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Priorities and Preconditions for Successful Investment in Smallholder Agriculture in Sub-Saharan Africa

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Abstract: In the past couple of years, there has been resurgence in interest in smallholder agriculture as a potential driver for growth and poverty reduction in Sub-Saharan Africa. However, there remains considerable skepticism as to whether public investment in smallholder agriculture will lead to the desired growth and poverty reduction, given a general pessimism about "absorptive capacity" for (public) investment in Africa, the perception of failure of past agricultural investment and the observation that current conditions are unconducive to agricultural growth in Africa. This paper combines experiences of two UK-based NGOs dedicated to promoting smallholder agriculture and strengthening rural livelihoods in Africa with insights from academic literature on African agriculture and rural markets to set out an agenda for investment in smallholder agriculture in Africa. It identifies priorities for public investment, but also key issues related to "absorptive capacity" that need to be addressed if such investment is to succeed in generating agricultural growth and poverty reduction. Particular emphasis is placed on: a) investment in human and organisational capacity of smallholder farmers; b) investment in coordinated service provision to equip producers to respond to evolving market opportunities; c) the process of developing and implementing credible agricultural development strategies at both national and local level, and; d) reform of Ministries of Agriculture to support this process.

Priorities and Preconditions for Successful Investment in Smallholder Agriculture in Sub-Saharan Africa

In the past couple of years, there has been a resurgence in interest in smallholder agriculture as a potential driver for growth and poverty reduction in Sub-Saharan Africa. However, there remains considerable scepticism as to whether public investment in smallholder agriculture will lead to the desired growth and poverty reduction, given a general pessimism about "absorptive capacity" for (public) investment in Africa¹, the perception of failure of past agricultural investment and the observation that current conditions are unconducive to agricultural growth in Africa (Ashley and Maxwell 2001; Dorward, Kydd et al. 2004). Thus, even an agency such as DFID that is committed in principle to increasing investment in smallholder agriculture in Africa can exhibit honest uncertainty about the most appropriate public investments to make (DFID 2003).

(Dorward, Kydd et al. 2004) address the perception of failure of past agricultural investment and the observation that current conditions are unconducive to agricultural growth in Africa. They note that public investment and intervention to promote agricultural growth has a mixed record in Africa, but that large public and private investments in research, infrastructure and subsidies were a central part of the Asian Green Revolution story. Meanwhile, we have yet to see a smallholder agricultural transformation in Africa or elsewhere driven entirely by liberalised private markets. Whilst global (e.g. low world commodity prices) and internal African (e.g. HIV/AIDS) conditions are often not conducive to accelerated agricultural growth, there are also opportunities (e.g. unsatisfied domestic market requirements, if intra-African trade barriers were lowered). Moreover, if agriculture is not to drive growth and poverty reduction in Sub-Saharan Africa, there are few promising alternatives either.

This paper combines experiences of two UK-based NGOs dedicated to promoting smallholder agriculture and strengthening rural livelihoods in Africa with insights from academic literature on African agriculture and rural markets to set out an agenda for investment in smallholder agriculture in Africa². It identifies priorities for public investment, but also key issues related to "absorptive capacity" that need to be addressed if such investment is to succeed in generating agricultural growth and poverty reduction.

¹ See <u>http://www.htm-journal.info/article.php3?id_article=13</u> and <u>http://www.eurodad.org/articles/default.aspx?id=182</u> for examples of the debates in this area.

² The paper draws on the advocacy paper "Reaching the Poor: A Call to Action – Investment in Smallholder Agriculture in Sub-Saharan Africa" prepared by staff of FARM-Africa, Harvest Help and Imperial College London in February 2004. This paper is available from <u>www.farmafrica.org.uk/documents/20.PDF</u>.

Particular emphasis is placed on: a) investment in human and organisational capacity of smallholder farmers; b) investment in coordinated service provision to equip producers to respond to evolving market opportunities; c) the process of developing and implementing credible agricultural development strategies at both national and local level; d) reform of Ministries of Agriculture to support this process.

Why the interest in investment in smallholder agriculture?

