



## RETHINKING AGRICULTURAL POLICIES FOR PRO-POOR GROWTH

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*Global experience demonstrates the importance of agricultural growth for poverty reduction in poor rural areas, but also identifies the limitations of agriculture in delivering poverty reduction, and the need for complementary growth in the non-farm sector. Contrary to the thinking that dominates much of current development policy, subsidies need to play a crucial part in 'kick starting' food grain supply chains if increased smallholder productivity is to drive rural non-farm growth. Establishing the base conditions for such subsidies to work, designing and implementing them to be effective, and then phasing them out as soon as they have done their task, are major challenges facing policy makers concerned with reducing poverty in rural areas where most of the world's poorest people live.*

### Policy conclusions

- In many rural areas both the farm and non-farm sectors are critical for poverty reduction, with different but complementary contributions to pro-poor growth. As both sectors grow, the non-farm sector will build on the gains made by smallholder agriculture and increasingly influence real wages and food security.
- Critical 'base' conditions for pro-poor agricultural growth include adequate levels of rural infrastructure, labour-demanding technical change that delivers significant productivity gains, and access to stable input, output and financial markets supporting such technologies. These should transmit to the poor the benefits from widespread technology adoption through tightening of labour markets and falling grain prices (but these must not precede growth or they will choke it).
- Structural change of this kind requires policy analysis to differentiate between stages of development in poor rural areas and between different categories of rural people, and needs careful sequencing and targeting of policies. The early stages of growth require an active coordinating role by some central player(s). Finding new and more effective coordination mechanisms with different roles for the state, the private sector and civil society presents major technical, administrative and political challenges in policy design and implementation.
- Subsidies focusing on transaction cost reduction may also often be necessary to make input purchases both profitable and affordable. The design and implementation of any interventions needed for output price stabilisation and credit delivery pose challenges, but if effective will often be more efficient than blunter input subsidies.
- Promoting structural change from agriculture-based to non-farm growth requires large scale and long term investments. Increased pressure on resources, HIV/AIDS and competition through globalisation mean that it is becoming more difficult to achieve.
- Nor can structural change be promoted successfully everywhere. In areas remote from markets with high population density and a declining resource base, the emphasis may have to be more on resource rehabilitation, supporting out-migration, and meeting local food needs than on fully-fledged transformation. Supporting pro-poor agricultural growth is a risky and long term project, but is one of the few alternatives to desperate outmigration and indefinite large scale welfare support.

### Introduction

Sub-Saharan Africa and parts of South Asia are likely to hold large numbers of very poor rural people for the foreseeable future. Despite a pre-eminent role for agricultural growth in poverty reduction in poor agrarian economies in the past, such growth today faces new difficulties. This paper reports principal findings from a study of pro-poor agricultural growth (PPAG), presenting conclusions from (a) a wide ranging literature review examining characteristics of PPAG, conditions necessary for such growth, and its impact and development pathways (Dorward et al., 2004) together with specific reviews of case study countries (Malawi, India and Zimbabwe) (Dorward and Kydd 2004; Poulton et al. 2002; Smith and Urey, 2002); (b) econometric work on the poverty and growth impacts of different kinds of government spending in India over different time periods; and (c) livelihood, partial and general equilibrium modelling of the effects of different types of change on different categories of poor people in Malawi and Zimbabwe.

### Lessons from experience

There is substantial evidence that agricultural growth has played a critical role in poverty reducing growth around the world (see for example Dorward et al., 2004). However, **local conditions** (agro-ecology, climate, population density, irrigation, administrative and human capital, and infrastructure), **global trends** (in agricultural prices,

urbanisation, globalisation, technology and the spread of HIV/AIDS) and a **changed policy orthodoxy** all mean that today's poor rural areas face greater challenges than did those achieving sustained PPAG two or three decades ago.

Agriculture in many poor rural areas, particularly in Africa, has been also affected by two major policy changes over the last thirty years – a large reduction in public investment in agriculture and a major emphasis on liberalisation. Reduced investment is attributable partly to perceived failure of earlier investments and to the growing importance of non-farm activities in rural livelihoods.

