



### LATEST AT LINK

#### OPEN SCIENCE CONFERENCE



**L**INK is a member of the steering committee for an INRA (French National Institute for Agricultural Research) and CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement) conference on "Partnerships-Innovation-Agriculture Open Science" in Paris in the first week of June. The conference will explore the need for and nature of open, composite innovation architectures to deal with contemporary agricultural themes such as pest management or food safety that demonstrate a high degree of integration of different scientific disciplines as well as different social and economic concerns. Similarly the new technological paradigms such as biotechnology are likely to demand new open forms of knowledge networks to successfully integrate the different arenas of knowledge and different societal concerns. It will use the metaphor of different innovation ecologies to convey the evolving diversity of ways of organising innovation that are needed in a fast-changing world.

[www.international.inra.fr/all\\_the\\_news/events\\_and\\_symposia/april\\_june\\_2008/partnerships\\_innovation\\_agriculture](http://www.international.inra.fr/all_the_news/events_and_symposia/april_june_2008/partnerships_innovation_agriculture)



## NEGOTIATING A NEW AGRICULTURAL INNOVATION PARADIGM: THE ANATOMY OF THE DEBATE

*The recently-concluded International Food Policy Research Institute conference, "Advancing Agriculture in Developing Countries through Knowledge and Innovation", was one more signal that the idea of an innovation system is now an integral part of the new international vision for agricultural development. But the conference also revealed this ambition is yet to be translated into action. More worrying is that critical sticking points — such as questions about how innovation should be evaluated — arise from the closely-guarded disciplinary perspectives of a small but powerful group of stakeholders in the international agricultural research community that has recently and reluctantly hitched itself to the agricultural innovation systems bandwagon.*

#### The new international vision for agricultural development

**A**t a time when soaring food prices are leading donors to increase funding to agriculture and agricultural research it is critical that the international community gets it right this time around. Failure will waste the huge financial and political capital that is now flooding back to agriculture. It will also have dire consequences for our global society, whose wealth, health and sustainability is all too apparently linked with the fortunes of the agricultural sector.

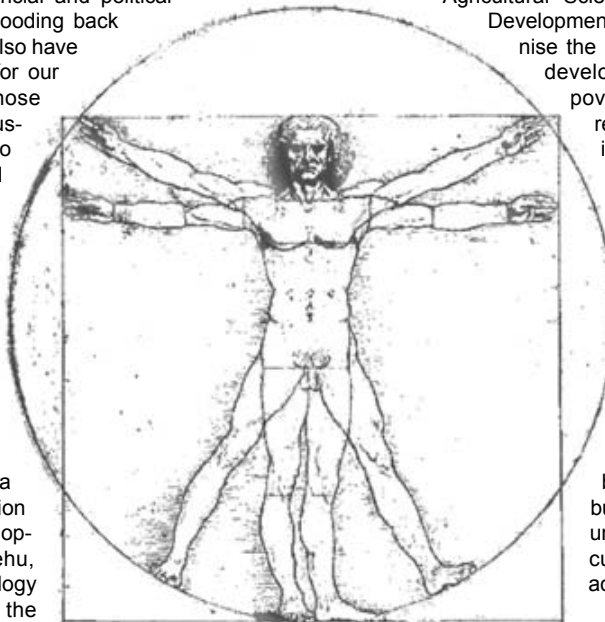
The recent IFPRI conference at Addis Ababa on knowledge and innovation responds to the increased interest surrounding what is emerging as a new international vision for agricultural development. Dr. Eija Pehu, Science and Technology Policy Advisor in the Agriculture and Rural



Development Department of the World Bank, set out much of this new vision in her presentation of the two critical roadmaps for agricultural development in the years to come — the agriculture-themed 2008 World Development Report and the International Assessment of Agricultural Science and Technology for Development (IAASTD). Both recognise the importance of agricultural development for growth and poverty reduction; both recognise the heterogeneity and complexity of agriculture and the agendas it encompasses; both recognise the critical importance of innovation; and both flag systems perspectives as a way to help build capacity and deal with a fast-changing world.

Can innovation systems ideas really help break the deadlock of business as usual and the unfulfilled promise of agricultural research that accompany it?

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To join in the debate on this issue, visit the new LINKLook blog at [www.link-look.blogspot.com](http://www.link-look.blogspot.com)



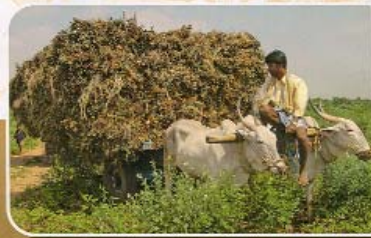
LINK is a specialist network of regional innovation policy studies hubs established by the United Nations University-MERIT (UNU-MERIT) and the Food and Agriculture Organization of the United Nations (FAO) to strengthen the interface between rural innovation studies, policy and practice and to promote North-South and South-South learning on rural innovation.