The recent resurgence of interest in smallholder agriculture in Sub-Saharan Africa is linked to the growing recognition that, unless current trends show a dramatic improvement, most countries in Africa will fall well short of the first Millennium Development Goal, to halve between 1990 and 2015 the proportion of people whose income is less than one dollar a day (defined in 1993 purchasing power parity terms) (Lipton and Waddington 2004). Most of Africa's poor live in rural areas (IFAD 2001) and rural poverty often remains stubbornly high even where some progress in poverty reduction has been seen in urban areas.

The potential for agricultural growth to contribute to poverty reduction in Africa is well illustrated by two studies. Firstly, (Irz, Lin et al. 2001) show a strong negative correlation between agricultural yields and poverty across samples both of developing countries in general and African countries in particular. Secondly, (Fafchamps, Teal et al. 2001) conclude that, whilst rapid and sustained growth in national GDP is only possible when the manufacturing sector is growing strongly, the conditions for this do not exist in many African countries. As a result, the majority will have to rely on agricultural exports to stimulate national economic growth for the foreseeable future. This argument can be taken one step further. Even where manufacturing, minerals or tourism are the national "growth drivers", mechanisms have to be found to channel the benefits from this growth to rural households if significant poverty reduction is to take place. Whilst labour flows may be more important for lower potential agricultural areas, smallholder agricultural growth in response to growing demand elsewhere in the economy is likely to bring the broadest benefits to communities in areas of medium-high agricultural potential until economic development is at quite an advanced stage.

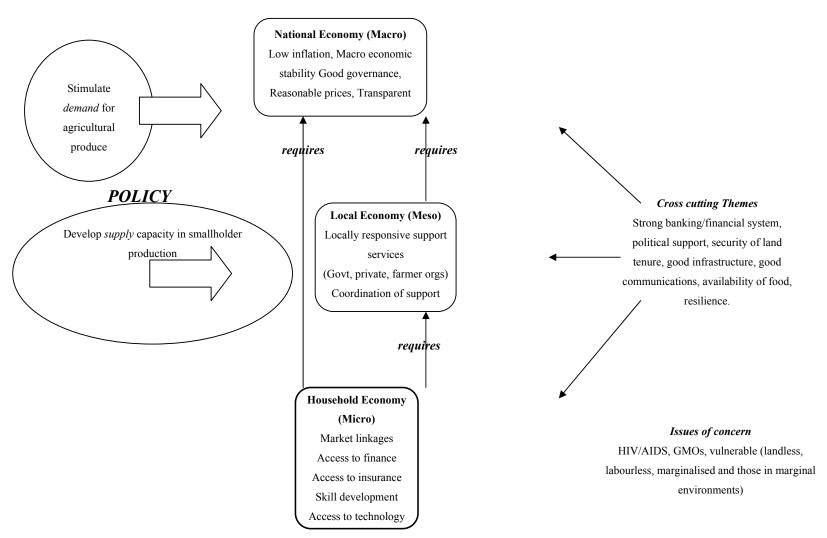
For the past decade or so, the international consensus on stimulating poverty reducing growth in Africa has focused on the maintenance of macroeconomic stability and the creation of an enabling environment for private investment. In rural space, much faith has been placed in the liberalisation of agricultural markets. However, whilst this has generated significant positive results, particularly for consumers (Jayne, Rubey et al. 1995; Coulter and Poulton 2001), the anticipated agricultural supply response has generally yet to occur and efficient private markets (particularly for food crops) have yet to develop. Some argue that this reflects the incomplete nature of the reforms (Kherallah, Delgado et al. 2000; Jayne, Govereh et al. 2002; Cooksey 2003). However, it is also notable that the share of official development assistance to Africa that is directed towards agricultural sector – perhaps reflecting this international "lead" – has also remained low³. We begin from the observation of poor agricultural supply response and low levels of market development to build the case for significantly expanded public investment – by both national governments and donors - in smallholder agricultural development in Africa⁴.

³ In recognition of this deficiency, African Heads of State and Government agreed, at the African Union Summit in July 2003, to raise budget allocations for agriculture to a minimum of 10% of total public spending within five years.

