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CONTEMPORARY LAND REFORM POLICY AND PRACTICE IN SOUTH AFRICA AND ITS ENVIRONMENTAL IMPLICATIONS: NEW IDEAS, OLD PROBLEMS?

ABSTRACT. An extensive land reform programme is underway, which faces many challenges unique to the socio-political context of post-apartheid South Africa. The aim of this paper is to review the extent to which agrarian land reform policy, more particularly in respect to its land distribution element, incorporates environmental sustainability principles into resultant practice and whether or not this may lead to exacerbation of land degradation problems in the country. The paper briefly outlines the key land reform role-players, the policy and implementation process of land reform, and considers these in relation to the problem of land degradation. Ongoing problems of implementation with the land redistribution programme are discussed in relation to a number of significant challenges. The paper illustrates the lack of integration of environmental planning in the land reform process generally and points to the potentially deleterious impact of land reform on land degradation.

KEY WORDS: Land reform, land degradation, *apartheid*, environmental impact, agricultural policy, rural livelihoods

INTRODUCTION AND CONTEXT LAND REFORM IN SOUTH AFRICA

Land reform is a highly topical and emotionally charged issue that has received particular attention in southern Africa but one that resonates across the continent as a whole

[Cousins, 2009]. South Africa, as an emerging democracy with a well known history of conquest and dispossession of land in the colonial and *apartheid* eras, has embarked on a systematic land reform programme in order to redress previous political and economic imbalances. Since the demise of the *apartheid* system in the early 1990s, land reform has been a part of the restructuring process in South Africa, and was one of the cornerstones of African National Congress (ANC) policy when they formed the new democratic government in 1994 [Ibsen, 2000; Lemon, 2004]. The ANC's Reconstruction and Development Programme (RDP) envisaged a land reform programme that was integral to rural development:

A national land reform programme is the central and driving force of a programme of rural development [African National Congress, 1993, section 2.4.2].

Through a government programme of land reform since 1994, efforts are being made to redress the past inequity of access to land and resources, although it remains a hotly debated, emotive and contested issue and one that is further complicated by other social and health problems in the region [Drimie, 2003]. There has been much debate in both official government circles and in the media (see, for example, *Financial Mail*, 28th February 2012, in which progress is described as proceeding "...at a snail's pace"). There are, in addition, other concerns, particularly

over the potential environmental impact of agrarian land reform if sustainability issues are not systematically incorporated into policy and practice [Wynberg and Sowman, 2007]. Thus, while there are clear political and economic imperatives to land reform, the fact that much of rural South Africa experiences a semi-arid climate and is highly susceptible to land degradation [Hoffman *et al.*, 1999; Kakembo and Rowntree, 2003], strongly suggests that such environmental concerns need to be taken very seriously.

The model of land reform developed and adopted by the post-1994 democratic government has three elements: land **restitution** (the return to the previous owners of land taken away under racially discriminatory laws, limited to those removals that took place after the 1913 Land Act), land **tenure reform** (administration and legislation to improve tenure security and to accommodate diverse forms of land tenure, including communal tenure) and a market-led, demand-driven land **redistribution** programme that intends to achieve both political goals and economic growth in the agricultural sector [DLA, 1997; Turner and Ibsen, 2000]. The land redistribution programme initially aimed to obtain the transfer of 30% of historically white-owned agricultural land (including both private commercial and State agricultural land) by 2014 [ANC 1993]. This paper explores agrarian land reform in South Africa, in particular its land redistribution component, and assesses the policy, process and practice of land reform together with its possible impacts on the environment. In reviewing progress – or lack of it – in regard to land reform, it is argued that any process that lacks integrity in terms of the environment will ultimately fail to solve the social and economic problems it is aimed at addressing. The argument is made that, while land reform *per se* is absolutely key to rural development in the country, its implementation without significant consideration of the natural environmental constraints of the country, cannot resolve the serious inequities associated with the marginalisation South Africa's rural poor.

While land reform has been a cornerstone of national policy since the installation of the first democratic government in 1994, the proposed future trajectory for the programme is set out in the recent *Green Paper on Land Reform* issued by the Department of Rural Development and Land Reform [DRDLR, 2011]. The basic tenets of the policy are underpinned by the recognition that agrarian transformation is fundamental to future social cohesion and development in general as well as improved food sovereignty and food security in particular; such goals depend on more equitable access to and ownership of land. The strategy involves government support (subsidies and technical support) for people of so-called designated population groups, wishing to purchase agricultural land for farming purposes (each described as a "land reform project"). The extent to which the revised land reform policy, as set out in this Green Paper, redresses some of the shortcomings of the original, post-*apartheid* intentions provides an important focus for this paper.

