

News release

## Science and innovation are key to improving lives in the developing world, claim top academics

Thursday 14 January 2010

A new book by two of the UK's leading international development thinkers is a landmark in development thinking and practice.

*Science and Innovation for Development* demonstrates how science and innovation can be harnessed to tackle today's biggest challenges in poor countries, including climate change, HIV/AIDS and illiteracy. Case studies are described, including the use of tissue culture to develop disease-resistant bananas in Kenya; the use of nanotechnology to develop cheaper and faster kits for diagnosing infectious diseases and the use of organic material to power a multi-purpose stove that can also function as a refrigerator and generator.

"*Science and Innovation for Development* is the most important publication on development since Fritz Schumacher's 1973 classic *Small is Beautiful*," says world-renowned development scholar Professor Calestous Juma of Harvard University. He will join the authors to launch the new title in London on Tuesday 19 January at the Wellcome Collection.

Written by two of the UK's foremost development experts, Sir Gordon Conway, Professor of International Development at Imperial College (and former chief scientist at the UK Department for International Development) and Professor Jeff Waage, Director of the London International Development Centre (LIDC), with Sara Delaney, LIDC & Imperial College, *Science and Innovation for Development* demonstrates how even the most basic daily activities in developing country communities are based on science and innovation.

Sir Gordon says: "People in developed countries sometimes forget how scientific innovations have transformed their lives.

"In the 20th century we witnessed dramatic medical inventions such as a vaccine against yellow fever and the discovery of penicillin. Today we are seeing revolutionary advances in

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electronics and communications. Similarly, technology is helping solve challenges faced by the world's poorest people: water purification technologies are providing communities with access to clean water, mobile phones are being used by farmers to access agricultural data and medical research is helping tackle diseases like malaria and HIV.”

Using the Millennium Development Goals as a framework, the book explores a wide range of development issues where science is particularly active: agriculture, health and the environment.

Co-author Professor Waage says: “We have written this book to help people understand the role that science and innovation can – and does – play in helping developing countries reduce poverty and improve people’s livelihoods.

“We firmly believe that science is vital for development and we want that to be well understood, particularly as science is often presented in a way that is not easily accessible to the non-specialist.”

The authors and Professor Juma will be joined at the book launch by a panel of leading UK scientists: Scotland’s Chief Scientist and UKCDS Chair, Professor Anne Glover; Professor Alan Thorpe, Chair of Research Councils UK and CEO of the Natural Environment Research Council (NERC); Professor Chris Whitty, Chief Scientific Adviser and Head of Research at the Department for International Development (DFID) and Saleemul Huq, Senior Fellow, International Institute for Environment and Development (IIED).

The book is published by the UK Collaborative on Development Sciences (UKCDS) in partnership with the London International Development Centre (LIDC), with contributions from Imperial College London. The production of the publication was funded by DFID.

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**For more information or to arrange author interviews, contact:**

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## Notes to editors

1. *Science and Innovation for Development*, by Gordon Conway and Jeff Waage with Sara Delaney. Published by UK Collaborative on Development Sciences (UKCDS) 2010. ISBN 978 1 84129 0829

For an embargoed PDF version of the book, see  
[http://www.m360.co.uk/transfer/science\\_innovation\\_development.pdf](http://www.m360.co.uk/transfer/science_innovation_development.pdf)

Copies can be purchased from BCPC Publications, [www.bcpc.org](http://www.bcpc.org).

Review copies available upon request.

2. Launch details

Tuesday 19 January, 17.30 at the Henry Wellcome Auditorium, Wellcome Collection, 183 Euston Road, London NW1 2BE. RSVP to Angela May at [a.may@ukcds.org.uk](mailto:a.may@ukcds.org.uk).

3. About the authors

**Gordon Conway** is a Professor of International Development at Imperial College. A trained agriculturalist, in the 1960's he was a pioneer of sustainable agriculture developing integrated pest management programs for the State of Sabah in Malaysia.

In the 1970s and 1980s he lived and worked extensively in Asia and the Middle East, for the Ford Foundation, World Bank and USAID.

From 1998-2004 he was President of the Rockefeller Foundation and from 2004- June 2009 Chief Scientific Adviser to DFID and President of the Royal Geographical Society.

He is a KCMG, Deputy Lieutenant of East Sussex, Hon Fell RAEng and FRS. He holds five honorary degrees and fellowships. He is the author of *'The Doubly Green Revolution: Food for all in the 21st Century'* Penguin and Cornell.

**Jeff Waage** is the Director of the London International Development Centre (LIDC), a development consortium of six University of London Colleges, and a Professor at the School of Oriental and African Studies.. He trained in entomology, and taught ecology at Imperial College London before joining the Commonwealth Agricultural Bureaux International (CABI) in 1986 where he headed the International Institute of Biological Control and later CABI Bioscience.

Jeff returned to Imperial as Head of its Department of Agriculture in 2001 and joined LIDC as its first Director in 2007. Jeff has been President of the International Organization of Biological Control and Chair of the Global Invasive Species Program, and has more recently served on scientific advisory committees with BBSRC, Defra and Natural England.

**Sara Delaney** is Editorial Officer at Imperial College. She studied biological and environmental engineering at Cornell University and 'Science, Society and Development' at the Institute of Development Studies (IDS).

From 2005-2007 Sara served as a US Peace Corps volunteer in Mali working in the water and sanitation sector.



**Calestous Juma** is Professor of the Practice of International Development and director of the Science, Technology and Globalisation project at Harvard University's John F Kennedy School of Government.

He is an internationally recognised authority and leader in the application of science and technology to sustainable development in developing and developed countries. He is a former Executive Secretary of the United Nations Convention on Biological Diversity and Founding Director of the African Centre for Technology Studies in Nairobi, and he also served as Chancellor of the University of Guyana. He is co-chair of the African High-Level Panel on Modern Biotechnology of the African Union and the New Partnership for Africa's Development (NEPAD). He has been elected to several scientific academies including the Royal Society of London, the US National Academy of Sciences and the Academy of Sciences for the Developing World (TWAS).

#### 4. About the organisations

**UKCDS** is a collaboration of UK medical, agriculture, environmental, engineering and social sciences organisations working together to maximise the impact of UK research on international development.

[www.ukcnds.org.uk](http://www.ukcnds.org.uk)

**DFID** is the part of the UK government that manages Britain's aid to poor countries and works to get rid of extreme poverty.

[www.dfid.gov.uk](http://www.dfid.gov.uk)

**LIDC** develops interdisciplinary research and training programmes to address complex international development challenges. It was established in 2007 with a grant of £3.7m from the Higher Education Funding Council for England (HEFCE), and it now has more than 1,000 staff, students and alumni members from its constituent Colleges: Birkbeck, Institute of Education, London School of Hygiene and Tropical Medicine, Royal Veterinary College, School of Oriental and African Studies, and The School of Pharmacy.

[www.lidc.org.uk](http://www.lidc.org.uk)

Consistently rated amongst the world's best universities, **Imperial College London** is a science-based institution with a reputation for excellence in teaching and research that attracts 14,000 students and 6,000 staff of the highest international quality.

Innovative research at the College explores the interface between science, medicine, engineering and business, delivering practical solutions that improve quality of life and the environment - underpinned by a dynamic enterprise culture.

Since its foundation in 1907, Imperial's contributions to society have included the discovery of penicillin, the development of holography and the foundations of fibre optics. This commitment to the application of research for the benefit of all continues today, with current focuses including interdisciplinary collaborations to improve health in the UK and globally, tackle climate change and develop clean and sustainable sources of energy.

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