# Searching for a Weapon of Mass Production in Rural Africa: Unconvincing Arguments for Land Reform 

JOHN SENDER AND DEBORAH JOHNSTON


#### Abstract

Many recent arguments for land reform share a central proposition concerning the relative efficiency of small farm production. This article argues that the theoretical reasoning underlying this proposition is not coherent, and furthermore the empirical support for this size-efficiency relationship in Africa is astonishingly weak. Given the evidence, the continued focus on the efficient, egalitarian family farm can only be ideologically driven. The poorest rural people are unlikely to benefit and will probably be harmed by the policies based on these arguments for land reform. To illustrate this point, the article considers data from land redistribution programmes, particularly in South Africa, that suggest not only that the poorest did not acquire land, but also that they suffered declines in rural wage earning opportunities that are crucial for their survival.


Keywords: land reform, small farms, inverse relationship, scale economies, rural poverty, South Africa

## INTRODUCTION

Between the 1950s and 1970s, development economists' arguments for land reform in Africa were often based on planning models or nationalist variants of socialism. The primary concern was with the dynamics of rapid accumulation processes. One key objective was to extract a surplus for industrialization by limiting the proportion of any increase in agricultural production that was consumed by small farmers, so that wage goods (especially food) were readily available to match the anticipated growth in the industrial labour force, as well as to feed the armies that were defending the integrity of fragile states. Some political economists therefore stressed the need to concentrate extremely limited investment resources only on those rural areas and institutions with the greatest capacity to

[^0]increase marketed output. This implied a neglect of many of the smallest producers on family farms, especially those located in less favourable agro-economic zones who were likely to consume most of what they produced. Paying less attention to these small farmers would allow the state to concentrate scarce fertilizers, farm equipment, irrigation, credit and skilled personnel on those large-scale (collective or state) farms with relatively high capital to labour ratios where consumption could be restrained and output could more readily be appropriated by the central authority.

Nationalist movements in the 1960s faced mass demands for improved access to basic infrastructure - schools, water, sanitation and health clinics. However, in a context where the rural population was scattered and widely dispersed, the costs of meeting these demands in the short run were regarded as unaffordable. It was believed that the costs of social infrastructure provision could be reduced, if agrarian reform consolidated homesteads and people were grouped together in 'villages', settlement schemes or co-operatives. In addition, nationalist movements were under pressure to demonstrate that 'foreigners' and colonialists would no longer dominate agricultural production, but the new states would exert their rights to nationalize plantations/estates or control land for the benefit of Africans. ${ }^{1}$

These issues in political economy are no longer fashionable or discussed, at least amongst those economists whose policy prescriptions are most influential in Africa. A very different set of agricultural policy issues and far more static arguments for agrarian reform now dominate the literature and have influenced new legislation on land and land tenure reform programmes in many African countries, ${ }^{2}$ especially the land redistribution programme in South Africa in the 1990s. Of course, there are variations in nuance and in the weight given to particular arguments supporting particular land redistribution policies promoted by the World Bank (Deininger 1999 provides a useful overview), by IFPRI (Robillard et al. 2001), by IFAD (2001), by DFID (2002), and by others of whom Lipton (1993) has been particularly influential in Southern Africa. The GKI (Griffin et al. (GKI) 2002) argument is the most recent manifestation of the case for redistributive land reform: couched in general terms but with Africa clearly on the policy agenda. This article will attempt to highlight some common themes and their analytical foundations, within the relevant literature, with GKI in mind.

The next section provides a summary of the methodology underpinning recent arguments for land reform. The sections thereafter aim to show the weakness of the empirical support for the central proposition concerning the relative efficiency of small-farm production, emphasizing, in particular, the lack of robust African evidence. In addition, arguments made by mainstream economists concerning the probable impact on poverty of the proposed land reforms will be

[^1]criticized and some of the consequences of the 'Market Led Land Reform' in South Africa will be examined. GKI, of course, advocate what appears to be an altogether more radical redistributive land reform than so-called market-led land reform, via confiscation of land by the state: but it is an advocacy underpinned by precisely the same argument used by all the others mentioned, that smallscale farming is more efficient than large. The conclusion briefly expands on the allusion in the article's title, by suggesting that many economists' arguments for land reform amount to an ideologically driven search for something that does not exist, namely efficient and egalitarian 'family-operated' small farms that are likely to provide an escape from poverty for millions of the poorest rural Africans.

## THE BASIC ASSUMPTIONS OF THE CONSENSUS APPROACH

By the end of the 1990s it became possible to assert: 'In many developing countries today, far-reaching macroeconomic reforms have removed distortionary policies, the ideological divide has narrowed or disappeared' (Deininger and Binswanger 1999, 248). The triumphalist conclusion was that
in countries (e.g. Zimbabwe, Malawi, South Africa . . . among others) that continue to be characterized by the concentration of underutilized tracts of land in large farms alongside with (sic) pervasive lack of land access for poor and landless, macro-economic reforms have altered the rules of the game . . . the loss of privileges that had historically been conferred on large farms by discriminatory laws, trade protection, and credit subsidies might make it easier to utilize the market for a type of land redistribution aimed at increasing productivity and equity. (Deininger and Feder 1998, 34, our emphasis)
The International Fund for Agricultural Development, with substantial intellectual support from Michael Lipton, has also enthusiastically identified the potential for a 'New Wave', market-friendly land reform:

Economic liberalization is gradually removing incentives and reforming macroeconomic policies that have favoured large-holder agriculture . . . There is now a shift towards decentralised, substantially compensatory and market-led reform. Policy can help by removing . . . subsidies to large farmers and their inputs . . (IFAD 2001, 74 and 112)
Thus, inequality in the size distribution of farms, indeed the very existence and viability of large-scale mechanized farming in sub-Saharan Africa, is explained as a result of the market-distorting consequences of government intervention. The history and political economy of apartheid and colonialism can simply be interpreted as examples of the generic inefficiencies characteristic of markets distorted by state intervention (van Zyl et al. 1995, 1-2). Now that a consensus in favour of liberalizing agricultural markets has been manufactured in Africa, the inherent superiority of small-scale farms will become increasingly obvious.

This constitutes a useful catch-all argument, since in all those contexts where there is no evidence for the relatively greater efficiency of small farms, the apparent anomaly is easily resolved: market distortions or missing markets (a pervasive feature of reality) can be called upon to explain the surprising failure of small farms to outperform large farms.

The belief in the inherent advantages of small farms in Africa, indeed in all developing counties, is supported by many arguments in the mainstream theoretical literature. These arguments are consistent with the standard neoclassical trade theory arguments that are used to prescribe a focus on labour-intensive exports in developing countries, following the signals of undistorted world market prices in a liberalized environment, but they also usually depend on neoclassical production function analyses. ${ }^{3}$ They are as follows.

If factor prices are not distorted, all efficient agricultural enterprises in Africa will economize in their use of the scarce factor (capital) and take advantage of the most abundant factor (labour) to adopt highly labour-intensive farming systems. There is some empirical support, particularly in Asia, for the proposition that the smaller the farm, the greater the level of labour inputs per hectare. On this basis, it is argued that smaller farms produce efficiently, in the static sense that they make full use of the abundant factor. This is a repeated theme in GKI:

Given that labour is abundant (and hence has a low opportunity cost) and land and capital are scarce (and hence have relatively high opportunity costs), small farmers have a higher total productivity than large and hence utilize resources more efficiently. (GKI 2002, 286, 281, 317) ${ }^{4}$

Large farms and farms that cannot rely on family labour inputs are inherently incapable of matching the efficiency with which small farmers use the abundant factor. This, according to two World Bank economists, is because the costs of labour supervision are said to be
particularly large in agricultural production due to the spatial dispersion of the production process and the need to constantly adjust to microvariations of the natural environment. Family members are residual claimants to profits and thus have higher incentives to provide effort than hired labor. They share in farm risk, and can be employed without incurring hiring or search costs. These attributes underlie the general superiority of family farming over large-scale wage operations, manifested empirically in an inverse relationship between farm size and productivity. (Deininger and Feder 1998, 17)
The same argument is widely used outside the World Bank. For example, IFAD suggests that 'small scale brings advantages, such as low labour supervision cost

[^2]and hands-on family-level overview' $(2001,112)$, while GKI note that 'those who own large amounts of land face a major problem in mobilizing and organizing labour for purposes of production and extracting effort from their workers and tenants' $(2002,287)$. For World Bank economists, 'the main productivity advantage of land reform is linked to the increased incentives of owner-operators' (Deininger and Binswanger 1999, 257). Similarly, for GKI land reform is required because large farmers face higher costs of labour and, therefore, use less than the socially optimal amount of labour on their farms, although they have some additional arguments concerning the socially inefficient behaviour of large farms in the labour market (critically discussed elsewhere in this issue by Khan).