Rural livelihoods in South Africa are acknowledged to be complex and dynamic systems and that '...undoing the social, economic and cultural effects of centuries of discrimination and exclusion on the basis of race, class and gender, will take time and an enduring national political effort [DRDLR, 2011]. However, the fact that agrarian livelihoods and, indeed, the livelihoods of the rural population in general, are directly dependent on natural resources highlights the significance of the environment to the process. This clearly has important implications for the conceptualisation, design and implementation of land reform policy and practice [Shackleton *et al.* 1999]. It is, therefore, essential that the planning of land reform, including restitution, redistribution and tenure reform, should systematically embrace an evaluation of the land and the available natural resources, and an assessment of the suitability of land for the envisaged land uses (the impacts of the land uses on the natural environment). Such evaluation should incorporate an inventory and assessment of the existing situation

that focuses on the resources and services provided by the natural environment. Decisions made on a sound ecological basis, taking into account most recent theories of environmental degradation, are better able to avert the failure of these new settlements and promote more sustainable land reform projects. Sustainability within the land reform context is a measure of the extent to which land reform objectives (environmental, economic and social) can be met from a defined land use over a fixed period of time [Wynberg and Sowman, 2007].

Land degradation in rural South Africa

Land degradation has been recognised as a serious environmental problem and one that threatens global food and energy security [Reed *et al.*, 2011]. The United Nations Environment Programme (UNEP) estimated that 73% of Africa's drylands are moderately to severely degraded [UNCCD, 1995]. As much as two-thirds of the continent is classified as drylands according to UNEP definitions, thus the International Convention to Combat Desertification (UNCCD) gives priority to Africa in a special annexure. It is important

to note however, that the issue of land degradation and desertification remains the subject of much debate and uncertainty in spite of the recognition given to the issue by UNEP [Thomas and Middleton, 1994; McCann, 1999; Andersson *et al.*, 2011]. Poverty, climate variability, political mismanagement, institutional issues and even unfair trading by developed countries are all identified as potential contributors to environmental degradation. In South Africa, any policy aimed at agrarian reform must surely include a consideration of the environment in its manifestation. Land reform, if inappropriately or improperly applied, can amplify environmental degradation and reduce the sustainability of the very resource that is targeted by the policy [see Wynberg and Sowman, 2007].

The status of land degradation in South Africa has been surveyed in a comprehensive review by Hoffman *et al.* [1999] and published by the Department of Environmental Affairs and Tourism (DEAT), as part of a National Action Plan in terms of the UNCCD (Fig. 1). Land degradation is considered in terms of severity, rate and extent of both soil

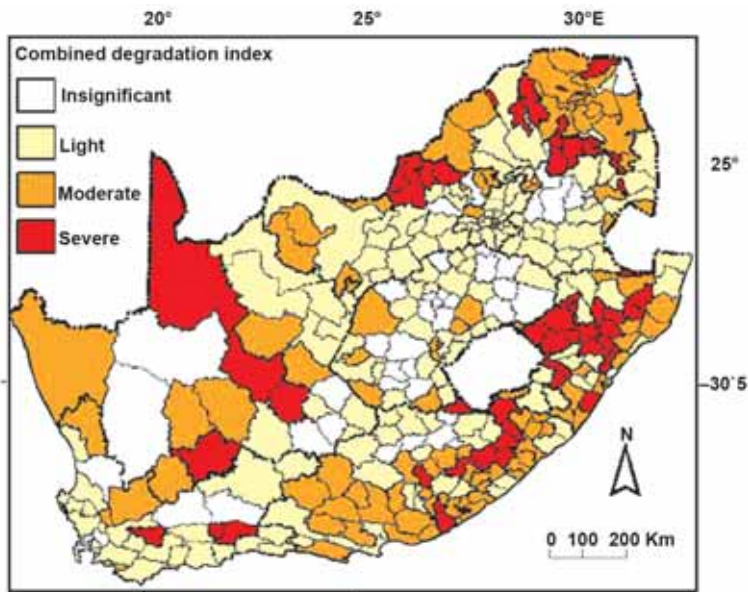


Fig. 1. Land degradation in South Africa illustrated by Hoffman *et al.*'s combined degradation index. Darker shading indicates areas of greatest degradation. The magisterial districts of South Africa are indicated.