⁴ The arguments presented here are perhaps applicable first and foremost to areas of higher agro-ecological potential within Africa. (Unlike Asia, Africa has yet to realise much of the potential even of its high potential areas). In areas of low agro-ecological potential, smallholder agriculture is less likely to function as a driver of growth, yet it continues to perform vital food security and welfare functions. Moreover, it will continue to do this until the efficiency of rural food markets increases considerably and broader employment opportunities expand to a similar degree. At the same time, the natural resource base on which such agricultural activity depends is being degraded, more or less rapidly, by the growth of the populations that still rely to some degree on semi-subsistence agriculture. Sustaining and indeed enhancing the ability of poor households to meet their food needs through own production requires intensification supported by public investment, just as in higher potential areas. Of course, the nature of the intensification will be different (e.g. greater emphasis on soil and water conservation, less on purchased inputs) as will the role of public support services (e.g. greater emphasis on supporting common property resource management; different emphases within livestock support services). However, the basic case for continuing investment in the agricultural sector is the same.

Figure 1: Necessary Conditions for Smallholder Agricultural Growth

FIGURE 1



Beyond the Enabling Environment

Figure 1 considers the necessary elements of an effective smallholder agricultural growth strategy. This starts at the household level and identifies what farm households need if they are to invest in more productive farming activities⁵. The figure recognises the importance of both a stable macro-economic and institutional environment, but also highlights the importance of access to locally-delivered services. The effective supply of these services itself requires a stable macro-economic environment, but it also needs active policies promoting supply capacity in the local economy. Below we highlight the challenge of coordinating delivery of services to producers, given that individual households need access to a range of services (technical advice, input supply, finance, output marketing services) if they are to respond to market opportunities.

This analysis makes a broad distinction between two policy 'legs', with one set of policies focussing on stimulating and transmitting to farmers demand for their products (e.g. through removing anti-agricultural policy bias and excessive taxes), and the other focussing on development of farmers' capacity to respond to demand. Obviously both policy 'legs' are needed, as farmers need the capacity to respond to effective demand. An admitted historical over-simplification is that policy in many African countries in the last 40 years has involved first a major emphasis on supporting supply (through state provision of extension, research, input supply and credit services) and then, with structural adjustment and liberalisation, a switch to an almost exclusive emphasis on stimulation and transmission of demand. The pendulum is now shifting back, as there is increasing interest in institutional issues around market failures, but there is still reluctance to face up to service delivery problems facing farmers and to make concrete investments addressing these.

Grassroots experience, which also finds support in academic literature, suggests that four core components are needed to develop farmers' supply capacity to respond to new opportunities. Where all four are in place, smallholders can respond successfully even under highly competitive and demanding market conditions.

Access to land and water resources

Without adequate access to land and water resources, farmers cannot be expected to respond to new market opportunities⁶. Table 1 shows that, in aggregate, availability of arable land in Sub-Saharan Africa, per head of population, is no worse than in other developing regions, although there may be issues of land quality. However, perhaps inevitably, conditions are not uniform across or within countries. In some countries of Sub-Saharan Africa, unequal access to land is already high on the political agenda. These countries need modes of redistribution that allow a much larger number of people to contribute to, and share in the benefits of, viable agribusiness enterprises, rather than destroying the value of existing assets during redistribution. Even in customary tenure systems, inequality in land holdings can be high (Jayne, Yamano et al. 2003) and may warrant research into the rules and norms governing land allocation within such systems⁷. There are also concerns that traditional tenure systems are failing to cope with the demands imposed by rising populations in a number of key areas (e.g. peri-urban areas, the communal lands of southern Africa, the cocoa belt of west Africa), such that reform of land administration and access in these areas may be necessary.

Enhancing access to, and control of, water remains a largely neglected area in Sub-Saharan Africa, yet these are prerequisites for successful agricultural intensification. As well as contributing to expanded production volumes and options for high value production, greater water availability and control reduce risk. In turn, these outcomes reduce the risk and cost for private provision of support services, such as input supply, credit and output marketing. Irrigation was critical to the spread of the main Green Revolution technologies in Asia and in Africa some countries (e.g. Zambia, Ethiopia) have huge potential for irrigation development. However, as Table 1 shows, the share of cropland in Sub-Saharan Africa that is irrigated is tiny compared with that in other regions. Whilst micro-irrigation has generated

⁵ Note that Figure 1 does not attempt an exhaustive list of all livelihood or asset requirements of farm households. Land and water requirements are considered shortly and it is assumed that smallholder farmers have both indigenous technical knowledge and an understanding of local environment. However, even where basic asset endowments are in place, the elements shown in Figure 1 will generally be required for households to achieve an attractive / greater return on these assets.

