointed executive director of the Stockholm Environment Institute. Sonntag is currently chairman of the ESSA Technologies Group Ltd., as well as president and CEO of ESSA Software Ltd. ■

IIASA Continues Koopmans Lecture Series in 1996

Distinguished economists open series with look at transitional economies.

The transition of former centrally planned economies to market-based systems is the theme of IIASA's 1996 Tjalling Koopmans Distinguished Lecture Series. This year's series stresses the economic factors involved in the transition process tempered by important political insights and considerations. The speakers are outstanding economists who have been involved in analyzing and/or implementing the transition process.

The first speaker of the Series, Professor **Anders Åslund** of the Carnegie Endowment for International Peace, Washington, D.C., presented a lecture on "The Political Economy of Transition in Central and Eastern Europe: Do Radical Reformers Necessarily Lose Elections?" Åslund's analysis of election results of radical reform governments in Central and Eastern Europe showed that three out of five radical reform governments have won the first elections after having launched *radical* reforms. On the contrary, all of the four non-socialist governments carrying out *gradual* reform lost the ensuing elections. Even of four post-communist governments undertaking gradual reform, two lost the next elections.

Professor **Leszek Balcerowicz**, former Deputy Prime Minister and Minister of Finance in the first Solidarity-led government of Poland and currently with the Center for Social and Economic Research in Warsaw, Poland, presented the second Koopmans lecture. Titled "Post-Communist Transitions in a Comparative Perspective," the lecture included Professor Balcerowicz's conclusions about economic transitions in Central and Eastern Europe, using Poland as a major example. He concluded that given the typical initial conditions of a socialist economy, a country will be better off politically and economically in the medium- to long-run if it adopts

a radical and comprehensive economic reform program soon after political transitions, implements as much of this program as possible, and then stays on the course of reform by implementing far-reaching institutional changes.

The Koopmans Lecture Series is named in honor of the late Professor **Tjalling Koopmans**, a Nobel prize winning economist at Yale University who was much involved with IIASA. Other speakers for this year's Lecture Series include Professor János Kornai of Collegium Budapest, Hungary and Harvard University, USA, who is scheduled to speak 18 June, and Doc. Ing. Václav Klaus, CSc., Prime Minister of the Czech Republic (date to be announced). For more information about the Tjalling Koopmans Distinguished Lecture Series, contact the IIASA Office of Public Information or visit the IIASA World Wide Web site at <http://www.iiasa.ac.at>. ■



Professor Anders Åslund gave his thoughts on "The Political Economy of Transition in Central and Eastern Europe: Do Radical Reformers Necessarily Lose Elections?"



Professor Leszek Balcerowicz spoke about "Post-Communist Transitions in a Comparative Perspective."



Austria

The Austrian Academy of Sciences

Bulgaria

The National Committee for Applied Systems Analysis and Management

Canada

The Canadian Committee for IIASA

Czech Republic

The Czech Committee for IIASA

Finland

The Finnish Committee for IIASA

Germany

The Association for the Advancement of IIASA

Hungary

The Hungarian Committee for Applied Systems Analysis

Italy

The Italian Committee for IIASA

Japan

The Japan Committee for IIASA

Kazakstan

The National Academy of Sciences

Netherlands

The Netherlands Organization for Scientific Research (NWO)

Poland

The Polish Academy of Sciences

Russia

The Russian Academy of Sciences

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