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Land reforms that exclude the poor: the case of Botswana

Patrick Malope & Nnyaladzi Batisani

Land reforms in Botswana, unlike those in other southern African countries, were not undertaken with the primary objective of redistributing land, but rather with the three objectives of increasing agricultural productivity, conserving range resources and improving social equity in rural Botswana. While there was modest success with the first two goals, the same cannot be said for the third. As it turned out, the two agricultural land reform policies (the Tribal Land Grazing Policy and the National Policy on Agricultural Development) harmed many poor households living in communal areas. Poor people were excluded by constraints such as high development costs, ownership of only small herds or no cattle at all, and lack of human capital. Complementary programmes in the form of innovative loan products and cash grants are needed to compensate them and so help them participate in the land reform process.

1. INTRODUCTION

Several countries in southern Africa (Namibia, South Africa and Zimbabwe) have adopted land reforms with the primary objective of redistributing land from white settlers to black people who were dispossessed of valuable agricultural land during the colonial and apartheid eras. In Botswana, however, land reforms were undertaken with the main objectives of improving agricultural productivity, conserving range resources and narrowing the gap between the rich and the poor (Government of Botswana [GoB], 1975:3; 1991a:10).

At independence Botswana's national cattle herd population had been drastically reduced by drought, and hence the first planning objective for the livestock sector was to increase this population (Malope, 1999:46). This objective was to be achieved in part by introducing borehole technology, which was subsidised to the tune of 40 per cent for individuals and 60 per cent for groups. Another way the government intended to increase the national herd was by improving disease control, which in turn reduced mortality. This was done by providing free vaccination against major diseases because it was realised that effective control depended on universal uptake (Malope, 1999:48).

The resulting expansion of the national herd was accompanied by problems such as overstocking and range degradation. Despite the considerable increase in the herd, there was no corresponding improvement in productivity indicators such as the calving percentage, off-take and mortality rates (Malope, 1999:51). This led the government to seek new ways to increase productivity and reduce range degradation. It was also realised that only a few wealthy cattle owners were able to raise finance for borehole drilling, and their boreholes gave them *de facto* ownership of the surrounding grazing areas and so were seen as a land grab (Peters, 1994:142).

In order to curb range degradation and improve equity, especially in the communal areas, Botswana introduced two related agricultural land reforms: the Tribal Grazing Land

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Policy (TGLP) in 1975 and the National Policy on Agricultural Development (NPAD) in 1991. The main objectives of the TGLP, as discussed in Section 3 below, were to increase cattle productivity through better range management, to upgrade the rural farming communities' living standards and to reduce the gap between the rich and the poor (GoB, 1975:7). The NPAD objectives were also to increase cattle productivity and reduce range degradation.

Several studies (Livingstone, 1988; Abel & Blaikie, 1989; Arntzen, 1990; Abel, 1997) have pointed out that the land reform policies were based on wrong conclusions about the problem and causes of range degradation in the communal areas of Botswana. Policies initiated to curb the problem have therefore achieved only modest success. Most studies have concentrated on the success of agricultural land reform policies, and on curbing the problem of range degradation, and the economic benefits from increased productivity per unit of land. Others have also touched on the equity dimensions (Segosebe, 1991; Cullis & Watson, 2004). Cullis and Watson (2004) analysed the Botswana agricultural land policies by identifying who the winners and losers were, and assessing the effectiveness of the agricultural land reform policies and their effects on the economic and social well-being of the Botswana and wildlife. This paper extends this study by providing an in-depth analysis of the extent to which marginalised groups have participated in the agricultural land reform programmes, and in particular the barriers that have kept them out.

The rest of the paper is structured as follows. Section 2 provides an overview of Botswana's land tenure and beef production systems. Section 3 describes the two land-related agricultural policies and the problems of implementing them. Section 4 discusses the main barriers that prevent the marginalised groups from participating in the land reform process and hence benefiting from these policies. The losers in the process are identified in Section 5. Section 6 discusses the implications for social equity and offers policy recommendations, and Section 7 concludes.

2. LAND TENURE IN BOTSWANA

Botswana has three types of land tenure system: communal/tribal, freehold and state land. Under the communal land tenure system, tribesmen and women are entitled to land for their own use but do not acquire exclusive or perpetual right to it. In practice, however, land that continues to be used for the purpose it was allocated for will stay in the family indefinitely, especially for ploughing purposes (GoB, 1991b:239). Prior to 1970, land allocation under this type of tenure was done by chiefs in their respective tribal territories. However, the Tribal Land Act of 1968 established statutory bodies called land boards that started operating in 1970 and took over the chiefs' responsibilities for allocating land in the communal areas.

The Tribal Land Board Act allowed any citizen of Botswana to qualify for any tribal land anywhere in the country. However, the basic concepts of land tenure did not change. The only change was in the method: land allocation became more centralised. The establishment of land boards did not in any way change the form of ownership in the communal areas; it only changed the institution allocating land and did not have any effect on agricultural production (Adams et al., 2003), and hence is not discussed in this paper.

