

**Small-Farms, Livelihood Diversification and Rural-Urban Transitions:
Strategic Issues in Sub-Saharan Africa**

by

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Paper prepared for the Research Workshop on:

The Future of Small Farms

Organized by

International Food Policy Research Institute (IFPRI)
Overseas Development Institute (ODI)
Imperial College, London

Withersdane Conference Centre, Wye, Kent, UK
26-29 June 2005

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Introduction

Of course small farms have a future. In Sub-Saharan Africa excluding South Africa most farming is small farming, and most rural populations are engaged to varying degrees in small farming as one component of diversified livelihoods. So no one would argue that improving the performance of small farms should be off the agenda for poverty reduction in Sub-Saharan Africa.

Nevertheless, the persistence, and even deepening, in Sub-Saharan Africa of a type of small farming that is getting smaller all the time, and that demonstrates an even greater orientation towards low level subsistence than was the case twenty or thirty years ago, should be of great concern to all those working on poverty reduction objectives in the continent. The dynamics of small farming in Africa are poorly understood and are not captured satisfactorily by the economic models that predict fantastic income and growth multipliers from yield growth in agriculture. Much of rural Africa is sliding into greater vulnerability where the slightest disturbance in the normal rhythm of the seasons causes quite disproportionate food security crises to arise in pockets here and there, or more widely across zones and countries, not to mention the “vulnerable groups” who more or less permanently require social protection in order to avoid falling into the abyss.

Several arguments need to be developed, and this paper will attempt to sketch out some of these arguments and link them together in order to provide a broader picture of the dynamics of what has been occurring, and continues to occur, in Sub-Saharan Africa. This might then provide a platform for developing some testable hypotheses that could take debates about growth and poverty reduction in SSA in new directions. First, SSA in the early 21st century is not Asia in the 1970s, and this needs to be well understood since otherwise invidious and unhelpful comparisons are made concerning the ability of SSA to replicate the Asian experience. Second, and closely related, the SAP recipe for regenerating agriculture in SSA broadly failed to do so, and a more explicit recognition of this by some of those who leapt so zealously on the SAP bandwagon as it rolled through the 1980s and 1990s would not on occasions go amiss. Third, the diversification out of agriculture which is such a strong feature of farm family livelihoods in many SSA countries contains several paradoxes that are worth exploring for what they can tell us about potential routes out of poverty in SSA. Fourth, the slow pace of rural-urban transition in many SSA countries over the past 40 years is part of the composite picture of stalled overall growth and agricultural failure, and this needs to be brought into the strategic picture, too.

In recent years, there has been quite a resurgence in what might be termed the “agriculture optimist” stance on poverty reduction in SSA. This stance refers to replicating the Asian Green Revolution in Africa; it is prone to specious generalisations of the kind that say “everywhere and in all history agricultural growth has been a prerequisite for the transformation of national economies”; and it ascribes fake scientific accuracy to the agricultural research investment and growth linkage multipliers in low income countries that are published from time to time in the academic literature. The agriculture optimist tends to

see livelihood diversification as emerging from agricultural success: agriculture as the driver of non-farm opportunities in rural areas.

The opposing view taken in this paper is that of the “agriculture sceptic” who would tend to be dubious about most if not all those propositions. The agriculture sceptic is more likely to see diversification as responding to the failure of agriculture under any reasonable yield growth scenarios to generate sufficient secure livelihoods for those who currently and in the projected future will be living in rural areas of SSA. The agriculture sceptic considers that there are certain problems about agriculture in liberalised markets that are substantially under-estimated by the agriculture optimists, as also are trends of declining farm size in many densely settled small-farm rural areas.

Nevertheless, it is worth emphasizing that from a poverty reduction policy point of view, neither of these positions should be taken as absolute. Seeking to raise yields and outputs in small-farm agriculture has a valid place in contemporary poverty reduction strategies in Africa. However, it will make a contribution only. It cannot single-handedly provide the “motor” of poverty eradication in SSA. Accelerated rural-urban transitions will be required as well.¹

The Asian Green Revolution and Other Stories

The appeal to the Green Revolution in Asia in contemporary debates about the potential for small-farm agriculture in Sub-Saharan Africa is one of the least satisfactory narrative ploys around at the moment. At a trivial level it seeks to re-write history as if SSA was somehow by-passed by the energy and excitement and debates that surrounded the introduction of high yielding crop varieties in Asia and Latin America during the 1970s. This is simply not true as any amount of the literature of the period would attest. Agricultural researchers and agronomists and economists were just as enthusiastic about this potential in Africa as elsewhere, but uptakes and outcomes were disappointing. True, this may have been in part due to the particular crops, wheat and rice, that excelled in Asia and that have always constituted a much smaller proportion of area and output in SSA.

However, the reasons for relative failure were much more complicated than this (and still are), and spawned a huge literature and subsequent endeavour to overcome the constraints. One response was the development of farming systems research (FSR) approaches to yield increases in African agriculture, giving explicit recognition to the crop interdependencies in farmers’ fields, the goals of farmers themselves in terms of food security and consumption preferences, and the need for experimenting with new technologies in farmers fields rather than just in research stations (Byerlee and Collinson, 1980; Collinson, 1981). The ability of farmers themselves to adapt technologies also received much attention in that era (Richards, 1985).