*Original data: Hoffman *et al.* [1999] and redrawn in Meadows and Hoffman [2003]*

degradation and vegetation degradation (loss of cover, change in species composition, bush encroachment, alien infestation and deforestation). The study [Hoffman and Ashwell, 2001] highlighted the overall severity of degradation in the communally farmed areas of the former so-called *Bantustans* (commonly referred to as the 'homelands'). This conclusion was contrary to the previously widely held view that the semi-arid eastern Karoo region was the most severely degraded as a result of overgrazing by commercial (white) farmers, although this is not to say that commercial farms were not also subject to degradation. There is evidently, however, a strong disparity between the Bantustans and commercial areas in terms of degradation and this is attributable to a number of factors including the history of land allocation in colonial and *apartheid* eras, issues of demography and settlement, land use policies, and access to government agricultural support [Hoffman and Ashwell, 2001:141].

Aim and objectives of the study

The overall aim of this paper is to review and reassess land reform policy (more particularly in regard to its land redistribution element) and practice and to reflect on the extent to which land degradation issues are dealt within contemporary agrarian transformation in South Africa. The degree to which environmental planning (in order to avoid further land degradation) is integrated into the land reform process is investigated. Finally, the question as to whether land redistribution may or may not aggravate or mitigate land degradation is briefly explored.

INSTITUTIONS ENGAGED IN LAND REFORM IN SOUTH AFRICA

The structure of governance in South Africa consists of three spheres, national, provincial and local government [Republic of South Africa, 1996]. There are nine provinces, each with a provincial legislature. National departments have provincial counterparts, although there is variation in these

departments between provinces. In terms of the Constitution, there are certain functional areas of concurrent national and provincial competence; agriculture, environment and urban and rural development are such areas [Republic of South Africa, 1996]. The Constitution obligates the government to enable citizens to gain equitable access to land, and to produce the necessary legislative and policy reform [S.25 [4]]. In 1999, following the nation's second democratic elections, the then Department of Land Affairs (DLA) undertook a major review of the land reform programme, principally affecting land redistribution. The outcome of this review was the launch of a new programme entitled: *Land Redistribution for Agricultural Development*, referred to as LRAD [MALA, 2001]. The responsibility for land reform until 2009 lay with the Ministry of Agriculture and Land Affairs, but in 2009 the Department of Rural Development and Land Reform (DRDLR) was established and this now takes administrative responsibility for the land reform process in general and LRAD in particular, while the Department of Agriculture, Forestry and Fisheries (DAFF) provides a parallel role acting mainly in an advisory capacity (Fig. 2).

In regard to the environmental implications of land reform it is worth considering the possible roles of two other government departments. Firstly, DAFF is not directly responsible for land reform *per se*, but retains an important advisory role and coordinates of land conservation work through the so-called 'LandCare' programme, inspired by the successful Australian model in 1998 [Turner and Ibsen, 2000:32]. The programme aims to build capacity and awareness around the conservation of agricultural resources. Funding is available to improve agricultural resource management, however, the national budget is small (R25 million) [DEAT, 2002:42]. Turner [2000] is critical of the programme, "...South African LandCare has done little to achieve the local environmental commitment and collaboration across social and economic sectors for which its Australian counterpart is renowned..." [Turner 2000:32].