Traditional beef production takes place in the communal areas where animals are kept in open rangelands with no defined property rights. Although grazing rights are not exclusive at the traditional cattle posts, ownership of a borehole or water point provides

de facto rights to the surrounding grazing resources. Communal land covers about 70 per cent of Botswana's total land area and accounts for over 80 per cent of its cattle (GoB, 2003a:181).

The freehold system of land tenure involves perpetual and exclusive ownership of land by individuals. Freehold land comprises about 5 per cent of Botswana's total land area and includes some of Botswana's most valuable agricultural land (GoB, 1991b:239). Commercial beef production takes place in freehold areas where animals are kept on fenced farms. State land, as the name implies, is owned by the state and covers about 25 per cent of Botswana's land area. It comprises national parks and game reserves (16 per cent), wildlife management areas (8 per cent) and forest reserves (1 per cent).

It has been observed that the productivity indicators of the two beef production systems differ, with the communal system performing poorly (GoB, 2003a:181). For instance, indicators such as the calving percentage and off-take rate were as high as 70 per cent and 17 per cent, respectively, in the commercial sector (including TGLP ranches), while in the traditional sector the same indicators were 50 per cent and 5 per cent, respectively, in 2002. The mortality rate was 5 per cent in the commercial sector while in the traditional sector it was as high as 12 per cent for the same period.

Mahabile et al. (2005) also found that there was a relationship between herd productivity and land tenure. They argue that in communal areas there are no incentives for an individual farmer to reduce the size of his or her herd or to finance fixed improvements because the benefits would accrue largely to free-riders. This problem is compounded by the fact that there is no market for open access land because of prohibitively high transaction costs. Privately owned land, on the other hand, creates an opportunity cost for under-utilised land that encourages the owner to sell or rent to more effective farmers. The stocking rates are therefore higher in communal areas and herd productivity lower in terms of calving, off-take and mortality rates.

Tenure-related differences in herd productivity, range degradation (particularly in open access communal areas) and the desire to reduce the gap between the rich and the poor prompted the government to introduce the land reforms are discussed in Section 3.

3. AGRICULTURAL LAND REFORMS

3.1 The tribal grazing land policy

The TGLP was launched in 1975 and, as its name suggests, was introduced to bring a new tenure system to the tribal or communal areas. At its inception, the TGLP identified two problems: the increased cattle population under the system of uncontrolled grazing in the communal lands had led to serious overgrazing around villages, surface water points and boreholes; and the wealthier farmers had obtained exclusive rights to graze in areas around their boreholes, leaving little grazing land for farmers with fewer cattle. The TGLP's objectives were therefore to control the widespread overgrazing by creating leasehold ranches by shifting large cattle owners and their herds out of the already overstocked communal areas; to increase cattle productivity by practising modern livestock management techniques; and to promote social equity and reduce the income gap between the rich and the poor by giving the poor more grazing land.

The tribal grazing areas were to be divided into commercial farming areas, communal farming areas and reserved areas. In the commercial areas, individuals with a large

number of cattle or groups of farmers with fewer cattle were to be granted exclusive rights to fence and graze their cattle over a specific area of land on a leasehold basis for a period of 50 years. At the launch of the TGLP the leases were renewable and inheritable. However, there would be restrictions on the transfer of leases, and subletting would only be permitted with the approval of the land board. As it turned out during implementation, the leases were fully transferable and could be sold or pledged as collateral. They also permitted sub-letting, and assigned exclusive rights to an individual holder (Mahabile, 2006:4).

It was hoped that exclusive rights would give farmers an incentive to practise responsible range management and improve the land and the herds. On the commercial ranches this would be achieved by associating private costs with private benefits by conferring the leasehold. It was also believed that commercial ranchers would improve their management and raise more offspring per cow and unit of land. It was further assumed that removing large herds from the communal areas would leave better grazing for the remaining cattle in the communal areas. In these areas, land tenure would not be changed, but livestock owners would be encouraged to adopt improved livestock management practices. This would be done by teaching skills and imparting knowledge to the communal farmers through the extension services (GoB, 1975:7). In addition, an improvement in cattle productivity in communal areas would be realised through a decrease in livestock numbers and thus decreased pressure on grazing (Segosebe, 1991:12)

The underlying assumption of the TGLP was that there was adequate unused land to allocate for commercial ranching while also reserving some for future use. Exclusive rights to the use of such land would provide an incentive for improved and responsible management of range resources. Improved simple management practices (paddocking, rotational grazing, early weaning, daily watering and controlled breeding) would in turn alleviate the problems of range degradation and deterioration. As a result, the output from herds would increase. Livestock numbers in communal areas would be greatly reduced by relocating large cattle owners to commercial ranches, and mandatory stock regulations would be applied on both commercial and communal areas to limit the number of cattle around water points in the communal areas (Hitchcock & Nkwe, 1986; Tsimako, 1991:22).