A considerable literature of the 1980s recognised critical differences between African agriculture and the rice and wheat farming systems of South and South-East Asia, especially with respect to risk and on-farm diversity (Chambers, 1983; Chambers *et al.*, 1989). Then

¹ This paper steals shamelessly from several unpublished pieces written by the author in the past two years (Ellis & Harris, 2004; Ellis, 2005). The author is also acutely aware that he needs a refresh on recent literature, so *mea culpa* if some very obvious recent references have failed to be cited in this piece.

there was the rise of the participatory movement towards the end of the 1980s that guided much policy and practice in the 1990s, and that contained within it variants specifically oriented towards farmer participation in agricultural research and the spread of new technologies (e.g. Farrington & Martin, 1988). The 1980s and 1990s saw a continuous stream of agronomic ideas and innovations designed to improve the performance of SSA food production systems under differing agro-ecological conditions. Rather than painting Africa out of the picture in the 1970s, and then suddenly bringing it back in the 2000s, the real position has been one of relentless endeavour by those engaged professionally in these issues to overcome the “difficulties” of achieving sustained farm yield growth in Africa.

Importantly, these points mean that new efforts are not starting from scratch, they are merely lending additional impetus to a struggle that has been going on continuously over the past 30 years. This also means, of course, that the likelihood of achieving a major breakthrough is quite low. Many, many avenues for raising farm productivity have already been explored in SSA, and the scope for a sudden uplift from previous slow progress is likely to be much smaller than is being suggested in some quarters nowadays.

More fundamentally, the Asian Green Revolution was predicated on comprehensive agricultural support policies that have been discouraged and dismantled in the post-liberalisation dispensation originating in the structural adjustment policies of the 1980s and 1990s. In those days there were fixed prices, floor prices, buffer stocks, fertilizer subsidies, credit subsidies and public irrigation schemes, all paid for by the state or by donors, and few of these policy instruments remain available in the current lexicon of acceptable public sector interventions in rural areas. This is an essential difference that is rarely addressed by those currently advocating the agriculture-led growth route to poverty reduction in SSA.

Indeed, if one were to compare and contrast more systematically the differences between the “success” of the 1970s Green Revolution in Asia and the prospects for achieving the same in Africa, the following points would all be relevant. First, for 1970s Asia:

- o food deficit, large, countries seeking to achieve food self-sufficiency in the face of unreliable international grain markets;
- o rising real food prices, both internationally, and in domestic markets beginning to undergo rapid urbanisation and industrialisation;
- o a vast array of agricultural policies, including fertilizer subsidies that in some countries lowered prices to 25 per cent of their international level and were sustained for ten or more years; and massive irrigation investments that were borne entirely by national governments at no cost to the beneficiary farmers.

Then compare to Sub-Saharan Africa in the 2000s:

- o often quite small domestic markets, that already veer unevenly between minor surpluses causing uneconomic returns to farmers, and minor deficits causing price hikes and food insecurity for the most vulnerable;
- o continuously declining real world agricultural prices, transmitted to domestic markets through trade liberalisation and globalisation;
- o the absence of state-led agricultural support policies and input subsidies, these being replaced post-market liberalisation by fragmented and scattered efforts to provide credit and farm support services by international and national NGOs;

- o following market liberalisation, increased output price risk, uneven market coverage by private traders, spatial price variations reflecting poor market integration, and high price instability.

This paper returns to the impacts of liberalisation in Sub-Saharan Africa in due course. In the meantime, some of those other stories about agriculture's essential role in economic transformation need to be interpreted quizzically. The history of Western Europe, for example, does not remotely parallel that of modern Africa. Feudalism created city states and market towns that provided non-farm markets for peasant outputs and non-farm occupations for previous rural dwellers. Later, in some countries, consolidation of land holdings took place (e.g. the "enclosure" movements in England) that threw the peasantry off the land and created larger farm size structures than occur in modern SSA, while also at the same time accelerating massively the pace of rural-urban migration. The customary mechanism of inter-generational land transfers in Africa that results in continuous farm sub-division at inheritance are not widely replicated in other places historically. The "role of agriculture in industrialisation" question that exercised classical economists and strategic thinkers in the 19th and early 20th centuries referred to emerging large nation states often at war with each other (hence, food self sufficiency an important strategic objective in its own right), and in a period when free international trade was in its infancy compared to the globalisation that has emerged over the past 50 years.

A proposition that this paper advances, and which is taken up in more detail in due course, is that in learning lessons from history it is human mobility that is possibly the most powerful factor that is present in all experiences of rapid economic change. Indeed, there may be a serious flaw in the notion, prevalent in development policy and practice for the past two decades, that the best way of addressing poverty is to support poor people at their static residential location. Rather, a more useful approach may be to build on those places in the national economy where growth is most evident, ensuring that infrastructure, transport, communications and skills are available to contribute to that growth process wherever it occurs. However, we jump ahead, more first on the tribulations of being a farmer in contemporary SSA.

The Failure of SAPs and Seriously Adverse Factors in SSA Agriculture

Certainly one of the reasons that was considered at the time fundamental to the failure of SSA to achieve its own Green Revolution was the policy environment prevailing in the 1970s, and specifically the pre-eminence of rapacious marketing boards ("crop parastatals") that artificially widened the marketing margin between farm gate and sales prices, extracting surpluses from the rural economy, and immiserising farmers (World Bank, 1981; Bates, 1981). Trade and exchange rate policy did not help either, depressing import and export parity prices via overvalued exchange rates and over-taxing export commodities to the further detriment of producers. A massive research endeavour sought to demonstrate that public policy in agriculture in Africa was detrimental to farm prices and agricultural development (Mellor & Ahmed, 1988; Krueger, Schiff & Valdes, 1991).