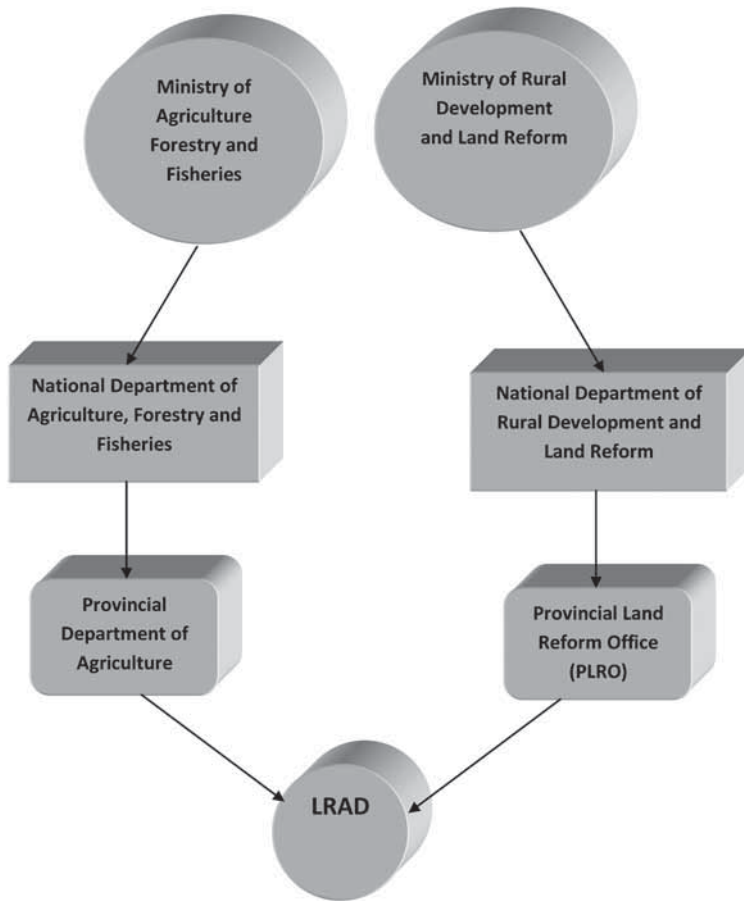


Fig. 2. Institutional framework for the implementation of land redistribution

The extent to which these conservation ideals feed into the land reform policy and practice is, in any case, very debatable [Wynberg and Sowman, 2007]. Secondly, DEAT, while one might expect a significant role in land reform, is not integrated into the programme at all – either at national or provincial level. For example, in Western Cape Province, there is no representative of Environmental Affairs on the so-called Land Reform Project Teams so that involvement appears to be absent at the LRAD project planning stage. More proactive involvement by DEAT in land reform projects only occurs when Environmental Impact Assessments (EIA) are required when a change in land use requires EIA in terms of the regulations (promulgated in terms of the Environmental Conservation Act, 1989).

POLICY AND LEGISLATIVE INSTRUMENTS RELEVANT TO LAND REFORM

The policies selected for review in this section are those considered relevant to land reform in the context of environmental sustainability.

The Constitution

The Constitution, within the Bill of Rights (Chapter 2), provides the basis for all land reform policy. The Property clause (S. 25) requires the government to take reasonable legislative action to provide citizens with access to land, secure tenure, and restitution of land rights. It also entrenches private property rights, which gives rise to the market-based land reform system. The environmental clause (S. 24) entitles every person to have the environment protected through measures

which prevent “...ecological degradation” and “...secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development” (S. 24(b)). In terms of this clause, land reform administrators and participants are therefore required by the constitution to develop and implement land reform projects in a manner that will promote ecologically sustainable development and avoid ecological degradation.

White Paper on Land Policy, Department of Land Affairs, 1997

The framework policy for land reform is still the White Paper on Land Policy, 1997 [DLA, 1997]. The principles of the land reform programme stated in the White Paper, set out in Table 1 are such that planning of land reform projects must ensure “...economic viability and environmental sustainability” [DLA, 1997:12].

The White Paper on Land Policy acknowledges the existence of “...severe land degradation and soil erosion” which it attributes to landlessness, overcrowding in Bantustans, and inappropriate farming methods on commercial farms [DLA, 1997:23]. It identifies the potential of the land reform programme to result in land degradation:

One of the challenges of land reform is to relieve land pressure without extending

environmental degradation over a wider area. Unless projects are properly planned and necessary measures are put in place to govern zoning, planning and the ultimate land use, the programme could result in land being used unsustainably [DLA White Paper on Land Policy, 1997:25].

The policy requires a 43feasibility study to be prepared, with the assistance of DLA planners, which includes an “...assessment of environmental consequences of the proposed undertaking” [DLA, 1997:25]. This requires the consideration of the suitability of the natural resources for the proposed farming [DLA, 1997:25].