⁶ In fact, land, water and purchased inputs may be considered partial substitutes in agricultural intensification. A binding constraint on one increases dependency on the others as the source of expanded production.

⁷ Alternatively, Jayne, Yamamo et.al. (2003) confront the possibility that policy may have to recognize that agriculture cannot provide more than subsistence requirements for a significant minority of smallholder households. In this case, agricultural development efforts should target primarily the middling and "better off" smallholder households (in fact, nearly all of these are still poor by most criteria!), and look for other ways to assist the semi-landless, e.g. through the rural non-farm economy or welfare. However, as well as narrowing the supply base in response to new market opportunities, greater inequality in land holding will also tend to reduce the multipliers associated with expanded agricultural production – a double blow for poverty reduction efforts.

interest (particularly amongst NGOs) in recent years, closing this gap is likely to require some investment in large schemes, where environmental conditions permit. Meanwhile, as experience in central Tanzania is showing, much can be achieved by improved soil and water conservation practices and techniques such as rainwater harvesting, even where scope for irrigation development is much lower.

Improved and accessible rural infrastructure

Much of rural Africa is poorly served by roads, telecommunications and physical market facilities. In terms of Figure 1, improved roads and telecommunications can be seen either as stimulating demand (through more effective transmission of wider opportunities to local area) or as enhancing the competitiveness of local producers in responding to wider opportunities. In addition, they assist in reducing the costs of support service delivery and can also benefit rural non-farm activity, which is a vital complement to agricultural growth in achieving poverty reduction (Haggblade, Hazell et al. 2002). Roads have been one part of the rural economy that has (rightly) received substantial public investment in recent years. Emphases on use of local inputs (including labour) in construction and on mechanisms for ensuring maintenance of the road network thus enhanced are both welcome. Priority should continue to be given to construction and upgrading of rural feeder roads, development of accessible communications systems (mobile phones, IT) and provision of market infrastructure (storage, stalls, sanitation), as well as to encouraging provision of low cost transport services.

Effective and efficient front line support services

There are widespread and major gaps in agricultural service provision in most rural areas in Sub-Saharan Africa, many resulting from the active withdrawal or passive decline of state agencies previously responsible for delivering these services, with varying effectiveness. Farmers located in more remote rural areas face particular problems. There is an urgent need to find effective and efficient means of delivering these services and also to establish which providers may be best able to deliver specific services in specific locations. These will vary between countries and with different types of services. However, experience from Asia, Latin America, and Africa, together with an understanding of both market and state failure in service delivery, suggests that likely solutions will involve an active coordination and investment role for public agencies, in partnership with the private and NGO sectors, which in turn will require clear mechanisms for accountability both to farmers and to other stakeholders.

Extension: Towards a Facilitation Role

A crucial area for support is the facilitation of learning and reflection amongst farmers. Sustainable intensification of agricultural production is knowledge-intensive. Greater use of water control, safe and effective use of inorganic fertilisers and chemical products, introduction of organic farming techniques, planning production in response to changing market opportunities and establishing linkages with input suppliers or produce buyers - all require access to, and understanding of, information. A fundamental change in the nature of advisory services should be the shift from simply extending messages to farmers to facilitating change. Farmers want advice not solely on production issues but also on linkages to markets and on ways of adding value. They also want access to other sources of expertise (not least their fellow farmers through organised exchange visits). They are interested in "fixers" that can help them make these linkages. A revitalisation of African extension systems is, therefore, necessary.

Current evidence from many areas is that those farmers who receive extension advice appreciate it; the problem is that coverage is declining and the limited service that exists is often biased towards the better off. This is linked to the fact that extension is too often seen to be about promoting certain technology packages, which are not appropriate for many, especially poorer households. Although proving the effectiveness of advisory services is difficult, largely due to selection bias, studies that control for this (e.g. (Owens, Hoddinott et al. 2001) show clear benefits. Realistically, achieving greater coverage with a more participatory, farmer-led extension approach will require a greater focus on farmer groups and umbrella organisations of farmer groups, maximising the involvement of other stakeholders such as local traders, private vets and commercial farmers.

