

# THE FALLACY OF UNIVERSAL SOLUTIONS IN EXTENSION: IS ATMA THE NEW T&V?

*The universal application of the T&V model of agricultural extension in more than 50 countries is one of agricultural development's best known failures. The approach worked well in places where it was originally developed, but proved inappropriate almost everywhere else.*

*In this month's LINK LOOK, **Rasheed Sulaiman V.** and **Andy Hall** worry that an apparently successful extension innovation piloted in India is set to suffer a similar fate. Is there an alternative to promoting turnkey, "one-size fits all" approaches in countries as vast as India — where agriculture-related poverty needs urgent solutions? Is extension still a relevant concept?*

### DISEASES OF A DINOSAUR

If the truth be told the classic idea of agricultural extension is an idea from a bygone age. It is simply no longer useful for the main public agency entrusted to promote agricultural development to be conceived as an organisation that is dedicated solely to transferring technology — and mainly production technology, at that.

The reality of the rural economy in many developing countries is one where farmers need not just technology, but information on prices, consumer preferences, markets and trade regulation. They need access to credit and other inputs. Their information needs change quickly and require rapid responses and solutions. Information needs to be complemented by links to markets and other players in local and global value chains. For the poorest households they don't necessarily need agricultural development support, but, rather, support for diversified livelihoods in the new rural economy.

### RE-INVENTING EXTENSION?

This diagnosis is not new. There is a fairly broad consensus that extension agents in an ideal world would resemble innovation brokers: articulating the demand of farmers for knowledge; facilitating linkages between players with ideas and resources; and managing the innovation process. Yet, in most countries, this vision remains a dream.

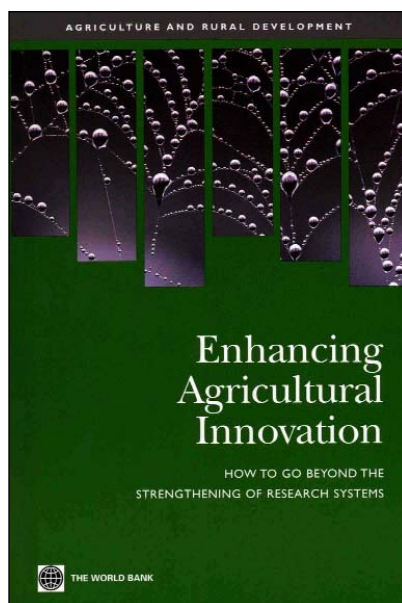
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## WB PUBLICATION NOW AVAILABLE IN SPANISH



The World Bank has released a Spanish translation of its publication “Enhancing Agricultural Innovation: How to go beyond the Strengthening of Research Systems.” The book published the findings of a collaborative World Bank-UNU-MERIT study that was established as an outcome of a June 2004 international workshop on “Development of Research Systems to Support the Changing Agricultural Sector”. One of the main conclusions of the 2004 workshop was that strengthened research systems will increase the availability of new knowledge and new technologies, but not necessarily the innovation capacity of the agricultural sector. The Spanish language translation of the publication will be made available for download from the website of the World Bank’s Agriculture and Rural Development at <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTARD/0,,menuPK:336688~pagePK:149018~piPK:149093~theSitePK:336682,00.html>.

## POLICY DIALOGUE ON FOOD PRICE CRISIS

The Agriculture and Rural Development Department of the World Bank held a policy dialogue to explore innovation in the food price crisis response on September 26, 2008. The event, titled “Cultivating Innovation: A Response to the Food Price Crisis”, brought together a number of policy-makers, development specialists, researchers and other experts to discuss innovation in a changing context. Presentations made by various speakers, including Chief Scientific Advisor of the UK’s Department for International Development (DFID) Sir Gordon Conway, are available at <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTARD/0,,contentMDK:21919537~pagePK:148956~piPK:216618~theSitePK:336682,00.html>.

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Of course, there are a number of useful new extension approaches emerging around the world. For example, Willem Heemskerck<sup>i</sup> and his colleagues recently reviewed experiences of outsourcing agricultural advisory services in Sub-Saharan Africa. William Rivera and Willem Zijp<sup>ii</sup> reviewed cases of contracting arrangements for extension. William Rivera and Gary Alex<sup>iii</sup> explored extension reform, including decentralisation, privatisation, demand-led approaches and revitalisation of public sector services.