Agricultural liberalisation emerged as a reaction to fiscally unsustainable state intervention in agriculture, with high costs for low quality services. New policies therefore called upon the discipline, incentives, and resources of the private sector to perform these functions more responsively and efficiently. This led to removal of regulatory controls in agricultural markets, elimination or reduction of subsidies and tariffs, and reform or privatisation of parastatals. These changes have delivered some positive impacts, in the supply chain systems for some cash crops in Africa, and in reduced food prices to many poor rural and urban consumers (Jayne and Jones 1997). However, particularly in cereal-based economies in poorer areas, the private sector has not moved in, and liberalisation in many countries is not leading to dramatic increases in PPAG.

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Lack of progress is attributed by some to government reluctance to give up sources of patronage. Incomplete liberalisation inhibits private sector investment (for example, Kherallah et al., 2000; Jayne et al., 2001) and calls for further opening of markets, as well as credible and sustainable macroeconomic policies, accompanied by measures to address problems in financial markets, and those affecting remote producers.

Lack of progress may also arise from a legitimate recognition that pervasive market failures impede the private sector. 'New institutional economics' arguments point to the weaknesses of institutions needed to support market exchanges in poor rural areas. This, in the context of a low density of transactions, leads to very high transaction risks and costs in financial, input, and output markets (See Box 1). These risks and costs, exacerbated by low population densities and poor communications, can lead to investment and market failures which in turn depress the level of economic activity, raising per unit transaction costs and (with thin markets) creating further risks of transaction failure: a vicious cycle or 'under-development trap' results. Problems of natural (for example climatic and pest) risks and of produce price variation (which has tended to increase with liberalisation) further depress investment returns and incentives, especially since, in most circumstances, these cannot be insured against. Whilst there are often incentives for processors of cash crops (such as cotton) to coordinate investments, this is rarely the case in food crops, and we cannot expect private agents on their own to break out of this under-development trap.

Examination of policies in place during rapid increases

#### Box 1 Transaction risks and costs

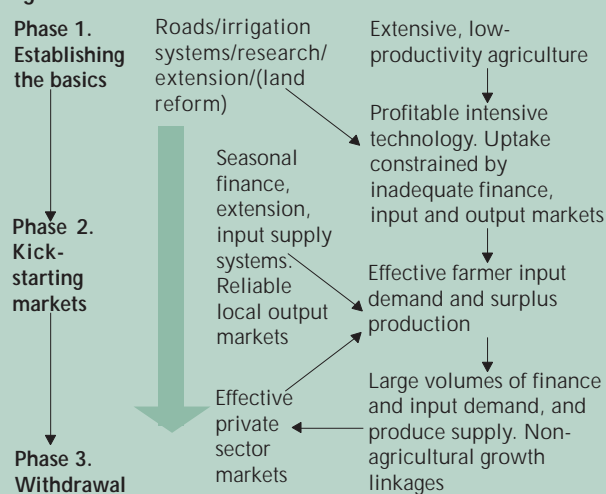
Buyers and sellers face risks that individual transactions will fail, with the loss of any investments in that transaction. Potential buyers and sellers may need to incur costs to protect themselves against such transaction failure. These 'transaction costs' include investment in information gathering about transaction partners, and development of various forms of 'non-market' relationship involving trust and the ability to impose some sort of penalty on a partner who defaults in a transaction. Where transaction risks and costs are high, and returns to transactions are relatively low, then transactions may not be worthwhile and market failure results. Poor rural areas face two major types of transaction risks: under **coordination risks**, one party's investment (in, e.g. production) may fail because other parties do not invest in the necessary complementary activities (e.g. marketing, processing or storage), and *vice versa*; **risks of opportunism** arise where other parties who have made complementary investments may be in an effective monopolistic or monopsonistic position that enables them to depress returns to the first investor below his or her break-even point. Opportunism may also involve the supply of sub-standard goods or services whose quality cannot be easily assessed when entering a contract. Examples of opportunism include loan default by farmers; low produce prices offered by traders at harvest time (when farmers are desperate for cash) or in remote areas (where farmers have no other sales outlets); sale of poor quality or adulterated inputs; and use of inaccurate weights and measures. An example of high transaction risks is provided by agricultural input retailers: any unsold stocks will often deteriorate and become worthless by the next season. Input sellers may therefore incur transaction costs in establishing social relationships with farmers so that they can take advance orders and may have to offer credit as part of this process. Farmers, on the other hand, need to be sure that they will be able to buy inputs on time, and perhaps on favourable credit terms. This requires them to invest in the development of relationships of trust and mutual commitment with input sellers. Both parties then incur transaction costs (making investments in relationships as well as forgoing possible opportunities to buy from or sell to other parties on better terms) in order to reduce risks from transaction failure.