## LATEST AT LINK

### FODDER PROJECT DOCUMENT PUBLISHED

Reframing Technical Change:  
Livestock Fodder Scarcity Revisited  
as Innovation Capacity Scarcity



The conceptual framework for the fodder innovation project LINK is undertaken with the International Livestock Research Institute (ILRI) — and their partners in India and Nigeria — is now available as a publication and is available at [www.fodderinnovation.org](http://www.fodderinnovation.org) or [www.innovationstudies.org](http://www.innovationstudies.org). The conceptual framework argues that it is necessary to address the problem of animal fodder shortages not from the perspective of information and technology scarcity, but from the perspective of innovation capacity scarcity.

### LINK-ACTS WORKSHOP ON INNOVATION RESPONSE

LINK and its East African hosting partner, the African Centre for Technology Studies (ACTS), conducted a workshop to explore and strengthen policy-relevant capacities for livestock sector development in Addis Ababa between April 9 and 11. The workshop brought together senior decision-makers from Intergovernmental Authority on Development (IGAD) member state ministries, UN agencies, regionally operating NGOs, key donor organisations, research institutes and civil society organisations engaged in livestock development and emergency management.

The workshop examined and assessed existing policy initiatives that aim at improving sector response capacity in the face of drought and livestock disease emergencies and explored the existing policy-relevant capacities that support policy and institutional change processes geared towards safeguarding the livelihoods of livestock-dependent people. Using the innovation systems framework as an analytical tool, workshop participants explored the policy process associated with drought and livestock disease emergencies in their countries and within the region. Through this analysis participants identified ways in which they could better influence the policy process, and how related policy learning mechanisms could be established and sustained.

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Agricultural practitioners, researchers and policymakers are certainly clamouring for help with tools and protocols to operationalise systems perspectives. But a more difficult question is whether the mainstream international agricultural research community can really accommodate some of the more professionally-challenging — but critical — aspects of this perspective and help make the potential of innovations systems ideas a reality?

### Mainstream at last?

International conferences on agricultural development with an agricultural innovation systems sub-text are now relatively commonplace — LINK LOOK reports on at least one every month. The meeting in Addis Ababa, however, was not notable for the subject matter it covered, but for the organisation that hosted it. No longer is the idea of an agricultural innovation system the preserve of academics working at the margins and arguing for a paradigm shift. Instead, this meeting was organised by a mainstream organisation — IFPRI, a centre of the Consultative Group on International Agricultural Research (CGIAR), with a long and proud history of agricultural economics research.

The irony is that IFPRI has been somewhat sceptical of the innovation systems perspective and its qualitative analytical tradition. However, as IFPRI economist Dr. Regina Birner pointed out in her presentation at the conference, innovation systems ideas have come out of the evolutionary economics tradition — a well-respected branch of the discipline. One of the factors that have moved IFPRI in this new direction is its merger with the former International Service for National Agricultural Research (ISNAR) — now an IFPRI division based in Addis Ababa. It is an open secret this is was more of an arranged marriage than a love marriage. At the time of the merger innovation systems ideas were arguably the cutting edge of ISNAR's science and technology policy work whereas IFPRI's work in this area followed the more traditional route of analysis of investment in agricultural research.

### A happy marriage?

Of course the confluence of two fast-flowing rivers can be a turbulent place and the debate on different perspectives is clearly still very active in IFPRI. For example, introducing his presentation on capacity development in innovation systems, Dr. Suresh Babu — another longstanding IFPRI economist — articulated his clearly palpable discomfort with the innovation systems idea, explaining that there was still resistance to an idea that “is not supported by an underpinning theory”. He went on to say that he didn't care what you called an approach as long as it helped poor farmers. His presentation suggested that he did care. And did so deeply.

Another IFPRI economist explained that he felt obliged to define and present his work in the idiom of the quantitative, neoclassical economics tradition of IFPRI. Of course, debates about agricultural innovation are not debates about quantitative vs. qualitative analytical approaches. It's just that attempts to understand the interplay of processes, policies, institutions and sys-

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tems dynamics — central concerns in an innovation systems perspective — tend to sit a little uncomfortably with the quantitative economics tradition.