Structural adjustment programmes (SAPs) were supposed to change all that. Reluctant governments were pressured through the threat of withdrawal of structural adjustment loans to eliminate fertilizer and other input subsidies, disband crop parastatals or open them up to private sector competition, eliminate fixed prices or floor prices, reduce export crop taxes, reduce non-tariff import barriers and import taxes, devalue currencies and move to market

exchange rates, and facilitate the emergence of competitive private trade in rural areas. Most governments acceded in the end to most of these requests, although often with a lot of foot-dragging and leaving remnants of old regimes still in place, as they still are to this day (see, for example, Cooksey, 2005).

The effects of all this on farm incomes and outputs should have been measurable, dramatic and wholly positive. That it palpably had more mixed and even detrimental effects is a phenomenon worth attempting to disentangle. Many of the adverse effects were probably to do with shocks and sequencing. Currency devaluation and fertilizer subsidy removal tended to be in the vanguard of policy change, and happened very suddenly. The size of devaluations required immediate counteracting measures of monetary and fiscal discipline in order to prevent spiralling inflation. Inflation by itself almost immediately cancelled out the beneficial effects of devaluation on real farm prices, while monetary tightening caused several fold increases in interest rates, severely curtailing farmers' ability to take on loans. Fertilizer prices doubled or tripled practically overnight, resulting in all but the wealthiest farmers ceasing to use them at effective levels (or any level at all).

Meanwhile internal market liberalisation took place in conjunction with trade liberalisation in an era of falling real prices of agricultural commodities in world markets through the 1980s and 1990s. This further reinforced a backdrop of downward underlying price pressures rather than the buoyant real trends predicted by the soothsayers of liberalisation. Private traders failed to rush into the spaces left behind by receding parastatals. For one thing, they were no doubt still impeded and inhibited by petty barriers-to-entry and trade kept in place by officialdom (licenses, taxes, roadblocks); but also the cost-benefit ratio of collecting half a pickup truck of maize from a remote village at the end of a terrible dirt road hardly made commercial economic sense.

In some ways, the great liberalisation thrust of the mid-1980s occurred too late to overcome pathological conditions in SSA agriculture that had been set in train during the epoch of the parastatals. The unreliability of markets in the parastatal era (farmers often never got paid for the crops that they delivered, or got paid months in arrears, let alone the level of prices that they were paid), resulted in a deepening 'food security first' subsistence rationale that the upheavals of liberalisation merely reinforced. If a farm family cannot depend on being able to purchase food at affordable prices during the lean season, then it makes good sense to retain as much production as required to ensure annual food security. The outcome is little exchange in the rural economy, little cash in circulation, and unpropitious circumstances for economic dynamism of any kind.

Lest the reader consider that this point is unduly exaggerated, reference can be made to the findings of livelihoods research conducted in 2001-02 in Uganda, Kenya, Tanzania and Malawi in a project entitled LADDER (Ellis & Freeman, 2005).² Some of the evidence on the physical output share of various food crops retained for home consumption rather than sold in the market, for sample farm households, is reproduced in Table 1 below. It can be seen that subsistence shares are routinely above 70 per cent and can, under certain circumstances, reach near enough 100 per cent (maize in Malawi). These are average figures

² LADDER, standing for Livelihoods and Diversification Directions Explored by Research, was a research programme funded from 2000-04 by the then Policy Research Programme of the Department for International Development (DFID), with a contribution to work in Kenya made by the United Nations Development Program (UNDP).

for the whole sample; if disaggregated by relative per capita income levels the poorest half of the sample exhibit near total non-engagement in the market for their main food crops. This is rural SSA in the 21st century.

A liberalised agriculture in SSA confronts other difficulties that are ignored or downplayed by the enthusiasts for agriculture-led growth strategies. Free agricultural markets are inherently unstable. This used to be one of the first things taught to first-year undergraduate agricultural economics students, accompanied by the lurid spectacle of the ‘cobweb theorem’ which under certain elasticity conditions produced ever greater price fluctuations in successive production cycles.³ It is that inherent instability and the routine ruin of farmers to which it gave rise that provided the economic logic underpinning the ubiquitous farm support policies put in place in the industrialised countries from early in the 20th century (politics and national security also played their parts), and still in place to this day. Most large Asian countries still implement floor prices to limit the downside of price instability, while post-SAP SSA countries do not.

Table 1: Output Share Consumed by Households, Selected Crops (LADDER Project)

| Subsistence Share % | Kenya n=350 | Uganda n=315 | Tanzania n=350 | Malawi n=280 |
|---------------------|-------------|--------------|----------------|--------------|
| Bananas | -- | 73.2 | -- | -- |
| Maize | 90.0 | 57.9 | 77.8 | 96.8 |
| Rice | -- | -- | 60.5 | 48.2 |
| Millet | 95.1 | 82.4 | -- | -- |
| Sorghum | 89.1 | -- | 60.1 | -- |
| Beans | 81.8 | 65.7 | 59.2 | 79.2 |