All these studies present detailed analyses of how the reform of extension can be managed. The broad conclusion emerging from all these studies, however, is that extension reform needs to move away from *best practices* to *best fit* approaches. That is to say, what works best in a particular situation is entirely dependent on the starting conditions in that specific location and point in time. The widely applicable blueprint doesn’t exist and approaches conceived in that way shouldn’t be attempted.

Willem Heemskerck’s group is, however, right to also caution that a *best fit* approach requires conditions that promote learning and incremental change and improvement in approaches. This, in turn, requires good connections between the wide array of organisations involved in extension and also a policy and institutional environment that allows arrangements to be adapted in response to lessons and emerging experiences about the effectiveness of arrangements.

In other words, what is required is the classic *learning by doing* mode of developing new capacities. Unfortunately the institutional environment conducive to such a learning-based approach is uncommon and, understandably, planners and donors feel reluctant to abandon a best practice, universal model approach.

### A LONG TRADITION OF UNIVERSAL SOLUTIONS

Promotion of successful pilots as universal solutions is nothing new in extension. The Training and Visit (T&V) system of extension was promoted with World Bank financial assistance in more than 50 countries based on its successful implementation in two pilot projects — one in Turkey and the other in India (see Box 1). One of the major conclusions that emerged from the world-wide eval-

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uation of the T&V extension was that “the Bank had erred in the extent to which it has promoted the T&V extension system in relatively uniform packages of investments and extension practices in large state and national programmes.”<sup>iv</sup>

The end of donor funding to T&V extension in the early ’90s was a watershed in extension’s world-wide evolution. The Post T&V period witnessed much experimentation in the approach to extension. This was largely due to the fact that without donor funds the T&V model was expensive to operate and a search for alternatives was necessary. Four main types of models were tried at various times and locations.

- **Decentralisation:** Shifting responsibility of extension to local governments
- **Privatisation:** Ceding substantial or total ownership and control to the private sector
- **Cost recovery, cost sharing and outsourcing**
- **Participatory and demand-led extension:** Group approaches, farmer-field schools and farmer consultations in design and implementation

### ATMA

One model developed in India was ATMA — Agricultural Technology Management Agency (see Box 2). This was part of a large World Bank-supported project aimed at strengthening and reforming the agricultural research and extension system. The central idea of the ATMA model was that it would act as a mechanism to bring together the different agencies involved in extension in a district. In consultation with farmers it identified local research and extension priorities and developed local level problem-solving plans. Funds specifically provided for ATMA were used to implement these plans.

The approach was pilot tested in 28 districts spread over 7 states between 1999 and 2003. Based on the “success” of this pilot in the 7 states, in 2004 the Government of India decided to expand this model with its own funds — across all 567 districts in the country. In practice this meant that the original pilot model, with little modification, was simply replicated elsewhere.

### GOING THE T&V WAY?

Not surprisingly, ATMA is currently facing numerous implementation challenges (see Box 4).

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### BOX 1

## TRAINING AND VISIT (T&V) SYSTEM: MAIN FEATURES

The Training and Visit (T&V) model of extension was promoted by the World Bank between 1975 and 1995 as a national public extension system in more than 50 countries. T&V was based on the assumption that a lack of management orientation of extension and its poor links with research were the major reasons for inadequate transfer and adoption of technology. The main features of the T&V system included: A single line of command for extension; a rigid bi-weekly schedule of visits to a defined fixed list of contact farmers; a fortnightly regular training of village level workers, regular interactions between extension workers and scientists in research stations, and focussed approach on dissemination of information on technologies in major crops. After the withdrawal of World Bank funds, the T&V structure collapsed everywhere, especially due to its high costs and lack of convincing evidence of its impact<sup>iv</sup>.