Land Redistribution for Agricultural Development (LRAD) – Ministry of Agriculture and Land Affairs, (Version 4, 2002)

The then Minister of Agriculture and Land Affairs undertook a review of land reform policy and programmes resulting in the LRAD programme, launched in August 2001. LRAD deals with both the transfer of agricultural land to individuals or groups, and with commonage projects aimed at improving access to municipal and tribal land primarily for grazing purposes. LRAD provides technical support and grants to historically disadvantaged South African citizens, regardless of income, to access land specifically for agricultural purposes. The

Table 1. Land reform principles

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| Social justice | Government must deal with landlessness and to remedy the unequal distribution of land in South Africa |
| Poverty focus | Priority is given to the poor who need land to contribute to income and food security |
| Needs-based | Land reform should respond to the expressed needs of people |
| Government as facilitator | Government should facilitate the expression of demand and inform people of their options |
| Flexibility | Provincial and local variations require flexible application of policy within a framework of national norms. |
| Participation | The participation of communities and individuals as partners with government. Decisions at local level. |
| Gender equity | Priority should be given to women applicants |
| Economic and environmental sustainability | Planning of land reform projects must ensure these are economically and environmentally sustainable |

Source: DLA, 1997. White Paper on South African Land Policy, Department of Land Affairs.

aim of the LRAD programme was explicitly stated as the transfer of 30% of the country's commercial agricultural land by 2014 in order to improve food sovereignty for the rural poor; decongest overcrowded former homeland areas; expand opportunities for women and young people in rural areas; and promote environmental sustainability of land and other natural resources [MALA, 2001:6]. LRAD may be considered as demand-led, meaning beneficiaries must define the type of project and must identify their own land and acquisition of land continues to be on the basis of the 'willing-buyer, willing seller' approach.

In the LRAD programme, all 'beneficiaries' must make a contribution in cash, kind or labour of a minimum of ZAR¹ 5000.

¹Beneficiaries can access a range of grants along a sliding scale from ZAR 20 000 – R100 000 per individual, depending on the amount of their own contribution. The grant and the contribution are calculated on an individual adult basis; if people apply as a group, the total amount of the grant and own contribution are both scaled up by the number of individuals represented in the group. The programme is unclear and conflicting with regard to the requirement for environmental assessment of projects. Version 4 of 2002 states that the 'Business Plan' should include "...environmental impact assessments" but only "...if applicable to the project", without any explanation of when this would be the case.

Green Paper on Land Reform, September 2011 [DRD&LR, 2011]

The release of the Green Paper (a document issued for public comment and indicating a policy framework) on Land Reform by DRDLR in September 2011 [DRDLR, 2011] heralds a fundamentally different approach to the issue of agrarian transformation. It is implicit, although not explicitly acknowledged, that the need for a new structure lies in the failure of the LRAD programme. The vision for land

reform as set out in the Green Paper is: *reasonable access to land with secure rights in order to fulfil basic needs for housing and productive livelihoods* [DRDLR, 2011]. Administratively, the most important difference between the proposed system and the existing LRAD is the adoption of a proposed Land Management Commission with extensive powers and which, working with a Land Valuer-General, will oversee the identification and purchase of land for redistribution and restitution. The message is that market principles have been an impediment to land reform and that, *de facto*, the 'willing seller, willing buyer' principle is no longer deemed central to the transaction process. It is envisaged that more properties would become State-owned and that there would be less emphasis on private ownership of agricultural land. The concept of 'land ceilings' is also alluded to, implying that there should be a maximum amount of land owned by any particular individual; this is also a new, and highly controversial, development, although there are no specific recommendations as to what such a ceiling should be. The much anticipated Green Paper has received generally highly critical reviews – from frustration that the proposed policy framework fails to give clear guidance as to how agrarian transformation can be achieved (for example, AgriSA, 2011), to outright rejection on the grounds that the proposals on land tenure violate the South African Constitution [Afriforum, 2012]. Crucially, in relation to the theme of this paper, there is no specific consideration of environmental sustainability in the vision (further discussed below).

LAND REFORM IN SOUTH AFRICA: STATUS AND CHALLENGES

The strategic objective of the land redistribution component of land reform was to ensure the transfer of 30% of all agricultural land by 2014 to the historically disadvantaged. What progress has been made and how realistic is it that the target will be met?

¹ Note, ZAR = South African Rand. At time of going to press, 1.0 US\$ is approximately ZAR 8.7.

What of the environmental sustainability of the programme? Certainly there have been significant problems regarding delivery due to the enormous scale of this objective, to lack of budget, lack of capacity and skills and to constraints embedded in the actual land reform policy instruments. In this section, some of the problems experienced with the implementation of land reform are explored.

