

IIASA-Israel Symposium on Sustainability Pathways empowered by Systems Analysis

28 – 29 November 2022

Tel Aviv University, Tel Aviv, Israel

Day 1: November 28, 2022

Venue: The Steinhardt Museum of Natural History, Tel-Aviv University

Registration link: https://en-social-sciences.tau.ac.il/igs3/iiasa-28-11-22

16:00 – 17:00 Working session

Meeting room, 4th floor Meeting with Executives of the International Institute for Applied Systems Analysis (IIASA), Israel's NMO IIASA Committee, Chief Scientists of Selected Government Ministries, and University VPs for Research

> 16:00 Welcome and opening remarks regarding IIASA 16:20 Research perspectives in Israel 16:45 Capacity building initiatives at IIASA 17:00 Closing remarks

- 17:00 17:30 Registration and refreshments
- 17:30 17:45 Master of Ceremonies

Prof. Itai Sened, TAU, IIASA Council member for Israel

Welcoming remarks

Prof. Tamar Dayan, Chair, The Steinhardt Museum of Natural History

- 17:45 18:00 Opening remarks
 Dr. Albert van Jaarsveld, Director General, IIASA
 18:00 18:10 Tentative: Mrs. Tamar Zandberg, Minister of Enviro
- **18:00 18:10** Tentative: Mrs. Tamar Zandberg, Minister of Environmental Protection, Israel
- 18:10 18:15 Tentative: Mrs. Hilla Haddad Chmelnik, Director General, Ministry of Science, Israel
- 18:15 19:00 Keynote presentation "Systems analysis of population, education and environment interactions" Prof. Wolfgang Lutz, Interim Deputy Director General for Science, IIASA
- 19:00 19:10 Closing remarks Dr. Gansen Pillay, Interim Head, Communications and External Relations Department, IIASA
- **19:10 20:00** Dinner reception at the Museum Terrace



Day 2: November 29, 2022

Venue: Naftali Building, Faculty of Social Sciences, Tel Aviv University

Registration link: https://en-social-sciences.tau.ac.il/igs3/iiasa-29-11-22

09:00 – 10:00 Plenary meeting (all participants)

Welcome and Greetings **Prof. Milette Shamir**, VP for international academic collaboration, Tel Aviv University **Dr. Vered Blass**, Head of the Innovation in Industrial Ecology Lab, Tel Aviv University **Dr. Albert van Jaarsveld**, Director General, IIASA Introduction to IIASA and Systems Analysis

10:00 – 12:30 Parallel panels

Including a coffee break

Meeting room, Demography

-1st floor Moderator: Prof. Isaac Sasson, Associate Professor of Sociology, Faculty of Social Sciences, Tel Aviv University

Session 1: Frontiers in Demographic Research

Prof. Wolfgang Lutz, Interim Deputy Director General for Science, IIASA
Prof. Isaac Sasson, Associate Professor of Sociology, Tel Aviv University
Prof. Juho Härkönen, Professor of Sociology, European University Institute (Via zoom)
Dr. Eliahu Ben-Moshe, Demographer and Statistician, Department of Sociology and Anthropology, Hebrew University

Session 2: Demographic Research in Israel - Opportunities and Challenges

Prof. Analia Schlosser, Associate Professor of Economics, Tel Aviv University
 Prof. Alex Weinreb, Research Director, Taub Center
 Prof. Daniel Gotlieb, Former Chief Scientist, Israel Institute for Social Security

Discussion: opportunities for collaboration between IIASA and Israel



Biodiversity and Agriculture

Moderator: Prof. Tamar Dayan, Chair, The Steinhardt Museum of Natural History, Tel Aviv University

Presentations:

Dr. Piero Visconti, Biodiversity, Ecology, and Conservation Research Group Leader, Biodiversity and Natural Resources Program, IIASA

Integrating ecology and conservation into the planning and assessment of sustainable agricultural policies.

Mr. Uri Ramon, the Open Landscape Institute, the Steinhardt Museum of Natural History, Tel Aviv University

Challenges in multi-purpose landscape management.

Dr. Orah Moshe, Ministry of Agriculture, Soil Erosion Research Station

Restoring riparian ecosystems as a means of increasing biodiversity.

Dr. Francesca Falco, School of Zoology, Tel Aviv University

Heterogeneous farmland under area-based conservation measures: the case of the EU Natura 2000 farmed sites.

Dr. Yael Mandelik, Faculty of Agriculture Food and Environment, The Hebrew University Crop pollination services by wild and managed pollinators: local and global perspectives. **Dr. Alon Shepon**, the Department of Environmental Studies, Tel Aviv University, and Chair of the Israeli Forum for Sustainable Nutrition

Nutrition-sensitive food systems: examples from terrestrial and aquatic environments. **Dr. Rotem Zelingher**, Post-doc, IIASA

A step towards food security: an accessible tool for analyzing and forecasting agricultural commodity prices.

Discussion: opportunities for collaboration between IIASA and Israel

Room # 731 Water

Venezuela hall, 527

Moderator: Dr. Dor Fridman, Research Scholar, Water Security Research Group, Biodiversity and Natural Resources Program, IIASA

Presentations:

Dr. Dor Fridman, Research Scholar, Water Security Research Group, Biodiversity and Natural Resources Program, IIASA

Water and water-human interactions - overview of the IIASA Water group research. **Prof. Hadas Mamane**, Head of Environmental Engineering Program, Mechanical Engineering Department, Tel Aviv University

It's all about water.

Mr. Asaf Peres, PhD student, Environmental Engineering Program, Mechanical Engineering Department, Tel Aviv University

Now-casting water quality parameters using AI.

Prof. Eran Friedler, Head of the Grand Water Research Institute, Technion Modelling and monitoring urban and rural water systems – Can it support decision-making?

Discussion: opportunities for collaboration between IIASA and Israel



Room # 505

The Energy and Transport Nexus

Moderator: Dr. Vered Blass, Head of the Innovation in Industrial Ecology Lab, The Porter School of the Environment and Earth Sciences, Tel Aviv University

Presentations:

Dr. Paul Natsuo Kishimoto, Energy, Climate, and Environment (ECE) program, IIASA Energy and Transport Systems Research using the MESSAGEix Integrated Assessment Model.

Dr. Ayelet Davidovitch, Innovation in Industrial Ecology Lab, Tel Aviv University Energy and Transportation National-Level Policy Analysis using MESSAGEix.
Dr. Shahar Dolev, Chief Scientist office, Ministry of Energy, Israel.
Using the MESSAGE model for planning NetZero emissions in 2050.
Dr. Moshe Tshuva, School of Mechanical Engineering, Afeka College Is it possible for Israel to achieve 100% Renewables in 2050?
Dr. Irena Milstein, Faculty of Industrial Engineering and Technology Management, Holon Institute of Technology
Competitive electricity market with photovoltaic cells, batteries and gas technologies.

Discussion: opportunities for collaboration between IIASA and Israel

12:30 – 13:15Summary Discussion and Closing RemarksMatanel
gardenDr. Vered Blass, TAU
Dr. Albert van Jaarsveld, IIASA