

POLICY BRIEF

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Ensuring Access to Water for Emerging Small-Scale Farmers in South Africa: A Water Reform Policy Perspective

Executive Summary

One of the key components essential to the productivity of emerging small-scale farmers who secured farms through the land redistribution programme in South Africa is access to adequate and reliable sources of water for irrigation. The lack of access to water compounds the adverse impact of challenges that inter alia include the high cost of electricity and lack of farming knowledge prevalent among these farmers. Securing a water use licence and accessing water for irrigated agriculture is not guaranteed for most emerging farmers. Often, they do not have sufficient finance and access to technical expertise to invest in sustainable water supply-systems for irrigation. Consequently, the operations of the majority of these farmers are sub-economic, which indicates a need for greater efforts towards ensuring improved access to water for them. *Ceteris paribus*, this will enhance their chances of realising greater agricultural production and, in the process, improved livelihoods.

Introduction

Since the mid-1990s, the government of South Africa has been grappling with the design and implementation of land redistribution reforms intended to ensure equitable distribution of agricultural land between the races, as it is currently dominated by Caucasians. The government seeks to increase the magnitude of and contribution by black farmers in this industry. However, the success of land redistribution remains a highly contested issue in the country's development discourses, particularly with regard

to the extent to which the programme has achieved its goals and expected outcomes (see Hall, 2010; Méndez-Barrientos et al., 2018). While other issues on the subject unfold, that of the water governance regime and its impact on emerging and mainly black farmers is perhaps one of the most important concerns for all stakeholders to tackle urgently. There are indications that even after two decades of water sector reforms, access to water remains highly skewed along racial lines, and thus, the envisaged massive socio-economic transformation of rural communities and landscapes has remained a pipedream.

This policy brief relies on empirical data gathered through an applied qualitative and stakeholder-oriented study in the Bela-Bela and Groblersdal municipalities, in the Limpopo Province of South Africa to demonstrate the extent to which (or not) and barriers (if any) to access to water confronting emerging farmers. It is assumed that addressing the challenges that these farmers face in accessing and using water partly determines the pace of their transition from subsistence to commercial farming. During the study, we embraced insights from published literature and government policy documents to gain a broad understanding of the reform processes and the theoretical basis informing public policy in this domain. We also interviewed key informants at the local and provincial levels and visited 63 land redistribution projects at the study sites for detailed profiling of the farms.

We argue that there is a need for stakeholders in the sector to pause and reflect on what else needs to be done to enable the land and water sector reforms to positively transform the rural socio-economic landscape in the country. We focus more on the *so what?* of the reform process, thereby departing significantly from the *what?*, *why?* and *how?* of the reforms that dominated earlier analyses by other scholars. In doing this, we seek to identify the missing water-related ingredients for

successful agricultural production by emerging farmers. The policy brief brings a sharper focus to bear on the challenges evident at the intersection of the land reform terrain and the commercial farming water supply regime in South Africa. It is intended to inform the development of more effective water policies and meaningful post-land transfer support systems in the country, and thus transform the livelihoods of beneficiaries of the land redistribution programme.

The intricacies of agricultural water reform policy in South Africa

In light of historic injustices in the allocation of land and water resources entrenched during the apartheid era, equitable allocation of water was central to water sector reforms implemented after 1994 in South Africa. Thus, a key tenet of the reforms was to redress historical inequities and enable all racial groupings to access and use water for productive purposes (Goldin, 2010). However, over two decades after the introduction of reforms, water allocation for economic production uses has not substantially changed in the country. Data shows that more than 90% of the total available water for agriculture is still in the hands of white commercial farmers (Dube et al., 2021). This suggests that issues of equitable redress are still to be fully resolved by the reform processes and policies. In some cases, experts argue that the entrenchment of existing uses in the interests of ‘sustainability’, an increasingly technocratic approach to redistribution, and socioeconomic dynamics at the regional and local levels has narrowed down the room for manoeuvring, resulting in an impasse in the water allocation reform process (Movik, 2009).

A key feature of the challenge is the attachment of water access rights to land ownership (riparian water rights) as established under the 1956 Water Act and subsequently inherited by the Water Act of 1998 (RSA, 1998). The implementation of water and land reforms as two separate processes has also worsened challenges emerging farmers face regarding access to water for their livestock and crops. Indeed there are many cases where emerging black farmers find themselves with land but no access to water for farming and other purposes. At the same time, national discourses on land reforms have repeatedly made reference to possibilities of quickening the pace of land expropriation without compensation, with the hope that this will catalyse more significant transformation on the ground. Nevertheless, it is doubtful that fast-tracking land expropriation will enhance rural transformation if access to productive water is not assured for the emerging farmers.