in smallholder food crop production ('green revolutions') around the world suggests a set of necessary conditions for such increases to occur: appropriate and high yielding agricultural technologies; local markets offering stable output prices that provide reasonable returns to investment in 'improved' technologies; seasonal finance for purchased inputs; reasonably secure and equitable access to land, with attractive returns for operators (whether tenants or land owners); and infrastructure to support input, output and financial markets. Achievement of these conditions did depend upon favourable local and global conditions but was also strongly associated with state investment in infrastructure, research and extension, as well as interventions such as price stabilisation (maintaining prices between import and export parity), guaranteed procurement, and input supply and credit subsidy. But current liberalisation policies frown on such intervention.

Drawing on new institutional economics arguments outlined above, policy experience in green revolution areas, and more detailed examination of agricultural successes and failures in India, Malawi and Zimbabwe, Figure 1 presents a summary of the processes necessary for rapid growth in food production and in the wider economy in poor rural areas.

This shows how the contributions of technical, infrastructure and market interventions to PPAG may be sequenced. Phase 1 interventions establish the basic infrastructure and institutions for more productive cereal technologies. Agricultural transformation may then be 'kick started' by government interventions (in phase 2) to enable farmers to access input, output and finance markets at low cost and low risk and to stimulate private sector involvement in these activities. In more favourable environments with highly productive technologies and large markets, subsidies are required primarily to cover transaction costs, not to adjust basic prices. When farmers are used to the new technologies and when credit, insurance, input and produce volumes have built up, transaction costs per unit will begin to fall and will be pushed down further as non-farm activity is stimulated by growth linkages. Governments should then withdraw from these market interventions (phase 3), transferring attention to supporting conditions that will promote development of the non-farm rural economy. Such interventions will be more costly and less effective if they are introduced too early (without establishment of the basic conditions), or continued too long (after they have ceased to be beneficial), and pressure to prolong price subsidies

Figure 1 Three phases of policy support to agricultural transformations



Source: Dorward et al (2004)

has to be resisted. Current liberalisation policies in poor rural economies unrealistically attempt to move straight from phases 1 to 3.

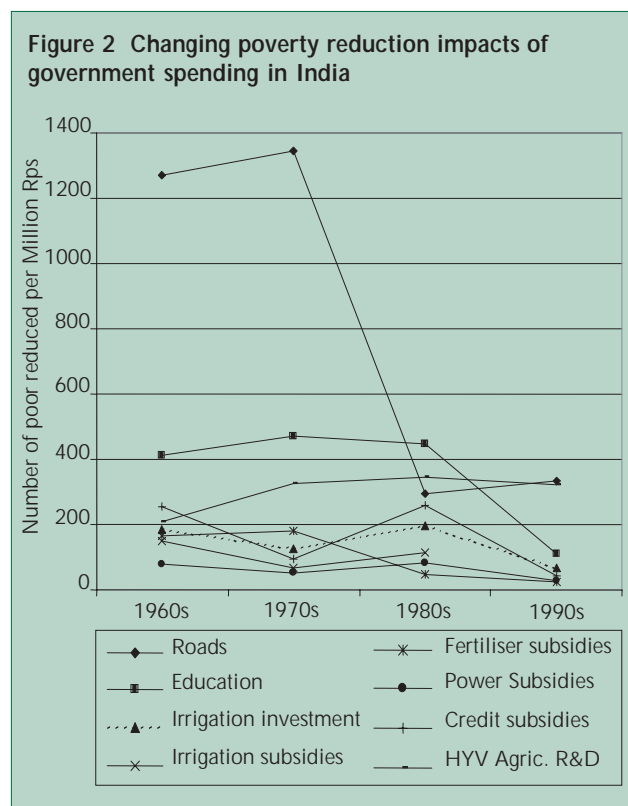
### Investments, subsidies and pro-poor growth in rural India

