ASA Outreach: WS Series on Uncertainty in Greenhouse Gas Emissions

February 2017

IIASA's ASA Program is engaged in a series of *International Workshops on Uncertainty in Greenhouse Gas (GHG) Inventories*:

1st International Workshop on Uncertainty in Greenhouse Gas Inventories

Warsaw, Poland; 24 - 25 September 2004

Website: Link

Published outcomes:

- Special Issue in 2007: Water, Air & Soil Pollution: Focus

- Book in 2007: Springer

2nd International Workshop on Uncertainty in Greenhouse Gas Inventories

Laxenburg, Austria; 27 – 28 September 2007

Website: Link

Published outcomes:

- IIASA Policy Brief 1/2007: Pdf

- Special Issue in 2010: Climatic Change

- Book in 2011: Springer

Thomas White - Muniture, Jonas - Zhaparev Raharski - Sten Nikoon Editors - Greenhouse Gas Inventories - Dealing With Uncertainty

3rd International Workshop on Uncertainty in Greenhouse Gas Inventories

Lviv, Ukraine; 22 – 24 September 2010

Agenda: Pdf

Published outcomes:

- Special Issue in 2014: Climatic Change

- Book in 2015: Springer

Ran P Ometto Rostyslan Bun Marthas Jonas Zolgwier Nathorali Editors Uncertainties in Greenhouse Gas Inventories Lepanding Our Perspective Springer

4th International Workshop on Uncertainty in Atmospheric Emissions

Kraków, Poland; 7 – 9 October 2015

Website: Link

Published outcomes:

- Workshop Proceedings: Pdf

- Special Issue and Book (forthcoming in 2018)



About our 2011 Book:

T. WHITE, M. JONAS, Z. NAHORSKI & S. NILSSON:

Greenhouse Gas Inventories: Dealing with Uncertainty.

The book is based on the 2010 Special Issue **103**(1-2) of *Climatic Change*. Since its online publication in 2011 there has been a total of 11,529 chapter downloads (Springer Book Performance Report 2015, June 2016).

Year	Chapter Downloads
2015	2,962
2014	4,044
2013	3,145
2012	662
2011	716

The table to the left specifies the download figures for the years 2013–2015. Our book was among the top 50% of the most downloaded eBooks in Springer's 'Earth and Environmental Science' eBook Collection.

The book focuses on the assessment of GHGs emitted to and removed from the atmosphere which is high on the international political and scientific agendas. Growing international concern and cooperation regarding the problems of climate change have increased the need for policy-oriented solutions to the issue of uncertainty in, and related to, inventories of GHG emissions.

The approaches to addressing uncertainty discussed in this book reflect attempts to improve national inventories, not only for their own sake but also from a wider, systems analytical perspective—a perspective that seeks to strengthen the usefulness of national inventories under compliance and/or under a global monitoring and reporting framework. These approaches demonstrate the benefits of including inventory uncertainty in policy analyses. The authors show that considering uncertainty helps avoid situations that can, for example, create a false sense of certainty or lead to invalid views of subsystems.

However, considering uncertainty does not come for free. Proper treatment of uncertainty is costly and demanding because it forces us to make the step from "simple" to "complex" and only then to discuss potential simplifications. Moreover, comprehensive treatment of uncertainty does not offer policymakers quick and easy solutions.

About our 2015 book:

J.P. OMETTO, R. BUN, M. JONAS, Z. NAHORSKI:

Uncertainty in Greenhouse Gas Inventories: Expanding our Perspective

The book is based on the 2014 Special Issue **124**(3) of *Climatic Change*. It brings together 16 key papers presented at, or produced, subsequent to the 2010 (3rd) International Workshop on Uncertainty in Greenhouse Gas Inventories. The Workshop was jointly organized by the <u>Lviv Polytechnic National University</u>, Ukraine; the <u>Systems Research Institute of the Polish Academy of Sciences</u>; and the <u>International Institute for Applied Systems Analysis</u>, Austria.

Year	Chapter Downloads
2015	1,505

The table to the left specifies the download figure for the book's year of online publication (2015).

This book has been written to enhance understanding of the uncertainty encountered in estimating GHG emissions and in dealing with the challenges resulting from those

estimates. Such challenges include, but are not limited to i) monitoring emissions; ii) adhering to emission commitments; iii) securing the proper functioning of emission trading markets; and iv) meeting low-carbon or low-GHG futures in the long term.

Further information available at http://www.ibspan.waw.pl/unws2015/index.php?go=home