During the implementation of the TGLP, numerous problems emerged (Machacha, 1986:8; Segosebe, 1991:21; Peters, 1994:146). The TGLP's assumption that there was adequate unused land was found to be wrong. Several ranches had to be de-zoned because conflicts with other land users erupted as the TGLP encroached on communal areas. There were a large number of people already living on what was believed to be empty land. Many of these people were herders, servants of cattle owners, and hunter-gatherers, mostly the Basarwa/San (Keijsper, 1992:10; White, 1993:22; Peters, 1994:146).

The other concern about the TGLP was that it did not benefit all, as had been initially anticipated. Land previously held in communal tenure was increasingly being leased on a long-term basis at relatively low prices (rent was charged at 4 thebe per hectare per year, increased to 70 thebe per hectare per year in 2005)¹ to a small number of individuals who were already among the largest cattle owners and, therefore, among the

¹At the time of writing the exchange rate was US\$1.00 = approximately 6.6 Botswana Pula (BWP), so P0.04 = US\$0.006, and P0.79 = US\$0.11.

wealthiest Botswana. Although the land allocated for TGLP ranches was, for the most part, in the less heavily grazed areas, the total amount of land remaining in communal grazing was reduced, leading to a *de facto* dispossession of grazing lands for some citizens, the majority of whom were poor and voiceless (Hitchcock & Nkwe, 1986).

As argued by Segosebe (1991:20), the TGLP's success has been at best minimal. The policy has provided some segments of the population with opportunities for improving their livestock at least in terms of reducing the number lost through straying, and better control of contagious diseases. However, on the downside, the TGLP has not only failed to achieve its objectives, it has in fact widened the gap between the rich and the poor.

At its inception, the TGLP proclaimed increased access to as much land as required by every person. However, this did not materialise during implementation. In reality, the TGLP helped those with financial capability to develop ranches and acquire exclusive rights, and so maintained what it was supposed to correct – land acquisition by the rich. As argued by Segosebe (1991:20), access now appears to be based on creditworthiness rather than the need to subsist. Machacha (1986:9) notes that, while the initial intent of the policy was to benefit all, it turned out that it was a policy that only benefited the rich, since poorer people were being forced out of their communal areas to make room for wealthy commercial ranchers. Moreover, a number of mechanisms designed to protect the poor – such as reserved areas, limits on the number of ranches an individual could own, and the abolition of dual grazing rights – were not implemented (Peters, 1994:147). Peters argues that the TGLP not only failed to achieve its equity and social justice goals, it also fell short on economic benefits (1994:147). For example, the First Livestock Development Project (LDP1) showed a negative rate of return instead of the predicted 21 per cent. Thus, most ranches proved to be economic failures.

Ranchers have also been able to move their cattle temporarily off their ranches and into the communal areas, either because their ranches were overgrazed or burnt by veld fires or their boreholes had broken down. This enabled them to rest their own grazing while using the communal areas that were used all year round by those without TGLP ranches. Others choose to leave some of their cattle in the communal areas as an insurance against total loss in cases of disasters such as drought, fire and disease. TGLP farmers thus benefit disproportionately because, in addition to having exclusive rights on large TGLP ranches, they also have access to communal grazing. By enjoying dual grazing rights, they thus avoid the consequences of overstocking and overgrazing their ranches (this is a clear departure from the adoption of improved management practices). The issue of the ranchers' dual rights has been discussed for years without any results (GoB, 1991c:25). Despite past resolutions and recommendations to abolish dual rights, over 60 per cent of the ranchers reported keeping some cattle in the communal areas and 54.9 per cent of the ranchers reported having water rights in the communal areas (Tsimako, 1991:25).

The practice of dual rights goes against other aims of establishing TGLP ranches; namely those of relieving the communal areas of large herds of cattle to leave room for small farmers, and controlling overgrazing in communal areas. Apart from ranchers moving their cattle off the ranches and onto communal areas, it has also been found that some ranches have been sited around existing boreholes or cattle posts and this meant that cattle did not move from the communal areas since they were already in the commercial areas.

As a result of the TGLP's failure to reduce the gap between the rich and the poor in terms of access to land due to lack of legislation, and some people's subsequent dissatisfaction with the effects of the TGLP, it appeared that the policy had reached a dead end. However, this did not happen, because the new agricultural policy was later to recommend a reform of the TGLP (Segosebe, 1991:25).

3.2 The national policy on agricultural development

The NPAD adopted by Parliament in February 1991 emphasises, among other goals, increasing agricultural productivity, natural resource management and the conservation of scarce agricultural and land resources. It proposes modifying the TGLP to overcome the problems and constraints that led to its poor performance, such as poor management and water problems. While the government recognises that problems were encountered during the implementation of the TGLP, its feelings are that fenced farms are more productive than communal management systems (GoB, 1991a:11)

The NPAD further calls for the privatisation of the commons as the way to improve productivity and conserve the range resources. The policy states that, where possible, farms should be demarcated for individual or group fencing. Those individuals or groups with existing *de facto* rights in terms of owning a borehole in a particular area will automatically be allocated the ranches. Only those ranches without boreholes or existing rights will be advertised so that farmers can apply for them (GoB, 1991a:12).