### Tomorrow's paradigm on yesterday's terms

The introduction to the conference by IFPRI director Dr. Joachim von Braun — arguably the seniormost agricultural economist in the CGIAR — unintentionally made it quite clear that there are unresolved debates about accommodating the innovation systems perspective in the CGIAR mainstream. He insisted that the conference's deliberations about innovation and development should not be a debate about different paradigms and ideological positions. In the same breath he also insisted that innovation should be evaluated using good counterfactuals — an evaluation technique that forms a central tenet to Dr von Braun's own paradigm, but which those from the systems perspective have great difficulty with.

Andrew Barnet, a freelance innovation policy advisor, argued in his presentation that the debate was indeed about coming to terms with some of the implications of shifting to a new paradigm implied by the innovation systems concept. He also suggested that the question of evaluating the outcome of interventions seeking to stimulate innovation processes may not just be more difficult — as some other presenters had suggested. It may well be impossible in the conventional sense.

### Roadmaps and roadblocks

The conference did make an extremely valuable contribution towards moving innovation systems ideas towards practice and charted out many next steps, including: the need to balance research capacity investments with investments in the linkages and institutional and policy changes associated with innovation capacity; the need to invest in a new generation of research and policy professionals whose “technical” skills are complimented with a systems view point; and the need to learn from the vast diversity of global innovation experiences.

A roadmap is certainly starting to emerge and IFPRI's conference documentation will, hopefully, reflect that. But, roadblocks are also becoming apparent. These roadblocks are apparent in the attempts seen at the conference to force fit old paradigm principles on the new analytical and policy tools needed to understand and plan innovation capacity and performance. The source of these roadblocks lies in the disciplinary traditions within international agricultural research community that is now charged with taking these ideas forward. As Dr. von Braun's opening comments so clearly demonstrated, the pivotal issue is the question of evaluation and how it should be conducted.

Evaluation is pivotal because it spills over into three operational concerns that are critical in taking the innovation systems perspective forward:

1. Benchmarking innovation performance and capacity
2. Experimenting with new approaches to stimulating innovation; and

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3. Learning from global innovation diversity. Get these wrong, or even continue to do things the way we have done them before and we are stuck at business as usual.

### Benchmarking: Balancing different perspectives

**B**enchmarking is an important tool tracking innovation performance and capacity and identifying where remedial action can strengthen capacity and boost performance. Historically, it has relied on outcome indicators, new patents, processes and products and input indicators, particularly in investments and in R&D. There is a high demand from policymakers for this sort of concise, numerically-based information. Innovation surveys in industrialised countries have developed relatively sophisticated composite indicators of innovation performance. IFPRI's Dr. David Spielman's presentation at the conference gave an overview of these approaches and his work on using them to benchmark agricultural innovation performance.

Of course, indicator-based innovation benchmarking has a role, but it clearly needs to be expanded to accommodate key insights from the innovation systems perspective. Most important is the need to assess the degree of interconnectedness in the economy and the institutional setting that shapes this interconnectedness. Innovation outcomes such as new products are certainly a proxy for innovation capacity, but have limited diagnostic content for policymakers seeking to strengthen capacity.

Both Dr. Spielman's presentation on benchmarking and Dr. Nienke Beintema's on agricultural science and technology indicators acknowledged that their approaches did not capture the critical aspects of systemic coherence or even the prevalence of partnership in a given location. Network analysis was presented, but its diagnostic or predictive powers were not elaborated. The question, however, that one is left with is why — considering the limitations of a numerical, indicator-based approach to innovation benchmarking — a research organisation like IFPRI has not started to experiment more prominently with different approaches.

For example, the literature discusses a more process-orientated approach, where policymakers interact with various innovation actors to discuss what works and what does not and what could be done in the future. Currently, the World Bank Institute (WBI) is experimenting with a remarkably similar approach. In a workshop organised by the WBI in May, country teams consisting of policy, private and development actors will convene to discuss and act on a series of innovation and agribusiness case studies from six sub-Saharan African countries. This is not a substitute for conventional benchmarking, but it illustrates that there are alternative ways of generat-

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ing information about innovation experiences and using it to drive policy dialogue and institutional and policy changes.

If innovation benchmarking reverts back to counting R&D inputs and measuring outcomes, instead of helping policymakers also think about how to build the links and ways of working needed to enable innovation, it will lead back to business as usual. Analysts would do well to remember that when it comes to innovation not everything that counts can be counted.