Source: sample surveys conducted in 37 villages, 2001-02

While on the subject of agricultural markets, national market size is a factor rarely given sufficient attention in agriculture-led growth scenarios. Most SSA countries are more or less self-sufficient in their staple foods in normal years, such that an above average harvest depresses farm prices and returns to farmers, while a below average harvest leads quickly to food security difficulties for the most vulnerable. The assessment of relative self-sufficiency is of course complicated by routine import levels, and by food security operations in those countries requiring food safety nets in most years. Nevertheless, it is quite difficult to see where the two- to three-fold increases in yields sought by the agriculture optimists could be absorbed. SSA countries hardly possess a competitive edge in world food markets (remoteness and quality being key considerations). Limited domestic markets result from the slow pace of urbanisation in many countries, a topic to which this paper returns, and poor overall per capita income growth in quite a few countries, too. The idea, prevalent in some

³ The cobweb theorem can be checked out in almost any intermediate micro-economics textbook, see for example Gravelle & Rees (2004)

quarters, that new high value export crops (vegetables, flowers) can somehow ride to the rescue is risible given the very few farmers that can in practice be absorbed in such ventures.⁴

Finally, when considering the scope and limits of agriculture-led poverty reduction in SSA is the ubiquitous phenomenon of declining farm size. This trend tends to be 'left out' of the economic models that estimate the poverty reduction benefits of farm yield growth, either due to lack of data or perhaps because it is considered unimportant due to the 'small farm efficiency' argument. This raises the question as to how small a small-farm has got to get before the agriculture optimist begins to perceive that this may actually constitute part of the problem of rural poverty rather than part of its solution.

It is unfortunate that very little reliable data exists on farm size trends in SSA. For various methodological reasons, agricultural censuses that are conducted from time to time in individual countries are of little help. Yet qualitative research in rural communities invariably reveals that this is the factor that most preoccupies rural families when they look to the future. Even if they have just about got enough land now, they can see that the next generation will not be so lucky, and inter-generational tensions about the future disposition of land rights are prevalent everywhere. Meanwhile a sizeable and growing proportion of the rural poor already do not have sufficient land to produce enough food for the calendar year, and these are swelling the ranks across the continent of those that may require emergency food security at any time, or, indeed, are already on more-or-less permanent social security measures.

The average farm size across 1,345 households across four countries in the LADDER project was near enough 1.5 ha. Table 2 below shows the distribution of farm sizes across sample households by country. Between 40 and 50 per cent of households by country sample had farm sizes under 1 ha in 2001. In one case-study location, Suba district on Lake Victoria in Kenya average farm size had declined from 20 ha per household in the mid-1960s to just over 1 ha per household in 2001. In this instance, verification was possible since the area chosen for research had been newly settled on the basis of 20 ha. farm sizes shortly after the country's independence in 1963 (Cross, 2005). In Ethiopia, a country currently following an agriculture-led growth strategy, evidence suggests that average farm size is now about 0.75 ha, and has been declining steadily for decades. Even if farms are not physically sub-divided, inter-generational land sharing occurs that reduces the effective land area for individual households in the extended family or clan.

Declining farm size reflects inheritance norms under customary and state land tenure in a great number of SSA countries. It also, of course, reflects the eventual exhaustion of the land frontier in most countries; and the failure of rising populations to urbanise fast enough to stabilise available farm land per rural household. In the context of unreliable growth and urban policy failures, it further reflects the understandable unwillingness of SSA citizens to cede their access rights to land altogether, since land has hitherto provided the final safety net should non-farm occupations fail. The scope for land to continue to play this role is, however, nearly exhausted in many places.

⁴ High value agricultural ventures such as flower growing for the European market can of course become a significant source of foreign exchange, and are therefore worthwhile pursuing, but they are not going to change the livelihood status of the millions of maize farmers in southern Malawi or the *teff* and barley growers in the Ethiopian highlands.

Table 2. Distribution of Farm Sizes between Sample Households (LADDER Project)

| Farm Size | Uganda <i>n</i> = 315 % | Tanzania <i>n</i> = 350 % | Malawi <i>n</i> = 280 % | Kenya <i>n</i> = 175 % |
|-------------------|-------------------------------|---------------------------------|-------------------------------|------------------------------|
| None | 7.7 | 4.6 | 0.4 | 2.9 |
| Less than 0.5 ha. | 25.9 | 11.7 | 10.7 | 16.0 |
| 0.5-1 ha. | 23.3 | 29.7 | 31.1 | 24.6 |
| 1-2 ha. | 22.7 | 29.4 | 39.3 | 30.3 |
| 2-3 ha. | 10.5 | 13.7 | 12.9 | 14.3 |
| 3-5 ha. | 6.1 | 7.1 | 5.0 | 7.4 |
| More than 5 ha. | 3.8 | 3.7 | 0.7 | 4.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

In summary of these arguments, liberalisation did not provide a panacea for the disappointing agricultural performance in SSA in the 1970s, and a number of reasons are advanced as to why this was the case. Post-liberalisation enthusiasm for utilising agriculture as the main vehicle for poverty reduction needs a reality check by reference to several facets of farm-based livelihoods in SSA that counteract the potentially beneficial effects of rising yields, if such can be secured. These facets include limited domestic markets, unstable prices in free markets and declining farm sizes, not to mention a host of subsidiary factors that are implicit or explicit in the discussion of this paper so far. It is perhaps not surprising, then, that small farm households in SSA have sought over many years to secure part of their livelihood, and preferably as large a part as possible, from non-farm income sources. People, as they say, vote with their feet.