Since they do not have to use hired labour, small farms benefit from cost advantages that are said to outweigh any of the disadvantages they face because of the small scale of their operations in agricultural processing, marketing, access to credit and improved technology.

The supervision and labour cost advantages of family labor are apparently greater than the disadvantages that the lumpiness of management skills and machines and better access to credit and other risk-diffusion measures confer on large farms. (Binswanger et al. 1995, 2705-6)

Moreover, it is claimed that these scale disadvantages experienced by small farmers can easily be overcome by improving the functioning of markets. In other words, they are not disadvantages that are 'inherent' in small-scale production, but should be seen as the outcome of distorted and missing markets. Thus, on the basis of agricultural production function analyses in China and India that were unable to reject the hypothesis of constant returns to scale, it is asserted that the number of cases where 'true' technical economies of scale apply is extremely limited. 'Economies of scale in processing or marketing are . . . important for the size of farming operations only as long as markets for outputs and inputs are either unavailable or malfunctioning'. Besides, rental markets have the potential to overcome indivisibilities associated with machinery, while improvements in capital markets 'through regulation, better information, or cooperatives to reap economies of scale . . . could lead to productivity gains' (Deininger and Binswanger 1999, 252).

GKI share the static view that in all countries where labour is abundant 'economies of scale in cultivation are unlikely to be important and small farms consequently are likely to be efficient'. They also believe that 'there is no reason why the existence of economies of scale in some rural activities should be an insuperable obstacle to the creation of a small peasant farming system'. They believe that these obstacles, in agricultural processing for example, could be overcome through improving the functioning of credit markets and the creation of multi-purpose cooperatives (2002, 318).

There is an unexplained asymmetry in these arguments. While small farmers are anticipated to face few difficulties in creating new institutions to avoid scale diseconomies (cooperatives, irrigation associations and financial institutions providing better access to micro-credit with the help of pro-poor local states and
international donors), large, capitalist farmers will never be able to exert their social and political power to reduce labour supervision costs.

In addition to these arguments concerning the relative efficiency of small farms, the literature proposing land reforms also makes the populist claim that transfers of land from large to small farmers will reduce poverty, that 'a system of small family farms would contribute massively to the elimination of income poverty and human poverty in rural areas' (GKI 2002, 320). This is a powerful claim. It rests on several assumptions.

The first is that in all developing countries the poorest rural people are small farmers, or that raising the income or improving the physical asset base of small farmers will improve the prospects for the rural poor. ${ }^{5}$ Indeed, the rural poor are usually treated as synonymous with 'small farmers' (GKI 2002, 284). In the voluminous donor literature on poverty, it is almost always assumed that the poor are self-employed farmers (Sender 2003). Even when it is acknowledged that rural wage labour provides a significant and rapidly growing source of income for the poor, it is believed that landless or semi-landless rural people who depend on wages will always suffer less poverty and find more opportunities for on and off-farm wage employment
where land is more equally distributed among small family farms. Small farms employ more people per hectare than large farms and generate income more likely to be spent locally on employment-intensive rural nonfarm products, thereby stimulating overall economic development in the rural sector ... Land in smallholdings tends to be managed more labour-intensively, raising demand for labour and increasing wages and/or employment of low-income workers, even if they do not control any land. (IFAD 2001, 74-5, emphasis added)
This argument clearly conflates claims concerning employment in general (labour intensity per hectare) with claims concerning wage employment (wage-labour intensity per hectare, or the growth of wage labour opportunities in rural areas). ${ }^{6}$ However, it would be incoherent to argue that the main advantage of small farms is that they can rely on family labour inputs, while at the same time claiming that small farms will generate fast rates of growth of wage employment opportunities.

The wage rates of and the demand for the labour provided by the poorest rural people are said to be strongly and negatively influenced by the existence of

[^3]large farms. This is mainly because it can never be in the interest of large farmers to cultivate their land with large amounts of wage labour: either because they have an incentive to underemploy labour since employing more workers could drive up wages and threaten monopsonistic profits (GKI 2002, 291) or because of the prohibitively high costs of supervising and monitoring hired labour discussed above. Altering the size distribution of the ownership of farms is, therefore, believed to be the key to influencing the demand for wage labour, levels of wages and the depth of rural poverty. The putative mechanism through which rural wages will rise when land is redistributed in favour of very small farms, even farms that are too small to allow farmers to survive in the absence of additional income derived from off-farm wage labour, is through an increase in the reservation wage of the reform's beneficiaries (IFAD 2001, 86). The argument is that access to a tiny parcel of land will significantly increase the bargaining power of those seeking waged work, although no empirical evidence covering trends or the distribution of rural wages is cited to demonstrate these effects of owning a plot of land. Nor are there many examples of land reforms in developing countries that effectively transfer land to rural wage labourers, especially landless women (see the penultimate section, below).

Other factors known to influence levels of demand for labour in agriculture (and wage rates) are not seriously considered. In particular, the fact that labour use per hectare and the demand for wage labour are very strongly and positively influenced by state-subsidized investments in irrigation and water control is usually ignored in the new anti-statist literature advocating redistributive land reform. ${ }^{7}$

It is obviously important to assess the degree to which the evidence from rural sub-Saharan Africa supports the above arguments concerning the advantages of small family farms and their potential to reduce poverty. However, before examining some of this evidence in the following sections, it may be useful to emphasize the logical implications of the standard efficiency arguments. The idealized small family farm is regarded as 'superior' and 'efficient' because it is an institutional form that has been capable of applying huge amounts of very low productivity labour to tiny parcels of land. Undernourished people are compelled to engage in many hours of back-breaking work, assisted by virtually no mechanized equipment, because more remunerative forms of employment are not on offer by other rural enterprises, or because older men prevent them from leaving their farms in search of more productive employment. The 'viability' of most small family farms in rural Africa is predicated on compulsion, either exercised by men over the labour of women, younger men and destitute kin, or enforced by acute risks of starvation that necessitate the severe exploitation of all family labour (Patnaik 1979; Kautsky 1988; Sender and Smith 1990). While earlier arguments for land reform stressed the critical need to increase labour productivity in the agricultural sector, if accumulation was to take place in

[^4]poor countries (Kalecki 1976; Sawyer 1985, chapter 10), the newer arguments discussed above appear to make a virtue out of inefficiency, to trumpet the competitive advantages of those institutional forms that survive on the basis of relatively low labour productivity.

## SOME EVIDENCE FROM SUB-SAHARAN AFRICA

The view that small farms are more efficient than large farms in sub-Saharan Africa is rarely supported by references to detailed, micro-economic comparisons of the performance of different sizes of farms located in similar agro-ecological zones. For example, only about 5 per cent of the text advocating redistributive land reform by GKI is devoted to a discussion of sub-Saharan Africa (2002, 2925). Their discussion of Africa focuses on a critique of land titling, or the privatization of land, echoing arguments earlier developed in far more empirical detail by Platteau (1999). No evidence at all on trends in the relative productivity of different size categories of farms in Africa is cited.

IFAD (2001) only devotes a half-page 'box' to the evidence on the efficiency of small farms in developing countries and provides a total of four references to African empirical studies, conducted in Madagascar, Malawi, and Kenya and in West African rice production (Barrett 1993; Sahn and Arulpragasam 1993; Hunt 1984; Pearson et al. 1981). The empirical evidence thus refers to a limited number of countries (and farming regions/crops within these countries) and is by no means up-to-date, relying on data collected more than 20 years ago (West Africa and Kenya), or at least data over 10 years old. Besides, IFAD's interpretation of these data is open to question.