The challenge of delivery

The scale of redistribution of land envisaged in the land reform programme is enormous and way beyond the levels of delivery achieved thus far. The land reform programme has been constrained by shortfalls in budget, with potential expenditure being double or more the amount available from the national treasury as well as underspending [DLA, 1999]. Slow implementation of land redistribution projects has been a consistently alarming feature of the programme, as indicated by statistics for particular years. For example, in 2006–2007, the then Department of Land Affairs reported land transferred at 258 890 ha, which was barely 10% of the targeted figure of 2.5 million ha [Lahiff, 2008]. Indeed, by 2007 the programme was so far behind the land redistribution target that approximately 2 million ha of land a year would have to be acquired to reach the target of 30% by the end of the year 2014 and that "...this is the equivalent of an area the size of the Kruger National Park every year for the next seven years" [De Villiers 2007:7]. However, the introduction of the Proactive Land Acquisition Strategy (PLAS) and the Land and Agrarian Reform Project (LARP), "...together with a greater political emphasis on expropriation, raises the possibility of at least some increase in the rate of land transfer" [Lahiff, 2008: 2]. The most recent statistics are, accordingly, somewhat more encouraging and suggest an increasing pace of acquisition. During 2011–12, the Department actually over-performed in transferring ownership of some 392,850 ha (cf 239,990 ha in 2009) of land against an annual target of 303,612 ha [DRDLR, 2012], albeit this still falls woefully

short of what would be required if the figure of 30% of total land were to be reached by 2014.

Quantity or quality?

In its early years, the land reform programme prioritised speed of delivery of land rather than sustainability and quality of land reform [DLA, 2000:36]. DLA's internal performance management systems have rewarded officials in terms of quantity, measured in hectares and households and in spending their budget. The latest report [DRDLR, 2012] hints at the transfer of 'strategically located' land and perhaps points to a greater emphasis on effective land planning as a key performance area. Davis [2011] argues that there focus has now shifted from simple land acquisition and transfer to ensuring that systems are in place to make productive use of the land, although it is difficult to see exactly what such systems are in perusing the policy instruments.

Lack of capacity

The lack of capacity within land reform offices, affects the ability to deliver both quantity and quality. Jacobs [2003] reported that understaffing throughout the ranks of DLA imposes constraints on the ability to meet the needs of land reform beneficiaries and the department itself notes that more than 11% of posts remain vacant [DRDLR, 2012]. Both implementation and effectiveness are clearly constrained by a lack of capacity and, in reviewing the programme, the department indicates that more successful land reform projects are those where the individual or group beneficiaries are adequately trained. The current programme, however, does not provide for the inclusion of environmental considerations either in the business plan or in the development of capacity for the land redistribution beneficiaries.

Accessing suitable land

A market-based model of land reform has thus far meant that land had to be obtained on a 'willing-seller, willing-buyer' basis. The high demand for land, coupled with the fact that no incentive exists for

landowners to sell or subdivide their land for redistribution purposes, means that land available for land redistribution may often be of poor quality and/or high price. Landowners are also reluctant to sell land through a slow, bureaucratic process, which involves waiting for land grants to be approved before the sale transaction can be completed [Jacobs, 2003; Heibinck and Shackleton, 2010]. The problem may therefore manifest itself in terms of land degradation because the LRAD system is silent on the issue as to where land reform takes place, such as in or near the overcrowded former homeland areas. It remains to be seen if the new procedures proposed in the 2011 Green Paper will address some of these shortcomings, but the lack of any attention to land quality in the documentation remains a concern.

DISCUSSION

It is clear that South African land reform, particularly in the context of land redistribution, has thus far failed to deliver on its lofty aims. The goal of "30% by 2014" will not be met (the current figure stands at somewhat less than 10%) and has even been referred to as trying to put out a fire with a broken teacup [Moseley and McCusker, 2008]. The 'two cycles' of policy [Hall, 2007] that saw an earlier, more populist policy aimed at very poor farmers has been replaced by one that focuses more on emerging black commercial farmers, yet neither has been able to keep pace with demand. This is a policy shift that arguably '...reflects a desire on the part of the government to support the expansion of black commercial farmers ...rather than radically restructure the agriculture sector in South Africa' [Boudreaux, 2010] and misses the opportunity to improve social justice. The policy set out in the 2011 Green Paper aims to redress some of these shortcomings but it proposes to do so by placing more land in the hands of the State – a highly controversial and, as yet, untested strategy.