Rural Livelihood Diversification and Its Paradoxes

For the purposes of this discussion, rural livelihood diversification simply describes the phenomenon by which small farm households take up non-farm activities, or rely on non-farm income transfers, for the overall standard of living that they are able to achieve. The extent of such diversification away from agriculture is an indicator of the degree to which farming operations on their own can provide a secure and improving livelihood. Thus where diversification is widespread, and the share of livelihood portfolios to which it corresponds is considerable, then it may be supposed that farming is for one reason or another unable to satisfy those basic requirements.

There is no doubt that diversification in association with small farming has been around a long time. The two “classic” reasons for diversifying – risk and seasonality – have always been pertinent.⁵ Non-farm occupations reduce risk by combining activities that have different risk profiles, while they can also ameliorate the labour and consumption smoothing problems associated with seasonality. These reasons are likely to have relevance even in the presence of relatively favourable agricultural conditions, and the production of a surplus for the market in normal years. However, in the latter circumstances, the expectation would be for agriculture to constitute the fundamental platform of the household livelihood, with other

⁵ See, for example, Netting (1993) for discussion of these reasons in peasant farming societies in the North as well as the South.

activities merely helping to achieve increased security and stability of outcomes across the calendar year.

In Sub-Saharan Africa, livelihood diversification has come to symbolise a state of affairs which is quite distinct from the minor adjustments at the margin implied by the classic reasons for doing so. The various difficulties confronting small farm agriculture in liberalised markets discussed in the preceding section are heavily implicated. The overall flavour of evolving rural circumstances in the 1990s was captured in rather eclectic fashion by the Deagrarianization and Rural Employment (DARE) project conducted by the African Studies Centre at Leiden University (Bryceson, 1996; 1999; 2002; Bryceson & Jamal, 1997). This multi-country project utilised a mixture of qualitative and quantitative methods to derive a composite picture of the relative collapse of agriculture as the primary source of rural livelihoods in SSA, and the associated broadening pursuit of non-farm options across the continent.

Key components of this picture are supported by a considerable amount of less diffuse evidence. Studies of rural income portfolios derived from both large-scale, nationally representative, sample surveys, and from purposive household studies, converge on the once startling figure that, on average, roughly 50 per cent of rural household incomes in SSA are generated from engagement in non-farm activities and transfers from urban areas or abroad; remittances and pension payments being the chief categories of such transfers (Reardon, 1997; Ellis, 2000; Ellis & Freeman, 2004).

There is a great deal of variation around this mean figure at the household level, but less variation than might be supposed when comparing sample evidence across different countries in a particular region. A strong positive correlation between the proportion of rural household income obtained from non-farm sources and overall household income per capita has been observed in numerous studies. It is also widely found that while diversity of income sources is prevalent across different income classes, the nature of this diversification differs between better off and poorer households. The better off tend to diversify in the form of non-farm business activities (trade, transport, shop keeping, brick making etc.) or salaried employment, while the poor tend to diversify in the form of casual wage work, especially on other farms, while remaining heavily reliant on subsistence crop production.

Rural livelihood diversification in SSA contains several paradoxes that are worth exploring for the light they shed on the actual and potential role of agriculture in poverty reduction. It might be thought that diversification would be the last resort of those unable to gain a sufficient livelihood from their depleted farms, and there is some truth in this, but it is not the whole story. In the LADDER project, the positive correlation between per capita household incomes and share of income obtained from non-farm sources was strongly affirmed.

A case-study from Tanzania provided in Table 3 below typifies this finding. It is observed that the average farm:non-farm split for the sample of 344 households is almost spot on the 50:50 division referred to above as a widespread finding in SSA. The relative dependence on agriculture declines across the income ranges from 68 per cent for the poorest quartile to 43 per cent for the richest. It is notable that the share of livestock in the income portfolio of the top quartile more than doubles compared to the bottom quartile, and the share of non-farm business income quadruples from 11 to 44 per cent of the income portfolio.

Table 3 Income Portfolios by Income Quartile, Tanzania (LADDER Project)
(sample of 344 rural households, 2001)

- composition of household incomes % -

| Income Sources | Income Quartile | | | | Total |
|------------------------|-----------------|--------------|--------------|--------------|--------------|
| | I | II | III | IV* | |
| | <i>n=87</i> | <i>n=88</i> | <i>n=88</i> | <i>n=81</i> | <i>n=344</i> |
| Maize | 27.1 | 21.5 | 15.1 | 7.9 | 12.4 |
| Rice | 12.3 | 14.2 | 10.3 | 8.8 | 10.0 |
| Other Crops | 23.3 | 19.9 | 23.8 | 11.8 | 16.3 |
| Livestock | 5.0 | 7.7 | 6.5 | 14.1 | 11.0 |
| <i>Sub-Total Agric</i> | <i>67.7</i> | <i>63.3</i> | <i>55.7</i> | <i>42.6</i> | <i>49.7</i> |
| Wages | 14.6 | 8.9 | 9.3 | 11.0 | 10.5 |
| Non-Farm Business | 11.5 | 23.7 | 29.3 | 44.0 | 36.1 |
| Transfers | 6.3 | 4.2 | 5.7 | 2.5 | 3.7 |
| <i>Total</i> | <i>100.0</i> | <i>100.0</i> | <i>100.0</i> | <i>100.0</i> | <i>100.0</i> |

* 7 specialised pastoral households were removed from the top quartile

Source: Ellis & Mdoe (2003)

It might be thought that the attention paid by better off households to non-farm activities would result in the neglect and poor performance of their farming activities. Not so at all. Table 4 below shows for all four LADDER project countries how agricultural productivity per hectare rises steeply across the income ranges. Net farm output per hectare in a series of country samples was between three and six times higher for the top income quartile of households compared to the lowest income quartile.