The West African study does not allow one to compare farms of different sizes, but provides estimates of the social 'efficiency' of different technologies used in rice production, measured in shadow or accounting prices. Most importantly, this study concludes:

Comparative advantage in West African rice production will not remain static . . . capital-intensive techniques are likely to increase in profitability relative to those that are intensive in the use of labour . . . (Pearson et al. 1981, 430)

The data from Madagascar are for farmers in the Central Highlands region and are recognized to be flawed by 'important empirical weaknesses'. The productivity effects of a redistributive land reform policy in this region are described as ambiguous: 'land redistribution which left peasants sufficiently endowed to provide for their own needs could actually reduce agricultural yields (Barrett 1993, 12).

The Malawian research cited by IFAD notes: 'The evidence indicates an extremely low level of productivity on customary holdings in Malawi . . . yields of maize barely rose through the 1980s . . . yields of most smallholder export crops have stagnated or declined' (Sahn and Arulpragasam 1993, 313). The same study refers to evidence that 'labor inputs for smallholder production are lower than for estate production, including on the few smallholder farms producing
burley [tobacco]' (Sahn and Arulpragasam 1993, 325). More recent and more disaggregated research on Malawi confirms relatively low labour inputs on small farms and is not cited by IFAD, despite its direct relevance. Dorwood (1999) investigated the farm size-productivity relationship amongst smallholders, concentrating on two particular ecological areas in Malawi. He found a positive relationship between size and productivity, not only when examining national data, but also when he used data for each region. He explained this relationship as arising from the fact that poorer/smaller farmers did not have the capital to make agricultural investments, or the working capital to purchase inputs and, crucially, had to engage in wage labour and were therefore unable to devote sufficient labour to their own farms. In addition, poorer/smaller farmers were more likely to focus on low value maize production, further reducing the value of their farm output. In contrast, richer farmers benefited from a 'greater ability to determine the timing of labour inputs throughout the season and the high incentives for labourers to perform well in order to retain employment'. These advantages might explain '. . . a positive relationship between farm size and net output per hectare' (Dorwood 1999, 145). Thus, Dorwood argues that even in the absence of capital-intensive technology and even when shadow prices are used, the inverse relationship may not hold. His findings appear to be the result of differences in both cropping patterns and crop yields associated with variations in farm size and soil fertility within and between areas, with the continuously cropped smaller farms in more densely populated areas subject to depleted soil fertility (Dorwood 1999, 151).

Both the evidence on Kenya cited by IFAD, which relies on data collected in the mid-1970s, as well as more up-to-date studies, suggest that the relationship between farm size and productivity varies between agricultural zones and depends on the range of farm sizes considered. Hunt (1984) suggests that the inverse relationship is weaker in less fertile, unimodal rainfall areas, but provides no disaggregated data covering the many micro-farms in Kenya that are below 0.5 hectares in size, while more recent work finds that a positive relationship between size and productivity is absent when comparing relatively small farms, but does emerge in the data for larger holdings (Carter and Wiebe, 1990). ${ }^{8}$

The World Bank is sometimes more cautious than IFAD in its interpretation of the African evidence on the efficiency of small farms, arguing: 'Most of the empirical work on the farm size-productivity relationship in the developing world has been flawed by methodological shortcomings, and has failed to deal adequately with the complexity of the issues involved' (Binswanger et al. 1995, 2706). ${ }^{9}$ They also note that the alleged superiority of small farms may be

[^5]confined to 'an environment with little mechanization and slow technical change' (1995, 2707), ${ }^{10}$ and they admit that there are true technical economies of scale in plantation crops that are important in Africa, including sugarcane, tea and bananas. They even cite a micro-study (in the Sudan) confirming a positive relationship between size and productivity (Deininger and Binswanger 1999, 251-2) and data confirming the fact that 'large scale commercial farms achieve the highest yields everywhere in Zimbabwe', far higher than those achieved in the smallholder, 'communal' sector and higher than yields by settlement scheme smallholders in most agro-ecological regions (Deininger and Binswanger 1992, 25). Similarly, mixed results emerge in survey of African evidence by Byiringiro and Reardon (1996), who also found some studies showing a positive relationship between farm size and productivity.

It is remarkable that neither the World Bank nor IFAD makes any reference to detailed comparative size-productivity data from South Africa to support their arguments for redistributive land reform. The best of this evidence is derived from the Western Cape and clearly indicates that a shift to small-scale farming would be unlikely to increase farm employment. Such a shift would also be unlikely to increase employment through forward, backward or consumption-linked labour demand. The conclusion is:

In the foreseeable future, the scope for competitive new small scale farming may be limited . . . it will not do the cause of rural reform any good to overemphasize land redistribution at the expense of other programmes which will benefit a far larger number of rural residents. (Lipton et al. 1996, xx-xxi)

However, in the same publication, Lipton dismisses these empirical results with the claim that when and if there is less distortion in markets and less discrimination against small farmers in South Africa then they will use more labour per hectare and achieve higher yields per hectare (Lipton et al. 1996, xi). This argument is a good example of the catch-all technique noted in the introduction, since it cannot be refuted by reference to surveys of existing farms, but remains firmly rooted in an imaginary, 'undistorted' counterfactual world. ${ }^{11}$

In the same volume, Lipton also cites a review of the literature that concludes: 'The inverse farm size-efficiency relationship . . . is present in South African Agriculture despite a history of policies favouring relatively large mechanised

[^6]farms . . .' (van Zyl 1996, 304). However, it is important to add the remainder of the quoted sentence and then to discuss van Zyl's review of the evidence in greater detail. Van Zyl's sentence continues by drawing the implication, 'that significant efficiency gains can be made if farm sizes in the commercial sector become smaller'. A key question, therefore, is what is meant by the term 'smaller'. Most of van Zyl's data refers to 'representative' farms in the six major grainproducing areas of South Africa. In this sample, the median quality-adjusted acreage farmed varied between about 1150 hectares and 360 hectares, depending on the region. Thus, although van Zyl does not allow his readers to calculate the actual size of the farms he defines as 'small', preferring to identify them as 'the smallest third of the farms', it is clear that a great many of these small, relatively labour-intensive and more efficient farms cultivate over 500 hectares (van Zyl 1996, figures 11.3-4) and hardly match the Liptonian populist image of a 'family farm' operated by a poor African rural household.

When van Zyl does analyse a sample of somewhat smaller, irrigated farms (with a median and average area of about 50 hectares), he finds evidence of scale economies and that most of the inefficient farms are rather small. In fact, '. . . roughly one third to one half of the small farmers are scale inefficient' $(1996,297)$.

In this review, there is no analysis of any data from the dynamic and macroeconomically significant perennial crop or horticultural farms in South Africa. ${ }^{12}$ However, van Zyl does cite some evidence of a positive relationship between size and efficiency in sheep farming (Hattingh 1986) ${ }^{13}$ and also reviews existing sample surveys of relatively small farms in the former homelands, reporting that results are 'mixed' (1996, 275), i.e. do not unambiguously support the proposition that smaller farms are more efficient. His own more recent data set, covering maize farms in some of the former homelands (KaNgwane, Lebowa and Venda), allows him to conclude that 'the small farms in KaNgwane are scale inefficient, relative to the larger units' and that '. . . only a little over 7 per cent [of sampled farms] are large enough to be scale efficient in KaNgwane and Lebowa, whereas 23.3 per cent are scale efficient in Venda’ (1996, 281-2). His conclusion is that 'increasing the size of some farms in the former homelands would achieve large efficiency gains' (1996, 284). However, he does not compare yields and input use on these small and inefficient homeland farms with yields and input use on neighbouring 'commercial' farms, although there is little doubt as to what such comparisons would reveal.