### Experimenting with innovating and learning from experience

**L**ike the benchmarking tradition of examining the innovation inputs and outputs, the dominant evaluation tradition follows the same logic. The innovation systems protagonists argue that it is difficult to relate any one particular intervention with discreet outcomes. Instead, it is argued that what is more useful is to build up an understanding of how capacities develop over time, exploring the extent to which these are more likely to achieve mission goals and develop lessons for how this has been achieved. They also argue that this is usually a path-dependent trajectory of history and learning and that reliable counterfactuals are thus, by definition, impossible to identify.

Again, the point is not to say that innovation outcomes cannot and should not be measured. Rather it is to recognise that this may not always be possible in the conventional sense and that often the only substitute is to collect qualitative information about institutional change and capacity development. The problem with Dr. von Braun's assertion that a counterfactual is essential in innovation evaluation is the limitations this puts on legitimising a diversity of innovation experiences, and, thus, the ability of policy and practice to learn from this diversity. Take, for example, the presentation made by Dr. Howard Elliot, a research and innovation management specialist, on a whole range of different agricultural programmes that now exist with an innovation element. To suggest that we can only learn lessons from those for which a counterfactual evidence can be established is clearly stretching belief! And what about the lessons we can learn from programmes that fail according to conventional evaluation techniques — i.e., those that have not had any direct welfare impacts?

On a practical note, during the course of LINK's advisory work with both the sub-Saharan Africa Challenge Programme (SSA CP) of Forum for Agricultural Research in Africa (FARA) and the Research Into Use programme of DFID (managed by NRIInternational), we have seen how these traditional evaluation perspectives have all but derailed efforts to experiment with new ways of organising innovation. Let us not allow narrow evaluation perspectives to block space for experimentation.

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## IAASTD REPORT CALLS FOR RADICAL AGRICULTURE CHANGE



**A**fter three years of international collaboration and deliberation the International Assessment of Agricultural Science and

Technology for Development (IAASTD) has released a report that calls for radical change in agriculture to "serve the poor and hungry if the world is to cope with a growing population and climate change while avoiding social breakdown and environmental collapse". According to the report, in order to meet the challenges, it is necessary to place institutional, economic and legal frameworks that combine productivity and the protection and conservation of natural resources. The IAASTD was aimed at evaluating the relevance, quality and effectiveness of agricultural knowledge, science and technology. The report, however, was not endorsed by CropLife International, which noted that it failed to recognise the role modern plant sciences, including plant biotechnology and crop protection, can play in increasing agricultural crop productivity. **LINKLook** is digesting the report and its implications. Watch this space for our take on the report next month.

[www.agassessment.org](http://www.agassessment.org)

## GLOBAL SEMINAR ON GREEN REVOLUTION IN AFRICA



Former UN Secretary General Kofi Annan will speak at the Salzburg Global Seminar on May 3-7 in Salzburg, Austria, on "A Green

Revolution in Africa: What Framework for Success?" The seminar will consider various proposals for a "green revolution" in sub-Saharan Africa, placing them in a "distinctly African context and with an eye to holistic development goals". It will also seek to enable a broad range of stakeholder comment, and ensure that efforts to transform agriculture through new technology are undertaken within a broad policy framework that takes account of infrastructural prerequisites — physical, social and environmental. This follows a three-day conference titled "Towards a 'Green Revolution' in Africa", which will bring together diverse stakeholders, from Africa and beyond, to explore issues of vital concern to the future of African agriculture.

[www.salzburgseminar.org/2008/index.cfm](http://www.salzburgseminar.org/2008/index.cfm)

## NEW UNU-MERIT M.PHIL

**U**NU-MERIT has announced a new graduate fellowship programme in economics, innovation and technology aimed at attracting outstanding economics students from both developed and developing countries with a keen interest in development issues. UNU-MERIT will support students enrolled in the METEOR M.Phil programme in the Faculty of Economics and Business Management in Maastricht University. The course will lay the groundwork for a Ph.D. or provide the training necessary for a career in policy-making in development and innovation. For further information visit [www.merit.unu.edu](http://www.merit.unu.edu).

## INNOVATION JOBS AT IFPRI

**T**he International Food Policy Research Institute is seeking applicants for several post-doctoral research fellow positions at its International Service for National Agricultural Research (ISNAR) division in Addis Ababa, Ethiopia. It is also looking for TWO senior fellows for programmes in research systems of IAR4D and innovation processes associated with value chains. For further details, visit [www.ifpri.org](http://www.ifpri.org).

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## Time for a new evaluation gold standard?