Econometric analysis of Indian state-level data from 1967 to 1997 (Fan et al, 2004) shows structural change over the period in relationships between poverty on the one hand and non-farm employment and agricultural prices on the other, with higher agricultural prices benefiting the poor in earlier decades, but harming them in the 1990s (as non-agricultural activities became increasingly important in their livelihoods). There is also evidence of increasing integration into the wider economy, with a growing influence of rural-urban linkages and of non-agricultural employment on wages.

Figure 2 shows initially high but then declining poverty reduction impacts from fertiliser subsidies; high benefits from investment in roads, education and agricultural R&D during all periods and varying benefits from credit subsidies over four decades; low impacts from power subsidies; and intermediate impacts from canal irrigation investments.

The results suggest a number of policy conclusions: priorities for public expenditure should change **over time** to reflect the changing patterns of return on investment. They should also differ **spatially**: in areas weakly integrated into markets, the priority is for investments in infrastructure, technology and land reform (stage 1 in Figure 1). Only then do subsidies have any prospect of working, and even so, for the short term they must be limited to those having robust delivery mechanisms, whilst longer term efforts are put in place towards improved governance.

These policy conclusions make challenging demands on politicians and policy makers – to match different stages of growth, to get the timing of subsidy introduction right, to design and implement subsidies to be effective (especially in increasingly liberalised global markets and in relatively small states), and to withdraw them when they are no longer needed.



### Box 2 Farm and non-farm activities in pro-poor rural growth

The non-farm sector is important (especially seasonally) for its contribution to the incomes of the poor, but also helps to finance employment and investment on medium-scale farms. However in most rural areas of Africa there are few opportunities for the non-farm sector to drive overall growth – it tends to be dependent on agriculture. In the many areas weakly integrated into markets, food supplies and prices, which are crucially important to the poor, will be influenced mainly by local production patterns, as will local wages.

As a result, own-farm smallholder production, and its continued development, is critically important to the poor, but so is the non-farm sector. Both must develop together so that the non-farm sector will, with time and improved markets, increasingly take over from smallholder agriculture its current dominant influence on real wages and food security.

### Lessons from Malawi and Zimbabwe

To analyse the structure of different rural livelihoods and to simulate policy impacts on livelihoods, rural growth and poverty, empirical work on Malawi and Zimbabwe used farm-household, rural economy and computable general equilibrium (CGE) models (Dorward, 2003; Wobst et al, 2004; Dorward et al, 2004; Poulton and Dorward, 2003). This highlighted very diverse constraints, opportunities and behaviour among different household types and showed that even where agriculture accounts for less than 50% of rural incomes its growth can still reduce poverty through labour and grain markets (Box 2 summarises critical relationships between farm and non-farm growth). Growth that raises real wage rates is crucial to sustained poverty reduction, and the poor benefit from raised labour demand or enhanced grain supply and reduced prices.

Large productivity increases are therefore needed from labour saving technical change if smallholder agriculture is to drive pro-poor growth, but this must be backed up by growth in the rural non-farm economy.

Where productive labour-demanding technologies do exist, there are large potential pro-poor growth benefits from reducing transaction costs impeding access to markets and from increased smallholder household liquidity. Easing of very severe liquidity constraints affecting poor households can lead to important synergies between some forms of direct income support and agricultural productivity and growth. Market intervention policies (such as output, input or credit system subsidies) that support labour demanding technical change and stimulate otherwise thin food grain and input markets can stimulate pro-poor growth. As with all growth policies, success will also depend on good governance and macroeconomic management, low real interest rates and (in many African countries) long-term donor support.