[^7]It should be emphasized that none of the sample studies of African farms in the former homelands of South Africa, or elsewhere in sub-Saharan Africa, directly addresses the central issue of the relative efficiency of farms using only family labour, compared to efficiency on farms that face the postulated theoretical disadvantages of using hired labour. The consensus approach fails to recognize the degree to which small farms in sub-Saharan Africa are differentiated in terms of their ratios of paid to unpaid labour inputs, preferring simply to assume the prevalence of unpaid labour in more or less homogeneous African 'households'. ${ }^{14}$ However, there is a great deal of evidence throughout the sub-continent that contradicts the assumption that rural households can ever be analysed as if they had a complete uniformity of interest, or as if 'family' labour could seamlessly be controlled by a benevolent dictator (Guyer and Peters 1987; Evans 1991; Alderman et al. 1995; O'Laughlin 1995; Manji 2003). There is also contemporary and historical evidence showing that the control and supervision of the labour of children, spouses and other relatives is actually extremely difficult for many small African farmers to achieve, and that effective incentives, as opposed to coercion, cannot be assumed to stem automatically from primordial intra-household solidarity (James 1985, 182; Schirmer 1994; van Onselen 1996; Kotze 1992; Kotze and van der Waal 1995; Chanock 1990, 214-15; Posel 1991, 204-5; Moore 1994; Silberschmidt 1999).

There is no justification for the stereotyped assumptions made about incentives on 'owner-operated farms' by the World Bank and IFAD. In those rural areas where the income from different operations on a family farm is gender-typed, women (or men) will have little incentive to provide adequate labour inputs, if the benefits from particular types of production are seen as exclusively male (or female) (Elson 1991, 24; von Bülow and Sørensen 1993; Carney 1987/88; Carney and Watts 1990/91). The pattern of farm labour inputs (both hired labour inputs and unpaid/family labour inputs) will be influenced not only by prevailing social norms and 'idioms of accumulation' (Cheater 1984; Sender and Smith 1990, 79-88), but will also emerge as the contingent outcome of intrahousehold struggles and conflicts over reproduction strategies. The pattern will also be influenced by the rate of growth of opportunities for young men and for women to migrate in search of off-farm employment, since small-scale agriculture has, in many parts of Africa, become impossible without inputs purchased through labour migrant remittances (James 2001, 93; Peters 1983, 104, 117).

In addition, the viability of all large-scale agribusinesses and plantations in Africa does not appear to have been undermined by the insuperable difficulties and costs of supervising wage labour. Capitalist employers in African agriculture, as elsewhere, have developed a wide range of institutional arrangements to reduce the bargaining power of their workers, facilitate supervision and increase incentives. For example, large-scale and labour-intensive horticultural operations

[^8]in the Free State and Eastern Transvaal Provinces of South Africa have hired their labour, especially temporary and seasonal labour, from multiple sources that include migrant labour from Lesotho and Mozambique. These migrant workers have the advantage, from the employers' perspective, of being female, foreign and casual (and therefore less legally protected). Migrants were selected not because of any local shortage at the going wage rate in the supply of female labour with similar levels of skills and experience, but because of their relatively weak bargaining power and the ease with which they could be controlled and disciplined (Johnston 1997; Sender 2002). ${ }^{15}$ Even in comparison to poor South African citizens in the Bantustans, the older women who were often recruited from Lesotho and the refugees from Mozambique had few alternative means of survival and, therefore, a great incentive to retain the wage employment they had obtained.

There are many other examples of techniques used by employers to reduce labour supervision and recruitment costs while providing incentives, especially through the provision of tied housing, small plots of land and schooling on the farm to monopolize access to the labour of a worker's wife and children (Standing et al. 1996, 272-3), or through out-grower or contract schemes in tobacco, sugar cane, and tea that can effectively disguise the wage relationship (Little and Watts 1994). These techniques may be reinforced by ideological efforts, especially the promotion of a belief in the paternalism of farm employers (van Onselen 1997; du Toit 1996), or through the increasingly fashionable 'social responsibility' and 'community development' programmes of modern agribusiness.

In sum, the inherent disadvantages of larger scale farming and the immutable advantages of small family farms in terms of labour control and discipline are not evident in sub-Saharan Africa. It is not surprising, therefore, that there is also no convincing evidence that small farms outperform large farms in terms of yields per hectare, or even in terms of input intensity. There remains the hypothetical assertion that, if the world were a different place and markets looked more like those in an undergraduate neo-classical economics textbook, then new and more supportive evidence of the superiority of small farms would emerge. This article of faith does not warrant further discussion, but the following section of this article will discuss the evidence supporting the belief that redistributive land reforms improve the prospects for the rural poor. The focus will be on the market-led land reform in South Africa that, as will be shown below, closely followed the prescriptions of the World Bank.

GKI predict that market-led land reform, as advocated by the Bank and followed in South Africa, will result in a very small programme, because of the amount of state resources required to subsidize the purchase of land. They are, therefore, sceptical about such land reform. Nevertheless, it is instructive to

[^9]consider the outcome of such land reform, where it has taken place, inasmuch as it is supported by a logic very similar to that developed by GKI.

## LAND REFORM AND THE POOR: ZIMBABWE AND THE CASE OF SOUTH AFRICA

It is beyond the scope of this article to attempt anything like a comprehensive analysis of evidence concerning the effects of land reform on the poor in subSaharan Africa. In many of the countries undertaking land reforms, time series data on trends in poverty are unreliable or absent. Besides, war and other factors are likely to have affected rural poverty in ways that are difficult to disentangle from any impact directly attributable to programmes of land redistribution. There is good evidence to suggest that both the Ethiopian and the Zimbabwean land reforms have resulted in substantial declines in opportunities for casual and seasonal wage employment, with devastating consequences for the poorest rural people. In Ethiopia, the policy-induced disappearance of the historically important agricultural wage earning opportunities for migrants from the North East to plantations in the South and South West, as well the decline in seasonal wage earning possibilities in the Awash Valley, is part of the explanation for the huge number of famine deaths in the 1980s (Sender 1989; McCann 1987). In Zimbabwe,
those most disadvantaged by the fast track land reform program are landless farm workers; large numbers of farm workers have been laid off from paid work; yet farm workers have not been among the groups targeted to benefit from land reallocations. Those who are descendants of Zambians, Malawians or Mozambicans . . . may have additional difficulty in accessing the fast track resettlement schemes . . . women, whose rights to land under customary law are weak, have also failed to benefit proportionately from the fast track process. (Human Rights Watch 2002, 3)

Women who work as non-permanent and contract farm labourers are much poorer than other rural women in Zimbabwe (Amanor-Wilks 1996) and, in 2002, 'most seasonal workers have lost employment' (Farm Community Trust 2002, 20), so the consequences of land redistribution may be regarded as particularly severe for the poorest Zimbabweans (UNDP 2002, 35). ${ }^{16}$

Apart from the well-documented direct impact on extremely poor female casual workers, the vast majority of poor rural women living in Zimbabwe's 'Communal Areas' have clearly derived no benefits from the land reforms. The rural population of Zimbabwe probably exceeds 8.5 million, but the estimated total number of (urban and rural) beneficiaries of two decades of resettlement by mid-November 2001 was considerably less than 236,000 families, ${ }^{17}$ or at most

[^10]1.4 million people (UNDP 2002, 20). There is no reason to believe that these beneficiaries were selected from amongst the poorest rural households living in the highly differentiated communal areas (Adams 1991; Cavendish 1999; Cousins et al. 1992; Robillard et al. 2001); the data show that well over 85 per cent of beneficiaries were men, despite the prevalence in rural Zimbabwe of several million poor households that do not contain an adult male (UNDP 2002, 37). ${ }^{18}$ In a review of land reform initiatives undertaken in a number of African countries since the late 1980s, it is argued that 'control of land has been retained by existing powerful social groups' and that gender concerns have been largely ignored (Izumi 1999, 9). The Zimbabwean evidence confirms this finding, as does the South African evidence discussed below.