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Four issues have been critical:

- **Insufficient support:** The same technical support and funding available during the pilot stage is not available at the expansion phase.
- **Mismatch with diversity of application contexts:** The uniform model is struggling to cope with the wide diversity in Indian agriculture in terms of different crops, livestock, rural enterprises, infrastructure, governance, local institutions and ethnic groups, social and economic status of farmers.
- **Lack of local ownership:** Since the model was centrally conceived and promoted it suffers from lack of ownership and is treated as just one more central scheme that state level extension services have to implement.
- **Capacity and institutional constraints:** Lack of dedicated manpower, functional autonomy and attitudinal barriers at all levels.

Apart from bringing some additional resources for extension activities (see Box 3 for its other contributions), ATMA has failed to address some of the major institutional challenges of agricultural extension. For instance, even now extension functions as an agency for technology dissemination and is funded and evaluated for this function only. There is also an apparent reluctance to deal with some of the operational bottlenecks that constrain development of public-private partnerships and which are probably a prerequisite for reinventing extension.

ATMA seems to be going the T&V way. It is only a matter of time before we will hear people talking about it as yet another model that failed due to its universal promotion. Jock Anderson<sup>v</sup> points out that the World Bank was criticised for its "slowness in admitting that T&V was inappropriate for the situation of many of its client countries". India needs to make sure it doesn't make the same mistake by promoting ATMA in all districts in the country. Rumours that the ATMA model is to be exported to Bangladesh and Indonesia are even more worrying.

## BACK TO SQUARE ONE?

There is no doubt that something that resembles a 21<sup>st</sup> century vision of agricultural extension is needed and this means substantial reforms in public policies and services. Adding urgency to this is the ever-increasing complexity of agricultural sector development and the sector's acknowledged role in poverty reduction.

Of course, it is all too easy to criticise new approaches, such as ATMA. It is also important to realise that in a country like India and, indeed, elsewhere, administrative traditions and realities place limits on what is possible and politically feasible even as a pilot. But the challenge remains of how to break out of this *best practice to best fit* impasse.

## THE BEST OF 'BEST FIT' APPROACHES

While developing a framework for moving from best practice to best fit, Regina Birner and colleagues<sup>vi</sup> suggest that what is needed is "sophisticated econometric and quasi-experimental methods". This doesn't, however, seem to sit well with the zeitgeist of current thinking that points to *learning by doing* approaches to strengthening extension capacity in locally-relevant ways. The real answer is that there is no

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## BOX 2

### ATMA: MAIN FEATURES

**A**gricultural Technology Management Agency (ATMA) is a decentralised participatory and market driven extension approach pilot tested in India in 28 districts during 1999-2003. It is a district level autonomous agency constituted for:

- a) Integrating extension programmes across all key line departments and other extension agencies
- b) Linking research and extension activities in a district
- c) Decentralising extension decision-making through a participatory programme planning process involving all categories of farmers

The district collector/deputy commissioner heads the ATMA Governing Body, with members drawn from the line department, Farmer Technology Centres, farmers and NGOs. Under ATMA, grassroots-level extension is mainly implemented through the involvement of Block-level Technology Teams, farmer advisory committees, farmer/ farmer interest and self help groups. This model was subsequently replicated in all districts with central government funds. So far, ATMAs have been established in 567 districts of India.

## BOX 3

### ATMA: POSITIVE OUTCOMES

**S**ome of the positive contributions of ATMA are as follows:

- For the first time, an attempt for convergence of extension by different service providers has been attempted through a legally-constituted body
- It has developed a mechanism for participation of farmers in:
  - i) Deciding priorities (strategic research and extension plan)
  - ii) Identifying and implementing programmes (Farmer advisory centres)
- It has brought some additional funding for conducting demonstrations, trainings, exposure visits, and forming farmer groups. Some of the groups were facilitated in developing better links with agro-processors.
- ATMA brought some publicity and goodwill and also generated some success stories for extension at a time when public funding and support for extension has been dwindling.
- ATMA provided space for seeding some new ideas such as public-private partnerships and user contribution for extension, though several challenges still remain in mainstreaming these ideas.

one answer. The best that policy can do is arm itself with an array of different approaches. These might include the following:

- **Reform by replacement:** It could be argued that the under-resourced and moribund extension services are beyond reform. Better just to start again through a new organisation with new values and broader expertise. The National Agricultural Advisory and Development Service (NAADS) in Uganda is an example where an entirely new organisation was set up to pilot a radically different approach to extension.