A new cadre of skilled field workers is required to deliver this facilitating advisory role, demanding increased investment in their training. Greater emphasis needs to be placed on responding to farmers' needs and empowering farmers and their community-based organisations to take wise decisions, appropriate to their local conditions and building on their local knowledge. Successful local models do exist, particularly where non-governmental organisations have intervened to develop such partnership approaches, but investment is needed to adapt and implement these innovations on a larger scale. Where HIV/AIDS has had a profound effect on the structure of rural society, the resulting heterogeneity amongst households within a given area, in terms of their relative endowments of labour, land and capital, reinforces the argument that extension advice and facilitation should not seek to be over-prescriptive.

Research

There exists a large body of literature documenting the high returns to public sector agricultural research in developing countries, including in Africa (Alston, Chan-Kang et al. 2000; Townsend and Thirtle 2001; Thirtle, Lin et al. 2003). In

Sub-Saharan Africa, basic yield-enhancing technologies are available for most crops but further adaptive research is often needed, as is work to increase drought tolerance and resistance to key pests and diseases⁸. Uptake of improved varieties is most likely to follow when farmers themselves are involved in monitoring and evaluating different technologies or crop varieties. Farmers have their own criteria for assessing crop performance, often looking to minimize risk rather than simply maximize yields. Many farmers are natural innovators, experimenting in their own fields and observing the results. What they need is support in this process and access to new ideas and crop varieties with which to move forward.

Further work is also needed in key areas such as improved natural resource management, more intensive low external input systems, crop-livestock integration and livestock husbandry. At the same time, the biotechnology revolution creates opportunities for adapting crop varieties to cope with the particular problems faced by poor farmers in poor areas, for example drought or specific tropical pests and diseases. However GM technologies bring many contentious issues which must be recognised and addressed if farmers are to benefit. The development of technologies that are applicable and accessible to the poor should be the critical element of any new research. The HIV crisis also exposes the need for research into technologies that both save labour where economically-active adults have been lost and enhances the nutritive value of production so that those directly affected can fight the disease, resume productive lives and regain positions of dignity in their communities.

Financial Services

Lack of capital is a feature of poverty, and the poor generally lack both saving and borrowing opportunities. However, whilst micro-finance institutions have taken financial services to millions of previously unbankable clients, they have largely failed to reach poorer rural areas and/or smallholder agricultural producers whose livelihoods are characterised by highly seasonal investments, risks, and returns (Dorward, Kydd et al. 1998; Morduch 1999). Government provision of seasonal agricultural credit had significant impact in successful green revolutions in Asia, but in Africa high costs, poor recovery records, and the failure to provide savings services have led to it being abandoned. Agricultural finance services need to be revisited with the benefits of new experience from micro-finance and new insights into the development contributions and structural features of the more successful large scale service providers in the past – one of these being the use of 'interlocking' of finance with other transactions (for example input and output transactions). Subsidies for start up and operations should not be ruled out. In addition, the risks associated with borrowing in rain fed African production conditions, with the additional risks associated with the impacts of HIV/AIDS, plus the high value of seasonal production inputs relative to the total asset base of poor households⁹, mean that seasonal finance services may need to be backed up by some form of insurance. Success stories are limited in this area, so more research is clearly needed.

Input Supply

Table 1 provides evidence of low fertiliser use in African agriculture. This remains the case despite input market liberalisation and despite the fact that African soils are increasingly depleted (Sheldrick and Lingard 2004). That private input supply systems in Africa are underdeveloped is widely agreed; the question of why this is the case is more contested. Some highlight the low profitability of input use, in turn related to the removal of subsidies and the high cost of transport, and/or government interference discouraging private investment; others suggest that failure in credit markets restricts effective demand (Crawford, Kelly et al. 2003). One thing at least is agreed: greater response from private input suppliers depends on complementary investment elsewhere, often of a public good nature, for example in roads and extension and perhaps also in the promotion and strengthening of farmer organisations.

⁸ This is not an argument against continuing research into new higher yielding varieties. Rather, it simply emphasises that a better balance needs to be struck between such ongoing work and the adaptation and extension of technologies that have already been developed.

⁹ Promoting both organic and inorganic technologies should allow producers with different asset and income levels to choose the intensification path that is most consistent with their ability to bear financial risk.