Where widespread and large scale increases in productivity cannot be achieved (for example in areas with high population pressure and a poor resource base), agriculture will not be able to drive the growth and structural change needed for significant poverty reduction. It still, however, has a vital role to play in 'livelihood protection and promotion': supporting people's existing livelihoods and strengthening or maintaining the natural resource base. The requirements of, e.g. minimum scale, impact, coordination or institutional capacity for policy success in these contexts are not so demanding as those outlined above for fully transformational PPAG. Nevertheless, significant investments will still be needed in technologies, coordinated service provision and the creation of a favourable investment climate. The costs of these investments need to be weighed against the costs of livelihood and natural resource failure in these poor rural areas, and the human



and fiscal costs of greater dependence on long term welfare support and emergency relief – often the only alternatives.

The study also demonstrated the need for disaggregated policy analysis that allows for variation between different household types in their responses to and gains or losses from different policies, as different households interact with, impact on, and are impacted by market changes in different ways. Similarly, policy interventions that specifically target seasonal constraints may play an important role in pro-poor rural growth. Overall, there is an urgent need for policy analysts to have access to better information on wage rates, on the workings of rural labour markets, and on the rural non-farm economy.

## Conclusions

This paper emphasises the importance of smallholder agriculture development in driving growth in poor rural areas. But it also recognizes the limits of agriculture-based growth: in some areas agriculture may not have the potential to drive much growth. Even where such potential exists, widespread and significant poverty reduction will only be achieved when agricultural growth stimulates rapid growth in rural non-farm employment, with institutional development, markets and trade relations all eventually favouring the non-farm sector and allowing it to build on the early gains made by agriculture. This requires significant economic structural change and depends heavily upon second round effects and growth multipliers in the local economy. Careful monitoring will be needed in several dimensions, to ensure that policies tighten markets which the poor can supply into (and so raise the price of, e.g. unskilled labour) and/or significantly loosen markets from which the poor buy (and so lower the price of, e.g. staple foods) – with measures to compensate the poor for any effects working against their interests.

Careful sequencing of investments is also needed (a) to put in place critical base conditions (e.g. infrastructure, technology, and equitable and secure access to land), (b) to ensure that complementary markets, services and conditions develop together (promoting rather than crowding out private sector development), and (c) to prevent policy implementation and benefits being subverted and captured by elites.

Evidence from India (on public investment) and from Malawi (on liquidity enhancement) suggests strong complementarities between agricultural growth policies and poverty reduction. But investments in agricultural growth must be on a large scale over long periods if they are to raise wages. This involves significant risks of unintended effects and high fiscal opportunity costs (e.g. reduced investment in welfare and in other sectors and services). These costs are exacerbated where the scale, scope and life of investment and subsidy programmes are extended by political pressures.

Establishment of the necessary base conditions will be slow, difficult and in some cases unattainable. Small countries with permeable land borders face particular difficulties in intervening in markets (regional coordination is needed here). In addition, globalisation and trade reduce local multipliers and may weaken critical growth linkages. To design and implement targeted, efficient and equitable policy sequences requires high levels of policy information and skills, a stable macroeconomic environment, and a sound administration. Past experience of failed agricultural growth demonstrate the challenges, but may lead to their being written off prematurely, or captured by elites seeking to (re-)gain personal advantage.

In some areas the challenges will be too great, as in countries or areas suffering a degraded resource base, high

population pressure and few alternatives to agricultural growth. In such situations there is still usually a vital 'livelihood protection and enhancement' role for agriculture, supporting existing livelihoods and maintaining the natural resource base. This will make fewer policy demands but still require substantial investment. The returns to these investments need to be compared with the human and fiscal costs of what is often the only alternative – viz. economic stagnation, with increasing dependence on long-term welfare support and emergency relief.

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