- **Models as seeds for learning and capacity development:** Models are always a good starting point but only if they are treated as pilots for learning and capacity development. Piloting different models relevant to specific regions should be a continuous process and should be part of any successful organisation's learning strategy. The Kerala Horticultural Development Programme (KHDP) implemented in Kerala (India) owes its success to its continuous experimentation and learning<sup>vii</sup>.

- **Learning from positive deviants:** This involves purposely seeking out and learning from past and contemporary cases of exceptional successes from groups or individuals who are operating with the same constraints and resources as everybody else and who prevail against the odds. The purpose is to learn from the way different actors were effective in bringing about positive changes. Though the overall extension scene appears to be gloomy there are always exceptions. For example, the way the international civil society movement spread and popularised the systems of rice intensification (SRI) has many lessons to offer.

- **Scanning and incubation:** There are useful experiences of innovations in extension that have emerged in response to the changing context of agricultural development (for example, in the Netherlands<sup>viii</sup>) or as a way of dealing with social and environmental concerns (for example, farmer field schools). Identifying these experiences and learning the underlying principles and lessons from such different cases and then incubating these as pilots to aid local adaptation would be useful for introducing new approaches. Opportunities for South-South learning, particularly in regions with similar institutional settings, could also be better exploited.

## GOODBYE EXTENSION: HELLO INNOVATION

**M**any of the challenges in the reform of agricultural extension are in fact challenges that accompany the transition to innovation as the organising principle for policy and capacity building. Like agricultural research and other developmental efforts in the rural sector, there is a need for a whole new cadre of professionals with an appreciation of systems thinking and a familiarity with the idea of learning and incremental capacity upgrading as a means of achieving goals.

We are not suggesting that the world should be filled with innovation systems specialists. But the world does need scientists, technical specialists, policymakers and others who recognise the broader landscape into which their professional expertise fits as well as the systemic nature of social and economic change process. Only when this happens will it be possible to redefine the role of extension as a provider of

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integrated support and services to rural communities. And only then will some progress be made in introducing learning-derived institutional changes needed to support this new role.

Our hope, however, is not just that some progress is made in extension reform. Instead we hope that we can wave goodbye to extension as a specialist area of policy and policy research. In its place we would like to see a more coherent, integrated and all encompassing approach to building the agricultural innovation capacity that many countries still so urgently need.

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LATEST AT LINK

OPEN UNIVERSITY SEMINAR ON AGRICULTURAL INNOVATION

LINK Coordinators Andy Hall and Jeroen Dijkman presented a talk on “Agricultural Innovation for Development: Any Chance of Getting it Right This Time?” at a seminar organised by the Open University’s school of Development Policy and Practice in the Faculty of Maths, Computing and Technology in Milton Keynes on October 1. Drawing on the conclusions of the 2008 World Development Report and the report of the International Assessment of Agricultural Science, Technology and Development (IAASTD) — which placed science, technology and innovation centrestage in the development agenda — Andy and Jeroen discussed the challenges ahead before these new perspectives could be coupled with agricultural science. Until progress were to be made on these challenges, the development community could well be condemned to relive past failures.

LINK PHD RESEARCHER AT GLOBELICS MEETING



(Above) LINK Ph.D. researcher Ekin Keskin at the meeting of GLOBELICS (Global Network for Economics of Learning, Innovation, and Competence Building Systems) in Mexico City, held between September 22-24. Ekin presented her paper titled “The role of intermediaries in innovation response capacity development: The case of livestock in Ethiopia”.

BOX 4

ATMA: CURRENT OPERATIONAL DIFFICULTIES

During the pilot stage, ATMA was supported with higher resources, hand-holding by consultants, a full-time project director and intensive training by national level organisations. However, when it was up-scaled without donor funding, it didn't have the same support structures. There is no full-time Project Director and training is handled at state-level training centres that are poorly-equipped. Convergence is limited by a spending cap of less than \$200,000 allotted for each district. This amount is shared by different agencies to independently implement a few extension activities, such as training, exposure visits and demonstrations. Moreover, this is only a fraction of the total amount spent by all these agencies independently in the district. Most of the line departments and extension functionaries are not clear about the approach and ways of integrating extension through ATMA.

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