Commercialisation of communal areas under NPAD will continue to exclude marginalised groups, as the TGLP has already done. For instance, allocating ranches to individuals or groups who have boreholes will definitely favour the relatively wealthy farmers who are able to drill and equip boreholes. Ranch allocation under this policy is based mainly on the management plan presented by the applicant, which includes a bank statement from the applicant to determine his or her financial position. This requirement effectively eliminates poor people who do not have savings or access to banks.

It is clear that Botswana has chosen land reform rather than other alternatives for addressing the problems of range degradation and low productivity. This has taken the form of commercialisation of the communal areas through offering exclusive grazing rights to individuals and groups. Mahabile et al. (2005) argue that this theoretical solution to the problems of overstocking and underinvestment may not be politically, socially or economically feasible in communal areas where there are many poor users. In such instances, the next best option would be to convert grazing into common property by subsidising the costs of defining user groups and the boundaries of their resources, and negotiating and enforcing rules limiting individual use of common property. This option seems to have been overlooked by policy-makers in Botswana, and as a result agricultural land reform policies have created a number of losers who were not adequately compensated, as is discussed in Sections 4 and 5 below.

4. BARRIERS TO MARGINALISED GROUPS' PARTICIPATION IN LAND REFORMS

Botswana's agricultural land reform policies are not demand led *per se*, and there are specific requirements and factors that prevent certain groups from participating and hence benefiting from them. These include development costs, cattle ownership and human capital constraints.

4.1 Development costs

During the implementation stage of the TGLP it was recognised that finance would be a major impediment to ranch development, and the government sought funding from the World Bank. The funds for ranch development were provided through the second Live-stock Development Project (LDP2) (Segosebe, 1991:17; Peters, 1994:148). These funds were to be made available to all farmers through loans from the National Development Bank at subsidised interest rates.

Ranch development costs are substantial, as indicated in Table 1, and are likely to be more binding on farmers with fewer cattle than on those with large herds. These costs are therefore likely to serve as a barrier to participation for the very group that Botswana's land policy intended to help. For instance, Tsimako (1991:20) estimated the development costs of a 6400-hectare ranch at P150 000. Table 1 indicates that these costs had increased dramatically to P298 000 for the same ranch size by the year 2000. These development costs include the costs of drilling and equipping a bore-hole, and installing water reticulation and fencing. Under the NPAD's fencing policy, the minimum ranch size is 3600 hectares. Even for this small ranch size the development costs are estimated at P225 000.

As part of the loan requirement from the National Development Bank, farmers are required to contribute a minimum of 25 per cent for capital costs. Consequently, only the wealthier farmers are able to access funding. As argued by Segosebe (1991:18), a number of constraints were encountered during the implementation of TGLP, some of which included the need to raise capital for investment and to secure fencing materials and water supply. Peters (1994:148) claims that at the beginning of the TGLP even large farmers were reluctant to participate owing to high development costs – despite the availability of credit from the National Development Bank. Prospective ranchers can also access subsidised credit through the Citizen Entrepreneurial Development Agency if they are creditworthy, a condition that smallholders might find difficult to fulfil.

Cullis and Watson (2004:4) note that, because drilling is expensive and risky, only wealthy cattle owners and government were able to invest in it. This high cost means that only either wealthy individuals or syndicates are able to own boreholes. However, many common property syndicates have squeezed out the poorer members because they were expected to make equal contributions toward running costs rather than contributions proportional to their expected usage (their herd size) (White, 1993:12; Cullis & Watson, 2004:10). Arntzen and Opschoor (1986:8) found that borehole syndicates in Kgatleng tended to reduce their membership numbers. They argue that since watering fees do not discriminate for herd size, small herd owners face high costs of watering per animal and hence are more likely to drop out of the syndicate and be forced out of

Table 1: Estimated development costs of various ranch sizes

Area in hectares	Development costs
3600	P225,000.00
4900	P279,000.00
6400	P298,000.00

P1 = approximately US\$0.15. *Source:* Macala et al. (2001).

its grazing area. They further point out that if the trend continues (and there is no reason to think otherwise), more and more relatively poor farmers are going to be forced out of suitable grazing areas. As noted by Lyne and Roth (2004), this problem might be overcome by converting syndicates into non-user groups structured as investor-owned firms that not only align costs (contributions) with benefits but also have the added advantage of allowing shareholders to realise capital gains.

4.2 Cattle ownership heterogeneity in Botswana

Traditionally, owning livestock (especially cattle) has served as an indicator of wealth. However, with the growth of the non-agricultural economy the relationship between herd size and wealth has weakened (Centre for Applied Research [CAR], 2005:21). Table 2 shows that the proportion of rural households without cattle has increased from 28 per cent in 1980 to 46 per cent in 1999. The CAR (2005:22) reports that by 2002/03 the proportion of households without cattle had risen to 62.5 per cent. This implies that the majority of rural households do not own cattle and hence do not derive any direct benefit from beef production. In addition, White (1993:50) argues that most livestock owners are agro-pastoralists and that a livestock policy geared to beef will not benefit them. Given that these policies are meant to create ranches for cattle, it is therefore safe to conclude that traditional households without cattle will not benefit from the policies.