Table 4: Net Farm Output per Ha, by Income Quartile, Four Countries (LADDER Project)
(US\$/ha)

| Country | Income Quartile | | | | Ratio IV:I |
|----------|-----------------|-----|-----|-----|---------------|
| | I | II | III | IV | |
| Uganda | 131 | 215 | 295 | 487 | 3.7 |
| Kenya | 135 | 266 | 358 | 430 | 3.2 |
| Tanzania | 81 | 108 | 156 | 381 | 4.7 |
| Malawi | 18 | 44 | 84 | 109 | 6.0 |

Source: Ellis & Freeman (2004)

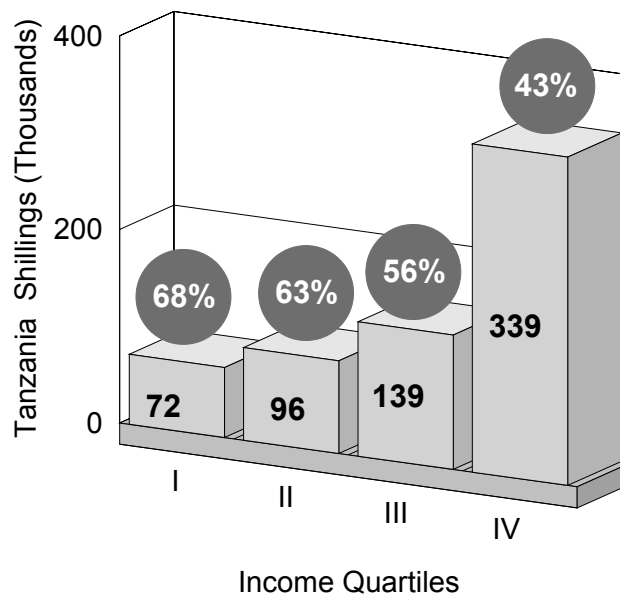
Taking the Tanzania case as an example, Figure 1 below compares the rising net farm income per hectare across the income quartiles against the figures for the share of agriculture in total per capita income derived from Table 3 above. The picture is an interesting one: the lower the importance of agriculture in the total income portfolio of the household, the higher the farm productivity realised. This emphasises the interdependence between farm and non-farm livelihood components that describes doing well in rural Tanzania. However, it also points in a broader direction that is compatible with the agriculture sceptic position. It is possible that farm productivity in SSA rises as a function of household members taking up non-farm

opportunities, rather than being the driver of such opportunities as is proposed in much of the agriculture-led growth literature.

The widely observed rural livelihood patterns illustrated by the LADDER project data help to shed light on the dynamics of rural vulnerability in Sub-Saharan Africa. The poorest and most vulnerable are those most heavily reliant on agriculture, and most strongly locked into subsistence within agriculture. This is a growing proportion of rural households in food insecure and poorly performing SSA countries. The same category of the rural poor also tend to be dependent on work on other farms in order to cover the deficit in their household food balance. This exacerbates rather than diminishes their vulnerability for two reasons: first, labour on other farms can mean neglect of good cultivation practices on own farms (Alwang, 1999); and, second, work on other farms proves an unreliable buffer when adverse natural events occur that affect all farms in a geographical zone.

It is clear that livelihood diversification, whether by the better-off, middle, or poor possesses positive attributes for poverty and vulnerability reduction in SSA. It is partly predicated on, and itself increases, human capital in terms of experience, skills and willingness to innovate. It generates earnings and remittances that alter the options open to the household by providing it with cash resources that can be flexibly deployed. It contributes to lessening vulnerability by ameliorating risk and reducing the adverse consumption effects of seasonality. In general, livelihood diversification improves livelihoods, and to the extent that it fails to do so, this can often be traced to adverse public sector contexts that penalise people in the market and on the move. This conveniently brings us to the next step in the argument of this paper, which is the necessity for and accelerated rural-urban transition in SSA.

Figure 1: Tanzania – Rising Yields and Declining Dependence on Farming



Rural-Urban Transitions and Poverty Reduction

Previous sections of this paper have proposed that the potential benefits of yield growth in small farm agriculture in SSA are offset by a number of adverse trends and circumstances so

that in practice little net gain occurs in farm incomes; and, indeed, in the worst cases the adverse factors outweigh efforts to raise yields so that livelihood circumstances continue to deteriorate despite the best efforts of all concerned to move forward. Undoubtedly the most lethal combination is failed growth at the macro level (static or declining per capita GDP) combined with these adverse rural trends. This combination severely curtails the non-farm options available, throwing rural households even deeper into excessive reliance on semi-subsistence food crop production. A considerable number of SSA countries persistently or intermittently fall into this category.