The land redistribution policies in South Africa have been strongly influenced by the advice of the World Bank. In the early 1990s, the Bank recommended a 'broadly targeted' injection of state-subsidized purchasing power to allow some black South Africans to purchase land in the existing land market. ${ }^{19}$ No well-defined or coherent measures to focus on the rural poor or women were proposed and it was predicted that the Bank's approach would eventually result in 'a package of state subsidies to a class of male black rural capitalists' (Macro Economic Research Group 1993, 192). The accuracy of this prediction, and the internalization of the Bank's views by the Mbeki government, was confirmed in the Integrated Programme of Land Redistribution and Agricultural Development (IPLRAD) circulated by the Ministry of Agriculture and Lands in October 2000. An analysis of the detailed provisions of IPLRAD concludes that
the emphasis of IPLRAD on a substantial own contribution and on the promotion of black commercial farmers creates a real risk that the poor will be excluded from land redistribution . . . the new policy will favour comparatively rich blacks who can easily raise the funds to draw down . . . grants of up to R100,000 [equivalent to about $\$ 13,000$ ] . . IPLRAD could

[^11]end up with a much smaller number of applicants than its predecessor. (Turner and Ibsen 2000, 40) ${ }^{20}$

In fact, the number of beneficiaries of the earlier programmes of land redistribution was also very small indeed.

Land was transferred to about 37,000 households between 1994 and August 2000. Estimates of the total number of poor rural households in South Africa are unreliable, but one recent calculation suggests that there are about one million 'chronically poor' rural households out of a total of about 3.3 million rural African households (Aliber 2001, 33). Thus, over 96 per cent of poor households did not benefit from the land reform programme. Moreover, the evidence clearly indicates that the insignificant number of beneficiaries of land redistribution lived in relatively wealthy rural households. A random sample of beneficiary households showed that their characteristics were very different to those of the average rural African household (Deininger and May 2000, 11; Deininger et al. 1999, Table 3). For example, 27 per cent of beneficiary households owned cattle (compared with 15 per cent of African rural households in the national PSLSD 1994 survey); over 42 per cent of beneficiary households had access to electricity, 17 per cent owned a car and 19 per cent had access to a telephone (compared with 26 per cent, 8 per cent and 5 per cent, respectively, in the PSLSD survey). Besides, the PSLSD national survey failed to sample poor rural households adequately; therefore, comparisons between the characteristics of beneficiary households and the characteristics of poorer groups of rural households covered in other South African surveys show much larger gaps (Sender 2002).

It is surprising that the World Bank claims that the results of the random survey of beneficiaries allow them 'to reject the hypothesis that program benefits are appropriated by the non-poor' and to conclude that their results 'imply that the program is well-targeted to the poor' (Deininger and May 2000, 12). ${ }^{21}$ It is even more surprising that they dismiss concerns that the land reform programme was biased against women, on the grounds that 31 per cent of the surveyed land reform households were 'female headed'. Other, careful studies have concluded that 'women, and poor rural women specifically, do not appear to be gaining

[^12]any particular benefit from land reform', because although some women were registered as formal beneficiaries in some groups that acquired land, neither the nominated/registered female heads nor anyone else believed that they (as opposed to their male relatives) had secure rights to the land concerned (Cross and Hornby 2002). ${ }^{22}$ Finally, the World Bank has, of course, not been able to provide any evidence that poverty was reduced because the newly created farms created expanded opportunities for wage employment. The evidence on the total recorded profits earned on the 87 sampled land redistribution projects indicates that the holy grail of efficient and labour intensive small-scale agricultural production was very rarely achieved: the median profit per beneficiary was R161 (equivalent to about $\$ 20$ ), which seems to reflect the high proportion of 'unsuccessful large scale projects where enterprising individuals managed to enlist hundreds of beneficiaries who were [not] interested in agricultural cultivation' (Deininger et al. 1999, 14 and Table 6).

No survey results are reported on wage employment opportunities created on any of the farm enterprises established under the land redistribution programme, or on the ratio of unpaid family labour to wage labour inputs in these enterprises. However, the available evidence on trends in wage employment on farms in South Africa in the period since 1994 suggests that the government's populist pronouncements on land reform have resulted in a surge of wage-labour shedding, motivated by employers' fears of loss of control over land (Simbi and Aliber 2000; Hall et al. 2001). ${ }^{23}$ It may be concluded that, over the last decade, redistributive land reform in South Africa has had adverse effects on the standard of living of very large numbers of the poorest rural people. They did not acquire any land and suffered from declines in the rural wage earning opportunities that are crucial for their survival.

## CONCLUSIONS

The empirical support for arguments in favour of 'new wave' land reforms in sub-Saharan Africa seems astonishingly weak. The well-financed search for small farms that use family labour to produce more efficiently than capitalist farmers employing wage labour is driven by an ideological vision of the 'potential' of small farms, but has not uncovered satisfactory evidence of such potential, even in the aftermath of enforced liberalization and de-regulation in the economies concerned. Nor are the theoretical arguments in favour of such farms coherent. In particular, the gender and distributional consequences of the recommendations for land redistribution are analysed simplistically.

[^13]In contrast, the role of capitalist agriculture in Africa, whether in the form of large-scale agribusiness or dynamic medium-scale farm enterprises combining family labour inputs with hired labour, is rarely discussed by development economists. Policies to promote capitalist farming and the growth of decently remunerated agricultural wage employment in Africa, as elsewhere, would require far higher levels of public investment and a much more interventionist state than the current consensus is prepared to contemplate. Although both the South African and Zimbabwean governments do appear keen to encourage the emergence of a black rural bourgeoisie, their efforts to provide them with the required strategic support have been haphazard and have met with limited success. The consequences for the poorest rural people in these countries have been severe, as discussed in the penultimate section.

The technological dynamism, growth in investment, contribution to exports and wage employment of agricultural enterprises have not been the subject of policy debates and strategic planning in South Africa, since it is believed that market deregulation and the competitive discipline imposed by world market prices will provide most of the impetus required to achieve these objectives, as well as to change the size distribution of farms and the skin colour of their owners. It is recognized that some access to subsidized capital may also be needed, but following the advice of the World Bank (Deininger and May 2000, 18), the private sector is now envisaged as a major source of finance for black capitalist farmers, with the government merely playing a facilitating role (Darroch and Lyne 2002). In this context of internal and external political support for a minimalist state, only capable of defusing opposition from some of the more powerful black rural classes through one-off grants, the plea for 'radical land confiscation and redistribution' (GKI, 2002) has no immediate relevance. Of course, the World Bank and IFAD policy prescriptions also have little relevance for the poor, but these international financial institutions have considerable resources with which to peddle the same ahistorical vision of an egalitarian co-operative African countryside inhabited by 'small family farms', who will use 'undistorted' markets to achieve dynamic capitalist accumulation with no workers, capitalists or poverty.

## REFERENCES

Adams, J., 1991. 'The Rural Labour Market in Zimbabwe'. Development and Change, 22 (2): 297-320.

Adams, M. and J. Howell, 2001. Redistributive Land Reform in Southern Africa. Natural Resource Perspectives No. 64. London: ODI.
Alderman, H., P.-A. Chiappori, L. Haddad, J. Hoddinott and R. Kanbur, 1995. 'Unitary versus Collective Models of the Household: Is It Time to Shift the Burden of Proof?'. World Bank Research Observer, 10 (1): 1-19.
Aliber, M., 2001. Study of the Incidence of Chronic Poverty and Development Policy in South Africa: An Overview. Programme for Land and Agrarian Studies in Conjunction with Chronic Poverty Research Centre. University of the Western Cape: South African Regional Poverty Network. htttp://sarpn.org.za/Country Poverty Papers/South Africa/policy

Allen, T., 2002. 'Assessing the Impact of Land Reform on Rural Poverty in Zimbabwe: A Critique'. MSc Thesis, School of Oriental and African Studies, University of London. Amanor-Wilks, D., 1996. 'Invisible Hands: Women in Zimbabwe's Commercial Farm Sector'. SAFERE, 2 (1): 37-57.
Barrett, C.B., 1993. 'On Price Risk and the Inverse Farm Size-Productivity Relationship'. University of Wisconsin-Madison Department of Agricultural Economics Staff Paper Series No. 369.
Berry, R. and W. Cline, 1979. Agrarian Structure and Productivity in Developing Countries. Baltimore: John Hopkins University Press.
Bharadwaj, K., 1974. 'Production Conditions in Indian Agriculture. A Study Based on Farm Management Surveys'. Occasional Paper 33. Department of Applied Economics, Cambridge University.
Binswanger, H. and K. Deininger, 1993. 'South African Land Policy: The Legacy of History and Current Options'. World Development, 21 (9): 1451-75.
Binswanger, H.P., K. Deininger and G. Feder, 1995. 'Power, Distortions, Revolt, and Reform in Agricultural Land Relations'. In Handbook of Development Economics, vol. 3, eds J. Behrman and T.N. Srinivasan, 2659-772. Amsterdam: North Holland.
Byiringiro, F. and T. Reardon, 1996. 'Farm Productivity in Rwanda: Effects of Farm Size, Erosion and Soil Conservation Investments'. Agricultural Economics, 15 (2): 127-36.
Carney, J.A., 1987/8. 'Struggles Over Crop Rights and Labour Within Contract Farming Households in a Gambian Irrigated Rice Project'. Journal of Peasant Studies, 15 (3): 33449.

