



How do we improve synchronisation between LAND AND WATER REFORM?

A completed study initiated, managed and funded by the Water Research Commission (WRC) and led by the CSIR is delving into the successes of land reform and water allocation reform in the Maruleng local municipal area. Article by Karen Nortje, Nikki Funke and Willem de Lange.

South Africa has an evident 'dual-economy' agricultural sector on the one side consisting of large-scale mechanised commercial farmers and small-scale, resource poor subsistence farmers at the other. Currently, approximately 95% of the national agricultural output (traded in formal markets) is produced by 5% of South African farmers, who can be characterised as large-scale commercial. In addition, since 1994, the government has been implementing its land reform policy aimed at alleviating the political and economic inequalities that are a legacy of South Africa's past.

One of the major challenges associated with the government's objective to transfer land to black farmers has been to minimise productivity losses during the land reform process and thus avoid possible food security risks to the country. This has,

however, proved to be quite challenging as beneficiaries of the land reform process have struggled to maintain the comparatively high productivity levels of commercial agriculture. Consequently, several support programmes have been rolled out to support productivity-related challenges in the agricultural sector, yet insufficient attention seems to have been paid to addressing the challenges related to effective water utilisation in agriculture.

In parallel to the land reform process, the water reform process has also been underway, with one of its central pillars being the Water Allocation Reform Strategy of 2008. Water allocation reform (WAR) aims to provide water for subsistence farming or for sustaining basic livelihoods, and to start a development path of commercial and competitive water use in support of Broad Based Black Economic Empowerment (BBBEE). Compulsory licensing is a key part of the WAR programme, and allows for water currently allocated to users to be re-allocated to historically disadvantaged individuals. All commercial water users must now register their water use and will have to apply for a water use licence.

The alignment of these two processes has, however, not run smoothly. There is still a weak link

between land reform, agricultural support and water resource provision despite several trans-sectoral programmes that are in place. In South Africa, many land reform farms have failed because of water not being available for production. The synchronisation between water allocation and land reform programmes in irrigation areas, therefore, has to be improved. This challenge falls against a background where the scarcity of water resources in South Africa is on the increase due to various socio-economic and climate change related pressures.

In an attempt to engage with the need to align water and land reform initiatives in irrigated areas that have been subject to the land reform process in order to promote productivity, the WRC conceptualised a research project (K5/1958/4: Investigation of water conservation in food value chains by beneficiaries of water allocation reform and land reform programmes in South Africa) to investigate water

conservation in food value chains by beneficiaries of water allocation reform and land reform programmes in South Africa.

A CSIR multi-disciplinary team commenced with this four-year project in 2010, incorporating multiple levels of stakeholder input into the data pool that underpins the project's findings and analysis and making use of a qualitative research methodology. The project's stakeholders are mostly located within the Maruleng Local Municipal Area and include emerging farmers who are beneficiaries of the land reform process, strategic partners to emerging farmers, and institutional representatives from: the Maruleng Local Municipality, the Lower Blyde Water User Association (WUA), the Moletete Communal Property Association (CPA), the Makhutswe CPA, the Department of Agriculture and Forestry (DAFF) extension officers and Lepelle Northern Water.

