

Rethinking Agricultural Input Subsidies in Poor Rural Economies

Agricultural input subsidies were a common element in agricultural development in poor rural economies in the 1960s and 70s, including successful green revolutions. Although subsidies have continued, to a greater and lesser extent, in some countries, conventional wisdom as well as dominant donor thinking in the 80s and 90s was that subsidies had been ineffective and inefficient policy instruments in Africa, which contributed to government over-spending and fiscal and macro-economic problems.

Recent years have seen a resurgence of interest in agricultural input subsidies in Africa, together with the emergence of innovative subsidy-delivery systems. These developments, together with new insights into development processes, make it necessary to revisit the conventional wisdom on subsidies. This should include an examination of the various development opportunities and constraints facing African farmers, a review of recent experience with input subsidies, and a thorough re-examination of the role played by agricultural input subsidies in the Asian green revolution.

Why subsidise?

The conventional argument for subsidies in agricultural development is that their primary role is to promote adoption of new technologies and thus increase agricultural productivity (Ellis, 1992). Subsidies do this by allowing farmers to access purchased fertilisers and improved seeds at lower cost, thus reducing the disincentives to adoption that stem from farmers' cash constraints, risk aversion and low expectations of returns from investments in inputs. (Perceptions of risks and low expectations of returns may both be the result of limited information about input benefits and correct usage, among other factors).

Subsidies were also often implemented as part of policies aiming to support agricultural development in more remote areas, with pan-territorial pricing and subsidised delivery systems. Coupled with complementary credit and extension services, this was intended to encourage economically and technically efficient use of inputs. Input subsidies have also been a means for raising farm incomes, particularly where farmers were being taxed in other

ways through export tariffs and low fixed domestic prices.

The problem with subsidies

Conventional wisdom on the difficulties with input subsidies is that their costs are very difficult to control. This depends partly on the way that subsidies are delivered. It is particularly the case with general subsidies for particular types of input through, for example, fertiliser production or import subsidies.

Since subsidies should rapidly lead to learning about both input use and benefits and to increased incomes, subsidies should be needed for only a short time and then be phased out. However, even where there are quotas or targeted subsidies, there tend to be strong political pressures for the expansion of subsidies, and only weak pressures for their control. This also makes 'exits' very difficult: there is strong resistance to scaling down or termination of subsidies.

Targeting input subsidies to particular types of farmers is very difficult, with problems of diversion and leakage – for example from small- to large-scale farmers, and across borders to neighbouring countries. These problems both expand the cost of a subsidy programme and reduce its efficiency. Even where it is used by the target group, artificially low prices may lead to over-use of inputs, or to adoption of input-intensive rather than more economically efficient labour-intensive production methods.

Subsidy benefits may also be regressive in that they tend to benefit larger farmers who can afford subsidised inputs (the poorest farmers may not be able to afford inputs even where they are subsidised).

Finally the market distortions introduced by subsidies, and particularly parastatal involvement in subsidised input delivery, also tend to crowd out and inhibit private sector investment in input markets and provide opportunities for corruption, and hence impede sustainable development.

New thinking

New thinking on input (and particularly fertiliser) subsidies in Africa has arisen for a number of related reasons, including political pressures in African countries; concerns about declining soil fertility, agricultural stagnation and rural poverty in Africa; identification of input subsidies as a potential instrument for social protection policies; and questions about the failures of liberalised policies in supporting broad-based agricultural development, particularly the sustainable intensification of staple food-crop production.

Input subsidies have become more common in Africa in the past few years, with a number of different modes of implementation and a variety of, often unstated, objectives. In addition to the conventional arguments listed above, these objectives include:

- Short-term private input-market development.
- Replenishment of soil fertility.
- Social protection for poor subsidy recipients.
- National and household food security.
- Meeting broad-based political demands.

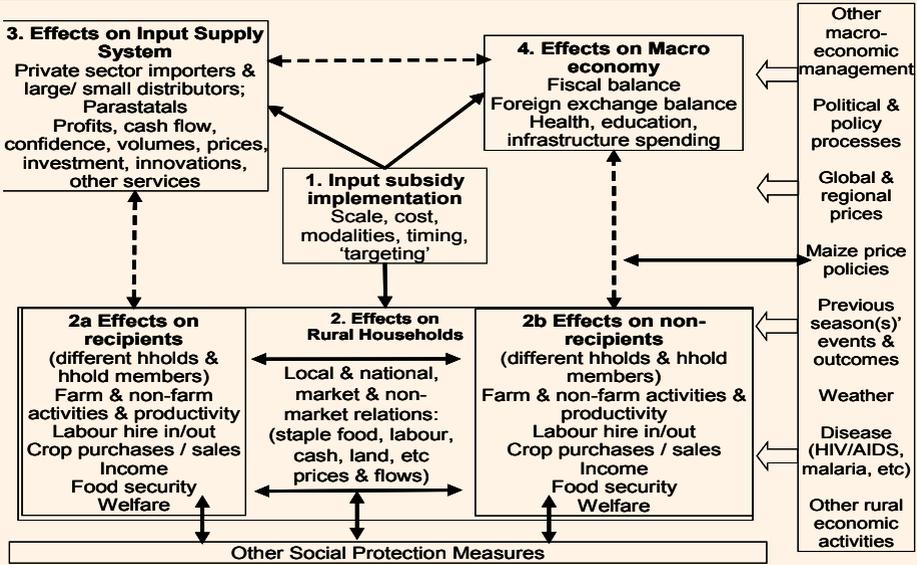
The extent to which input subsidies are the most cost effective ways of achieving these objectives will vary on a case by case basis.