Carney, J. and M. Watts, 1990/91. 'Disciplining Women? Rice, Mechanization, and the Evolution of Mandinka Gender Relations in Senegambia'. Signs, 16 (4): 651-81.
Carter, M.R. and K.D. Wiebe, 1990. 'Access to Capital and its Impact on Agrarian Structure and Productivity in Kenya'. American Journal of Agricultural Economics, 72 (5): 1146-50.
Cavendish, W., 1999. 'Empirical Regularities in the Poverty-Environmental Relationship of African Rural Households'. Working Paper No. 99-21. Oxford: Centre for the Study of African Economies.
Chanock, M., 1990. Law, Custom and Social Order: The Colonial Experience in Malawi and Zambia. Cambridge: Cambridge University Press.
Cheater, A.P., 1984. Idioms of Accumulation: Rural Development and Class Formation Among Freeholders in Zimbabwe. Gweru: Mambo Press.
Clapham, C.S. 1988. Transformation and Continuity in Revolutionary Ethiopia. Cambridge: Cambridge University Press.
Cliffe, L. and J.S. Saul, eds, 1975. Socialism in Tanzania: An Interdisciplinary Reader. Nairobi: East African Publishing House.
Cousins, B., D. Weiner and N. Amin, 1992. 'Social Differentiation in the Communal Lands of Zimbabwe'. Review of African Political Economy, 53: 5-24.
Cramer, C. and J. Sender, 1999. 'Poverty, Wage Labour and Agricultural Change in Rural Eastern and Southern Africa’. Background Paper for the Rural Poverty Report 2001. Rome: International Fund for Agricultural Development.

Cross, C. and D. Hornby, 2002. Opportunities and Obstacles to Women's Land Access in South Africa. A Research Report for the Promoting Women's Access to Land Programme. National Land Committee. http://www.nlc.co.za/pubs2003
Darroch, M. and M. Lyne, 2002. 'Helping Disadvantaged South Africans Access the Land Market: Past Performance and Future Policy'. BASIS Brief No. 10. Department of Agricultural and Applied Economics, University of Wisconsin-Madison.

Deininger, K., 1999. Making Negotiated Land Reform Work: Initial Experience from Colombia, Brazil and South Africa. World Bank Policy Research Working Paper No. 2040. Washington, DC: World Bank.
Deininger, K. and H.P. Binswanger, 1992. 'Are Large Farms More Efficient Than Small Ones?’ Mimeo, July. University of Minnesota and World Bank.
Deininger, K. and H. Binswanger, 1999. 'The Evolution of the World Bank's Land Policy: Principles, Experience, and Future Challenges’. World Bank Research Observer, 14 (2): 247-76.
Deininger, K. and G. Feder, 1998. Land Institutions and Land Markets. Policy Research Working Paper No. WPS 16. Washington, DC: World Bank.
Deininger, K. and J. May, 2000. Can There Be Growth with Equity? World Bank Policy Research Working Paper No. 2451. Washington, DC: World Bank.
Deininger, K., I. Naidoo, J. May, B. Roberts and J. van Zyl, 1999. 'Implementing 'MarketFriendly" Land Redistribution in South Africa: Lessons from the First Five Years'. Paper presented at the Global Development Network Conference. Bonn, Germany: World Bank.
DFID, 2002. Better Livelihoods for Poor People: The Role of Land Policy. Consultation Document November. London: Department for International Development.
Dorwood, A., 1999. 'Farm Size and Productivity in Malawian Smallholder Agriculture'. Journal of Development Studies, 35 (5): 141-61.
du Toit, A., 1996. 'The Fruits of Modernity: Law, Power and Paternalism on Western Cape Farms'. Programme for Land and Agrarian Studies Occasional Paper No. 3. University of the Western Cape.
Dyer, G., 2000. Output Per Hectare and Size of Holding: A Critique of Berry and Cline on the Inverse Relationship. Working Paper 101. London: Department of Economics, School of Oriental and African Studies, University of London.
Elson, D., 1991. 'Male Bias in the Development Process: An Overview'. In Male Bias in the Development Process, ed. D. Elson, 1-28. Manchester: Manchester University Press.
Evans, A., 1991. 'Gender Issues in Rural Household Economics'. IDS Bulletin, 22 (1): 51-9.
FAO, United Nations, 2003. 'Seeking Ways Out of the Impasse on Land Reform in Southern Africa'. Manhattan Hotel, Pretoria, South Africa: FAO, South African Regional Poverty Network.
Farm Community Trust, 2002. Report on Assessment of the Impact of Land Reform Programme on Commercial Farm Worker Livelihoods. Highlands, Zimbabwe: Farm Community Trust of Zimbabwe.
Ghosh, J., 1998. Assessing Poverty Alleviation Strategies for their Impact on Poor Women: Study with Special Reference to India. Discussion Paper No. 97. Geneva: UNRISD.
Graaff, J., 1984. Review of 'Economic Theory and the Economy of Palanpur'. Oxford Economic Papers, 36 (3): 327-35.
Griffin, K., A.R. Khan and A. Ickowitz, 2002. 'Poverty and the Distribution of Land'. Journal of Agrarian Change, 2 (3): 279-330.
Guyer, J. and P. Peters, 1987. 'Conceptualizing the Household'. Development and Change, 18 (2): 197-214.
Hall, R., K. Kleinbooi and N. Mvambo, 2001. 'What Land Reform has Meant and Could Mean to Farm Workers in South Africa'. Paper presented at the SARPN Conference on Land Reform and Poverty Alleviation in Southern Africa, 4-5 June. Pretoria, South Africa: SARPN.
Hamman, J. and J. Ewert, 1999. 'A Historical Irony in the Making? State, Private Sector and Land Reform in the South African Wine Industry'. Development Southern Africa, 16 (3): 447-54.

## 162 John Sender and Deborah Johnston

Hattingh, H.S., 1986. ‘The Skew Distribution of Income in Agriculture’. Paper presented at the Agricultural Outlook Conference, Pretoria.
Human Rights Watch, 2002. 'Zimbabwe: Fast Track Land Reform in Zimbabwe'. Human Rights Watch, 14 (1): 1-44.
Hunt, D., 1984. The Impending Crisis in Kenya: The Case for Land Reform. Aldershot: Gower. IFAD, 2001. Rural Poverty Report 2001. New York: Oxford University Press.
Izumi, K., 1999. 'Liberalisation, Gender and the Land Question in Sub-Saharan Africa'. Gender and Development, 7 (3): 9-18.
Jacobs, S., 2000. 'Zimbabwe: Why Land Reform is a Gender Issue’. Sociological Research Online, 5 (2). http://www.socresonline.org.uk/5/2/jacobs.html
James, D., 1985. 'Family and Household in a Lebowa Village'. African Studies, 44 (2): 159-87.
James, D., 2001. 'Land for the Landless:Conflicting Images ofRuralandUrban in South Africa's Land Reform Programme'. Journal of Contemporary African Studies, 19 (1): 93-109.
Johnston, D., 1997. Migration and Poverty in Lesotho: A Case Study of Female Farm Labourers. PhD Dissertation, Department of Economics, School of Oriental and African Studies, University of London.
Kalecki, M., 1976. Essays on Developing Economies. Hassocks: Harvester Press.
Kautsky, K., 1988. The Agrarian Question. London: Zwann.
Kotze, J.C., 1992. 'Children and the Family in a Rural Settlement in Gazankulu'. African Studies, 51 (2): 143-66.
Kotze, J.C. and C.S. van der Waal, 1995. Violent Social Relationships and Family Life in Two Transvaal Lowveld Settlements. Cooperative Research Programme on Marriage and Family Life. Pretoria.
Lipton, M., 1993. 'Land Reform as a Commenced Business: The Evidence Against Stopping'. World Development, 21 (4): 641-57.
Lipton, M., M. de Klerk and M. Lipton, eds, 1996. Land, Labour and Livelihoods in Rural South Africa. Durban: Indicator Press.
Little, P.D. and M.J. Watts, 1994. Living Under Contract: Contract Farming and Agrarian Transformations in Sub-Saharan Africa. Madison: University of Wisconsin Press.
Macro Economic Research Group (MERG), 1993. Making Democracy Work: A Macroeconomic Policy Framework for South Africa. Cape Town: MERG.
Magaramombe, G., 2001. 'Rural Poverty: Commercial Farm Workers in Land Reform in Zimbabwe'. Paper presented at the SARPN Conference on Land Reform and Poverty Alleviation in Southern Africa, 4-5 June. Pretoria: SARPN.
Manji, A., 2003. 'Capital, Labour and Land Relations in Africa: A Gender Analysis of the World Bank's Policy Research Report on Land Institutions and Land Policy'. Third World Quarterly, 24 (1): 97-114.
McCann, J., 1987. From Poverty to Famine in Northeast Ethiopia: A Rural History, 19001935. Philadelphia: University of Pennsylvania Press.