There have been changes in the sources of income in the rural areas, with more and more people relying on transfers rather than on income from productive sources (CAR, 2005:23). In 2005, only one-third of rural households owned livestock (CAR, 2005:23). This means that the poverty reduction capacity of the livestock sector has been greatly reduced. A more uneven ownership of livestock and scale economies from livestock production are concentrating wealth and income in the hands of large livestock owners (CAR, 2005:35). Policy reform that extends leasehold ranching to all cattle posts directly affects access to land and grazing. Access to these resources has already become more difficult for communal area farmers. Those denied land lose access not only to grazing but also to water, firewood, thatching grass and other natural resources. Rural poverty is expected to worsen as income and asset gaps widen, increasing the already high unemployment rates in Botswana's urban areas.

A possible way to overcome the inability to benefit from these policies is for those households who own fewer than 40 cattle to form groups. But unfortunately group formation in Botswana's agricultural sector has not been successful. The existing groups perform poorly and the majority die a natural death because of mismanagement and poor leadership. This view is supported by White (1993:8), who argues that individuals see little

Table 2: Cattle ownership (%) in the traditional sector for selected years

Year	1980	1983	1986	1987	1995	1999
Households with no cattle	27.88	28.90	36.49	38.51	33.13	45.91
Farms with 40 cattle or fewer	51.38	54.15	49.58	46.21	52.54	41.74
Farms with 41–100 cattle	14.00	12.56	9.04	10.21	8.98	8.17
Farms with more than 100 cattle	6.75	4.39	4.08	4.99	4.54	4.18

Source: GoB (2003b).

advantage in group formation for purposes beyond limited specific aims such as dip construction and hence there is lack of group cohesion in all long-term projects. Where group ranches have been established, members tend to operate independently despite high costs and management inefficiency (Tsimako, 1991:25). It is therefore unlikely that substantial numbers of the poor will benefit from these policies through group formation.

Roth (2002:7) doubts whether group ownership schemes can or will provide easy entry and exit for members, adequate incentives for individual investment, secure incentives for capital accumulation and increased access to long-term financial capital through the use of land as collateral. He further questions whether the new land reform beneficiaries in trusts and common property associations and individuals within communities would be able to borrow. He maintains that due to the problems of moral hazard, free-riding and cooperative failures in group ownership models, individual ownership has become the mantra for administration for economic development (Roth, 2002:7). Thus, it is highly unlikely that smallholders will benefit in large numbers through group formation unless the groups are restructured as non-user groups that operate along the lines of a private company with voting and benefits rights tradable and proportional to individual investment (Lyne & Roth, 2004).

4.3 Human capital constraints

As argued by Segosebe (1991:16), the criteria for allocation of TGLP ranches are based on both technical and non-technical factors. The technical factors include management capability and sufficient herd size (i.e. 300 livestock units for a ranch that has a 400 livestock units capacity) and access to capital. The non-technical factors are preference for groups or syndicates and limited access to grazing. Under the NPAD, potential ranchers are required to come up with a management plan and present it to the land board before they can be allocated a ranch. This requirement will most probably prevent the poor from obtaining a ranch, since they are more likely than the rich to lack human capital in the form of the skills required for preparing a management plan and managing a modern ranch.

5. WHO ARE THE LOSERS FROM AGRICULTURAL LAND REFORMS?

In theory, everybody should benefit from the two agricultural land reform policies discussed in Section 3, and indeed one of the objectives of the TGLP was to ensure that not only wealthy farmers benefited. In practice, however, especially during the implementation of the TGLP, certain groups of people did not benefit as envisaged in the policy documents: smallholder farmers, non-cattle-owning households, hunter-gatherers (especially the Basarwa, or San), and women and the youth.

5.1 Non-cattle-owning households

Since the two land-related policies are geared towards beef production, anybody who does not own beef cattle is automatically excluded and hence cannot directly benefit from these policies. In addition, the policies have created an emerging class of households who do not own cattle, as discussed in Section 4.1. Under the NPAD the borehole owners are given priority in the allocation of the ranches within which their boreholes are situated. As this happens, the smallholders will lose their grazing rights in the areas

where they previously grazed their livestock. As argued by the CAR (2005:46), the changes that have occurred in the livestock sector have made losers of the poor and marginalised, including herders, who are now dependent on government handouts.

The non-cattle-owning farming households are less likely to gain in terms of an increase in their income due to the introduction of the land reforms because, as more and more land becomes privatised in the form of ranches, there will be less and less land left where they can keep cattle and other livestock if they wish to do so. They will be left with nothing but small pieces of land where they can gather firewood and other forest products for sale. The net result will be that their ability to make an income from the veld will be greatly reduced and hence their living standards lowered.

