

# Rethinking Agricultural Input Subsidies in Poor Rural Economies

**Andrew Dorward, Peter Hazell and Colin Poulton**  
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## Introduction

Agricultural input subsidies were a common element in agricultural development in poor rural economies in the 1960s and 70s, and were a common element of successful green revolutions. Although they have continued to a greater and lesser extent in some countries, conventional wisdom and dominant donor thinking in the 80s and 90s was that subsidies had been ineffective and inefficient policy instruments in Africa and contributors to government over-spending and fiscal and macro-economic problems. Recent years have seen a resurgence of interest in agricultural input subsidies in Africa and the complementary emergence of innovative subsidy delivery systems. These developments, together with new insights into development processes, require a revisiting of the conventional wisdom on subsidies: an examination of the various development opportunities and constraints facing African farmers, a review of recent experience with input subsidies in Africa, and a thorough re-examination of contributions and implementation modalities of agricultural input subsidies in the Asian green revolution.

## Key issues

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 adoption disincentives as a result of farmers' cash constraints and of their risk aversion and low expectations of returns from investments in inputs (where risks and low expectations of returns are the result of (inter alia) limited information about input benefits and correct usage). 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. 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. 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.

Conventional wisdom on difficulties with input subsidies are that their costs are very difficult to control. This depends partly on the way that subsidies are delivered, and is particularly the case with general subsidies for particular types of input through, for example, fertiliser production or import subsidies. 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 of input subsidies to particular farmer types is very difficult, with problems of diversion and leakage – for example from smallholder 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 even 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 on input (and particularly fertiliser) subsidies in Africa has arisen for a number of related reasons: 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 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 with a variety of often unstated objectives. These objectives include, in addition to the conventional arguments listed above

1. Short term private input market development
2. Replenishment of soil fertility
3. Social protection for poor subsidy recipients
4. National and household food security
5. 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 main text of the 2008 World Development Report on "Agriculture for Development", for example, recognises all these objectives but its summarised position is more restricted and conventional, focusing on "sustainable solutions to market failures, ... 'market smart' approaches to jumpstarting agricultural input markets...., and underwriting risks of early adoption of new technologies to help achieve economies of scale ... to reduce input prices ... as part of a comprehensive strategy to improve productivity with credible exit options" (World Bank, 2008).

It is, however, 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) and to identify other, perhaps more important, outcomes from subsidy use in these green revolutions or in more recent input subsidy programmes. These outcomes include

1. Long term 'thickening' of supply chains and rural markets
2. Lower staple food prices and higher wages
3. Increased real incomes for poor non-recipients (as a result of 2 above)
4. Longer term structural changes in livelihoods and the rural and national economy with 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 as a result of increased staple crop productivity

Hazell and Rosenzweig (2000) and Timmer (2004) discuss (2) to (4) above as major outcomes of the Green Revolution, and Gregory (2006) argues that fertiliser subsidies for staple crops are a critical requirement for this process 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 and 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 in Malawi). Emphasis on wider structural change impacts of subsidies then weakens conventional concerns (discussed above) about regressive access to subsidy, and focuses more attention on the indirect impacts as opposed to direct impacts on beneficiaries. The effectiveness of input subsidies in achieving or contributing to wider structural change and other outcomes is, however, also very dependent upon complementary policies affecting output (staple food) prices (which must be low and stable - but not too low), investing in roads and communications infrastructure and in agricultural services (to promote efficient input use and agricultural diversification), and facilitating private sector development and non-farm diversification.

Another important set of issues affecting the implementation and outcomes of input subsidy programmes concern domestic and international political contexts

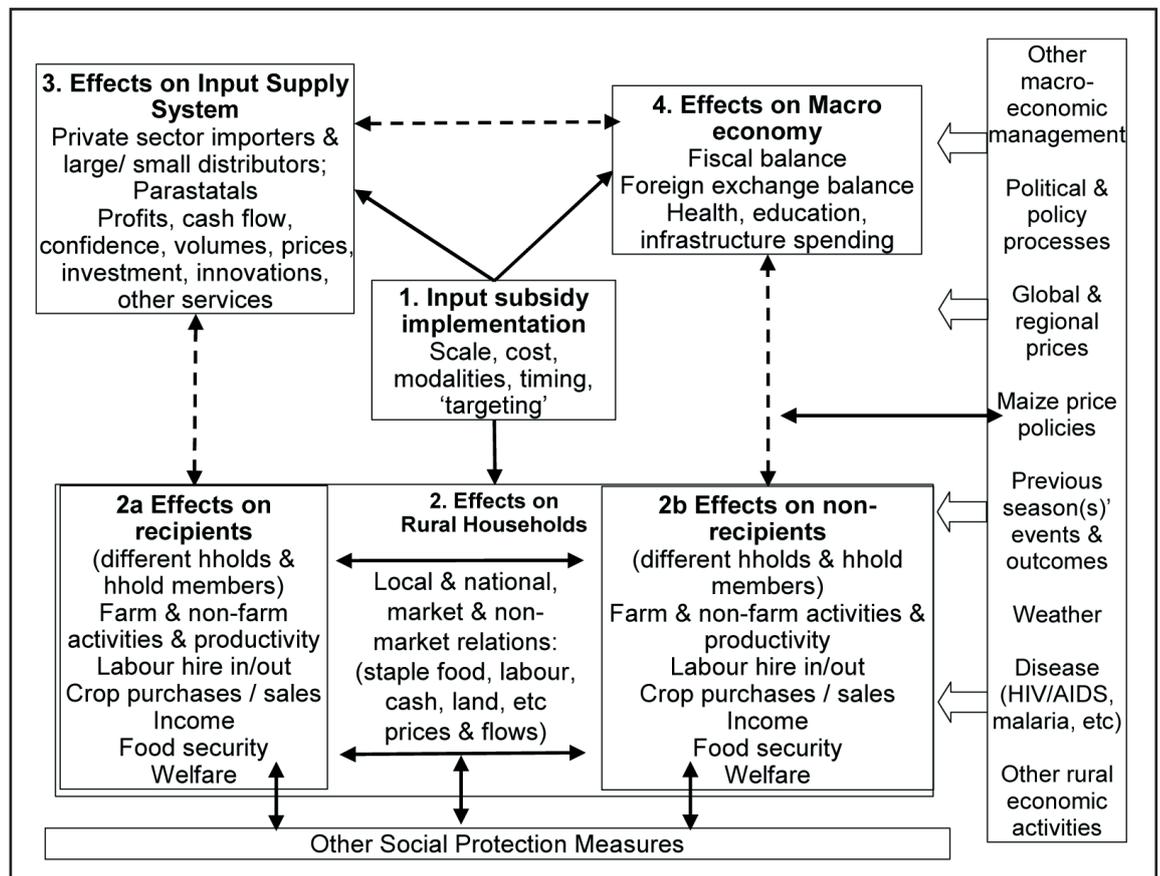
and processes. These are given increasing recognition in agricultural development policy analysis (see for example Birner and Resnick, 2005; Cabral and Scoones, 2006; World Bank, 2007) but detailed analyses of study of policy processes in input subsidy programmes are less common (Chinsinga, 2007, is a notable exception).

### Research Questions, Activities and Outputs

The 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 in particular the role of subsidies in promoting structural change), and a broader set of implementation issues regarding subsidies themselves (their mode, sequencing and policy context) and the complementary policies needed for these wider impacts to be achieved. A conceptual framework for such study is provided below (from Dorward et al 2007).

There is some urgency in the call for new research on agricultural input subsidies 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

A conceptual framework for investigating agricultural input subsidies impacts



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.

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