What the April conference demonstrated so ably was that as the innovation systems approach beds down into the mainstream economics tradition of critical mainstream organisations like IFPRI, the outcomes of these philosophical debates are going to determine whether the dominant paradigm persists or whether new and complementary perspectives such as innovation systems can be accommodated. Can a new innovation evaluation gold standard be agreed upon? Unless the international agricultural research community legitimises a much broader suite of evaluation techniques, the expansion of the agricultural innovation repertoire is going to be difficult and that will harm us all.

On a practical level it is now urgent that a neutral broker organise high-level discussions on these issues with the gatekeepers of the international agricultural research community and the proponents of the innovation systems approach and related perspectives.

## Mainstream or backwater?

Paradigm changes always need to be owned and interpreted by the mainstream if they are to take hold. The danger is that in the process, key messages, critical insights and opportunities for doing things differently get lost. The gatekeepers of the current mainstream have to take their responsibility very seriously if they want to grasp this key moment in history and have agriculture really make a difference in international development. They would do well to remember that if they do not move with the times the mainstream can all too easily turn into a backwater.

Discussions on this topic don't end here. To join in with your views, visit and comment in [www.link-look.blogspot.com](http://www.link-look.blogspot.com)

## ILAC CONFERENCE ON IMPACT ASSESSMENT

**ILAC** A diverse group of over 60 participants involved in agricultural research for development met in Cali Colombia March 26-28 to discuss issues related to research for poverty reduction, impact assessment approaches of such research and means for institutionalizing new approaches to research and impact assessment. Participants' experiences confirmed that impact can include economic, social, environmental, health and other factors related to well being and that dynamic, learning oriented interactions are needed to define and deliver locally relevant impacts. Impact assessment approaches and methodologies need to be broad enough to evaluate a range of impacts and associated processes, and the impact assessment process should be a means of learning about how research can contribute more successfully to development impacts. A summary report is being prepared now and will be widely circulated. All background materials from the workshop are available on line at [www.prgaprogram.org/riw/](http://www.prgaprogram.org/riw/).  
(From Jamie Watts, ILAC Project Coordinator)

## CORRECTION

In an editorial in January's issue of the LINK News bulletin, titled "Initiatives to watch out for in 2008", LINKLook erroneously reported that Institutional Learning and Change (ILAC) initiative of the CGIAR had received a €4 million grant from the Dutch government. The actual sum received is closer to US\$ 3.4 million. We at LINK apologise for the error and any misconceptions we may caused among our readers.

## WBI CONFERENCE ON INNOVATION IN MAY

The World Bank Institute (WBI) is organising a two-day conference, starting May 12, in Dar-es-Salaam, titled "Developing Agricultural and Agribusiness Innovation in Africa". The forum is part of a project on agricultural innovation launched by the WBI in 2007 in six African countries: Ghana, Kenya, Mozambique, Rwanda, Tanzania and Uganda. The project involves the development and discussion of a series of agribusiness innovation case studies. During the May event, a number of policymakers and practitioners are expected to discuss these case studies and the factors that help or hinder innovation in the agricultural sector, learn about operationalising agricultural innovation systems, and strategise on agricultural innovation at the national level. Organisers hopes discussions at the conference can inform national initiatives to promote agricultural innovation as well as the ongoing implementation of NEPAD's Comprehensive Africa Agriculture Development Program. The WBI is partnering with DANIDA, Irish Aid, the Global Development Network, FARA and other units of the World Bank to organise both the research agenda and forum.

## NEW IDS MA PROGRAMME

The Institute of Development Studies (IDS) at the University of Sussex is seeking applicants for its Masters programme in Science, Society and Development, launched in 2007. The MA focuses on practical and policy questions and combines "a solid grounding in development theories with an understanding of the politics and governance of scientific knowledge and policy". Visit [www.ids.ac.uk/go/teaching](http://www.ids.ac.uk/go/teaching) or email Julia Brown at [teaching@ids.ac.uk](mailto:teaching@ids.ac.uk).

## LINK AT IFPRI CONFERENCE

LINK coordinator Andy Hall and South Asia Director Rasheed Sulaiman presented papers at the conference on "Advancing agriculture in developing countries through knowledge and innovation" organised by the International Food Policy Research Institute (IFPRI) in Addis Ababa, Ethiopia, between April 7 and 9. Andy's presentation, titled "Next steps in strengthening agricultural innovation capacity: A roadmap for investigators and investors" was made during the closing plenary of the conference. Rasheed presented on "Extension from an Innovation Systems Perspective" during a session on Knowledge, Innovation, Agricultural Extension and Education. Powerpoints of the presentations can be found on the LINK website at [www.innovationstudies.org](http://www.innovationstudies.org).

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