One might argue that displaced farmers and urban consumers could benefit from lower beef prices as a result of increased beef supply due to commercialisation. However, this might not necessarily be the case, since increased supply from the commercial sector will end up at the Botswana Meat Commission. This supply will be exported to the European Union since Botswana has not been able to meet its beef quota to the European Union. The net result will be that the increased supply will not find its way into the local market and hence will not lower the local beef prices. In addition, because the Botswana Meat Commission is a price leader, the local prices are based on its prices (Botswana Institute of Development Policy Analysis, 2005:57), which are largely determined by the export prices since most of the Botswana Meat Commission throughput is exported.

It could perhaps be argued that the displaced farmers will benefit from the extra jobs created on the commercial farms. However, the absence of enforced minimum wages for farm workers implies that the displaced subsistence farmers are unlikely to benefit from these jobs. In addition, the job creation potential of the fenced farms has not been impressive because the majority continued to operate like cattle posts (Segosebe, 1991:20; Tsimako, 1991:24; White, 1993:22). This argument is further supported by the Botswana Government (GoB, 2002:39) and Hitchcock and Nkwe (1986), who maintain that a comparison between TGLP ranches and large cattle posts does not point to any increased production or employment. On the contrary, fenced farms tend to employ fewer people to look after the herds than the cattle posts.

As more and more grazing resources become inaccessible to the communal farmers, their herds will be greatly reduced and some will give up livestock farming altogether. The figures in Table 2 support this assertion: they show that the number of households without cattle has increased. White (1993:7) also observed that the number of livestock owners declined by 57 per cent between 1979 and 1989 in the Kalahari as a result of the creation of TGLP ranches. Owing to their inability to find alternative sources of income in the rural areas, these ex-livestock-owners have become destitute and depend largely on handouts.

5.2 Hunter-gatherers

Perhaps the most adversely affected group is the traditional hunter-gatherers, who have not only been excluded from their traditional hunting areas by the establishment of game reserves such as the Central Kalahari Game Reserve, which has been a topical issue recently, but also forced out of their hunting areas by the new ranches. These ranches are for the exclusive use of their owners and whatever natural resources are found on the ranches belong to them. This has meant that the hunter-gatherers have been excluded

from hunting, gathering wild fruits, harvesting firewood and collecting medicinal plants inside the new ranches.

As argued by Malope and Molapisane (2006), veld products provide alternative sources of income especially in the sandveld areas where the climate is unfavourable to arable agriculture. Ironically, these are areas that are targeted by the TGLP and the NPAD. The net result of this has been that the poor hunter-gatherers have become even poorer and a majority now rely heavily on government handouts.

5.3 Women and the youth

The last group of people who are unlikely to benefit from land reforms are women and the youth. Women in the rural areas are primarily engaged in arable rather than livestock farming and hence only a minority own cattle. In 2002 only 31 per cent of cattle holdings in Botswana were owned by women, and these holdings had only 32 per cent of the national herd. The CAR (2005:48) lists a number of constraints that limit women's participation in livestock ownership, including limited access to productive resources, patriarchal traditional practices and customary laws. These, and the fact that women often lack cattle-rearing skills, partly explain why poverty is more widespread among women than among men.

Although the government initiated the Young Farmers Fund through its Citizen Entrepreneurial Development Agency in 2007, the land tenure system is still an impediment to youth participation in farming because the minimum age for owning land is 21 years. The majority of unemployed youths, the probable beneficiaries of this programme, are younger than this. In addition, they are prevented from participating in the livestock sector because they find it difficult to meet the sector's investment requirements (CAR, 2005:49).

6. IMPLICATIONS FOR EQUITY, AND POLICY RECOMMENDATIONS

The two land-related agricultural policies have serious implications for equity in rural Botswana. The communal farmers have been pushed out of their grazing areas, and some have been forced to give up livestock farming altogether. They have been deprived of their livelihoods. With no alternative opportunities elsewhere, these people have been forced into destitution and rely on government handouts for their survival. The remaining communal farmers, especially those who do not own water sources, will also be pushed out of their grazing areas as ranches are demarcated under the NPAD.

The traditional hunter-gatherers have been pushed out of their hunting areas and forced to live in abject poverty. As argued by the Botswana Government (GoB, 2002:3), while the benefits of the TGLP and NPAD in terms of productivity are unclear, the costs in terms of landlessness are very high. Many people who have been deprived of access to their communal grazing rights and veld products end up in townships such as Ghanzi. These policies have created a potential for a steep increase in inequality and have made it even more difficult for the descendants of the poor to escape poverty. The government has tried to come up with schemes for the poor such as the Self Help Housing Agency for the provision of affordable houses. However, in Ghanzi, where the majority of the Basarwa were relocated to make room for commercial ranching, there were about 1600 poor people on the waiting list for surveyed residential plots and more than 2000 who were too poor to apply (GoB, 2002:4). Thus, many of the

poor people could not meet the criteria for the Self Help Housing Agency, which requires a minimum annual income of between P4400 and P36 000.

To mitigate the negative effects of commercialisation of the communal areas, policy should be directed to addressing the problems of the losers. First, while recognising that certain land rights will be lost when communal grazing is privatised to individuals or well-defined groups (syndicates), the government could help the losers by facilitating rental contracts between new owners and tenant farmers, as this would at least give the losers continued access to grazing and other resources on private ranches, and by providing the losers with compensation in the form of serviced residential sites and houses in towns or villages.