Although environmental sustainability in general, and land degradation in particular,

are to some extent reflected in the land reform policies and instruments, it is clear that they remain secondary or minor considerations. Thus, the White Paper on Land Policy 1997 acknowledges the existence of severe land degradation and the risk of increased land degradation as a result of the land reform programme but the LRAD policy documents do not provide sufficient detail to ensure that adequate attention to environmental planning occurs in the design stages of projects. There is insufficient guidance on the issue of environment as it relates to land reform for private sector consultants, agricultural officers or planners to ensure sustainability. Any future policy needs to be translated into simple tools that can be used by planners, consultants and agricultural officers to achieve both quantity and quality in terms of land reform projects. Regrettably, the new dispensation promised in the Green Paper is silent on such matters. The only, tangential, reference to sustainability in this policy document are those comments that refer to 'livelihood security' or 'sustainable rural production systems' but these terms are more likely used in the context of the economic, rather than environmental or ecological, context.

Poorly planned and managed land redistribution may easily lead to more intensive production, resulting in over-cultivation or overgrazing. Exceeding the carrying capacity of land (humans and livestock) therefore has the potential to increase land degradation. The viability of farming enterprises will be threatened if farmers have unrealistic expectations of the supply of natural resources and the productive potential of their land. Detailed resource assessments and land evaluations prior to project implementation, can avoid potential risks associated with pressure from overcrowding, both humans and livestock.

Review of land reform projects post-implementation clearly reveals some of the negative environmental impacts of land reform [see DLA, 2000]. These impacts need to be minimised through more thorough

environmental planning if intensified land degradation is to be avoided. The effect of land degradation goes beyond the physical impacts and the issue of agricultural production. The social impacts of land degradation are increasing urbanisation, as farming becomes less productive. [Hoffman and Ashwell 2001]. As Hebinck and Shackleton [2010: p xx] note: "...resources and their use can and should not be treated as disconnected from the social actors that access and use them" and there is a distinct risk in the current and likely future implementation of the land reform programme in South Africa that such a disconnection can result in significant environmental deterioration. An environmentally unsustainable solution cannot resolve the crisis of rural poverty and inequity [see Giller *et al.*, 2008, for a possible approach to addressing this problem].

Returning to the key elements of this paper, it is clear that environmental sustainability and land degradation have not yet been adequately addressed in South Africa's land reform programme. Initially, it appears that there was recognition of the potential risk of environmental deterioration but the policy in practice has fallen short of providing adequate, sufficiently detailed and user-friendly guidelines to avoid further degradation. Environmental planning is not integrated into the land reform process in a consistent and coherent manner. The potential impact of land reform on land degradation is problematic and could result in the failure of land reform projects. The impact of land reform on land use and land degradation has thus far not been monitored. It is a lesson that we need to learn fast if the land reform process, controversial and complex as it already is, is not to result in further environmental degradation and the exposure of South Africa's historically disadvantaged rural poor to even greater levels of risk and vulnerability. Land reform experience elsewhere suggests that ecological and environmental factors can be incorporated successfully into the system. In Brazil, for

example, where historically agrarian reform had been associated with deforestation and environmental degradation, the government introduced a scheme in 2003 that actively encouraged citizens to adopt an ecologically sustainable attitude to land [Wittman, 2010]. Successive governments in that country have successfully integrated food production and environmental management into the land reform programme [Davis, 2011]; South Africa would surely do well to implement such a model.

CONCLUSION

Although it is important not to delay the process of land reform even further, incorporation of environmental guidelines and proper follow-up to individual land reform projects in the form of sound ecological monitoring and advice is essential if land degradation is not to be accelerated as a result. The South African environment has been termed a 'neglected dimension' in agrarian transformation [Wynberg and Sowman, 2007] and, unfortunately, newly proposed policy interventions appear unlikely to be any more sustainable than existing ones. Given the semi-arid nature of much of South Africa, the words of Geist and Lambin [2004: 828] are highly pertinent where they note that "...a detailed understanding of the complex set of proximal causes and underlying driving forces affecting dryland-cover change is required before any assessment or policy intervention". Furthermore, as Seekings and Nattrass [2004] argue, several post-1994 government policies have accentuated rather than alleviated poverty so that, without proper environmental planning, land reform is at risk of doing the same.

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