Table 5 below provides rural and urban headcount poverty data for a selection of southern and East African countries in the late 1990s or early 2000s. Is this data trying to tell us something? Well, yes it is, and that is that with rare exceptions urban poverty levels are very considerably below rural ones. Some of the rural poverty levels are so high in southern African countries that they are scarcely possible to grasp, yet we know from what happens when there is a slight disturbance in rainfall patterns that southern African rural dwellers are indeed amongst the most vulnerable populations to food crisis in the world. The agriculture optimist is essentially arguing that these impoverished populations should be kept in agriculture because yield growth on their farms is an essential precursor to their ability to move out, and this argument has been dominant for the past thirty years.

Table 5: Rural and Urban Poverty Data, Selected SSA Countries

| Country | Year | Rural | Urban | National |
|------------|-----------|-------|-------|----------|
| | | % | % | % |
| Kenya | 1997 | 52.9 | 49.2 | 52.3 |
| Uganda | 1999-2000 | 39.1 | 10.3 | 35.2 |
| Tanzania | 2000-01* | 38.7 | 17.6 | 35.7 |
| Malawi | 1997-98 | 66.5 | 54.9 | 65.3 |
| Zambia | 1998 | 84.0 | 56.0 | 72.9 |
| Zimbabwe | 1995-96 | 76.2 | 41.1 | 63.3 |
| Mozambique | 1996-97 | 71.2 | 62.0 | 69.4 |
| Lesotho | 1993 | 53.9 | 27.8 | 49.2 |

* The urban headcount figure for Tanzania refers to Dar es Salaam only; the figure for other urban areas was 25.8 per cent.

Sources: Ellis (2003); Ellis & Freeman (2004)

Strangely, economists who in all other respects are great believers in the capabilities represented by individual human initiative have a curious myopia when it comes to what people do for a living in cities. When challenged with the notion of accelerated rural-urban transition in SSA, they will say “but what will they do there” or “but there are no visible sources of growth there”. This is, of course, nonsense. People have agency, and people’s agency when freed from the shackles of unremitting toil on the land, is to find niches in the urban economy where they can get by. Towns and cities become teeming hives of small-scale activity in which people begin to specialise in providing services for others, and purchase services in return. In this process, they develop new outlooks and skills, and down the line

they become much more interesting for larger scale investments by emerging urban entrepreneurs, and eventually industrialists.

In a recent paper, Tiffen (2003) explores a model of rural-urban transitions that ends up by cautiously suggesting that urbanization has been hindered by policy in SSA, and that urban growth is required to stimulate agriculture and to provide jobs for those who are leaving farming (Ibid, p.1343). The interdependency of rural and urban poverty reduction emphasized by Tiffen is central to obtaining a better grasp of the strategic balance between sectors required for accelerated growth and poverty reduction in SSA. And caution should be thrown to the wind. For small farm agriculture to grow and prosper in SSA, rapid rural-urban transitions will have to take place in order to reverse declining farm size, provide a robust domestic market for farm output, increase cash in circulation in rural areas, and take the pressure off over-exploited natural resources.

The link between rural-urban transitions and rural poverty reduction is provided by the diversification evidence. Many observers, and politicians, have a far too deterministic view of rural-urban migration as being a simple, linear, one-way ticket from one state of being to another. Yet fast growing economies, wherever they are encountered, are nothing like this. They exhibit mobility, yes, but this mobility is not a single movement from one occupation to another, as in most of the traditional migration literature, it is a mobility of many different distances and durations and purposes that broadens and deepens trade and exchange between rural and urban areas to the benefit of growth in both sectors.

It is the failure to grasp the nettle of accelerated rural-urban transition that has mired SSA in its spreading rural poverty and intensifying vulnerability of the past several decades. Ethiopia is a country that exhibits this failure to an extreme.⁶ Ethiopia has 70 million people only 17 per cent of whom in 2005 live in urban areas. It has suited successive Ethiopian governments going back decades, if not centuries, to keep peasants toiling on the land. Ethiopia has an agriculture optimist growth strategy called Agricultural Development Led Industrialisation (ADLI) which is built into its Sustainable Development and Poverty Reduction Program (SDPRP) (Ethiopia, MoFED). Urban development is regarded as a minor cross-cutting issue that receives 2½ pages attention in the 200 page SDPRP. In Ethiopia the state owns the land, and farm families have rent free access to it and can pass it on to their progeny. Several past land redistributions mean that in the densely settled areas farm sizes are in the narrow range of 0.5 to 2 ha. Farm sizes are shrinking since the rural population is growing at 3 per cent per annum.

Ethiopia follows policies that “trap people in agriculture”. The capital or rental value of land cannot be realised (say, as a precursor to moving to town) since the land belongs to the state and cash renting is prohibited. There are widespread perceptions in rural Ethiopia that if land is left for more than 3-4 months it will be reallocated by the local administration, and the same also would occur if individuals were thought to have moved unduly into non-farm activities. The current rate of urbanisation in the country at 6 per cent is considered to be an unwelcome trend, to be contained if at all possible. However, the shocking implication of this is that in 10 years time, in 2015, 77 per cent of Ethiopians will still live on the land, and 15 million more people will have had to be absorbed into an already exhausted agriculture.

⁶ It is not considered necessary to rehearse Ethiopia’s chronic food insecurity situation here, which is known well enough by the likely readers of this paper.

Conclusions and Implications for Poverty Reduction Policies

A great deal more work needs to be done to get the speculative ideas put forward in this paper into a shape that would stand up to close scrutiny. Nevertheless, the outline of a model of poverty reduction failures in SSA begins to emerge. In this model, rural poverty reduction and urban growth are interdependent, and rural poverty reduction requires a much more rapid rural-urban transition than has been occurring in most SSA countries over the past three decades. This also means investing in urban infrastructures and anticipating the arrival of populations in towns in order to avoid the worst horrors of urban squalor. However, there cannot be much worse circumstances than the rural squalor to which very substantial proportions of SSA populations have been consigned for the past several decades.

