

Update

January - March 2013 (No 14)

Work in Progress

Project Completions

By the end of March, three more SAIN projects completed:

- Addressing vulnerabilities and building capacity for adaptation of agriculture to climate change in China, completed by the team led by Prof Tim Wheeler of Reading University and Prof Lin Erda of CAAS;
- Estimates of future agricultural greenhouse gas emissions and mitigation in China, completed by the team led by Prof Pete Smith of University Aberdeen and Prof Genxing Pan of Nanjing Agricultural University;
- Conservation for enhanced utilization of crop wild relative diversity for sustainable development and climate change mitigation, completed by the team led by Prof Brian Ford-Lloyd, Dr Nigel Maxted, Dr Shelagh Kell of Birmingham University and Prof Kang Dingming of China Agricultural University.

Over the past three years, project teams have delivered a series of outputs, include methodology training, study tour, workshops, policy briefs and academic papers, which were reported in the previous issues of Update. The following are the recent publications from the projects:

- Yang Y, Ji C, Ma W, Wang S, Wang S, Han W, Mohamma A, Robinson D and Smith P, Significant soil acidification across northern China's grasslands during 1980s–2000s, *Global Change Biology* (2012) 18, 2292–2300, doi: 10.1111/j.1365-2486.2012.02694.x
- Yang Y, Fang J, Ji C, Ma W, Mohammat A, Wang S, Wang Shaopeng, Datta A, Robinson D and Smith P. Widespread decreases in topsoil inorganic carbon stocks across China's grasslands during 1980s–2000s, *Global Change Biology* (2012) 18, 3672–3680, doi: 10.1111/gcb.12025
- Zheng J, Li L, Pan P, Zhang X, Smith P & Hussain Q, Potential aerobic C mineralization of a red earth paddy soil and its temperature dependence under long-term fertilizer treatments, *Soil Use and Management*, June 2012, 28, 185–193



UK-China Sustainable Agriculture Innovation Network (SAIN)

New project on sustainable nutrient management and water resources protection

Researchers of SAIN Working Group 1 and Working Group 4 are going to start a new project on *Knowledge, policy and practice for sustainable nutrient management and water resources protection in UK and Chinese agro-ecosystems*.

With the objective of achieving more sustainable management of N and P in agro-ecosystems, this project will develop and exchange innovation in the fields of knowledge, practice, policy and governance. The project team will focus specific activities on regional examples that capture key farming systems within both the UK and China.



For more information about this project, please contact Laurence Smith (l.smith@soas.ac.uk).

Research Report

China's Food Security - Challenges and Responses in a Global Context

David Norse, Yuelai Lu and Jikun Huang have recently completed a report to EU on the above title. The report has four key conclusions:

- China's food security to 2020/30 need not be at risk
- In the main China could feed itself. It has the capacity to maintain a high level of self-sufficiency except in soybean, maize and dairy products. However, this will require critical policy and technological changes to re-direct agriculture on to a sustainable growth path that minimizes GHG emissions and other negative impacts on the environment.
- China's net food imports in 2020/30 need not place an unsustainable burden on world agriculture, and could provide agricultural export opportunities for some countries in Sub-Saharan Africa
- The implications for the EU are modest but some member countries could make significant contributions to China's food security as a source of commodities, and of management expertise or technology for the whole food production, distribution and retailing chain.

Please contact Yuelai Lu (y.lu@uea.ac.uk) if you need full report.

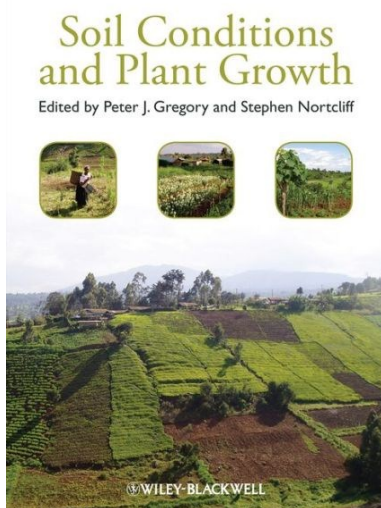
Job announcement

World Society for the Protection of Animals (WSPA) is recruiting a Programme Manager for its Humane Sustainable Agriculture work in China. The position will be based in Beijing.

The main purpose of the Programme Manager – Humane and Sustainable Agriculture (HSA) role is to provide leadership and direction to the campaign to end the suffering of animals for food and living conditions, particularly for pigs farmed for intensive feeding, and put the welfare of animals at the heart of pig farming in the China context.

If anyone is interested, please contact the WSPA China office directly: infochina@wspa-asia.org

Other News



12th edition of “Soil Condition and Plant Growth” published

The latest edition (12th) of a valuable textbook, “Soil Condition and Plant Growth” was published recently by Wiley. The book has been used by generations of students studying soils. The first edition was published over 100 years ago by Sir John Russell who at the time was Director of Rothamsted. In this new edition the Editors have re-emphasised the interactions between soils conditions and plant growth – as in the title. It is not a text book purely on soils. A number of SAIN colleagues made contribution to the book, Peter Gregory is the editor, David Powlson and Pete Smith contributed the chapter on Soil Organic Matter, Phil Haygarth contributed the chapter on Nitrogen and Phosphorus Cycles and Their Management. Full details can be found at:

<http://onlinelibrary.wiley.com/book/10.1002/9781118337295>

The 2013 Human Development Report – "The Rise of the South: Human Progress in a Diverse World" – examines the profound shift in global dynamics driven by the fast-rising new powers of the developing world and its long-term implications for human development.

China has already overtaken Japan as the world’s second biggest economy while lifting hundreds of millions of its people out of poverty. India is reshaping its future with new entrepreneurial creativity and social policy innovation. Brazil is lifting its living standards through expanding international relationships and antipoverty programs that are emulated worldwide.

But the "Rise of the South" analyzed in the Report is a much larger phenomenon: Turkey, Mexico, Thailand, South Africa, Indonesia and many other developing nations are also becoming leading actors on the world stage.

Click [here](#) for full report

Increase in Agriculture Students in the UK

The Higher Education Statistics Agency (HESA) revealed postgraduate ‘Agriculture and related subjects’ saw the biggest increase in UK university enrolment over the last year. Between 2010/11 and 2011/12 the number of postgraduate students studying agriculture rose from 1,970 to 2,170 - a 10 per cent rise, while computer science, which saw the biggest decline, dropped by 15 per cent.

Click [here](#) for details

For more information about SAIN, please visit: <http://www.sainonline.org/English.html>

If you have any further enquiries, please contact Yuelai Lu at: y.lu@uea.ac.uk