Building Linkages to Markets and Service Providers

The extent to which market access for smallholder producers has improved with market liberalisation varies across crops and regions. Whilst new opportunities have certainly emerged for many producers, markets are also widely seen as less predictable than before. Even in more accessible areas, producers want some assurance both that they will be able to sell what they produce (particularly if they aim to produce well in excess of what they can either consume themselves, store or sell locally) and that they will obtain some minimum, remunerative price for it.

Service Coordination

We see coordination as being required at two levels:

- The first level is coordinating individual households' access to the whole range of services. In some cash crop systems, output buyers provide the whole range of services to individual producers on an interlocked basis. However, where interlocking does not occur, information and other transaction costs make it uneconomic for most smallholder households to deal individually with multiple service providers (and vice versa). Therefore, sustainable access to services by large numbers of agricultural households is only likely to be achieved through the activities of farmer organisations, either as service providers in their own right or as intermediaries linking their members with specialist service providers.
- The second level is that of the locality (district or region). Once agricultural intensification has proceeded far enough and production has risen above a critical minimum threshold, market forces alone may be sufficient to attract private service providers to work in a given locality. However, at least until this time, it is likely that the activities of farmer organisations as gateways through which producers access support services will have to be complemented by locality-specific coordination activities that ensure that the range of services are made available within an area. The essence of this coordination activity is the establishment of linkages between input suppliers, financiers, output buyers and public services that farmers need to make profitable use of their service are indeed available. Moreover, the nature of the individual investments can reflect the nature of the complementary services that are also to be supplied. Such coordination activity may be performed by NGOs or area-based development projects, although these tend to have a finite funding period. An emerging alternative is to embed this coordination role within decentralised development planning processes (see below).

Empowered and enabled rural poor

Arguably, this is the most fundamental of the four priorities set out in this paper. Empowering smallholder farmers has a political economy dimension – enabling them to influence (local and national) policy, claim more resources for rural and agricultural development and also to hold public service providers to account. As noted above, farmers' organisations are also likely to be central to models of coordinated service provision.

The high priority attached to the development of farmer organisations in this paper notwithstanding, experience with farmer organisations in Africa has so far been quite mixed. They can be diverted to serve the ends of a few influential people and may fail unless they can draw on the necessary skills and resources, and develop the necessary accountability mechanisms, to provide valued services for members. However, in a number of countries there are now promising models that appear to create strong organisations capable of engaging both with commercial and public service organisations following moderate inputs of outside training and facilitation (Bingen, Serrano et al. 2003).

There is widespread acknowledgement that development policy making needs to listen and respond to the voice of poor citizens, who are supposedly the main beneficiaries of development policy. This is as true in the case of smallholder agricultural development as in other areas, but past efforts have often failed either because they have not sufficiently recognised smallholder farmers' interests, opportunities and constraints, or because resources have intentionally or unintentionally been diverted to serve other interest groups. Even where African PRSPs recognise that "agriculture is the backbone of the economy", this is rarely translated into "priority actions" targeted at the agricultural sector. As noted above, the share of government expenditure actually devoted to agriculture often remains small.

Rural households need to be empowered to demand that support services are delivered to them, but also to hold service providers accountable for how these services are delivered (how is money actually spent? Who benefits in practice?). This requires that farmer and other community-based organisations be given opportunities to engage with policy decision-making processes. Whilst one of the aims of decentralisation processes is to make public agencies more responsive and accountable to citizens, there is a danger that local administrations will be "captured" by local elites,

who are more experienced and better placed to influence officials¹⁰. There may thus be a need for external support to develop the organisational and representational effectiveness of farmer groups.

Tackling Governance Issues

In this final section, we consider the governance issues that inevitably accompany any proposal to significantly raise public investment. We briefly outline proposals that, if implemented, should raise the return to additional public investment in African agriculture, thereby enhancing the "absorptive capacity" within African states for such investment.

Due consideration should be given to governance issues for at least two reasons. Firstly, the identification of priority areas for investment in the preceding section in no way implies a blueprint for agricultural intensification and growth in Africa. Rather, specific needs, and the balance of those needs, will vary both by country and by region / district within countries. Hence, there is a question of how national and local priorities are to be identified. In terms of its impact on agricultural performance, the policy making process is as important as the technical advice that informs it.

Secondly, attention needs to be paid to the effectiveness and efficiency with which identified priorities are met as and when public investment is increased. Questions of effectiveness and efficiency inevitably cast the spotlight onto the incentives facing relevant public agencies and their employees, as well as the capacity of such agencies to deliver on agreed strategies and programmes.