Various implications for future poverty reduction policies may be deduced from the threads of the argument put forward here. These are briefly identified and discussed as follows:

Facilitating not directing. In general, decisions about what and where to produce are best left to private actors exercising their own agency; what governments, donors and NGOs can do is to contribute to the overall climate of facilitation that surrounds individual decisions. This means supporting and encouraging domestic policies that improve exchange, mobility, communication, information and infrastructure, and discouraging domestic policies that have the reverse of these effects. Clearly, development agencies already contribute in some of these areas. Budget support to education and healthcare provides valuable momentum to increasing human capital, knowledge, and the capability of individuals to make decisions from a broader set of alternatives. However, in other areas contributions are weaker; especially when it comes to human mobility and the adverse circumstances under which it typically occurs.

Supporting urban growth. Growth processes can be stifled or slowed down just at the point that they might seriously take-off due to wrong strategic thinking by donors and governments about the undesirable side effects of growth. Thus the rapid growth recently observed in capital cities like Kampala or Dar es Salaam that perhaps offer the only prospects of serious poverty reduction in the countries where they are located, is prematurely curtailed by a failure to support the urban infrastructure necessary to fuel the growth process. Instead, with heads full of populist visions of prosperous peasants, donors neglect urban growth constraints and encourage money to be poured into the impoverished countryside.

The decentralised public sector institutional context. An enabling environment for private wealth creation would comprise neutral or progressive local taxation designed to exclude those living at or below the poverty line from the tax net; business registration designed to provide support services to start-up enterprises rather than to penalise them with taxes and other costs; encouragement of mobility in order to broaden spatial options and encourage growth processes wherever these occur; and the generalised removal of spurious obstacles put in the way of people going about the business of making a living by those who derive power from local public sector office. These are aspects of making a living in low income countries where a great deal of what occurs in practice operates in opposition to facilitating rapid poverty reduction. While, the issues that arise are complex and difficult to tackle, at the very least the gulf between the rhetoric of decentralised local government and its reality needs to be recognised and debated at the policy table.

Agricultural and rural policies. A first priority is to support policy levers that have generally beneficial effects upon all types of economic activity in rural areas, and on rural-urban

mobility, rather than focusing narrowly on agricultural yield growth alone. Thus infrastructure (roads, communications, power), services (education and health), information (knowledge, ideas, radio, television, newspapers), enabling local public sector contexts for private initiative, exchange and mobility all have their roles to play.

Many current policy directions in agriculture remain valid and should be supported: improving public-private (incl. public-NGO) partnerships in service and input delivery, strengthening demand for advisory services, using modern communication technologies (radio, television, mobile phones) to disseminate advice and create discussion in farming communities, continuing to support the development of new technology, and seeking innovative solutions to gaps and failures in private marketing systems.

Land tenure reform. A major barrier to beneficial economic change in agriculture is often the historical and prevailing land tenure system. In particular, land tenure systems that fail to allow for the development of a purchase or rental market in land have the effect of reducing mobility, slowing down rural-urban transitions, and rigidifying uneconomic farm size structures. While it is understood that equity considerations often underpin traditional and state-owned tenure systems, in densely settled zones exhibiting extremes of farm subdivision, it is doubtful that anyone gains much from the absence of a land market, and from the lack of security of ownership or tenure. Moreover, many existing tenure systems are deeply gender-biased against women both in custom and law, causing serious dysfunctions between control, decision making, and use of land as a productive resource.

Second generation PRSPs. These should be encouraged to contain wide ranging recognition of the importance of occupational diversification, mobility and cross-sectoral inter-dependencies:

- o the current heavily sector and production-oriented bias of PRSPs requires substantive overhaul;
- o aside from their justifiable emphasis on improving access to education and primary healthcare, PRSPs should be primarily about enabling environments that apply across all sectors;
- o artificial and unnecessary blockages to peoples' exercise of their own agency in making a living should be removed wherever they occur, either in central or local government, or for that matter when caused by the concentrated economic power of particular private organisations;
- o the antagonistic view of migration expressed in many PRSPs needs removing, to be replaced by a facilitating approach that recognises what governments must do to support personal economic mobility;
- o the resistance to urbanisation prevalent in PRSPs also needs to be reversed; rapid urbanisation creates dynamic growth processes that are then often stifled by inept urban planning and a failure to provide the infrastructure necessary for growth to be maintained.

Returning finally to the overall theme of this conference, the future of small farms, there can be no doubt at all that small farms have a future in development and poverty reduction in SSA. However, that future must consciously and progressively involve a smaller proportion of national populations over time than is occurring under current trends. Specifically, the trend towards uneconomic micro holdings must at some stage be halted and reversed if there is going to be any possibility of sustained increases in output per hectare, and if those remaining in agriculture are to enjoy livelihoods sufficiently above the poverty line to avoid the periodic vulnerability crises that currently hit rural areas of SSA countries with undue

regularity. It follows that future poverty reduction strategies need to be oriented more to increasing people's mobility out of agriculture than to relying on unwarranted optimism about the beneficial outcomes of agricultural yield growth.

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