Moore, H., 1994. Is There a Crisis in the Family? Social Effects of Globalization Paper No. 3. Geneva: UNRISD.

Moyo, S., 2002. 'The Land Occupations Movement and Democratisation: The Contradictions of the Neoliberal Agenda in Zimbabwe'. www.worldsummit2002.org/texts/ SamMoyo.pdf
Nyerere, J., 1967/68. 'Socialism and Rural Development'. Mbioni, 4 (8): 2-46.
O'Laughlin, B., 1995. 'Myth of the African Family in the World of Development'. In Women Wielding the Hoe: Lessons from Rural Africa for Feminist Theory and Development Practice, ed. D. Bryceson, 63-91. Oxford: Berg.

Oya, C., 2001. 'Large and Middle-Scale Farmers in the Groundnut Sector in Senegal in the Context of Liberalization and Structural Adjustment'. Journal of Agrarian Change, 1 (1): 124-63.

Patnaik, U., 1979. 'Neo-Populism and Marxism: The Chayanovian View of the Agrarian Question and its Fundamental Fallacy'. Journal of Peasant Studies, 6 (4): 375-420.
Pearson, S.R., J.D. Stryker and C.P. Humphreys, 1981. Rice in West Africa. Stanford: Stanford University Press.
Peters, B. and J. Peters, 1998. 'Women and Land Tenure Dynamics in Pre-Colonial, Colonial and Post-Colonial Zimbabwe'. Journal of Public and International Affairs, 9: 183-203.
Peters, P., 1983. 'Gender, Development Cycles and Historical Process: A Critique of Recent Research on Women in Botswana'. Journal of Southern African Studies, 10 (1): 100-22.
Platteau, J.-P., 1999. 'Does Africa Need Land Reform?' Paper presented at the Land Rights and Sustainable Development in Sub-Saharan Agriculture Sunningdale Workshop.
Posel, D., 1991. The Making of Apartheid 1948-1961: Conflict and Compromise. Oxford: Clarendon Press.
PSLSD (Project for Statistics on Living Standards and Development), 1994. South Africans Rich and Poor: Baseline Household Statistics. Cape Town: SALDRU, School of Economics, University of Cape Town.
Robillard, A.-S., C. Sukume, Y. Yanoma and H. Lofgren, 2001. Land Reform in Zimbabwe: Farm-Level Effects and Cost-Benefit Analysis. Trade and Macroeconomics Division Discussion Paper No. 84. Washington, DC: International Food Policy Research Institute.
Roth, M., 2002. 'Integrating Land Issues and Land Policy with Poverty Reduction and Rural Development in Southern Africa'. Paper presented at the World Bank Regional Workshop on Land Issues in Africa and the Middle East. Kampala: World Bank.
Sahn, D.E. and J. Arulpragasam, 1993. 'Land Tenure, Dualism, and Poverty in Malawi'. In Including the Poor, eds J. van der Gaag and M. Lipton. Washington, DC: World Bank, 306-34.
Sawyer, M., 1985. The Economics of Michal Kalecki. London: Macmillan.
Schirmer, S., 1994. The Struggle for Land in Lydenburg: African Resistance in a White Farming District, 1930-1970. PhD Thesis, University of the Witwatersrand, Johannesburg.
Sen, A. and J. Ghosh, 1993. Trends in Rural Employment and the Poverty Employment Linkage. ILO ARTEP Working Papers. Delhi: International Labour Organization.
Sender, J., 1989. Special Programming Mission to Ethiopia. Rome: United Nations International Fund for Agricultural Development.
Sender, J., 2002. 'The Struggle to Escape Poverty in South Africa: Results from a Purposive Survey'. Journal of Agrarian Change, 2 (1): 1-49.
Sender, J., 2003. 'Rural Poverty and Gender: Analytical Frameworks and Policy Proposals'. In Rethinking Development Economics, ed. H.-J. Chang, 405-23. London: Anthem Press.
Sender, J. and S. Smith, 1990. Poverty Class and Gender in Rural Africa: A Tanzanian Case Study. London: Routledge.
Silberschmidt, M., 1999. Women Forget that Men are Masters. Stockholm: Nordiska Afrikainstitutet.
Simbi, T. and M. Aliber, 2000. Agricultural Employment Crisis in South Africa. TIPS Working Paper No. 13_2000. Johannesburg: Trade and Industrial Policy Secretariat.

Standing, G., J. Sender and J. Weeks, 1996. Restructuring the Labour Market: The South African Challenge. Geneva: ILO.
Turner, S. and H. Ibsen, 2000. Land and Agrarian Reform in South Africa. Research Report No. 6. Programme for Land and Agrarian Studies, School of Government: Norwegian Institute of Human Rights, NORAGRC and University of the Western Cape.
UNDP, 2002. Zimbabwe Land Reform and Resettlement: Assessment and Suggested Framework for the Future. New York: UNDP.
van Onselen, C., 1996. The Seed is Mine: The Life of Kas Maine. A South African Share Cropper 1894-1985. Cape Town: David Philip.
van Onselen, C., 1997. 'Paternalism and Violence on the Maize Farms of the South-Western Transvaal, 1900-1950'. In White Farms, Black Labor: The State and Agrarian Change in Southern Africa 1910-50, eds A. Jeeves and J. Crush, 192-213. Pietermaritzburg, Portsmouth, NH and Oxford: University of Natal Press, Heinemann and James Currey.
van Zyl, J., 1996. ‘The Farm Size-Efficiency Relationship’. In Agricultural Land Reform in South Africa: Policies, Markets and Mechanisms, eds J. van Zyl, J. Kirsten and H.P. Binswanger, 259-309. Cape Town: Oxford University Press.
van Zyl, J., J. Kirsten and H. van Schalkwyk, 1995. 'Land Reform in South Africa: Efficiency, Policies and Land Markets'. Pretoria: Faculty of Biological and Agricultural Sciences.
von Bülow, D. and A. Sørensen, 1993. ‘Gender and Contract Farming: Tea Outgrower Schemes in Kenya'. Review of African Political Economy, 56: 38-52.
Walker, C., 2002. 'Agrarian Change, Gender and Land Reform: A South African Case Study'. UNRISD Social Policy and Development Programme Paper no. 10 (April).
World Bank, 1997. Poverty in Cote d'Ivoire: A Framework for Action. Human Development Technical Group III, Report No. 15640-IVC. Washington, DC: World Bank.
Wuyts, M., 1981. 'The Mechanization of Present Day Mozambican Agriculture'. Development and Change, 12 (1): 1-27.
Zimmerman, F., 1998. 'Barriers to the Participation of the Poor in South Africa's Land Redistribution'. Mimeo. Stanford University: Food Research Institute.