The degree of external accountability that public agencies are subject to is critical to the incentives that they and their employees face. Experience suggests that greater accountability is needed both "upwards" (to specialist public bodies and elected politicians) and "downwards" (to clients). The job of ensuring value for money and accountability for expenditure in irrigation or road investment should not be left entirely to a national audit commission or to MPs' questions during budget presentations, although these are both important. There are also related questions as to how public employees, for example extension agents, spend their time. In many cases, given high information costs in African rural areas, clients may have better information than managers.

What is proposed here is a twin-track approach to external accountability. Firstly, national and local policy making processes should create "spaces" in which civil society (including farmer organisations, NGOs and private sector representatives) can hold public agencies to account. These would focus on the participatory development and monitoring of clear strategies and programmes against which performance can be assessed. At the same time, investments should be made to strengthen farmer organisations, so that they can play an effective part in the accountability process.

Whilst agriculture is commonly referred to as the "backbone of the economy" in political discourse in African countries, only a limited number of countries have a credible and coherent national agricultural (or rural) development strategy. Only a subset of these can claim that the strategy was developed in full consultation with farmer organisations, NGOs and private sector representatives, let alone that such players are expected to monitor the performance of public agencies in delivering upon this strategy. Moreover, where administrative decentralisation is the prevailing policy, implementation of a national strategy requires that it find expression in a number of local strategies and plans. Indeed, effective coordination of service provision can only really occur at local level. Thus, participatory development and monitoring of a national agricultural (or rural) development strategy should be mirrored by participatory development and monitoring of sub-sectoral and local level agricultural (or rural) development plans¹¹.

If performance is publicly scrutinised, this will provide some incentive for public agencies to change their internal management systems and organisational culture to become more performance-oriented. (External help may also be needed here!). However, other incentives can also be brought into play.

¹⁰ In fact, the ideal scenario for pro-poor service delivery may well be a mixture of decentralised control (to achieve local coordination) and top-down pressure from central governments committed to a poverty reduction agenda, so as to ensure genuine participatory practices by decentralised authorities, but also that national poverty reduction priorities are taken into account. As argued later, national poverty reduction priorities need to go beyond the detail of current PRSPs to include credible agricultural sector development strategies.

¹¹ For major cash crops, stakeholder-designed sub-sectoral development strategies are appropriate, with private sector and farmers' representatives holding public agencies (e.g. crop boards) accountable for their performance in accordance with these strategies. For food crops, the most appropriate planning level remains an open question. Whilst administrative decentralisation suggests district-level planning as the basic building block, flexible cooperation across several districts (perhaps mirroring agro-ecological zones) may be necessary for some purposes [J.Lynam, pers.comm.].

At national level, whilst a number of leading donors may now be committed in principle to increasing their investment in African agriculture, actual disbursal of this aid to a given country could be made conditional on there being a credible and coherent national agricultural (or rural) development strategy that was developed in full consultation with relevant civil society players and a commitment to let such players monitor the performance of public agencies in delivering upon this strategy. This would provide a positive incentive for reform. In addition, where a Ministry of Agriculture (say) was considered unfit in its current state to handle additional investment expenditure, priority could be given within that country to investment in rural infrastructure and/or the promotion and strengthening of farmer organisations. Of course, such ideas assume that major donors have the capability of maintaining a common stand on such matters.

Meanwhile, at local level similar incentives could be provided to local government administrations by responsive funding windows, that would provide complementary funding to that available through local taxes and the central government budget, for local initiatives carried out in accordance with a local level agricultural (or rural) development plan. As above, eligibility for such funding, which would be competitive across jurisdictions (and possibly across neighbouring countries¹²), would depend upon there being a credible and coherent local agricultural (or rural) development strategy that was developed in full consultation with relevant civil society players and also upon there being a commitment to let such players monitor the performance of public agencies in delivering upon this strategy.

There are direct parallels between the "process conditionality" advocated here and the thinking underlying the development of the PRSP framework (Booth 2003).