The Asian case

It is possible to argue that some of these objectives were not important in successful Asian green revolutions (for example replenishment of soil fertility and social protection for poor subsidy recipients). One can also identify other, perhaps more important, outcomes from subsidy-use in these green revolutions or in more recent input-subsidy programmes. These outcomes include:

- Long term 'thickening' of supply chains and rural markets.
- Lower staple-food prices and higher wages.
- Increased real incomes for poor

Figure 1: A conceptual framework for investigating agricultural input subsidies impacts



non-recipients as a result of lower food prices and higher wages.

- Longer-term structural changes in livelihoods and the rural and national economy, leading to expanded domestic demand for higher-value livestock and horticultural products and for non-farm goods and services, together with expanded supply capacity, due to release of land and labour made possible by increased staple crop productivity.

These are argued to be major outcomes of the Green Revolution (Hazell and Rosenzweig, 2000; Timmer, 2004). Gregory (2006) argues that fertiliser subsidies for staple crops are a critical requirement for this process to occur in Africa. Dorward et al. (2004) argue that sustained (but not indefinite) input subsidies were a major part of successful Green Revolution packages, making a critical contribution to thickening and thus kick-starting markets, first within staple-food supply chains and then in the wider rural economy.

Dorward et al (2007) identify these as potentially the major pro-poor growth outcomes of a long-term, consistent input-subsidy programme in Malawi (outcomes which have long but unsuccessfully been pursued there). Emphasising these wider structural-change impacts of subsidies focuses more attention on the indirect beneficial impacts of input subsidies and undermines the concerns discussed above about regressive aspects.

The effectiveness of input subsidies in achieving or contributing to wider structural change and other outcomes also depends critically upon complementary policies affecting output (staple food) prices (which must be low and stable – but not too low), investment in roads, communications infrastructure and agricultural services (to promote efficient input use and agricultural diversification), and facilitating private sector development and non-farm diversification.

Research questions, activities and outputs

This brief review of key issues suggests that there are important questions that need investigation, about past and present successes and failures in agricultural input-subsidy programmes. These need to examine both the impacts of such programmes and the necessary and sufficient conditions for the achievement of beneficial impacts.

Agricultural input-subsidy impacts have been extensively studied in the past, but a new look at these questions is needed to address a wider set of impacts than have been considered in the past (including particularly the role of subsidies in promoting structural change), together with a broader set of implementation issues regarding subsidies themselves (their mode, sequencing and policy context), as well as the complementary policies needed for these wider impacts to be achieved. A conceptual framework for such study is provided in Figure 1.

The call for new research on agricultural input subsidies is urgent, for two reasons. First, there is an urgent need for better information to guide input-subsidy policy design, investment and implementation. Pressure for investments in inputs subsidies in Africa is growing and it is important that subsidy debates and policies are informed by up-to-date understanding of options and impacts, founded on relevant and rigorous research.

Second, the successful implementation of input subsidies in many Asian green revolution countries

occurred 40 to 50 years ago. Many professionals who were involved as implementers or analysts have already retired: there is limited time to ask new questions about these historical events and processes.

Sources:

Dorward, A. R., J. G. Kydd, J. A. Morrison and I. Urey (2004). "A Policy Agenda for Pro-Poor Agricultural Growth." *World Development* 32(1): 73-89.

Dorward, A. R., E. Chirwa, D. Boughton and V. A. Kelly (2007). *Evaluation of the 2006/7 Agricultural Input Supply Programme, Malawi: Interim Report*, Imperial College London; March 2007.

Ellis, F. (1992). *Agricultural policies in developing countries*. Cambridge, Cambridge University Press.

Gregory, I. (2006). *The Role of Input Vouchers in Pro-Poor Growth*. Background Paper Prepared for the African Fertilizer Summit, June 9-13, 2006, Abuja, Nigeria. Muscle Shoals, Alabama, IFDC.

Hazell, P. and M. Rosenzweig (2000). *Rural Asia: Beyond the Green Revolution*, OUP/ ADB.

Timmer, C. P. (2004). *Food Security and Economic Growth: An Asian Perspective*, Center for Global Development: Working Paper Number 51

Acknowledgements

This Policy Brief was written by **Andrew Dorward**, **Peter Hazell** and **Colin Poulton** of the **Future Agricultures Consortium**. The series editor is David Hughes. Further information about this series of Policy Briefs at: www.future-agricultures.org

The Future Agricultures Consortium aims to encourage critical debate and policy dialogue on the future of agriculture in Africa. The Consortium is a partnership between research-based organisations across Africa and in the UK. Future Agricultures Consortium Secretariat at the University of Sussex, Brighton BN1 9RE UK T +44 (0) 1273 915670 E info@future-agricultures.org

Readers are encouraged to quote or reproduce material from Future Agricultures Briefings in their own publications. In return, the Future Agricultures Consortium requests due acknowledgement and a copy of the publication.

FAC appreciates the support of the UK Department for International Development (DFID)