Study findings

Access to water by black emerging farmers

Table 1 presents findings regarding access to water for the farmers in our study sample. Out of a total of 63

farms observed during the study, 40% had reliable access to water and 60% faced challenges regarding access to water. The findings show that there is no difference in terms of access to water in the two study areas showing that less than half of the emerging farmers had reliable access to water. The limitation of farmers that have reliable access to water for irrigation can be associated with various factors, including limited water sources, failure to obtain a water user licence, poor irrigation infrastructure and lack of a reliable energy source.

Table 1: Access to water on the selected farms in Bela-Bela and Greater Sekhukhune (n = 63)

Assessment variables	Bela-Bela	Groblersdal	Total	%
Farm has reliable access to water	15	10	25	40
Farm has challenges in accessing water	25	13	38	60
Total	40	23	63	100

Limited water sources

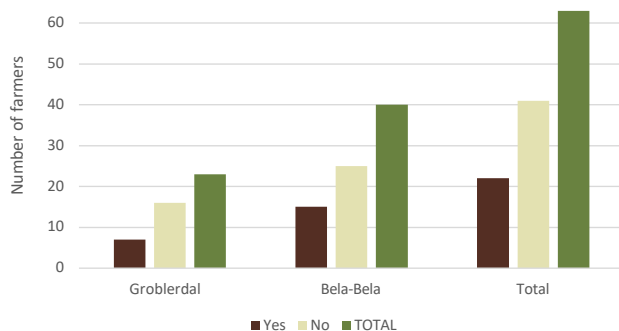
In terms of water sources, most of the farmers in the Bela-Bela study area mainly relied on groundwater from boreholes, and these are associated with a range of limitations unique to them. At the same time, groundwater is dependent on the availability of good rainfall in each rain season, and during the dry season, the borehole water levels recede such that access becomes limited. Agricultural extension officers reported that in most cases, the white predecessors for each farm used to have more than one functioning borehole, which allowed the farmer to rotate the boreholes when extracting the water for irrigation from time to time. This is not the case with most of the current black owners, mainly because a number of the boreholes previously sunk on the farms have either run into disrepair or have dried up. At least 60% of the farms in our sample had only one borehole that was functional. From time to time, the boreholes also require costly maintenance or complete replacement of the equipment. Some of the farmers also indicated that they use very small pressure pumps to convey groundwater to the fields, and this means that they are only able to supply limited amounts of water for irrigation at a time.

The water licensing dilemma

From a government regulation perspective, the National Water Act 36 of 1998 (RSA, 1998) informs the current agricultural water management practices in South Africa. The Act separates ownership of land from ownership of water (riparian rights). It vests the latter in the state. Under this Act, agricultural producers are required to

register as water users and formally obtain licences to get access to water through specific volumetric allocations. While this system enables the state to set aside water for basic needs and ecological purposes as necessary, water permits from the previous water governance regime are still recognised in the new National Water Act (section 32 to 35) such that the emerging farmers do not necessarily get automatic access to water, particularly in cases where the rivers are already fully allocated. This situation essentially serves the interests of large-scale white commercial farmers whose families obtained water permits long back during apartheid rather than those of emerging black farmers. The status of water licences and permits in Bela-Bela and Groblersdal presented in Figure 1 is revealing in this regard. We established that about 65% of the farmers in our sample did not have water licences. They cited a number of factors limiting them from getting water permits on time. One of the main reasons is that the government offices that are supposed to assist them in obtaining water licences are not sufficiently responsive.

Figure 1: Status of water license distribution among emerging farmers



Most of the farmers in our sample (55%) indicated that they were not aware that they are supposed to register and obtain water licences for groundwater. In addition, some of the farmers who were aware of this requirement indicated that they do not know the process to follow in order to obtain water licences or use rights. Those who have applied for the licences also indicated that it takes a very long time to finally obtain the licenses. In addition, some of the white farmers who previously owned the land transferred their water use permits to other white farmers who were still operating in the area when it became clear that they were going to lose their land through the redistribution programme. This makes it difficult for the new occupants of the farms to acquire water permits. As a result, white commercial farmers continue to have better access to agricultural water than the black emerging farmers. Licence ownership also gives the white commercial farmers more decision-making privileges and power in terms of sitting on water boards and catchment management agencies as they have a greater stake than the emerging farmers. The inability of emerging farmers to obtain a water user licence within a reasonable time, demonstrates the inadequacy

of implementing water and land reforms parallel to each other, with no deliberate effort having been made to ensure that the two reform processes sufficiently complement each other.

