

The Stockholm Seminars

- focusing on the dynamics and stewardship of social-ecological systems

Food security and planetary boundaries

Dr. John Ingram

UK-Natural Environment Research Council/University of Oxford

Wednesday 18 April, 2012, 15.00–16.00

Linné Hall, the Royal Swedish Academy of Sciences,
Lilla Frescativägen 4, Stockholm

This seminar will discuss the two-way interactions between human activities related to food security (in the context of the ‘food system’), and environmental conditions (in the context of ‘planetary boundaries’).

Food system activities include: (i) producing food; (ii) processing food; (iii) packaging and distributing food; and (iv) retailing and consuming food. ‘Planetary boundaries’ define the safe operating space for humanity with respect to the Earth system and are associated with the planet’s biophysical subsystems or processes. If these thresholds are crossed, important subsystems such as a monsoon system, could shift into a new state. Such shifts will have consequences for humans and undermine the environmental conditions and natural resource base upon which our food security is founded.

The seminar will highlight how our food system activities contribute to crossing the planetary boundaries and present some of the impacts of crossing these boundaries for food security. The seminar will also examine options to adapt our food systems to changes in environmental parameters, and to mitigate further deleterious changes.

John Ingram is based at the Environmental Change Institute, University of Oxford, UK. He has extensive research experience in agriculture, forestry and agroecology from projects in East and Southern Africa, and South Asia. In 1991 he was recruited by the UK’s Natural Environment Research Council (NERC) to help organise and coordinate research on global change and agroecology as part of International Geosphere-Biosphere Programme. In 2001 he was appointed Executive Officer for the Earth System Science Partnership’s Joint Project ‘Global Environmental Change and Food Systems’ (GECAFS). On the close of GECAFS in 2011, he assumed a new role as ‘NERC Food Security Leader’.