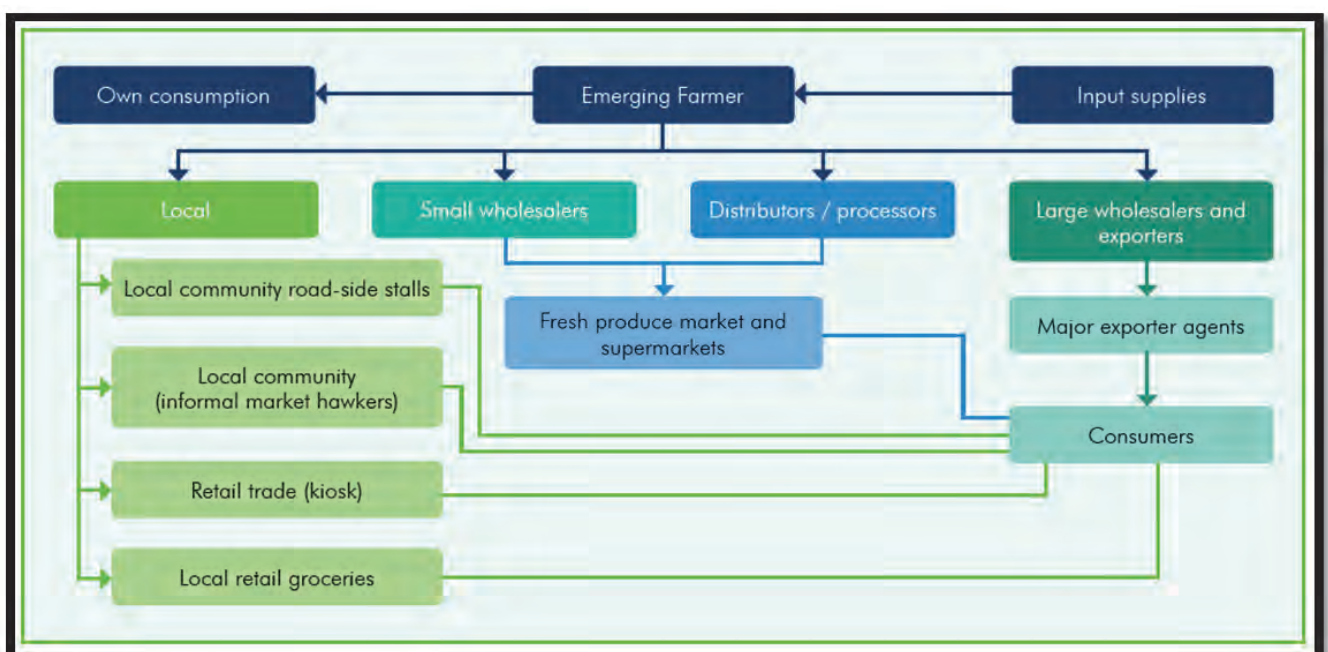
The project has resulted in a number of

Figure 1 (right): Types of emerging farmers

Figure 2 (below): Food value chain for emerging farmers in the Maruleng Municipal Area.

Type 1	The 'really' big players Generally identified as large-scale commercial farmers who do not need to be in a strategic partnership
Type 2	The big players in training Generally identified as large-scale commercial farmers who still need to be in a strategic partnership
Type 3	The entrepreneurs Generally identified as small-scale commercial farmers with aspirations to grow their farming business
Type 4	The transitioners Generally identified as subsistence farmers well on their way to becoming commercial farmers
Type 5	The wishful thinkers Generally identified as subsistence farmers with vague aspirations to become commercial
Type 6	The survivalists Generally identified as subsistence farmers with no aspirations to become commercial

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interesting findings and key messages that could potentially be valuable inputs to South Africa's land reform and water allocation reform initiatives. One of the key deliverables of this project has been a set of three guide books aimed at emerging farmers, agricultural extension officers and policy advisors working in the Department of Rural Development and Land Reform (DRDLR) as well as DAFF.

Each of the guide books is therefore aimed at a different target audience and targets some of the perceived knowledge needs of that particular audience, as established during the course of the research. The contents of the guide books centre on the key themes of the research project: water allocation and land reform, water conservation and food value chains.

What are the key messages coming out of this WRC project? Firstly, it has to be noted that not all beneficiaries of the land reform process aspire to be farmers, let alone commercial farmers. The research has revealed the existence of a diversity of contexts, objectives and aspirations across the range of individuals that have benefitted from the land reform process. As a result, different support strategies are needed for different types of beneficiaries.

It should also be noted that given that support programmes related to water allocation reform and land reform aim to change human behaviour (e.g. to improve water conservation), the design phase of such programmes should systematically account for the culture, norms and traditions of target groupings within the target community within which this behaviour change is supposed to occur.

Furthermore, and this is promising for the future of agriculture in South Africa, the project team found strong evidence of individual entrepreneurs

with commercial aspirations who have the ability to do insightful planning and are determined to be self-reliant and financially sustainable, even in the face of adversity and harsh economic circumstances. However, these individuals were in the minority, with most beneficiaries not displaying such characteristics. In fact, for many land reform beneficiaries it is enough to have a garden that supports their day-to-day needs, or at most provides enough for them to sell a few vegetables at the local market.

In order to make sense of the different kinds of farmers that had been identified during the research, the project team developed a typology (classification framework) of emerging farmers for the case study area. The typology defines attributes according to which each type of emerging farmer can be discussed. The attributes chosen for this typology speak directly to the need to categorise farmers in a way that facilitates an assessment of their ability to conserve water and of their position on the economic trajectory from subsistence to commercial.

The project team identified six basic types of emerging farmers in their typology. This typology has been included in the guide book for policy advisors in order to illustrate the existence of different kinds of emerging farmers. An explanation of the different kinds of emerging farmers that were identified is followed by reflections on how these insights could be used by policy advisors in their day-to-day decision-making: It is clear from our research that not all beneficiaries of water allocation and land reform have the will, the determination, the resources or the ability to take on full scale commercial farming, and all the positives and negatives that it entails.

