



International workshop of the Global Phosphorus Research Initiative (GPRI):

Phosphorus and Global Food Security

February 25th - 26th 2010

Linköping University, Sweden

hosted by

Department of Thematic Studies - Water and Environmental Studies, Linköping University

As all modern agricultural systems are dependent on continual inputs of non-renewable phosphate rock as fertilizer, we are facing an acute need for research and solutions to sustain global food security. A sustainable phosphorus future needs to consider both the global, inter-regional and local flows and strategies of consumption, production and trade. With this agenda at hand, researchers of the Institute for Sustainable Futures, University of Technology, Sydney and the Department of Thematic Studies - Water and Environmental Studies, Linköping University co-founded the Global Phosphorus Research Initiative (GPRI) and associated website (www.phosphorusfutures.net). Over the last 1.5 years this initiative has received large response internationally and in autumn 2009 the GPRI expanded to include researchers from Wageningen University in The Netherlands, University of British Columbia (UBC) in Canada and the Stockholm Environmental Institute. Following substantial and growing interest from other researchers, the GPRI is now developing a Global Phosphorus Network to link researchers and practitioners globally.

In September 2009, the GPRI launched the *Declaration on Global Phosphorus Security* which is planned to be the basis for future work within the international network and in direct collaboration with ambassadors and international researchers and organizations. Due to the current international focus on phosphorus as a crucial resource for food security (including a competitive EU tender which was awarded to a consortium of several members of the GPRI), this workshop is organised to gather current GPRI members and to reach out for researchers in related fields. This workshop will also provide the first opportunity for existing GPRI members to meet in person and further strengthen the international relationships.

Venue & Registration

The workshop will take place at the Institute for Thematic Studies – Water and Environmental Studies, Linköping University, Sweden. For map and more information please visit www.tema.liu.se/tema-v

Registration fee: 700 SEK. The number of participants is limited to 25.

For pre-registration application, please send an email with a few sentences about your area of research interest related to phosphorus and a short bio to Lotta Berglund lotta.berglund@liu.se.

Workshop objectives and details

The specific aim of this workshop is to generate a joint dialogue on the challenges and possible research opportunities regarding phosphorus security and its implications for global food security with leading international partners in this field.

The scientific goals of this workshop are to:

- Create a joint international research program within the responsibility of the GPRI
- To establish a consortia for future international co-operation
- To present and discuss ongoing research and policy analysis
- Provide a meeting place for scientific discussions and exchange of knowledge

The workshop will take place at Linköping University. The number of participants is limited to 25 persons. The outcome of the workshop is to be published as proceedings at LiU e-press.

Preliminary schedule:

Thursday February 25th

(Events of interest, not part of official workshop)

10.00-12.00: Dissertation defence Dana Cordell (*"The Story of Phosphorus: sustainability implications of global phosphorus scarcity for food security"*)

14.00-15.30: Open Public Lecture (to be announced)

Friday February 26th

8.30-9.00: Registration for workshop participants

9.00-17.30: Phosphorus and Global Food Security workshop:

Each 1-1.5 hour Session (1-4) will include selected presentations, followed by group and plenary discussion on research challenges, opportunities and actions.

- Welcome by Åsa Danielsson, Head of Water and Environmental Studies
- Introduction to the GPRI and global phosphorus security scenarios (Dana Cordell & Tina Neset)

Session 1: Food security and current sustainability challenges

Session 2: Sustainable phosphorus use in agriculture

Session 3: Sustainable sanitation and nutrient recovery

Session 4: Managing phosphorus pollution and waste from mine to field to fork

Concluding Synthesis - Setting the policy and research agendas

19.00 Workshop dinner at local restaurant