An approach that was tried when the Basarwa were relocated from the Central Kalahari Game Reserve and the western sandveld areas met with little success. For relocation of this kind to be successful, careful planning needs to be done so that the displaced people do not end up depending entirely on government handouts, as it is happening with the Basarwa. As argued by the Botswana Government (GoB, 2002:6), the problems faced by the Basarwa extend beyond lost land rights; they live in more abject poverty than any other group. Thus, any programme of restitution, however favourable, might not solve these problems. The problems that need to be addressed include education and training, health and nutrition, housing, social welfare and employment. The poor should not be made to wait for residential plots for such a long time that they end up living in squalor as they do in Ghanzi. In addition, programmes should be instituted so that the poor can afford to build houses for themselves since they cannot afford the current programmes. More job opportunities should be created in the rural areas to make these areas more attractive and thus reduce rural–urban migration.

Second, while recognising that the small user group approach has done little to conserve or improve grazing resources, conversion to non-user groups organised as private companies would help to remove free-rider problems and could make the group approach to privatisation an effective way of achieving efficiency with equity (Mahabile et al., 2005). This option has been overlooked by policy-makers and could reduce the equity problems brought about by the two land-related agricultural policies. This might also address the problem of ineffective group formation and cohesion that characterises Botswana's agriculture.

Third, the government needs to implement complementary programmes to make markets more accessible to poor people. These programmes might include cash grants and innovative loan products that could help poor people to finance cattle, and the business plans and infrastructure that are needed to participate successfully in the land reform programme. This approach would help the poor to participate in the economy and hence reap the benefits of the economic growth that Botswana has experienced since independence. These programmes should make sure that the poor do not rely on government handouts, as this will not get them out of the poverty trap. While government safety nets are commendable, efforts should be made to ensure that the poor participate in productive activities and hence earn a decent living. This will in the end give them self-determination and also reduce government expenditure on the provision of safety nets.

7. CONCLUSIONS

This paper has enumerated several barriers that stand in the way of poor households' participation in the TGLP and the NPAD. It has also demonstrated that the two land-related

policies directly benefit large cattle owners at the expense of smallholders and non-cattle-owning households, who – along with the hunter-gatherers, the women and the youth – are the main losers. These groups are unable to benefit from agricultural land reform because of the barriers discussed in Section 4. Hunter-gatherers have been pushed out by commercial ranchers especially in the western parts of the country where the majority of them were living. In these areas many ranches have been demarcated, and thus hunter-gatherers have been left with no land to subsist on. The end result has been that many have been driven to urban centres such as Ghanzi where they live in destitution because alternative livelihoods and employment opportunities are difficult to find.

The losers must be compensated so that they can live a decent life rather than depend on government handouts. This compensation should not be land restitution only, but should include other complementary programmes that will enable them to participate in the economy, such as education and training in order to increase their human capital, and the creation of job opportunities in the rural areas.

The effects of the TGLP and the NPAD show that there should be careful planning before any land reform programme is implemented. For example, there was no cost–benefit analysis before these policies were undertaken. The policies therefore failed to identify who the losers would be and hence no specific mechanisms were instituted to compensate them. The extent to which the losers have been affected or will be affected has not yet been quantified, hence there is now a need to undertake a cost–benefit analysis of these policies, especially the NPAD as it is presently being implemented, so as to minimise its negative effects on the losers.

In order to increase the efficiency of private farms, the government should, as a matter of urgency, legislate against dual grazing rights as this does not encourage better range management. In addition, rentals charged should be based on commercial rates so that they discourage herd building and encourage off-take. The income received should be used to develop the communal areas as part of compensation to losers, as stated in the policy documents.

REFERENCES

- ABEL, N, 1997. Mis-measurement of the productivity and sustainability of African communal rangelands: a case study and some principles from Botswana. *Ecological Economics*, 23(2): 113–33.
- ABEL, NOJ & BLAIKIE, PM, 1989. Land degradation, stocking rates and conservation policies in communal rangelands of Botswana and Zimbabwe. *Land Degradation and Rehabilitation*, 1: 101–23.
- ADAMS, M, KALABAMU, F & WHITE, R, 2003. Land tenure policy and practice in Botswana: governance lesson for southern Africa. *Austrian Journal of Development Studies*, XIX(1): 55–74.
- ARNTZEN, JW, 1990. Economic policies and range degradation in Botswana. *Journal of International Development*, 2(4): 471–99.
- ARNTZEN, JW & OPSCHOOR, JB, 1986. Environmental pressure and land use change in communal eastern Botswana: the case of Kgatleng. In Arntzen, LW, Ngcongco, LD & Turner, SD (Eds), *Land policy and agriculture in eastern and southern Africa*. Selected papers presented at a workshop held in Gaborone, Botswana, 14–19 February 1982. Tokyo: United Nations University.