[^0]:    John Sender, African Studies Centre, Leiden, The Netherlands and Department of Economics, School of Oriental and African Studies, University of London, Thornhaugh Street, Russell Square, London WC1H 0XG, UK. e-mail: js9@soas.ac.uk. Deborah Johnston, Department of Economics, School of Oriental and African Studies, University of London, Thornhaugh Street, Russell Square, London WC1H 0XG, UK. e-mail: dj3@soas.ac.uk

    For their constructive comments, we would like to thank Terry Byres, Christopher Cramer and Jonathan Pincus. However, we are responsible for the analysis, and any errors, in the final paper.

[^1]:    1 Some of these issues are discussed in Wuyts (1981), Nyerere (1967/8), Cliffe and Saul (1975), Clapham (1988), Sender and Smith (1990).
    ${ }^{2}$ Land laws inspired by the new 'Consensus Approach' have been passed in Eritrea, Ethiopia, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania and Uganda (Roth 2002).

[^2]:    3 On the theoretical incoherence of production function analyses, see Bharadwaj (1974) and Graaff (1984).
    ${ }^{4}$ A similarly simplistic argument is used in making the case for land re-distribution in Zimbabwe: 'Land transfer will make the agricultural sector more efficient by having many more people engaged in producing for the economy' (Moyo 2002, 25).

[^3]:    5 Thus, for example, 'Removing obstacles - often government regulations or imperfections in other markets - that prevent smooth functioning of land rental markets . . . considerably increases both the welfare of the poor and overall efficiency of resource allocation' (Deininger and Feder 1998, 2).
    ${ }^{6}$ Similarly, Deininger and Binswanger claim small farms provide considerable indirect benefits to wage workers in agriculture, by citing evidence that more equal land distribution is 'associated with higher agricultural employment' (1992, 28). Robillard et al. begin by making the unrealistic assumption that all labour inputs will be family labour inputs after a redistributive land reform in Zimbabwe. Then they compare 'employment' on the new farms owned by the land reform beneficiaries with current wage employment on large farms to arrive at the conclusion that land reform will, after 15 years, increase employment $(2001,16)$. GKI claim that 'In principle . . . wage workers should benefit from the [land] reform indirectly, through its effects on the level of employment and wages', although they cite no evidence at all in support of this claim (2002, 291-2).

[^4]:    7 Apart from investment in irrigation, several other types of state expenditure and the expansion of employment in the public sector also positively affect the demand for non-agricultural rural wage labour and unskilled rural wage rates (Sen and Ghosh 1993; Ghosh 1998)

[^5]:    8 On the relative dynamism and higher yields of large-middle, as opposed to small or very large groundnut farmers in Senegal, see Oya (2001). The Indian literature confirms the absence of a smooth size-productivity relationship.
    ${ }^{9}$ These shortcomings, especially those of the Berry and Cline (1979) research (frequently cited by the Bank as well as IFAD), are analysed in detail by Dyer (2000). See also Dyer's contribution to this special issue. Some of the most important conceptual shortcomings of the Indian surveys purporting to establish the inverse size-productivity relationship are discussed in Patnaik (1979).

[^6]:    10 The degree of mechanization affects efficiency in southern Africa because: 'Where rains are both unpredictable and unreliable, which is over much of the region, the mechanised farmer can readily take advantage of favourable soil moisture conditions for land preparation, sowing and subsequent cultivations. This flexibility is not available to small-scale farmers dependent on borrowed oxen or draught animals weakened by fodder shortages during the long dry season' (FAO 2003, 6).
    ${ }^{11}$ Binswanger and Deininger $(1993,1463)$ also make use of the catch-all argument when referring to South Africa and to the rest of Africa, arguing that distortions caused by state intervention and discriminatory bias against small farmers mean that it is inappropriate to point to evidence showing their low productivity relative to large farmers, since they have the 'potential' (in an idealized world) to outperform them. This focus on 'potential', rather than reality, provides some rationale for the title of this article.

[^7]:    12 One such analysis (of the South African wine industry) concludes that 'no or marginal inverse returns to scale exist in the wine industry; in other words, downsizing farming units does not necessarily lead to increases in productivity' (Hamman and Ewert 1999, 3).
    ${ }^{13}$ Adams and Howell (2001) note the technical and economic problems in attempting to subdivide large livestock-based farms in semi-arid African areas: 'Over much of the region, scarce water resources mean that the human carrying capacity of the savannah is low. Pastoral settlement schemes in Africa suggest that neither the subdivision of commercial ranches into family livestock farms, nor group or co-operative ranching are viable options. The costs of settling families with small herds and flocks on individual farms, with reasonable standards of social and economic infrastructure, are very high and both economic returns and environmental effects almost certainly negative'.

[^8]:    ${ }^{14}$ Cramer and Sender (1999) provide some evidence on the prevalence of wage labour in Africa's rural small-scale sector. Of course some farms are able to achieve access to far more labour, both from unpaid relatives and by hiring in workers, than others.

[^9]:    ${ }^{15}$ Migrants from neighbouring countries have been estimated to account for 54 per cent of male labour in 1966 and 30 per cent of the total farm worker population in 1999 in Zimbabwe (Magaramombe 2001, 1). In the Ivory Coast, more than a quarter of the rural population were migrants from neighbouring countries in the mid-1990s; these migrants were a major source of agricultural wage labour (World Bank 1997, 59).

[^10]:    ${ }_{16}$ On the consequences for elderly farm workers, see Magaramomombe (2001, 6).
    ${ }^{17}$ Another estimate of the number of beneficiary households (Adams and Howell 2001) is much lower $-75,000$ households.

[^11]:    ${ }^{18}$ One survey of resettlement areas found that of those holding permits to land, 98 per cent were husbands while only 2 per cent were wives (Peters and Peters 1998). A large number of the women on the resettlement schemes are 'junior wives', who are treated as wage labourers and are in a particularly insecure position (Jacobs 2000). A critique of the literature that claims some success for resettlement in reducing poverty in Zimbabwe is provided by Allen (2002).
    19 Thus, the South African land redistribution programme envisaged a one-off role for the state, within a context of freely operating land markets with a significant role for the private sector in the purchase of land and the provision of services to beneficiary farmers. During the 1994-2000 phase, the vehicle for achieving land distribution was a Settlement and Land Acquisition Grant of R15,000 made available to households whose income was less than R1500 a month. Only a small proportion of the funds budgeted for these grants was spent (Adams and Howell 2001). The programme shifted focus in 2000 , with a move for greater support for the creation of black capitalist farmers (see Walker 2002 for a detailed description of this policy change). The new Programme of Land Redistribution and Agricultural Development provides grants that operate on a sliding scale with a significant 'own contribution' required to access even the smallest grant, while the maximum available grant is now several times larger.

[^12]:    20 The new programme, now called the Land Redistribution Programme for Agricultural Development (LRAD) was finally launched officially in August 2001. An assessment in February 2002 suggests that Turner and Ibsen correctly identified the likely consequences of the new programme: 'LRAD activity appears to be concentrated in or around the large farm sector ... LRAD is not reaching the former homelands, the people of the former 'black spot' tenancy areas, or the large numbers of rural people now living in dense informal settlements around the rural towns and cities, and it is not reaching poor women . . . most rural women currently have no real LRAD access' (Cross and Hornby 2002, 71-2).
    ${ }_{21}$ The Bank does admit that the land reform programme 'did not reach out to the poorest of the poor' (Deininger et al. 1999, 22). Zimmerman (1998, 29) notes that, 'The ability to pay up-front costs out of pocket, the possession of farming skills and experience, the capacity to devote free labour to farming, and the willingness to move long distances to access land are all more likely to characterize the strata of existing successful independent black farmers and rural entrepreneurs than the poor, landless and women.

[^13]:    22 In addition, the plots allocated to female-headed households were relatively small and were less likely to be used in agricultural production (Walker 2002, 47-8).
    ${ }^{23}$ It should be noted that the statistics on casual agricultural wage employment in South Africa are seriously incomplete. Nevertheless, the reduction in employment on large farms cannot be attributed to changes in the costs of farm labour over the last 10 years, nor to changes in the share of labour costs in total production costs on farms (Simbi and Aliber 2000, 13).