Of course, greater performance-orientation and accountability for public agencies also raises questions regarding their structure and their capacity to deliver on agreed strategies and programmes. Much has changed within the operating environment of Ministries of Agriculture, Livestock, Forestry and Fisheries in recent years (e.g. the increased focus on poverty alleviation within public policy, market liberalisation, administrative decentralisation, greater recognition of livelihood diversification) and it is questionable whether such agencies have changed sufficiently to respond to new challenges (Hubbard 2003, p10). In addition, the emphasis placed on service delivery and coordination issues in the earlier sections of this paper raises the profile of public agencies within agricultural and rural development efforts. Not only should they play an active role in service delivery, given the public good nature of services such as extension and research, but they are probably also best placed to be formally in charge of service coordination (even if others drive efforts in practice). However, a coordination role requires a very different institutional mindset from that displayed by a traditional paternalistic state – one that values, supports and works with other (non-governmental) players.

When the spotlight is shone on African Ministries of Agriculture, however, what is revealed is rarely encouraging. They are often inefficient, production- (rather than poverty-) focused and ineffective in negotiations related to PRSPs and medium term expenditure frameworks (MTEFs) (Booth 2003)¹³. Reform within Ministries of Health and Education is widely perceived to be ahead of that within Ministries of Agriculture, which some allege are seen by politicians more as vehicles of patronage than serious development organisations.

A key step in increasing the "absorptive capacity" of African states for public investment in support of agricultural growth and poverty reduction is, therefore, the reform of Ministries of Agriculture and other related agencies. This is not the place to make detailed recommendations as to the path that reform should take. However, the following suggestions are tentatively advanced in the spirit of stimulating debate on this critical issue. A model of future Ministries might be:

- Generally smaller (in numerical terms ideally enhanced in terms of skills) central capacity focused on policy analysis and advice for national policy making and on supporting (primarily through information provision and analysis¹⁴) decentralised planning processes;
- Research, resourcing of front-line extension staff and price stabilisation functions handled by autonomous agencies accountable to the Minister on the basis of clear performance objectives;
- District officers and extension staff employed by and accountable to local government administrations, with their primary role being the development and/or implementation of local agricultural (or rural) development plans;
- Ministries of Agriculture, Livestock, Forestry and Fisheries possibly merged into one Ministry of Rural Development, with additional responsibility for development of rural non-farm activity.

¹² The Maendeleo Agricultural Technology Fund (www.maendeleo-atf.org), managed by FARM-Africa in partnership with Gatsby Charitable Fund and Rockefeller Foundation, provides an example of a responsive funding window dedicated to supporting agricultural innovation and development across three countries (Kenya, Tanzania and Uganda). What we propose in this paper could be a variant on this model.

¹³ In addition, all these criticisms were levelled at Ministries of Agriculture by contributors to the recent DFID econsultation on agriculture (http://dfid-agriculture-consultation.nri.org).

¹⁴ In the case of sub-sectoral development strategies, there may also be a direct role for Ministry officials within multistakeholder management bodies, such as crop boards.

In conclusion, we believe that both national governments and international donors could increase their agricultural investment in accordance with the priorities set out earlier in this paper and make useful contributions to poverty reduction even in the absence of governance reforms. However, reforms of Ministries of Agriculture and other related agencies should greatly increase the "absorptive capacity" of African states for public investment in support of agricultural growth and poverty reduction and should, therefore, be high on the agenda of both international development agencies and NEPAD.

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	Arable Land Hectare per capita		Irrigated Land % of cropland		Fertiliser Consumption Hundreds of grams per hectare of arable land		Tractors Number per 1,000 agricultural workers	
Region	1979/81	1998/00	1979/81	1998/00	1979/81	1998/00	1979/81	1998/00
EA & P	0.12	0.11	36.5	38.1	1117	2346	2	2
E & CA	0.16	0.57	10.6	10.7	1445	339	67	101
LA & C	0.32	0.26	11.8	13.9	587	895	25	36
ME &	0.29	0.19	25.8	37.3	422	787	12	24
NA								
SA	0.23	0.15	28.7	39.9	360	1065	2	5
SSA	0.32	0.24	4.0	4.2	158	130	3	1

Table 1: Agricultural Inputs in Low and Middle Income Countries, by Region

Source World Development Indicators 2003

Key:

EA & P - East Asia and the Pacific

E & CA - Europe and Central Asia

LA & C - Latin America and the Caribbean

ME & NA - Middle East and North Africa

SA - South Asia

SSA - Sub-Saharan Africa