Beneficiaries need to be made aware of what is required to successfully manage a commercial farming enterprise and need to be given the opportunity to decide whether they want to follow this route. At the same time, if beneficiaries do not want to become full-scale commercial farmers, they need to be given alternatives. These alternatives may involve commercial farming at a smaller scale, or they may involve activities other than farming. This is also an important message for policy advisors to take note of.

A second key message from the project relates to how different groups interpret the concept of "water conservation". One of the biggest problems that the project team identified in its research is that emerging farmers and extension officers are uncertain about what water conservation actually means and what it implies. This is also a major theme that is addressed in the guide books for emerging farmers and extension officers in the case study area.

The primary focus of the guide books on the issue of water conservation ties in with the need for

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emerging farmers to use their water as effectively and efficiently as possible in order to maximise their position in existing food value chains and new food value chains. For the purposes of this research, water conservation is interpreted as “doing things right” to conserve water, i.e. making use of the right kind of irrigation (e.g. flood irrigation, drip irrigation etc.) and agricultural practices (e.g. mulching, wind rows, tillage) for the specific kind of farming activities that beneficiaries engage in. Furthermore, water conservation is interpreted as “doing things the right way”.

In other words, if a farmer is using a specific kind of irrigation or agricultural technique, they need to make sure that they are applying the technique correctly and that water is not wasted when they do so. For example, being water use efficient means using only as much water as needed to grow healthy crops, and no more. The guide book for emerging farmers looks at why water conservation is important, how farmers can know if they are practicing water conservation, how they can become better at water conservation and how they can share their knowledge about water conservation with other farmers. The guide book for extension officers is based on the same content, but focuses on how extension officers can assist emerging farmers in improving their water conservation practices.

A third key message from the project team’s research relates to the ability of emerging farmers to progress along the food value chain. Emerging farmers face a range of challenges when it comes to their farming operations. For instance, many of the farmers do not have record keeping systems, and therefore find it difficult to estimate how much water they use and whether they practice water conservation. Financial resources are also a big problem, with many farmers not being able to source the capital to invest in tractors, farming implements and irrigation infrastructure and only making enough to pay their farm labourers and keep their farms going.

Finally, many of the emerging farmers do not have the know-how and experience to run a farm and expressed a need for mentors and or sustainable strategic partnership relationships. The challenges listed above are often the reason why farmers find themselves “stuck” in a particular position within a food value chain and are not easily able to progress along the value chain. For the purpose of these guide books, the project team identified a food value chain that is representative of the Maruleng Municipal Area within which the research was conducted. In the

guide book for emerging farmers, the project team identifies how the current positions of most emerging farmers in this food value chain are problematic, and discusses some of the steps that could be taken to assist emerging farmers to participate more fully in the food value chain and also to move along it.

Lastly, this research has highlighted that much still has to be done to align land reform and water allocation reform. This has also been clear from the project’s case study area, where water allocation reform has not been nearly as prominent or influential as the land reform process. In fact, water allocation reform has for the most part been non-existent with the majority of beneficiaries not having any knowledge of water allocation reform processes in their area.

The level of knowledge regarding the quantity of water used, licensing and water use authorisation, financial support for resource poor farmers and efficiency practices has also been found to be extremely low. During the

project team’s research, it became evident that not a single farmer from the irrigation schemes the project focused on had a water use licence in place. In the case of the CPAs, very few farmers knew about water use licensing and it was only the management structure of the CPAs that was aware of water allocation and water use licensing.

In conclusion, this research has shown the importance of “thinking out of the box” when it comes to the future of South Africa’s land reform and water allocation reform processes. It is critical to be aware of the fact that not all land reform beneficiaries are the same nor want the same things, but that instead beneficiaries are individuals with varying interests and ambitions. These are important nuances that need to be taken into account as the land reform process is interrogated and adapted in a bid to improve its rate of success.

From the project team’s analysis of water conservation-related issues in the Maruleng Municipal Area, it also became evident that it is important for this kind of research to take into account the needs of stakeholders and to address these as far as the project allows. This means doing a needs analysis and, based on this, designing research outputs that are directly relevant to the needs expressed by the project’s stakeholders. Introducing new insights into existing policy processes as well as focusing on the needs of stakeholders and addressing these as far as possible are key ways of improving the impact of such a project. □

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