Support infrastructure for accessing and utilising water

Access to water, particularly for irrigation purposes, does not only depend on the availability of water sources or use rights. It also depends on the existence of the infrastructure that enables water to be conveyed from the source to the site where it is needed. Electricity to pump groundwater or operate irrigation equipment was cited as one of the major constraints to efficient utilisation of the water that is already available on the farms we studied. Most of the farmers interviewed at the study sites indicated that the electricity tariffs charged are beyond their reach and this worsened their ability to access water. In some cases, electricity transformers on the farms have been stolen or damaged, and the emerging farmers are expected to pay for the replacement fee. This is beyond the means of many of these farmers.

Water storage facilities and irrigation equipment

On most of the farms in our sample, water flow capacity is not sufficient to meet the immediate consumption requirements of the farm operations and thus extra water storage facilities such as tanks are required. Very few of the farmers we visited had sufficient water storage on the farms. Although in many cases water storage facilities are inherited with the land, the lack of maintenance under the new black owners was notable. For those farmers practicing crop production, the majority of them had irrigation equipment that was either funded by the government or inherited from the previous farm owner. However, a notable number of emerging farmers did not have any irrigation equipment at all, either because the government had not yet assisted them to get the equipment, or that which they had inherited with the land had become dysfunctional. Therefore, the post-land transfer farmers' support needs to be strengthened.

Other farm production challenges

In terms of farm performance, it is not only access to water that limits farm production. Often, other challenges act as a barrier to full farm production. Table 2 shows that at least 73% of the emerging farmers cited lack of funding as the biggest challenge facing them; the cost of electricity was considered the second biggest challenge at 56%; and lack of commercial farming knowledge came a close third, at 49%. As such, there were farms that were not commercially functional even though they had reliable access to water. These findings suggest that to improve production, policymakers and practitioners should pay more attention to lack of funding, costs of electricity, access to water, and capacity development for the emerging farmers.

Table 2: Main challenges faced by the emerging farmers (n = 63)

Challenge	Frequency	Percentage
Lack of funding	46	73
Lack of knowledge about commercial farming	31	49
Poor irrigation infrastructure	28	44
Cost of electricity	35	56
Farming inputs	23	37
Farming machinery & implements	23	37
Fencing	24	38
Markets	18	29
Extension services	11	25
Transport services	10	19

Conclusion and Recommendations

Findings from this study illustrate that access to water is not guaranteed to the majority of emerging black farmers who obtained land through land reform, and this negatively affects their productivity and capacity for irrigated agriculture. In addition, other constraints are facing farmers such as lack of knowledge of commercial farming; lack of finance for buying farm inputs; poor or non-existent irrigation equipment; and expensive electricity supply for pumping water to the fields. The following inputs are therefore recommended to improve access to water and agricultural production by emerging black farmers.

Strengthen inter-governmental departmental coordination

There is a need for land and water reform programmes to be aligned, such that the access to productive water will be assured for the emerging farmers prior to occupation of the land or very soon thereafter to ensure that meaningful agricultural production is not delayed. This requires that the Departments of Agriculture, Land Reform and Rural Development and Water Affairs work together, to ensure that the water licencing process is smooth, transparent and effective.

Address inequities embedded in the National Water Act

The issue of water and ownership in South Africa is a complicated matter. One of the aspects leading to this complication is that the Water Act of 1998 still contains the clauses (section 32 to 35) which were based on riparian rights of the 1912 Irrigation Act as well as those formalised in the 1956 Water Act. The National Water Act protects water rights that were issued under the apartheid system even though these old water rights were mostly owned by white commercial farmers. In addition, these old water rights account for most of the available water for

irrigation. Therefore, the solution could be found in a new legislation that is well informed by the scope and depth of deprivation that is inherent in current national legislation.

Prioritise training and improve post-land transfer support

The capacity building interventions that enable the emerging farmers to gain the knowledge they need to run the farms efficiently and productively need to be prioritised. Emerging farmers need capabilities in all key aspects of farming including the ability to apply for funding. Government also needs to ease requirements for emerging farmers to access enough capital for investing in the water and energy infrastructure needed for irrigation systems. The provision of subsidies on their electricity tariffs could partly alleviate their situation. It could also be useful to explore possibilities of providing alternative and cost-effective power sources such as off-grid solar and wind energy supply systems. For instance, solar-based irrigation pumps are already being used in other parts of the world, with a reasonable degree of success and there is no reason why this option should not be explored in South Africa. In the same vein, enabling the emerging farmers to augment their water supplies through rainwater harvesting approaches is also a viable option.

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