- BOTSWANA INSTITUTE OF DEVELOPMENT POLICY ANALYSIS, 2005. *Consultancy on the viability and long term development strategy for the livestock (beef) sub-sector in Botswana*. Draft report, Ministry of Finance and Development Planning. Gaborone: Government of Botswana.
- CENTRE FOR APPLIED RESEARCH, 2005. *A comprehensive study on viability and long-term strategy for the livestock (beef) sub-sector in Botswana. Component 4: The poverty and social impact assessment of the livestock Sector*. Draft final report. Gaborone: CAR.
- CULLIS, A & WATSON, C, 2004. *Winners and losers: privatising commons in Botswana*. Briefing paper. International Institute for Enforcement and Development (IIED) and Resource Conflict (RECONCILE).
- GOVERNMENT OF BOTSWANA, 1975. *National policy on tribal grazing land*. Government Paper No. 2 of 1975. Gaborone: Government Printer.
- GOVERNMENT OF BOTSWANA, 1991a. *National policy on agricultural development*. Government Paper No. 1 of 1991. Gaborone: National Resource Services (Pty) Ltd.
- GOVERNMENT OF BOTSWANA, 1991b. *National Development Plan 7, 1991–1997*. Ministry of Finance and Development Planning. Gaborone: Government Printer.
- GOVERNMENT OF BOTSWANA, 1991c. *Botswana's agricultural policy: critical sectoral issues and future strategy for development*. Gaborone: Government Printer.
- GOVERNMENT OF BOTSWANA, 2002. *Botswana land policy*. Issues Report Ministry of Lands, Housing and Environment. Gaborone: Government Printer.
- GOVERNMENT OF BOTSWANA, 2003a. *National development plan 9 2003/04–2008/09*. Ministry of Finance and Development Planning. Gaborone: Government Printer.
- GOVERNMENT OF BOTSWANA, 2003b. *1999 annual agricultural survey report*. Central Statistics Office. Gaborone: Government Printer.
- HITCHCOCK, RK & NKWE, T, 1986. Social and environmental impacts of agrarian reform in rural Botswana. In Arntzen, LW, Ngcongco, LD & Turner, SD (Eds), *Land policy and agriculture in eastern and southern Africa*. Selected papers presented at a workshop held in Gaborone, Botswana, 14–19 February 1982. Tokyo: United Nations University.
- KEIJSPER, VP, 1992. *The tribal grazing lands policy at cross roads: fencing by individuals in communal areas of Botswana*. A position paper. Unpublished, Gaborone.
- LIVINGSTONE, I, 1988. The common property problem and pastoralist economic behaviour. *Journal of Development Studies*, 23: 15–19.
- LYNE, M & ROTH, M, 2004. *Making co-ownership work: helping land reform beneficiaries access land and financial resources through equity sharing in South Africa*. <http://www.basis.wisc.edu/live/basbrief05.pdf> Accessed 13 June 2008.
- MACALA, N, MAKUBATE, L & ATLHOPHENG, M, 2001. *The financial viability of various ranch sizes in the western sand veldt and area 4B*. Unpublished manuscript. Botswana: Ministry of Agriculture.
- MACHACHA, B, 1986. *The Botswana land tenure system and how it's a contributory factor to the problem*. Report on the national conservation strategy. Proceedings of the Workshop on the National Conservation Strategy, 23–25 October, Gaborone, Botswana.
- MAHABILE, M, 2006. *Determinants of herd productivity in Botswana: a focus on land tenure and land policy*. PhD thesis, Department of Agricultural Economics. Petermarizburg: University of KwaZulu-Natal.

- MAHABILE, M, LYNE, M & PANIN, A, 2005. An empirical analysis of factors affecting productivity of livestock in southern Botswana. *Agrekon*, 44(1): 99–117.
- MALOPE, P, 1999. *Measuring price distortions and their effects on Botswana's beef sector: 1976–1996*. PhD Thesis, School of Economic Studies. Manchester: University of Manchester.
- MALOPE, P & MOLAPISANE, KR, 2006. Alternative livelihoods in Botswana's desert margins. *South African Journal of Agricultural Extension*, 35(1): 99–113.
- PETERS, P, 1994. *Dividing the commons: politics, policy and culture in Botswana*. Charlottesville and London: University of Virginia Press.
- ROTH, M, 2002. *Integrating land issues and land policy with poverty reduction and rural development in southern Africa*. Paper presented at World Bank regional workshop on Land Issues in Africa and the Middle East. 29 April–2 May. Kampala, Uganda.
- SEGOSEBE, EM, 1991. *Land tenure reforms in Botswana: a case study with special reference to the tribal grazing policy*. Paper presented at a national conference on Land reform, 2–7 June. Windhoek, Namibia.
- TSIMAKO, B, 1991. *The Tribal Grazing Land Policy (TGLP) ranches performance to date*. Gaborone: Agricultural Information and Public Relations Division.
- WHITE, R, 1993. *Livestock development and pastoral production on communal rangeland in Botswana*, A position paper. Gaborone: Botswana Society.

